Edited by
Christina Teipen · Petra Dünhaupt · Hansjörg Herr · Fabian Mehl

Economic and Social Upgrading in Global Value Chains

Comparative Analyses, Macroeconomic Effects, the Role of Institutions and Strategies for the Global South

palgrave
macmillan

Economic and Social Upgrading in Global Value Chains

Christina Teipen · Petra Dünhaupt ·
Hansjörg Herr · Fabian Mehl
Editors

Economic and Social Upgrading in Global Value Chains

Comparative Analyses, Macroeconomic Effects, the Role of Institutions and Strategies for the Global South

palgrave
macmillan

Editors
Christina Teipen
HWR Berlin (Berlin School of Economics and Law)
Berlin, Germany

Petra Dünhaupt
HWR Berlin (Berlin School of Economics and Law)
Berlin, Germany

Hansjörg Herr
HWR Berlin (Berlin School of Economics and Law)
Berlin, Germany

Fabian Mehl
HWR Berlin (Berlin School of Economics and Law)
Berlin, Germany

ISBN 978-3-030-87319-6 ISBN 978-3-030-87320-2 (eBook)
https://doi.org/10.1007/978-3-030-87320-2

This Palgrave Macmillan imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Acknowledgements

This book is the result of the research project "Global Value Chains - Economic and Social Upgrading", which we have had the pleasure of carrying out at HWR Berlin (Berlin School of Economics and Law) since December 2017 with the financial support of the Hans Böckler Foundation (Project No. 2017-233-1). We would like to express our sincere gratitude to the foundation for making this research possible. We are especially grateful for the support that we received from our contact person there: Marc Schietinger.

The idea for this research project arose much earlier, through discussions at our Institute for International Political Economy (IPE Berlin), with its decidedly interdisciplinary research profile. We found the idea of linking sociological research on industrial relations systems and the global value chain approach with macroeconomic perspectives from economics and development economics to be a very attractive field of research. In addition to the interdisciplinary theory linkages, our aim was to learn more about the context and determinants of economic and social upgrading through case studies in different countries and sectors.

We were very fortunate to cooperate with excellent international partners for the case studies. Our sincere appreciation goes to them: Premilla D'Cruz, Hugo Dias, Do Quynh Chi, Yan Dong, Anselmo dos Santos, Denis Maracci Gimenez, Mengmeng Guo, Praveen Jha, José Dari Krein, Dinesh Kumar, Shiyong Liu, Xiaoyan Liu, Alex Mohubetswane Mashilo, Ernesto Noronha, Carlos Salas and Jin Zhang. Many thanks for the

productive and trustful collaboration. Without them, neither the research results nor this book would have come about. Some of them are also contributors to this book. We also owe special thanks to Mark Anner, Frank Hoffer, Stefanie Lorenzen and Martina Sproll, who have always provided us with their expertise.

In addition, we would like to thank Christoph Scherrer and his international research team as well as the International Center for Development and Decent Work (ICDD) at the University of Kassel, Germany, for the close collaboration and for carrying out the case studies on the agricultural value chains. We would equally like to thank each of the other authors of this book who entrusted us with their impressive research results for this book.

We are grateful to our friends and companions who have inspired us with their research and ideas at workshops and conferences, and who have contributed to our success, for example, at the research project's kick-off workshop at HWR Berlin (Berlin School of Economics and Law), Germany (1–3 March 2018); the XIII. Global Labour University Conference at the Universidade Estadual de Campinas (Unicamp), Brazil, (6–11 August 2018); the XIV. Global Labour University Conference at HWR Berlin (Berlin School of Economics and Law), Germany (27–29 March 2019); the International Labour Process Conference at the University of Vienna, Austria (24–26 April 2019); the Global Value Chains Network O at the Conference of the Society of the Advancement of Socio-Economics [SASE] at The New School, New York City, USA (27–29 June 2019); the Conference "Continuing the Struggle: The International Labour Organization (ILO) Centenary and the Future of Global Worker Rights" at Georgetown University, Washington, DC, USA (21–22 November 2019); the Congress of the German Sociological Association (DGS) (online, 14–24 September 2020) as well as the Annual Conference of the German Industrial Relations Association (GIRA) in Heidelberg, Germany (9 October 2020).

Last but not least, we would like to thank Lola Attenberger, Anne Martin, Clare Hollins and Lukas Handley for their valuable assistance and feedback as well as their support with proof-reading and making linguistic improvements to the chapters.

Berlin
July 2021

Contents

1 Introduction: Governance, Rent-Seeking and Upgrading in Global Value Chains 1
Petra Dünhaupt, Hansjörg Herr, Fabian Mehl, and Christina Teipen

Part I Interdisciplinary Theoretical Contributions—Framing the Debate

2 Contemporary Globalisation and Value Systems: What Gains for Developing Countries? 35
Praveen Jha and Paris Yeros

3 Global Value Chains—A Panacea for Development? 55
Petra Dünhaupt and Hansjörg Herr

4 Social Upgrading in Global Value Chains—The Role of Labor and Industrial Relations 97
Christina Teipen and Fabian Mehl

5 Embeddedness of Power Relations in Global Value Chains 121
Christoph Scherrer

6 Social Upgrading in Global Value Chains from a Perspective of Gendered and Intersectional Social Inequalities 145
Martina Sproll

Part II Insights from Different National Sectors

7 Social Upgrading, a Mixed Bag: The Indian IT/ITES Sector 173
Ernesto Noronha and Premilla D'Cruz

8 India's Automobile and Textile Industries in Global Value Networks: An Assessment 197
Praveen Jha and Dinesh Kumar

9 Collective Bargaining During and After Apartheid: Economic and Social Upgrading in the Automobile Global Value Chains in South Africa 227
Alex Mohubetswane Mashilo

10 Economic and Social Upgrading in Global Value Chains: The Automotive Industry in Brazil 259
Anselmo Luis dos Santos, José Dari Krein, Denis Maracci Gimenez, and Hugo Dias

11 Locked Between Buyer-Driven Global Value Chains and State Control: An Analysis of the Stagnation of Economic and Social Upgrading in the Garment and Electronics Industries in Vietnam 287
Do Quynh Chi

12 Foxconnisation of Automobile Manufacturing? Production Networks and Regimes of Production in the Electric Vehicle Industry in China 311
Boy Lüthje

13 Few Opportunities for Smallholders for Upgrading in Agricultural Value Chains 335
Ismail Doga Karatepe and Christoph Scherrer

Part III Strategic Consequences and Solutions from Different Backgrounds

14 The Governance Challenges of Social Upgrading in Apparel Global Value Chains in the Context of a Sourcing Squeeze and the Covid-19 Pandemic 361
Mark Anner

15 Social Upgrading in the Bangladeshi Garment Sector Since Rana Plaza: Why Some Governance Matters More Than Others 385
Nora Lohmeyer, Elke Schüßler, and Naila Kabeer

16 China's Leverage of Industrial Policy to Absorb Global Value Chains in Emerging Industries 413
Anna Holzmann and Max J. Zenglein

17 New Business and Human Rights Laws—Support for Social Upgrading? 437
Stefanie Lorenzen

18 Lessons of the Indonesian Freedom of Association Protocol 467
Reingard Zimmer

19 From Corporate Social Responsibility Towards Working Solution: A Comment By The Former Executive Director of 'Action, Collaboration, Transformation' (ACT) 485
Frank Hoffer

Part IV Conclusions and Outlook

20 Comparing National and Industry-Specific Trajectories of Economic and Social Upgrading as Well as Various Strategic Solutions 505
Petra Dünhaupt, Hansjörg Herr, Fabian Mehl, and Christina Teipen

21 Economic and Social Effects of the COVID-19 Pandemic and the Future of Global Value Chains 565
Petra Dünhaupt, Hansjörg Herr, Fabian Mehl, and Christina Teipen

Index 593

Notes on Contributors

Mark Anner is Professor of Labor and Employment Relations, and Director of the Center for Global Workers' Rights, Penn State University USA. His current research examines how pricing and other sourcing dynamics in global supply chains affect working conditions and workers' rights. He has researched and written on international labour solidarity, labour law reform in Latin America, strikes in Vietnam and the impact of the COVID-19 pandemic on workers in the global apparel industry.

Do Quynh Chi is Founder and Director of the Research Centre for Employment Relations (ERC), a Vietnamese social enterprise conducting research on labour issues. She has a doctorate degree in industrial relations from the University of Sydney, Australia and is regularly contributing articles to international journals and books for academia and practitioners.

Premilla D'Cruz is Professor of Organisational Behaviour at the Indian Institute of Management Ahmedabad, India. Premilla's research interests include workplace bullying, emotions at work, self and identity at work, technology and work, whistleblowing at work, positive organisational scholarship and precarious/informal work. Premilla is the Chief Co-editor of the *Handbooks of Workplace Bullying, Emotional Abuse and Harassment, Vols 1-4* (Springer, 2021), in addition to co-authoring numerous papers in reputed peer-reviewed journals such as *Journal of Business Ethics, Information and Organization, Economic and Industrial Democracy* and *International Journal of Human Resource Management*.

Premilla has been a visiting scholar at several European and Australian universities. She was President of the International Association on Workplace Bullying and Harassment (IAWBH) between 2016 and 2018, having earlier served as Secretary (2010–2016) and Special Interest Groups Coordinator (2008–2010). She is currently the section editor of Labour Relations and Business Ethics at the *Journal of Business Ethics*.

Hugo Dias is Professor of the Institute of Economics of University of Campinas (UNICAMP/Brazil) and Researcher at the Centre for Studies in Trade Unionism and Labour Economics (CESIT/IE/UNICAMP).

Anselmo Luis dos Santos is Professor of the Institute of Economics of University of Campinas (UNICAMP/Brazil) and Researcher at the Centre for Studies in Trade Unionism and Labour Economics (CESIT/IE/UNICAMP).

Petra Dünhaupt is Research Associate and Lecturer at HWR Berlin (Berlin School of Economics and Law), Germany. Her current research centres around the consequences and impacts of international trade and integration into global value chains, with a focus on developing and emerging countries and development strategies.

Denis Maracci Gimenez is Professor of the Institute of Economics of University of Campinas (UNICAMP/Brazil) and Researcher at the Centre for Studies in Trade Unionism and Labour Economics (CESIT/IE/UNICAMP).

Hansjörg Herr is Emeritus Professor of Supranational Integration at HWR Berlin (Berlin School of Economics and Law), Germany. He is one of the founders of the Global Labour University. He published in various areas including development economics, European integration, monetary policy, minimum wages and international currency system.

Frank Hoffer was until 2020 the Executive Director of ACT (Action Collaboration Transformation). Before joining ACT he served for 20 years as a specialist for wages, industrial relations and social dialogue at the International Labour Organization (ILO). He holds a Ph.D. in Economics.

Anna Holzmann worked as an Analyst at the Mercator Institute for China Studies (MERICS) in Berlin, Germany, where her research focused

on China's industrial policies, economic development strategy and innovation systems. Anna also holds a special interest in China's discursive power and approach to sustainability. Before joining MERICS she was a Research Assistant at the Vienna University of Economics and Business. Anna studied International Business Administration, Chinese Studies and East Asian Economy & Society in Austria, Australia and China.

Praveen Jha is Professor at the Centre for Economic Studies and Planning, School of Social Sciences, Jawaharlal Nehru University in Delhi, India. His major areas of research include Political Economy of Development, with particular reference to labour, agriculture, natural resources, public finance, education and history of economic thought.

Naila Kabeer is Joint Professor of Gender and Development at the Departments of International Development and Gender Studies at the London School of Economics and Political Science (LSE), UK. Her research interests include gender, poverty, social exclusion, labour markets and livelihoods, social protection and citizenship and much of her research is focused on South and Southeast Asia.

Ismail Doga Karatepe is Postdoctoral Researcher at the International Centre for Development and Decent Work (ICDD), University of Kassel. He completed his Ph.D. degree at the University of Kassel. His publications generally focus on state theory, economic policies and production networks.

José Dari Krein is Professor of the Institute of Economics of University of Campinas (UNICAMP/Brazil) and Researcher at the Centre for Studies in Trade Unionism and Labour Economics (CESIT/IE/UNICAMP).

Dinesh Kumar is Assistant Professor of Economics at Delhi University, New Delhi, India.

Nora Lohmeyer is Assistant Professor of Organisational Design and Development at Radboud University in the Netherlands. Her research interests revolve around the governance of global production networks, the politics of corporate social responsibility and the privatisation of regulation.

Stefanie Lorenzen is Professor of Employment and Labour Law at HWR Berlin (Berlin School of Economics and Law), Germany. She is a member

of the "Green Button" advisory board, a government-run certification label for sustainable textiles. Her research focuses on corporate accountability, a topic she also pursues as a board member of the German climate and human rights NGO Germanwatch.

Boy Lüthje is Professor and Director at the Technology and Industry Research Centre, at the Institute for Public Policy, South China University of Technology, Guangzhou, People's Republic of China.

Alex Mohubetswane Mashilo has a Master's in Labour Policy and Globalisation, a Global Labour University Programme and a Ph.D. from the University of the Witwatersrand, Johannesburg. He started working in the automotive industry in the late 1990s as an apprentice in engineering (electrical), continued in full-time employment, engineering maintenance and served as the National Union of Metalworkers of South Africa's full-time shop steward and national official. He rose through the ranks of the union and held several key positions including head of bargaining while furthering his studies. He remains active in South Africa's policy discourse and is a visiting researcher at the Southern Centre for Inequality Studies, the University of the Witwatersrand.

Fabian Mehl is Research Associate and Lecturer at HWR Berlin (Berlin School of Economics and Law), Germany. He is working in research projects on global value chains, focusing on the role of labour and industrial relations for social upgrading.

Ernesto Noronha is Professor of Organisational Behaviour at the Indian Institute of Management Ahmedabad, India. Ernesto's research interests include workplace dignity, workplace diversity, technology and work, workplace bullying and employment relations and globalisation, and he has numerous papers published in reputed peer-reviewed journals on these topics including *Journal of Business Ethics, Industrial and Labor Relations Review, Information and Organization* and *Journal of Contemporary Asia*. Ernesto has received bi-lateral and multi-lateral grants to study various aspects of employee experiences of work in India's offshoring and outsourcing sector, focusing on new and unexplored areas such as organisational control, diversity, telework and collectivisation. He has been a Visiting Professor at the Industrial and Labor Relations (ILR) School, Cornell University, and at the Institute for Sociology, University of Vienna, in addition to being a visiting scholar at numerous European and Australian universities. He is currently a board member of the

RC30 Sociology of Workgroup at the International Sociological Association (ISA) and the section editor of Labour Relations and Business Ethics at the *Journal of Business Ethics*.

Christoph Scherrer is Professor of International Political Economy and Executive Director of the International Center for Development and Decent Work at the University of Kassel, Germany, and one of the founders of the Global Labour University.

Elke Schüßler is Professor of Business Administration and Head of the Institute of Organization Science at Johannes Kepler University Linz, Austria. She studies questions of organisational and institutional change, creativity and path dependence particularly in the context of societal challenges.

Martina Sproll is Professor of Social Sciences (Structural Change and the Welfare State in International Perspectives) at HWR Berlin (Berlin School of Economics and Law), Germany. Her main research areas are transnational production and labour, digitalisation, gender relations, intersectional social inequalities, (feminist) political economy and sociology of Latin America and Europe.

Christina Teipen is Professor of Social Sciences with a focus on economic sociology at HWR Berlin (Berlin School of Economics and Law), Germany. Her current research examines social upgrading trajectories in the Global South, the role of labour and the impact of the COVID-19 pandemic on global value chains. She coordinates several projects financed by the Hans Böckler Foundation, the VolkswagenStiftung and the German Research Foundation (DFG). She has previously researched and written on comparative analyses of institutions, focusing in particular on the video games industry in Germany, Sweden and Poland.

Paris Yeros is Professor of International Economics and Faculty Member of the Postgraduate Programme in World Political Economy, Federal University of ABC, São Paulo, Brazil.

Max J. Zenglein is Chief Economist at the Mercator Institute for China Studies (MERICS) in Berlin, Germany. His research focuses on China's macroeconomic development, foreign economic relations and industrial policies. Before joining MERICS he was an economic analyst for the German Chamber of Commerce in Shenzhen and Beijing. He is an economist by training and has studied at the University of New York

at Buffalo, the Berlin School of Economics and Law, the University of Hong Kong and the University of Kassel. He received his Ph.D. from the University of Kassel in 2015.

Reingard Zimmer is Professor of German, European and International Labour Law at HWR Berlin (Berlin School of Economics and Law), Germany.

List of Figures

Fig. 1.1 Typical market constellations and governance modes in GVCs 10

Fig. 1.2 The smile curve (*Source* Adopted from OECD [2013]; authors' presentation) 17

Fig. 3.1 Goods exports in percent of GDP, various world regions, 1970–2019 (*Source* UNCTAD Statistics) 60

Fig. 3.2 Foreign direct investment inflows in percent of GDP, various world regions, 1970–2019 (*Source* UNCTAD Statistics) 62

Fig. 3.3 Developing countries' share of world exports of manufactured goods, 1995–2019 (*Note* Manufactured goods [Standard International Trade Classification {SITC} 5 to 8 less 667 and 68]. *Source* UNCTAD Statistics [2021]) 67

Fig. 3.4 Terms of trade index (2000 = 100); various commodity exporting countries; 2000–2019 (*Note* Net barter terms of trade index is calculated as the percentage ratio of the export unit value indexes to the import unit value indexes, measured relative to the base. *Source* World Bank [2021]; World Development Indicators) 78

Fig. 3.5 Terms of trade index (2000 = 100); various Asian countries; 2000–2019 (*Note* Net barter terms of trade index is calculated as the percentage ratio of the export unit value indexes to the import unit value indexes. measured relative to the base. *Source* World Bank [2021]; World Development Indicators) 80
Fig. 3.6 Global Value Chain Participation excluding primary products, 2005 and 2015 (*Source* OECD TiVA Database. Version 2018; Data on primary products and total imports and exports: UNCTAD Statistics; GDP: World Development Indicators. Sorted ascending by 2015) 83
Fig. 3.7 GVC Participation and Growth in Productivity; 2005–2015 (*Source* GVC Participation Index is calculated from OECD TiVA 2018 edition; Output per worker [GDP constant 2011 international $ in PPP]—ILO modeled estimates. Nov. 2020 annual and average growth rates; average from 2005 to 2015) 86
Fig. 3.8 Global Value Chain Participation and Employment Share of Adult Population; 2005–2015 (*Note* Employment to population ratio. 15+ total [%] [national estimate]. *Source* GVC Participation Index is calculated from OECD TiVA 2018 edition; Employment Share from World Bank World Development Indicators; average from 2005 to 2015) 88
Fig. 8.1 Trend of Participation of India's textiles, wearing apparel, leather and related products industry in the GVCs, constant prices (2015) in (in Million USD) (*Source* OECD, TIVA database [October, 2015], *Note* _S denotes Secondary axis, backward linkages: foreign value added in gross exports of a country, forward linkages: domestic value-added embodied in foreign exports, GVC participation rate: ratio of total participation [Backward and Forward Linkage] to gross exports) 209
Fig. 8.2 Trends of India's Participation in Automobile GVCs, constant prices (2015) in US dollar (in Million USD) (*Source* OECD, TIVA database [October 2019]. *Note* _S denotes Secondary axis, backward linkages: foreign value added in gross exports of a country, forward linkages: domestic value-added embodied in foreign exports, GVC participation rate: ratio of total participation [backward and forward linkage] to gross exports) 211

Fig. 8.3 Category-wise Share in Number of Workers in the Automobile Industry (%) (*Source* EPW online database) 212
Fig. 8.4 Category-wise Average Monthly Wage Rates (in Rs.) at Constant prices (2011–2012) (*Source* EPW online database. *Note* Other Employees: clerical, administrative office, storekeeping section and welfare section, sales department, etc.) 213
Fig. 8.5 Category-wise number of workers in the textile industry (*Source* EPW online database) 217
Fig. 8.6 Category-wise number of workers in the apparel industry (*Source* EPW online database) 218
Fig. 8.7 Category-wise average monthly wage rate at constant prices in the textile industry (in Rs.) (2011–2012) (*Source* EPW online database. *Note* Other Employees: clerical, administrative office, storekeeping section and welfare section, sales department, etc.) 219
Fig. 8.8 Category-wise average monthly wage rate at constant prices in apparel industry (in Rs.) (2011–2012) (*Source* EPW online database. *Note* Other Employees: clerical, administrative office, storekeeping section and welfare section, sales department, etc.) 219
Fig. 9.1 South African automobile manufacturing employment (*Source* Author's Design) 230
Fig. 10.1 Annual Growth Rate (in percent) of GDP and GDP Per Capita. Brazil, 2000–2020. *Source* IBGE, 2018. Authors' elaboration 262
Fig. 10.2 Employment in the Manufacture and Assembly of Motor Vehicles, Trailers, and Bodywork, Brazil 1997–2017. *Source* RAIS/MTE (2019). Authors' elaboration 269
Fig. 10.3 Distribution of Workers in the Manufacture and Assembly of Motor Vehicles, Trailers, and Bodywork by Education, Brazil 1997–2017 (percentage of all workers in the industry). *Note* Primary Incomplete: have not completed the initial nine-year study; Primary Complete: has completed the initial nine-year study; Secondary Incomplete: has not completed three years of high school; Secondary Complete: has completed three years of high school; Tertiary Incomplete: has not completed higher education; Tertiary Complete: has completed higher education. *Source* RAIS/MTE (2019). Authors' elaboration 271

Fig. 10.4 Workers' Salary in the Manufacture and Assembly of Motor Vehicles, Trailers, and Bodywork in numbers of minimum wages, Brazil 1997–2017 (percentage of all workers). *Source* RAIS/MTE (2019). Authors' elaboration 273
Fig. 11.1 Foreign direct investment, net inflows (in % of GDP), 1986–2019. *Source* World Bank (2021); World Development Indicators 294
Fig. 14.1 Power Asymmetries and the Challenge of Social Upgrading 365
Fig. 14.2 United States Imports of Indian Apparel Real and Nominal USD per Square Metre (*Source* Author's calculations based on OTEXA and World Development Indicators data) 368
Fig. 14.3 Apparel Worker Monthly Wages (*Source* Author's Survey of Workers) 369
Fig. 14.4 Monthly Apparel exports to the United States from India (Millions of units) (*Source* Author, based on OTEXA data) 370
Fig. 14.5 Supplier Factories' Responses to Peak Orders from Buyers (*Source* Author's Survey of Suppliers) 371
Fig. 14.6 Worker responses to the question: are overtime hours voluntary or obligatory? (*Source* Author's survey of factory workers) 372
Fig. 14.7 India, Garment Exports to the EU, millions of Euros, 2019 and 2020 (*Source* Author, based on Eurostat data) 375
Fig. 14.8 India, Garment Exports to the US, millions of dollars, 2019 and 2020 (*Source* Author, based on OTEXA data) 376
Fig. 16.1 China's gross domestic product (GDP) share by sector, 1952–2019 (*Source* National Bureau of Statistics) 415
Fig. 16.2 China's exports and FDI as a share of GDP, 1960–2019 (*Source* World Bank) 419
Fig. 16.3 China's blueprint for fostering newly emerging industries from domestic niche markets to global leaders (*Source* Authors) 425
Fig. 20.1 Overview of factors influencing economic and social upgrading or downgrading 543
Fig. 21.1 S & P 500 (Standard & Poor's 500), share index of the biggest 500 US stock companies, 1991–2021 (*Note* Shaded in gray, we see periods when the economy has been in recession. *Source* Macrotrends, 2021) 571

Fig. 21.2 Discretionary fiscal response to the COVID-19 crisis in advanced economies (Percent of GDP) (*Source* IMF, 2021b) 572
Fig. 21.3 Discretionary fiscal response to the COVID-19 crisis in emerging economies (Percent of GDP) (*Source* IMF, 2021b) 573
Fig. 21.4 Discretionary fiscal response to the COVID-19 crisis in low income developing countries (Percent of GDP) (*Note* Estimates as of March 17, 2021. Numbers in US dollars and percent of GDP are based on April 2021 World Economic Outlook Update unless otherwise stated. Country group averages are weighted by GDP in US dollars adjusted by purchasing power parity. Data labels use standardized country codes by international organizations. AEs = advanced economies; EMMIEs = emerging market and middle-income economies; LIDCs = low-income developing countries. *Source* IMF, 2021b) 574
Fig. 21.5 Global and regional merchandise export volumes; quarterly data, 1st quarter 2018–1st quarter 2021 (growth rate over previous quarter; in percent) (*Source* UNCTAD Statistics, 2021) 578
Fig. 21.6 Global and regional export of services; quarterly data, 1st quarter 2018–4th quarter 2020 (Growth rate over previous quarter; in percent) (*Note* No data available for Africa. *Source* UNCTAD Statistics, 2021) 579

List of Tables

Table 3.1	Manufacturing Value Added (MVA) in percent of domestic GDP; various world regions, 1970–2013	67
Table 3.2	Export-market share concentration by Standard International Trade Classification, 1980–2018	72
Table 3.3	Real import price changes between 2000–2018, European Union	75
Table 4.1	Expected influence of national systems of industrial relations and industry-specific value chain governance on power constellations of employees for social upgrading	115
Table 9.1	Automobile manufacturing collective bargaining organisation	241
Table 9.2	Automobile assembly and tyre manufacturing bargaining units Grades/Skills levels and wage differentials	249
Table 9.3	Automobile assembly sector bargaining unit strikes from 1994	252
Table 9.4	Tyre manufacturing bargaining unit strikes from 1994	252
Table 10.1	Workers in the Manufacture and Assembly of Motor Vehicles, Trailers, and Bodywork by Type of contract, Brazil 1997–2017	270
Table 11.1	Performance of different sectors in Vietnam (% contribution to GDP, employment and total exports), 2018	295
Table 11.2	Overview of the Garment and Electronics Industries in Vietnam, 2020	295

Table 13.1 The matrix of case studies 338
Table 13.2 Similarities and differences—case studies 342
Table 14.1 Mean male and female take-home pay 369
Table 14.2 Worker Production Quotas (tasks/hour), 2012 and 2017 374
Table 15.1 Paths to social upgrading in the Bangladeshi garment industry 405
Table 20.1 Classification of governance modes, rent-seeking constellations and economic and social upgrading outcomes of the empirical cases analysed 508
Table 21.1 Real GDP growth rate; percent change; IMF Economic Outlook Projections April 2021 568

CHAPTER 1

Introduction: Governance, Rent-Seeking and Upgrading in Global Value Chains

Petra Dünhaupt, Hansjörg Herr, Fabian Mehl, and Christina Teipen

Over the past decades, the concept of global value chains (GVCs) has become an important analytical reference point within different strands of social sciences for making sense of the increasingly spatially and organizationally fragmented international system of production. Beginning in the 1960s, multinational corporations (MNCs) headquartered in the Global North started to outsource parts of their manufacturing activities

P. Dünhaupt · H. Herr · F. Mehl · C. Teipen (✉)
HWR Berlin (Berlin School of Economics and Law), Berlin, Germany
e-mail: christina.teipen@hwr-berlin.de

P. Dünhaupt
e-mail: petra.duenhaupt@hwr-berlin.de

H. Herr
e-mail: hansjoerg.herr@hwr-berlin.de

F. Mehl
e-mail: fabian.mehl@hwr-berlin.de

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_1

and offshore them to low-cost locations in the Global South. Subsequently, services were also increasingly outsourced and offshored (Gereffi, 2013). These developments have accelerated, especially since the 1990s, due to sunken transportation costs and innovations in information and communication technologies as well as the liberalization of the international trade regime and the deregulation of financial markets. All these developments have not only simplified international trade but have also massively reduced costs. The share of trade within GVCs out of total world trade increased sharply, especially during the 1990s and early 2000s, and accounted for more than 50% of total world trade in 2007. Since the financial and economic crisis, however, trade within GVCs has declined somewhat—as has global growth and investment in general (World Bank, 2020).

Thus, GVCs facilitated the emergence of a new international division of labour, by cutting the production process into different tasks and allocating them to different locations across the world. This process is being organized by the so-called lead firms of GVCs. While accessing specialized skills can be one reason for outsourcing by lead firms, one of the main motivations is cost savings. Lead firms outsource and offshore tasks to other countries because lower wages or lax labour and environmental regulations in these countries allow much cheaper production. Such cost-driven strategies are typical within GVCs that involve lead firms from the Global North and suppliers from the Global South.

Approaches to conceptualize and study GVCs trace their roots to world-systems theory (Hopkins & Wallerstein, 1977, 1986) as well as to business management scholarship (Porter, 1985). Over time, a rich body of theoretical and empirical literature has been produced within the academic community, critically engaging with and building upon one another.[1] While one dominant strand of research primarily focused on the analysis of inter-firm relations, others highlighted the need to take better account of broader macroeconomic dynamics and the role of the state. Much of the existing empirical research on upgrading in GVCs focuses on single industry-specific case studies without a systematic comparative perspective and is scattered throughout different disciplines. Other 'blind spots' of GVC research that have been addressed in recent years are the organization of the labour process and the role of organized labour

[1] For a genealogy of the concepts of Global Commodity Chains and Global Value Chains, see Bair (2005).

(Newsome et al., 2015), as well as the role of gender and reproduction regimes (Dunaway, 2013). From our point of view, what has been missing in the literature so far is a systematic incorporation of economic approaches to power in markets, the role of labour, national institutional systems and government policies for economic and social upgrading in GVCs. For example, besides inter-firm relations and sector-specific characteristics, national industrial policy strategies, national labour regulation and national systems of industrial relations can be of importance. With regard to social upgrading and the enforcement of labour standards, it is still underexposed which national and/or transnational regulations and strategies seem promising in which contexts (Gereffi & Lee, 2016).

The aim of this book is to add to the body of literature on GVCs by offering interdisciplinary perspectives that intend to improve the explanatory power of existing frameworks regarding the question of whether participation in GVCs contributes to economic development and social upgrading in the Global South.

Through combining different theoretical approaches and applying them to various empirical case studies, the contributions of the volume put analytical focus on the factors that have facilitated or prevented economic and social upgrading in specific national contexts. Here, special attention is placed on the investigation of the role of industry-specific value chain governance, industrial policies and public institutions, industrial relations and trade union power. Furthermore, the volume seeks to address the consequences that result from the structural characteristics of the GVC-dominated global economy for the strategies of different stakeholders, which aim at improving working conditions and spurring sustainable, inclusive economic development.

This introductory chapter serves to give an overview of several of the theoretical considerations and key analytical concepts that underpin our own contributions in this volume but are also recurrently taken up by other authors in this book. In particular, these include governance modes and market constellations in GVCs as well as the strength of trade unions and their effect on income distribution. Also, economic and social upgrading are defined, and the conditions under which they can be realized are discussed. Finally, we also provide short summaries of each of the volume's chapters.

The Role of Governance and Market Constellations for Rent-Seeking in Global Value Chains

In order to understand the specific particularities of inter-firm relations and value distribution in GVCs, we first turn towards microeconomic theories on the functioning of markets. Here, it is usually assumed that many buyers and sellers act independently from each other. An equilibrium price develops which equalises demand and supply. In the most abstract versions of these models, buyers and sellers in the market are perfectly informed about prices and product quality, and all firms possess the same knowledge of, and access to, technologies. But apart from that, firms are effectively 'black boxes' to each other, i.e., they have almost no information about the internal processes of other market participants. In GVCs, the situation is fundamentally different. Here, lead firms that sell the final product to consumers are managing—or 'governing'—the production process along the GVC, which takes place at different supplier firms in different locations. Governance in this context can be understood as the 'authority and power relationships that determine how financial, material and human resources are allocated and flow within a chain' (Gereffi, 1994, p. 97). Lead firms can even directly intervene in the production process of suppliers by determining the quality of the product, the materials to be used or even the technology to be employed. Also, there are power asymmetries between different firms in GVCs. Traditional economic models also analyse the power of certain companies, for example in the case of a monopoly, but they do not analyse how one firm directly influences or even intervenes in the internal production and management of other firms.

One of the most influential analytical frameworks for the study of the relations between firms in GVCs has been Gereffi et al.'s (2005) classification of governance modes. The authors are primarily interested in investigating how firms solve coordination problems with each other and determining the subsequently emerging firm network patterns in a specific industry. According to the framework, three factors influence which types of supply relationships are favoured by lead firms: the complexity of the transaction, the ability to codify the transaction and the capabilities of the supplier. The complexity of transaction relates to the information and knowledge needed for inter-firm transactions, particularly with respect to product and process requirements. Ability to codify means the capacity to

transfer this information and knowledge efficiently without transaction-specific investments. Capabilities express the competence of suppliers to fulfil the task without intervention by the lead firm.

The framework distinguishes five different forms of inter-firm governance: market, modular, relational, captive and hierarchy.

Governance via *market relationships* assumes many buyers and suppliers interacting via markets. The complexity of these transactions is low, and the ability to codify and the capabilities of suppliers are high. This governance type closely resembles traditional economic modelling. In *modular value chains*, the supplier delivers a complete intermediate or even final product but does not sell it in the final market. The complexity of transaction is high as well as the ability to codify the transaction and the capabilities of the supplier. A typical example is contract manufacturing in the electronics hardware industry. In the case of *relational governance*, the complexity of transaction and capabilities of suppliers are high, but the ability to codify is low. In this case, a permanent and partly tacit information flow between supplier and buyer is needed to organize the GVC. An example is the traditional automotive industry and their long-term relationships with specialized high-quality suppliers. In the case of *captive governance*, the complexity of transaction is high as well as the possibility to codify, but the capability of the supplier is low. One example is the garment industry where international fashion brands or retailers determine design, inputs and the process of production at supplier firms. *Hierarchy governance* exists in the case of vertically integrated lead firms that fully control the supplying subsidiary due to the ownership structure (via foreign direct investment) and can transfer profits to the parent firm at will. Vertical integration is common when a lead firm does not find a capable supplier or wants to avoid possible knowledge spill-over to other companies.

As the five modes represent ideal types, the authors acknowledge that, in reality, multiple modes of governance could be observed in one industry or even in a single GVC. For example, there may be a modular or relational governance between lead firm and first-tier firms and captive governance between second and third-tier firms.

Gereffi et al. (2005) are interested in the power relations between firms within GVCs, as each type of value chain governance is marked by different degrees of power asymmetry between lead firms and suppliers. Power asymmetries in the case of market-based governance are assumed

to be low and gradually increase in modular, relational, captive and hierarchical governance.

This is an important dimension to understand the functioning of GVCs, but the framework does not explicitly ask which actors benefit most in economic terms. How is value added distributed along a GVC? To what extent do lead company owners, final consumers or employees profit from GVCs? These questions go beyond the scope of the governance framework but are important for understanding GVCs in a more comprehensive way, which also incorporates economic ways of assessing the impact of power imbalances.

Economic theory commonly distinguishes between different ideal–typical market constellations that, in reality, hardly exist in their pure form, but which allow us to understand empirical cases that fit roughly to one of the theoretical cases.[2] In the model of *pure competition*, a market of a homogenous product with many suppliers and demanders exists. An equilibrium price is realised which covers all costs and a mark-up which for our purpose we call 'normal profit'.[3] As soon as profits are higher than normal profits new firms will enter the market until mark-ups and profits fall back to the normal level. In the case of profits below the normal level, firms, at least if they have other options, will leave the market. Low entry barriers are the most important precondition for this market constellation. Pure competition implicitly assumes either internal constant returns to scale or internal decreasing economies of scale. In the case of internal constant returns to scale, big and small firms have the same potential productivity. In the case of decreasing returns to scale, bigger firms, beginning from a relatively small size, start to become less productive than smaller firms

[2] Many economists have contributed to the development of the different market constellations. Especially Chamberlin (1933) and Robinson (1933) can be mentioned here.

[3] Normal profit is the profit a company can make under competitive conditions with many suppliers, and especially easy and quick entry and exit of firms in the market is possible. Remuneration of the work of management, for example the work of an owner in a small company, is not considered as profit in this sense.

and their growth is hindered by this.[4] In the case of monopolistic competition, product differentiation and consumer preferences are introduced.[5] Also, in such a market constellation new firms enter until the price has dropped to a level that only normal profits can be earned. How many firms in a market are needed to bring down profits to the normal profit level depends on the type of industry.

In many or even most markets, pure and monopolistic competition in the strict sense does not exist. In reality, firms often possess power sources that allow them to earn above-average profits. The power source can be based on a market with only a small number of incumbent firms and high entry barriers based on specific production technologies, brand names or legal regulations like patent laws. In such constellations, firms can earn a kind of rent, a quasi-rent. The term rent is usually used for the return of the ownership of a plot of land or a natural resource like mineral oil. 'The term Rent [is reserved] for the income derived from the free gifts of nature, (…) the term *Quasi-Rent* will be used for the income derived from machines and other appliances for production made by man (…) which is of the nature of a rent' (Marshall, 1949, p. 62f.). The owners of a plot of land or a natural resource get a return without any own productive performance,[6] thus exploiting the scarcity of the gifts of nature. Chasing for quasi-rents is one of the key engines for productivity increases and the innovation power of a capitalist economy.[7] Companies which use a better technology than competitors, or develop a new product, earn extra

[4] It has to be mentioned that *internal* constant or decreasing returns to scale depend on the production condition within firms, for example, whether with increasing production specific machines for mass production can be applied. *External* economies of scale depend on synergies of economic clusters. External economies of scale can be combined with pure competition which depends on internal economies. Krugman (1997), for example, has combined competitive markets with external economies of scale.

[5] In the case of monopolistic competition, each firm has some price-setting leeway. The pricing leeway, i.e., the demand curve of each firm, is determined by how differentiated the products are and how much competition there is. If a company raises its prices, it will likely lose customers to its competitors, and if it lowers its prices, it will gain customers. As long as the firm earns economic profits, more competitors will join the market and offer differentiated products, until no extra profits can be earned.

[6] In many cases some investment is needed to earn a rent. We refer here to the part of a rent which is the pure rent.

[7] Especially Karl Marx and Joseph Schumpeter stressed this. However, because of negative external effects the price system systematically does not include ecological effects in a correct way and gives wrong signals for producers and consumers and also for the type of

profits as the improved technology or innovation is a power source for the firm which can be exploited to earn a quasi-rent. But this source of extra profits disappears when other firms also introduce the same technology or product. Extra profits are the temporary reward for especially efficient and innovative firms.

However, firms can have a power source independent of, or in addition to, their innovative power. In many markets, only a few firms dominate and have the power to increase mark-ups above the level of normal profits. When we look at the selling side of a firm the extreme case is a *monopoly*. In this case only one firm exists which has full control over the price of the product it sells. The price is set at the level which maximizes profits. In the case of a small number of firms, an *oligopoly* exits. Monopolies and oligopolies occur in markets with product differentiation or for homogenous products. A monopoly usually is very strong in terms of rent-seeking. However, if the market of the product is very small then opportunities for the monopoly are small, as a price increase may reduce the willingness of customers to pay a higher price. An oligopoly can be very strong with high rent-seeking capacity if the market is big and the number of firms very small. Oligopolies avoid competing with prices and prefer competing in areas like product differentiation. Firms in an oligopoly can form secret cartels or follow the tacit price leadership of one firm without any kind of formal consultation. They can thus avoid price wars and compete in the field of product differentiation, branding and so on (Kalecki, 1965; Stiglitz, 2012). But an oligopoly can also be relatively weak in phases of fierce competition about the leadership in the market. So-called natural monopolies and oligopolies develop in the case of internal economies of scale which protect incumbent firms in mature markets from the entry of new firms. Given internal economies of scale a new firm has to start with a very high output and sufficiently high market shares to produce efficiently and to make a profit. In most industrial productions internal economies of scale exist, for example, in the automotive industry. The same applies to certain service sectors with strong network effects, such as IT.

Also, government policies can protect monopolies or oligopolies, for example via strict patent laws which have been shaped significantly according to the interests of big companies. Intellectual property rights

technological development. The capitalist productivity machine is running systematically in the wrong direction.

(IPR) have to search for a balance between the incentive to research and the defence of competition. However, as Stiglitz (2019, p. 74) notes, 'in recent years, that balance has been upset, as corporations have successfully lobbied for changes in IPR providing corporations increasing market power – so much so that now, it is even questionable whether America's IPR regime stimulates or stifles innovation'. Monopolies and oligopolies are considered to be welfare reducing as they decrease the quantity of output compared with pure or monopolistic competition, reduce the incentives to innovate and lead to higher income inequality as the profit share in an economy increases (Stiglitz, 2019, Chapter 3).

Power asymmetries also exist on the supply side of firms (Milberg & Winkler, 2013, p. 16). In the case of a *monopsony*, many suppliers produce for one firm which has a demand monopoly. Such a demand monopoly, according to conventional microeconomic thinking, leads to a situation of very low profits for suppliers. In a monopsony, the firm demanding the input can dictate a price for its input from the supplier below the mark-up which would allow a normal profit. Prices can be pushed down to a level that just allows the supplying firms to survive. To keep suppliers in a weak position, the firm demanding the input keeps suppliers relatively small to prevent them from developing market power.[8] In the case of an *oligopsony*, many suppliers sell their output to a small group of firms. In substance, in this constellation the prices and profits of suppliers are also pushed to a minimum. We can speak here of value grabbing by monopsony or oligopsony firms from weak suppliers.

Finally, the number of demanders and suppliers on both sides of the market can be very small. In the extreme case a *bilateral monopoly* exists. More realistic is a *bilateral oligopoly* with a small number of firms on both sides of the market. The rent-seeking power of demanders and suppliers in such markets is restricted.

In Fig. 1.1, the typical market constellations found in GVCs are presented. The left side of the lead firm shows the supply side, i.e., the relationship between the lead firm and the first-tier supplier. Though on the supply side shown here are only constellations between lead firms and first-tier suppliers, the analysis can be easily transferred to analyses of the constellations between first-tier and second-tier suppliers, etc. On the

[8] Monopsonies are also very famous in labour markets, as firms in a demand monopoly for labour reduce demand for labour and in this way bring down wages with the effect of increasing profits.

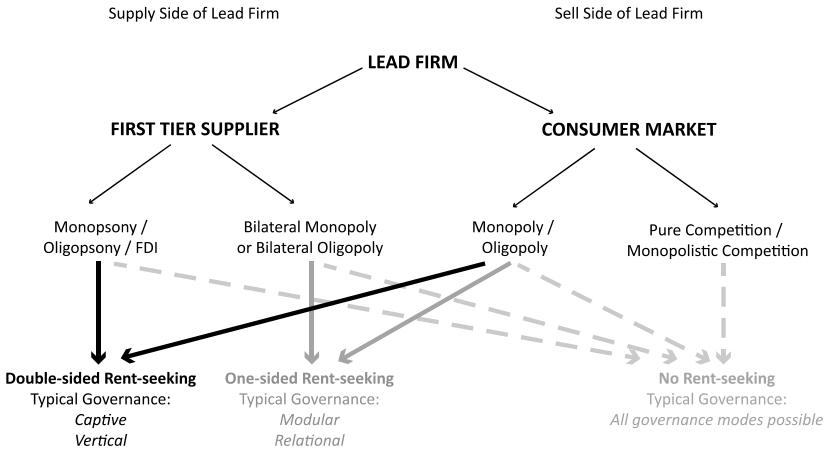


Fig. 1.1 Typical market constellations and governance modes in GVCs

right side of the lead firm, the market constellation of the lead firm is represented on the sell side, i.e., on the consumer market.

If we consider the typical market constellations of the lead firm on both the supply and the sell side, three typical rent-seeking constellations can be distinguished:

First, a lead firm is in a true rent-seeking paradise when it is in a constellation of being in a strong oligopsony/monopsony position on the supply side *and,* at the same time, is in a strong oligopoly/monopoly position in the market it sells its product. This can be conceptualized as a *double-sided rent-seeking constellation.*

With regard to the positioning of the lead company on the consumer market, i.e., on the sell side, two sub-cases can be distinguished: First, a typical oligopoly/monopoly is confronted with a normal demand function for its product—which means the demand will increase when prices go down. According to its profit maximizing strategy, a reduction in supply prices leads to a cut of the selling price as the oligopoly/monopoly searches for a new profit maximizing combination between the price for its product, demand for its product and costs.[9] This means lower costs for supplies of a lead firm will result in lower prices and higher profits

[9] Firms search for the price which makes marginal revenues equal to marginal costs.

for the lead firm. If the lead firm sells its product in the Global North and suppliers are located in the Global South—a typical constellation for cost-driven GVC strategies—the gains from the cheaper costs of inputs from the Global South are shared between the monopoly firm (i.e., its owners) and consumers in the Global North. Second, another constellation can exist where consumers do not benefit from lower input costs. As Thorstein Veblen (1899) already argued, certain luxury goods serve as status goods and are demanded precisely because of the high price, and an increasing price can even increase demand. This argument is related to the increasingly important role of the marketing and branding of products delivered by lead firms. If the lead firm sells a 'Veblen good', lower input costs only lead to higher rents for monopolies or oligopolies.

Second, a *one-sided rent-seeking constellation* exists when the lead firm has the position of a monopoly or is part of a strong oligopoly on its sell side, but on its supply side is confronted with strong suppliers which do not have to accept low prices and low profits as in the case of a monopsony. Depending on the power relation, the lead firm may be forced to accept that suppliers earn normal or even higher profits. It has to be taken into account that in many cases such strong suppliers are also multinational corporations from the Global North and typically have a monopsony or oligopsony position vis-à-vis their own suppliers. Still, the lead firm in this constellation can successfully follow a rent-seeking strategy vis-à-vis its customers.

Third, *no rent-seeking* occurs when the lead firm is confronted with pure competition or monopolistic competition on the sell side or is part of an oligopoly which is in a phase of intensive price competition. In this case, only normal profits for lead firms are possible, while consumers benefit from low prices. Overall, such a constellation is possible, but it is not very typical in the context of GVCs as in most cases lead firms are bigger firms that have at least some oligopolistic powers.

Bringing together the classifications of governance modes by Gereffi et al. (2005) and the market constellations in economic modelling allows us to get a more comprehensive understanding of GVCs, including the question of profit distribution within GVCs. In a generalized and simplified view, the following typical constellations exist. This does not mean that in specific industries other constellations might occur which have arisen as a result of additional framework conditions not considered here.

- The double-sided rent-seeking constellation typically exists when lead firms are connected via captive or vertical governance vis-à-vis their suppliers. Under these governance modes, there is either hyper-competition among suppliers or lead firms control input production via FDI. In addition, the lead firm is in an oligopoly, or even monopoly, in the market it sells its product.
- The one-sided rent-seeking constellation exists typically in cases of relational or modular governance. This is especially true if the product is relatively complex and the capabilities of the supplier need to be relatively high. These requirements usually can only be fulfilled by bigger firms or firms with some market power.
- A third typical constellation exists when a lead firm in a GVC is confronted with monopolistic or pure competition on the selling market. In pure form such a constellation is not very common in GVCs, but there are markets in which lead firms act under intensive price competitiveness. Such a constellation can be found with all types of governance between lead firms and first-tier suppliers.

Overall, it is very likely that the combinations mentioned in the double-sided rent-seeking and one-sided rent-seeking constellations have become more important over the last few decades. Furman and Orszag (2018) point out that the dispersion of capital returns in the USA between 1997 and 2007 substantially increased with an increasing share of firms with extraordinary high returns. They also showed that in the same period in three-fourth of nonfarm sectors the revenue share of the 50 largest firms increased, for example in transportation and warehousing (12.0%), retail trade (7.6%) or wholesale trade (4.6%). Although it might be assumed that an increase in globalization would lead to more competition, the opposite has actually happened and consolidation has taken place worldwide. In many markets with GVCs there are oligopolistic constellations. Regulations and laws which protect oligopolistic or even monopolistic markets—for example, patent law in international trade and investment agreements (Dünhaupt & Herr, 2020a)—have become widespread during the last decades. This general trend suggests that rent-seeking in GVCs has substantially increased during the last decades (Stiglitz, 2019).

Rent-Seeking and Trade Union Power

In order to gain a full picture of rent-seeking in GVCs one has to take into account the power relationship between labour and capital and investigate the distribution of income between workers, managers and owners of firms. In cases of pure competition and monopolistic competition, higher wages in the medium term are rolled over total costs and correspondingly simply increase prices without changing the profit mark-up. This applies if wage costs increase only in one firm, but not on an aggregate level (Weisenthal, 2010).[10]

In cases of a monopoly or oligopoly the situation is different. This point was especially stressed by Kalecki (1965). According to him, the profit mark-up in this market constellation does not only depend on the strength of the monopoly or oligopoly in the market, but it also depends on the strength of trade unions or workers in general:

> High mark-ups in existence will encourage strong trade unions to bargain for higher wages since they know that firms can 'afford' to pay them. If their demands are granted but (…) [the mark-up is] not changed, prices also increase (…) But surely an industry will not like such a process making its products more and more expensive and thus less competitive with the products of other industries. To sum up, trade-union power restrains the mark-ups. (Kalecki, 1971, p. 161)

Hence, corporations face a dilemma: if they want to maintain their profit margin, but strong trade unions push for higher wages, they can only achieve it by increasing their prices or following other strategies which all involve some costs. Strong trade unions can push for higher wages as long as quasi-rents exist and companies can 'afford' to pay higher wages.

Kalecki's argument stresses the importance of the corporate governance system. Under a stakeholder corporate governance system with strong trade unions and a management searching for a compromise between the different stakeholders of a firm, high revenues of firms based on market power are, to a certain extent, shared among workers, managers and owners. In the case of weak trade unions, owners and

[10] In many countries of the Global South, excluding wage costs, the exchange rate plays a relatively big role in the development of the price level.

management can appropriate a bigger share of the revenues as profit and high salaries.

In GVCs, lead firms as well as first-tier suppliers can be confronted with fundamentally different levels of trade union strength. There may be countries with lead firms and first-tier suppliers where strong trade unions can force management to share part of the extra profit with workers. Typically, in such cases workers in these firms earn more than the average employee in the rest of the country with the same qualification and experience. It is obvious that government regulations and policies can support or weaken trade union strength. In contrast, there can be countries in which lead firms and first-tier suppliers can push wages and working conditions to very low levels. The strength of trade unions and their ability to get part of the extra profits of powerful companies becomes an obvious criterion for the spatial allocation of tasks in GVCs. The same applies to environmental and other cost-increasing regulations.

In parallel to the trend of more oligopolistic markets over the last decades, we can also observe a tendency towards weaker trade unions with lower potential to participate in high quasi-rents of big companies. Galbraith (1967) described big companies in the USA as kind of bureaucratic institutions in which management organized a compromise between different stakeholders and only got decent salaries. This fundamentally changed in the 1980s when the shareholder value management system became popular and management started to follow a short-term profit maximizing strategy, with high bonus payments linking the interest of the managers to the profit maximization of shareholders (Rappaport, 1986). Stiglitz (2012, p. 66) speaks of 'corporate rents' which 'are divided among the various stakeholders in the corporation (in particular, between workers, shareholders, and management)'. After World War II 'the rents got divided largely between loyal workers and management. (…) Gradually, beginning in the 1980s and 1990s, management (…) could take a larger share of the corporate rents for themselves with impunity'.

GVCs and the rent-seeking strategies of lead firms are very much shaped by changes in management and declining trade union power in many countries. These corporate governance changes are themselves part of the bigger process of financialization which puts the interests of financial agents at the centre of production and which also shaped GVCs (Milberg & Winkler, 2013). Financialization, together with weaker trade unions and an increasing tendency towards more oligopolistic markets (and, in many cases, monopsony or oligopsony constellations in GVCs),

led to increasing profit shares in the Global North and more unequal income distribution within countries (Herr, 2019).

Economic and Social Upgrading

As mentioned above, one of the key research questions that is being addressed by the contributions in this book is whether, and to which extent, GVCs support economic and social upgrading of firms, industries or whole countries.

In a broad sense, our understanding of long-term *economic upgrading* implies increasing productivity of a country via the use of new technologies and increasing skill levels of the workforce. It implies the development of the productive and innovative powers of society and should result in the development and production of high-tech products and the delivery of high-tech services. In GVCs, it must include the taking over of higher value-adding tasks. For economic upgrading the general productivity level has to be increased in a sustainable way over a long period of time and the productivity gap between countries in the Global South and leading countries in the Global North has to shrink substantially. Thus, successful economic upgrading in the Global South implies economic catching-up.

International trade theory (e.g., Heckscher, 1919; Ohlin, 1933; Ricardo, 1817) assumes that under free trade production is allocated worldwide according to comparative advantages.[11] Countries in the Global South that have comparative advantages in low labour costs and a large, relatively unskilled workforce should concentrate on low-tech and labour-intensive production. This analysis can be transferred to GVCs in which companies from the Global South might have a comparative advantage in low-tech and labour-intensive tasks (Feenstra, 2010). Based on the simplicity of certain tasks, countries in the Global South can develop new comparative advantages. In this case GVCs facilitate the industrialization of countries of the Global South.

Indeed, while today's advanced industrialized countries have taken decades to develop whole industries, nowadays newly industrializing countries can enter industries by specializing in certain tasks which can

[11] The welfare effects from free trade which are derived from these models are a different story. They depend on very specific assumptions and especially do not consider dynamic productivity effects (Dünhaupt & Herr, 2020b).

be performed relatively easily (Baldwin, 2011). Consequently, integrating into GVCs has become the dominant paradigm for industrialization and economic development in most countries in the Global South, promoted by national policymakers as well as by international organizations such as the World Bank, the World Trade Organization and the International Monetary Fund (Gereffi, 2013). However, it has also been acknowledged that participation in GVCs does not automatically lead to economic development and broader welfare gains (Barrientos et al., 2011; Rodrik, 2018; World Bank, 2016).

To better understand the debate about economic upgrading an analysis of the so-called 'smile curve' is helpful. The allocation of tasks in GVCs, according to the market mechanism, follows the same logic as the trade of finished goods (Feenstra, 2010). Developing countries have a comparative advantage in low-tech, low-skilled and labour-intensive tasks, while developed countries have a comparative advantage in high-tech, high-skilled and capital-intensive tasks. Countries in the Global South are mainly integrated into cost-driven GVC strategies because of their competitive advantages in the areas of wages, labour market regulations or ecological standards. This distribution of tasks in such cost-driven GVCs is shown in the so-called 'smile curve' (see Fig. 1.2). The graph visualizes that the most upstream and downstream tasks of a value chain, which include research and development, design, marketing and after-sales services, have the highest value added and are typically kept in the Global North, while mid-stream, low value-added tasks are transferred to the Global South. With regard to the framework of comparative advantages, developing countries nowadays do not merely focus on the production of low-tech, low-skill and labour-intensive finished goods as in traditional trade theory, but they carry out the low-tech, low-skill and labour-intensive tasks in the production of *all* tradable goods and services.

Furthermore, empirical evidence suggests that the differences regarding value adding between developed and developing countries in GVCs became bigger over the decades, i.e., the 'smile' became more pronounced (OECD, 2013).

These observations hint at possible contradictions regarding the claim that GVCs facilitate the catching-up of developing countries. Friedrich List (1841) argued that free trade would kick away the ladder for development for less developed nations. To this day List's argument has to be taken seriously (Dünhaupt & Herr, 2020b).

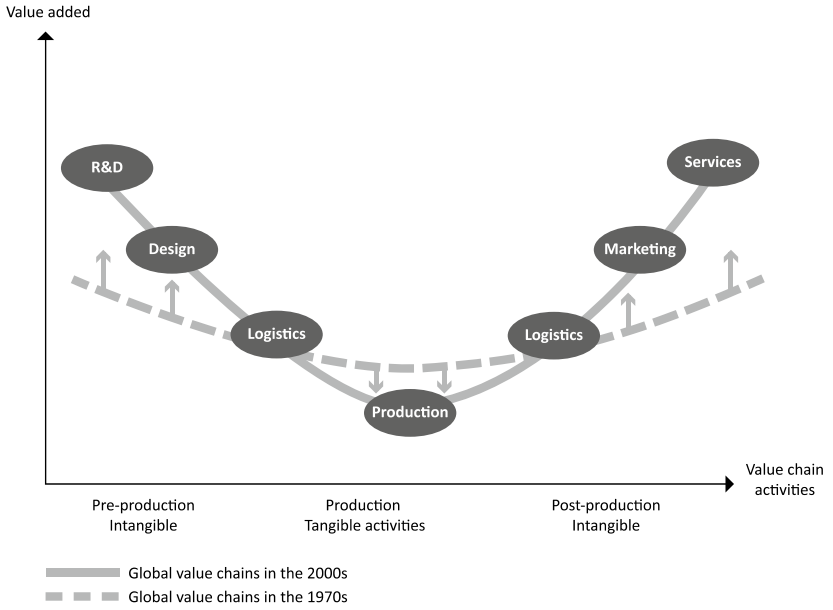


Fig. 1.2 The smile curve (*Source* Adopted from OECD [2013]; authors' presentation)

From the above discussion of governance modes it becomes clear that within GVCs relationships between firms exist which go beyond pure market relations. Lead firms directly or indirectly influence the production process, the skill development or the introduction of new technologies in supplier firms. The most direct relationship exists in the case of vertical governance. Great hopes are attached to FDI inflows in the Global South. It is expected that FDI could become a key channel to transfer technology and skills or to open export paths. Not least because of this hope the unlocking of countries in the Global South for FDI became one of the ten 'commands' of the Washington Consensus from the 1980s onwards (Williamson, 1989). In addition, lead firms can also fundamentally influence technology or skills in subcontracting firms via outsourcing.

In order to investigate upgrading effects in GVCs on the firm level, it is useful to differentiate between four types of upgrading, as proposed by Humphrey and Schmitz (2002). They distinguish between:

- product upgrading (producing a task with higher quality),
- process upgrading (introducing more efficient technology and processes to produce a task),
- functional upgrading (taking over higher value-adding functions in a GVC) and
- inter-sectoral upgrading (start production in related or new industries with higher value adding).

While product and process upgrading often occurs in Global South firms integrated into GVCs, this does not automatically imply that the share of value added in GVCs changes to the advantage of firms in the Global South. As mentioned above, between the 1970s and the 2000s the difference between value-added creation in GVCs in countries of the Global North and Global South has increased (OECD, 2013). Instead, what is needed for economic upgrading in the sense of catching-up is functional and inter-sectoral upgrading.

At first glance, it seems puzzling that even substantial productivity increases through product and process upgrading may not lead to higher income creation and positive welfare effects in countries of the Global South. However, Bhagwati (1958) explains this in an extreme case. If productivity to produce a good in a country jumps to a higher level and the complete output is exported, the export price of the good can decrease substantially. Wages in the country which depend on the national productivity level may not increase—the jump of productivity can even lead to less employment in the sector. If the good in our example is a main export good, the terms of trade of the exporting country can deteriorate to such an extent that the volume of goods which can be imported in exchange for the exported good shrinks, despite an increasing volume of exports. This implies that all of the positive effects of productivity increases are realised outside the exporting country, by foreign consumers and foreign companies. Bhagwati has termed this phenomenon 'immiserizing growth'.

GVCs have the potential to increase income and wealth inequality both in the Global South and the Global North. First, GVCs are integrated into the presently existing type of capitalism with financialization, shareholder value corporate governance and widespread rent-seeking. Especially in the Global North, this has resulted in a falling wage share over the past decades. Increased management remunerations flow to a concentrated group of households and add to higher inequality. This development is

facilitated by weakened trade unions in many countries across the globe (see above, Stiglitz, 2019). Traditional trade models have argued that the intensification of international trade will lead to the shift of simple jobs from the Global North to the Global South, making unskilled workers in the Global North the relative losers and unskilled workers in the Global South the relative winners of GVCs. Overall wage levels for unskilled workers would adjust to the same level as well as wage levels of high-skilled workers.[12] However, real-world developments have shown that wage dispersion is high in all countries and increasing in many (ILO, 2020a). Feenstra and Hanson (1996) argued that in the case of GVCs the least qualified jobs in the Global North tend to be outsourced to the Global South where the highest qualified workers within these national labour markets work in FDI firms or at suppliers of international lead firms. In such a case, the market mechanism leads to higher wage dispersion in the Global South and North. Even if the unskilled in the Global South increase their employment chances in GVCs, real wages for this group of employees will remain unchanged in spite of higher demand as long as the countries suffer from a surplus of labour—a very typical case for almost all countries from the Global South (Lewis, 1954). The conclusion is that GVCs, which are not embedded in institutions and policies which reduce income inequality, lead to higher inequality with potential negative effects for the overall welfare of countries. Several chapters of this book, including the conclusion (Chapter 20), further investigate to which extent and under which conditions economic upgrading can take place in GVCs and who benefits from it.

Consequently, addressing these questions requires us to take a closer look at the concept of social upgrading and its interrelatedness with economic upgrading. Social upgrading can be defined as 'the process of improvement in the rights and entitlements of workers as social actors, which enhances the quality of their employment' (Barrientos et al., 2011, p. 324). Normatively linked to the ILO's Decent Work Agenda (ILO, 1999), the concept refers to measurable standards of workers' well-being as well as enabling rights such as freedom of association and collective bargaining.

[12] Stolper and Samuelson (1941) concluded that under the framework of classical trade theory international trade would lead to an adjustment of real wage levels in all countries in the world. This argument can be transferred to different skill levels.

One key measurable dimension of social upgrading is wage development. Successful social upgrading implies increasing real wages and, at the aggregate level, increasing real income per capita. Social upgrading at the national level is associated with overall welfare gains and the reduction of poverty. It also includes a relatively equal income distribution, which is a precondition for social coherence and inclusive development. From a macroeconomic point of view, social upgrading also implies high levels of employment, which usually benefit the poorest households and increase real GDP per capita even when the productivity level remains unchanged. However, even though employment creation has been used for measuring social upgrading in empirical research (Bernhardt & Pollak, 2015; Milberg & Winkler, 2011), in our view it cannot be qualified as a sufficient condition on its own. In many countries of the Global South, emerging manufacturing and assembly industries tied to GVCs absorb part of the surplus labour from the relatively unproductive subsistence sector, in which underemployment is significant. Because of extreme rural poverty, lack of job alternatives as well as discrimination based on gender, race/ethnicity or caste, remuneration levels can be pushed down very low, thereby allowing employers to pass on the cost pressure from lead firms to workers.

Therefore, apart from wage increases and job creation, social upgrading also relates to the quality of employment, notably the type of employment relation (formal/informal), working time arrangements, social security benefits, occupational health and safety as well as protection from discrimination. Furthermore, social upgrading includes dimensions which cannot easily be measured quantitatively. These are enabling rights such as freedom of association, collective bargaining and social dialogue. Safeguarding these rights is a prerequisite for enabling workers and trade unions to voice and assert their interests and to achieve improvements in working conditions. The legal anchoring of worker rights has usually been the outcome of historical labour struggles in national contexts, whereby worker organizations managed to institutionally restrict the power of capital to unilaterally shape employment relations. However, in many countries of the Global South that have become integrated into GVCs, these fundamental rights are either not legally enshrined or public authorities or civil society organizations fail to enforce them. In these cases, workers lack institutional power and the ability to independently represent their interests.

In sum, sufficient employment creation, social protection, rights at work and social dialogue as well as gender equality form the core elements of the ILO's Decent Work Agenda (ILO, 2020b). Improvements in these fields can be considered as social upgrading.

Social upgrading in a national economy is only possible to a limited extent if it is not linked with economic upgrading. The simple reason is that without economic upgrading, the living standard in a country cannot be increased for the whole population, and redistribution policies are met with limitations. Real wage levels cannot increase in the medium term and, even less so, in the long term without corresponding productivity increases. In many Global South countries excessive working times prevail, often based on voluntary or forced overtime work. Reduction of working time should thus become an element of social upgrading not only in industrialized countries, but this requires productivity and wage increases. Without productivity increases, higher real income including real wages and/or shorter working time in the Global South cannot be realized.

There is, however, a lasting dispute over whether economic upgrading will lead to social upgrading and if so, under which conditions. The so-called trickle-down theory assumes that economic upgrading more or less automatically leads to social upgrading. Trickle-down theory is part of supply-side economics which became popular in the 1980s. It was not only supported by the administration of Ronald Reagan who became US president in 1981 but was also part of the Washington Consensus which guided economic policy action by the International Monetary Fund (IMF), the World Bank and the US Treasury in the 1980s (Herr & Priewe, 2006; Williamson, 1989). John Kenneth Galbraith explains the trickle-down theory which has a long history as the 'horse and sparrow' theory in the following way: 'If you feed the horse enough oats, some will pass through to the road for the sparrows' (quoted in Hamlethub, 2014, p. 1). Today, this theory enjoys less support from economists as well as parts of the political class. Some scholars, such as Joseph Stiglitz, even argue that markets rather lead to a trickle-up, as during the last decades in the USA and many other countries the rich experienced substantial income increases whereas the income of the lower and even the middle-classes stagnated (Stiglitz, 2016; see also Piketty, 2014).

This argument also holds true for most Global South countries that have become integrated into GVCs. Since profit rates of suppliers are

usually quite low due to the 'sourcing squeeze' from lead firms (Anner, 2020; see also the chapter by Anner in this volume), and access to credits is often limited, employers are left with little room for manoeuvre regarding investments in technology and skills as well as higher wages. Also, if social upgrading is being achieved only in a few single industries, social inequality within countries will increase.

Therefore, it is necessary to not only take into account the firm or industry level when analysing social upgrading dynamics, but also the national level. Furthermore, in order to comparatively assess different cases as well as to formulate strategies and policy recommendations, we need to investigate under which conditions and institutional settings social upgrading takes place or remains absent.

Gereffi and Lee (2016) identify six 'paths' through which social upgrading in GVCs can potentially be achieved. These are the 'market-driven', the 'CSR-driven', the 'cluster-driven', the 'multi-stakeholder', the 'labour-centred' and the 'public governance' path. The market-driven path would be based on higher demand from consumers for products or services produced with high social standards. This would put pressure on the lead firms selling in those markets to ensure compliance with labour standards in their supply chains. However, the path's chances of success are rather limited because markets do not always reward ethical behaviour of firms and consumer pressure so far has been concentrated on a limited number of products as well as domestic markets in which these products are sold. The second path also relies exclusively on the behaviour of market actors, namely on Corporate Social Responsibility (CSR) instruments of lead firms. It is based on the same premise that pressure from consumers and the public creates incentives for global brands to comply with social standards in order to avoid reputational damage. However, similar governance limitations like in the case of the market-driven path apply, as audits and codes of conduct depend on the voluntary behaviour of companies and non-compliance cannot be systematically sanctioned (see chapters by Teipen and Mehl as well as Lorenzen in this book). Equally, the cluster-driven path primarily relies on company strategies, but with a 'bottom-up' focus on 'cluster-based collective actions toward the improvement of labor conditions, facilitated by trust and mutual dependence between closely knit firms' (Gereffi & Lee, 2016, p. 33). Its implementation rests on supplier firms' joint cooperation and learning, supported by other actors such as business associations or

chambers of commerce. The challenges for this path arise from the structural features of GVCs such as high competitive pressures in the supply base, which disincentivizes compliance with labour standards. Like the CSR-driven and the cluster-driven path, the multi-stakeholder path also focuses on the monitoring of compliance and capacity building but it involves multiple private and public actors such as firms, NGOs, trade unions and even national governments or international organizations. This promises negotiated solutions with a higher degree of commitment. The labour-centred path emphasizes the central role of workers and their organizations as active agents for social upgrading. Workers and labour unions can secure concessions from employers in the form of higher wages and improved working conditions, by engaging in collective bargaining or going on strike. They can also voice their interests and be involved in the monitoring of labour standards at the workplace, e.g., via works councils. Challenges for this path are the relatively low structural power of most workers at supplier firms and restrictive laws regarding freedom of association in some countries. Another risk is that gains secured by some groups of workers with stronger assertiveness might come at the expense of workers with a weaker position in firms and industries, such as female, migrant and informal workers (see also the chapter by Sproll in this book). Finally, the public governance path rests on supportive legislative environments and states' effective enforcement of labour laws. Public regulation can potentially have the greatest impact on improvement of labour standards, but this crucially depends on the willingness of national governments in the face of global competitive pressures and resistance from employers. According to the authors' framework, the different paths are not mutually exclusive since 'social upgrading tends to be achieved through the engagement of multiple actors with distinctive capabilities and limitations' (Gereffi & Lee, 2016, p. 34). Strategies based on combined approaches that complement each other therefore seem to be the most promising ones. There is however also the risk that individual paths might displace each other, for example when voluntary CSR instruments become a substitute for public regulation.

These introductory remarks should raise awareness of the fact that, compared to other governance mechanisms, it is precisely public governance and strong trade unions that could help ensure that economic upgrading also leads to social upgrading. In sum, we assume that social upgrading in GVCs depends on multiple influencing factors and that economic upgrading does not automatically lead to social upgrading in

the form of higher wages and better working conditions for workers in the Global South. We would also argue that social upgrading can become an own force or even prerequisite to stimulate economic upgrading (see the concluding Chapter 20 in this book, as well as Barrientos et al., 2011; Plank et al., 2014).

Structure of the Book

The following chapters of this book are divided into four parts.

The first part contains theoretical contributions from macroeconomic, sociological and political economy perspectives on economic and social upgrading in GVCs. The first chapter by *Praveen Jha* and *Paris Yeros* situates the debates on economic development and GVCs into historical perspective. Adopting a Marxian political economy framework, the authors argue that globalization has been taking place since the beginning of European colonial expansion, but that the current phase of the global production and appropriation regimes is distinct in several regards. The second half of the twentieth century witnessed the ascendency and dominance of monopoly capital and free-floating finance. In parallel, many Global South countries underwent a transformation from merely supplying raw materials to becoming locations for the manufacture of intermediate and finished industrial goods. However, the authors make clear that although a significant dilution of the traditional division of labour between core and periphery in the global economy has occurred, it does not represent a break with the immanent tendencies of 'combined and uneven development', thereby still relegating countries in the Global South to their positions as sources for the appropriation of value by firms and countries in the Global North. In the next chapter *Petra Dünhaupt* and *Hansjörg Herr* employ a macro-level view, investigating if and how national economies have benefitted from trade in GVCs. Starting with a discussion and assessment of competing theoretical perspectives from development economics, the authors analyse the role of GVCs for countries of the Global South against the background of the shift from import substitution to the export-oriented economic policies of the last decades. While the authors find that under certain conditions such as supportive industrial policies, GVCs can present upgrading opportunities, they argue that for the vast majority of Global South countries, GVCs do not serve as a 'ladder' for catching-up with the Global North. Drawing on the theoretical debates on the role of labour in GVCs,

the chapter by *Christina Teipen* and *Fabian Mehl* presents an analytical framework that brings together different conceptual perspectives with the aim of enabling a more differentiated, context-specific understanding of labour agency and social upgrading trajectories. The authors' central argument rests on the assertion that, besides industry-specific governance modes in GVCs, national systems of industrial relations significantly shape the conditions for social upgrading. The chapter by *Christoph Scherrer* engages with additional strands of theoretical literature that aim to explain power dynamics and asymmetries in GVC contexts. Drawing on insights from neo-Gramscian theory, the author calls for looking beyond inter-firm power relations when studying GVCs, instead taking into account the broader socio-political dimensions underlying economic power in the global economy, such as finance capital and geopolitics. *Martina Sproll's* contribution reconstructs the theoretical debates on the gendered dimensions of GVCs and social upgrading, pointing out that the insights from feminist scholarship have been largely neglected in mainstream analytical frameworks as well as governance and policy responses. The author therefore emphasizes the need for taking better account of intersectional inequalities when analysing the international division of labour.

The second part presents empirical case studies from various countries of the Global South, which investigate country-specific economic and social upgrading dynamics in different industries. In their case study on the Indian IT services sector, *Ernesto Noronha* and *Premilla d'Cruz* highlight the crucial role that public policies have played in the ascent of the industry, resulting in considerable economic growth and well-paid jobs for highly qualified employees. However, they also emphasize that social upgrading dynamics have been ambivalent, with shortcomings regarding aspects such as working time, social protection and employee voice. The chapter by *Praveen Jha* and *Dinesh Kumar* analyses economic and social upgrading dynamics in the Indian apparel and automotive industries. The authors show that although partial economic upgrading took place in some segments, social upgrading gains remained limited or absent, as both sectors are marked by increasingly flexibilized and precarized employment relations and real wages have stagnated for most workers. In his case study on the South African automobile industry, *Alex Mohubetswane Mashilo* shows that despite limited economic upgrading, considerable improvements of the prevailing working conditions could be witnessed since the establishment of the industry during the Apartheid era. The author argues that this can be primarily attributed to the strong

role of unions in the historical transformation process in South Africa and their ability to establish stable collective bargaining institutions in the sector. By drawing on comparisons with the situation in the same sector in India, he emphasizes the centrality of institutional and associational power of workers as a key determinant for social upgrading in GVCs. The following chapter by *Anselmo Luis dos Santos, José Dari Krein, Denis Maracci Gimenez* and *Hugo Dias* analyses the development of the Brazilian automotive industry during the past decades. Similar to South Africa, automobile production in Brazil has been dominated by foreign multinationals from the onset. Despite some attempts by governments to strengthen domestic firms in the sector with the help of industrial policy, no substantial economic upgrading could be realized. Nevertheless, union power in the industry has traditionally been relatively strong, resulting in some social upgrading gains. *Do Quynh Chi* analyses Vietnam's garment and electronics industries, which have become the country's most important export sectors in recent decades. The author argues that state policies since the start of the economic liberalization period have one-sidedly catered to the interests of large multinational companies. As a result, both sectors are heavily dependent on FDI and stuck in low-cost, low value-added stages of GVCs without any prospects for economic upgrading. The cost pressure exerted by foreign lead firms as well as the lack of freedom of association have likewise impeded social upgrading. The chapter by *Boy Lüthje* analyses the changes in production networks in the Chinese automobile industry resulting from the transition to new-energy vehicles and digital driving technologies. It traces the complex politics of this transition, its impact on work and regimes of production, and discusses the transformation of a broad-ranging 'Foxconnization' of car manufacturing known from GVC governance in the electronics sector. The chapter by *Ismail Doga Karatepe* and *Christoph Scherrer* analyses economic and social upgrading dynamics in agricultural production. Based on comparative empirical case studies from different countries and agricultural value chains, the authors find that the transfer from economic to social upgrading is particularly rare in this sector. Instead, the possibility for smallholders and workers to secure improvements in their social position hinges on whether they are able to mobilize collective power through the formation of cooperatives or trade unions as well as exercising pressure on state authorities to enact supportive public policies.

The third part brings together contributions that focus on possible strategies and practical solutions, which could effectively challenge the prevailing power asymmetries in GVCs and contribute to decent work and economic development in the Global South. The chapter by *Mark Anner* discusses the causes of the systemic violations of labour standards in global garment manufacturing as well as possible strategies that could serve as an effective remedy. Since the decent work deficits result from the 'sourcing squeeze' exerted by powerful international brands and retailers, the author argues that they must be addressed via a transformation of the institutional context in which GVCs operate. This includes collective bargaining and other binding agreements as well as more effective public governance. *Nora Lohmeyer, Elke Schüßler* and *Naila Kabeer* analyse the changes that have taken place in the Bangladeshi garment industry since the Rana Plaza building collapse in 2013. By evaluating the responses of different actors from the perspective of which social upgrading paths have been activated through them, the authors find that a more complementary and synergistic approach would be needed to realize comprehensive and sustainable improvements. *Anna Holzmann* and *Max J. Zenglein* highlight the important role of industrial policy for economic upgrading. Their contribution focuses on China's strategies to technologically and economically catch-up with advanced industrialized countries. Using the examples of the solar panel and vehicle battery industries, they demonstrate how Chinese policymakers have strategically employed industrial policy by linking GVC integration with efforts to invest in technological upgrading and using domestic demand as a lever to exploit economies of scale and gain leadership in the newly developing industries. *Stefanie Lorenzen's* contribution assesses recent national legislations in three countries (the UK, France and Germany) that seek to prevent violations of labour standards in lead firms' supply chains, by introducing mandatory human rights due diligence regulations. While these innovative legal approaches are seen as important steps for improved corporate accountability, the author also highlights potential shortcomings, such as inadequate access to remedy violations or the danger that compliance costs might be shifted onto suppliers. *Reingard Zimmer* analyses the 'Freedom of Association Protocol' in the Indonesian garment industry, an agreement concluded between national unions, local supplier firms and international buyers that guarantees and facilitates the exercise of union rights in supplier factories. While building on the experience with international framework agreements, the author argues

that the Protocol's implementation presents a successful example of a bottom-up process, with local unions as the main drivers that have taken active ownership of the agreement and use it as a lever to facilitate organizing and to initiate social dialogue in the sector. The part is concluded by a commentary from *Frank Hoffer*, former managing director of the 'Action, Collaboration, Transformation' initiative, a partnership between global union federation IndustriALL and multinational garment firms. Besides the initiative's approach, the contribution discusses various other transnational instruments of labour governance that go beyond individual companies' corporate social responsibility initiatives and seek to address the structural conditions that lead to low wages and the violation of labour standards in GVCs. The author makes the case for a combination of different approaches that would result in a fundamental change of lead firms' purchasing practices and incentives to raise wages in production countries.

The final part consists of two concluding chapters by the editors of this book.

The first chapter is a comparative analysis of economic and social upgrading dynamics in various industries and countries, summarizing and discussing the findings from the previous empirical contributions as well as from own research through the lens of the theoretical frameworks presented above. Based on their results, some theoretical considerations and policy recommendations are presented and discussed. The last chapter of the book briefly assesses the developments since the start of the COVID-19 crisis regarding economic and social impacts, public policy responses and effects on GVCs as well as possible scenarios for future restructuring of GVCs.

References

Anner, M. (2020). Squeezing workers' rights in global supply chains: Purchasing practices in the Bangladesh garment export sector in comparative perspective. *Review of International Political Economy, 27*(2), 320–347.

Bair, J. (2005). Global capitalism and commodity chains: Looking back, going forward. *Competition and Change, 9*(2), 153–180.

Baldwin, R. (2011). *Trade and Industrialisation after globalisation's 2nd unbundling: How building and joining a supply chain are different and why it matters* (NBER Working Paper 17716). https://www.nber.org/system/files/working_papers/w17716/w17716.pdf

Barrientos, S., Gereffi, G., & Rossi, A. (2011). Economic and social upgrading in global production networks: A new paradigm for a changing world. *International Labour Review, 150*(3–4), 319–340.

Bernhardt, T., & Pollak, R. (2015, March). *Economic and social upgrading dynamics in global manufacturing value chains: A comparative analysis* (FIW Working Paper No. 150).

Bhagwati, J. (1958). Immiserizing growth: A geometrical note. *Review of Economic Studies, 25*, 201–205.

Chamberlin, E. (1933). *The theory of monopolistic competition*. Harvard University Press.

Dunaway, W. (Ed.). (2013). *Gendered commodity chains: Seeing women's work and households in global production*. University Press.

Dünhaupt, P., & Herr, H. (2020a). *Catching up in a time of constraints—Industrial policy under world trade organization rules, free trade agreements and bilateral investment agreements*. Friedrich Ebert Foundation. http://library.fes.de/pdf-files/bueros/singapur/16373.pdf

Dünhaupt, P., & Herr, H. (2020b). Global value chains—A ladder for development? *International Review of Applied Economics*. https://doi.org/10.1080/02692171.2020.1815665

Feenstra, R. C. (2010). *Offshoring in the global economy: Microeconomic structure and macroeconomic implications*. MIT Press.

Feenstra, R. C., & Hanson, G. H. (1996). Foreign investment, outsourcing and relative wages. In R. C. Feenstra, G. M. Grossman, & D. A. Irwin (Eds.), *Political economy of trade policy: Essays in honor of Jagdish Bhagwati* (pp. 89–127). MIT Press.

Furman, J., & Orszag, P. (2018). A firm-level perspective on the role of rents in the rise in inequality. In M. Guzman (Ed.), *Towards a just society: Joseph Stiglitz and twenty-first century economics* (pp. 19–47). Columbia University Press.

Galbraith, J. K. (1967). *The new industrial state*. Houghton Mifflin Co.

Gereffi, G. (1994). The organization of buyer-driven global commodity chains: How us retailers shape overseas production networks. In G. Gereffi & M. Korzeniewicz (Eds.), *Commodity chains and global capitalism* (pp. 95–133). Greenwood Press.

Gereffi, G. (2013). Global value chains in a post-Washington consensus world. *Review of International Political Economy*. https://doi.org/10.1080/09692290.2012.756414

Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy, 12*, 78–104. https://doi.org/10.1080/09692290500049805

Gereffi, G., & Lee, J. (2016). Economic and social upgrading in global value chains and industrial clusters: Why governance matters. *Journal of Business Ethics, 133*, 25–38.

Hamlethub. (2014). *Horse and sparrow economics*. https://news.hamlethub.com/riverdale/politics/841-horse-and-sparrow-economics. Accessed 24 Nov 2020.

Heckscher, E. (1919). The effect of foreign trade on the distribution of in-come. *Ekonomisk Tidskrift*, 497–512.

Herr, H. (2019). Karl Marx's thoughts on functional income distribution: A critical analysis from a Keynesian and Kaleckian perspective. *European Journal of Economics and Economic Policy, 16*, 272–285.

Herr, H., & Priewe, J. (2006). The Washington consensus and (non-) development. In L. R. Wray & M. Forstater (Eds.), *Money, financial instability and stabilization policy*. Edward Elgar Publishing.

Hopkins, T., & Wallerstein, I. (1977). Patterns of development of the modern world-system. *Review, 1*(2), 11–145.

Hopkins, T., & Wallerstein, I. (1986). Commodity chains in the world economy prior to 1800. *Review, 10*(1), 157–170.

Humphrey, J., & Schmitz, H. (2002). How does insertion in global value chains affects upgrading in industrial clusters. *Regional Studies, 36*, 1017–1027. https://doi.org/10.1080/0034340022000022198

ILO. (1999). *Decent work*. Report of the Director-General, International Labour Conference, 87th Session. Geneva.

ILO. (2020a). *Global wage report 2020–21, wages and minimum wages in the time of COVID-19*.

ILO. (2020b). *Decent work*. https://www.ilo.org/global/topics/decent-work/lang--en/index.htm. Accessed 24 Nov 2020.

Kalecki, M. (first publication 1965) [2009]. *Theory of economic dynamics* (2nd ed.). Augustus Kelley.

Kalecki, M. (1971). *Selected essays on the dynamics of the capitalist economy*. Cambridge University Press.

Krugman, P. (1997). *Geography and trade*. Leuven University Press.

Lewis, W. A. (1954). Economic development with unlimited supplies of labour. *The Manchester School of Economic Social Studies, 22*, 139–191.

List, F. (1841, English 1909). *The national system of political economy*. Longmans, Green and Co. https://oll.libertyfund.org/titles/315

Marshall, A. (1949, 8th and reset edition, from 1920). *Principles of economics*. Macmillan Press.

Milberg, W., & Winkler, D. (2011). Economic and social upgrading in global production networks: Problems of theory and measurement. *International Labour Review, 150*(3–4), 341–365.

Milberg, W., & Winkler, D. (2013). *Outsourcing economics: Global value chains in capitalist development*. Cambridge University Press.
Newsome, K., Taylor, P., Bair, J., & Rainnie, A. (Eds.). (2015). *Putting labour in its place: Labour process analysis and global value chains*. Palgrave/Macmillan Education.
OECD. (2013). *Interconnected economies: Benefiting from global value chains*. OECD Publishing.
Ohlin, B. (1933). *Interregional and international trade*. Harvard University Press.
Piketty, T. (2014). *Capital in the twenty-first century*. Belknap Press of Harvard University Press.
Plank, L., Staritz, C., & Rossi, A. (2014). What does 'fast fashion' mean for workers? Apparel production in Morocco and Romania. In A. Rossi, A. Luinstra, & J. Pickles (Eds.), *Towards better work: Understanding labour in apparel global value chains* (pp. 127–147). Springer.
Porter, M. E. (1985). *The competitive advantage: Creating and sustaining superior performance*. Free Press.
Rappaport, A. (1986). *Creating Shareholder Value: The New Standard for Business Performance*. Simon & Schuster Publishing Group.
Ricardo, D. (1817). *On the principles of political economy and taxation*. John Murray.
Robinson, J. (1933). *Economics of imperfect competition*. Macmillan.
Rodrik, D. (2018). *New technologies, global value chains, and the developing economies* (Pathways for Prosperity Commission Background Paper Series, no. 1). Oxford, UK.
Stiglitz, J. E. (2012). *The price of inequality*. W. W. Norton.
Stiglitz, J. E. (2016). Inequality and economic growth. In M. Mazzucato & M. Jacobs (Eds.), *Rethinking capitalism* (Chapter 8). Wiley-Blackwell in association with The Political Quarterly.
Stiglitz, J. E. (2019). *Power, people and profits*. Penguin Books.
Stolper, W. F., & Samuelson, P. A. (1941). Protection and real wages. *The Review of Economic Studies, 9*(1), 58–73.
Veblen, T. B. (1899). *The theory of the leisure class: An economic study of institutions*. Macmillan Publishers.
Weisenthal, J. (2010). *Rosenberg: If you don't think we're staring at deflation, check this out* (businessinsider.com). Accessed 15 May 2021.
Williamson, J. (1989). What Washington means by policy reform. In J. Williamson (Ed.), *Latin American readjustment: How much has happened* (pp. 7–20). Institute for International Economics.
World Bank. (2016). *Jobs in global value chains, jobs notes issue No. 1.*
World Bank. (2020). Trading for development in the age of global value chains. *World Development Report 2020*. The World Bank Group.

PART I

Interdisciplinary Theoretical Contributions—Framing the Debate

CHAPTER 2

Contemporary Globalisation and Value Systems: What Gains for Developing Countries?

Praveen Jha and Paris Yeros

Introduction

Among the much-discussed dimensions of contemporary capitalism happens to be the phenomenon variously described as Global Commodity Chains (GCCs), Global Value Chains (GVCs), Global Supply Chains (GSCs), Global Production Networks (GPNs), Global Value Networks (GVNs), etc., which essentially seek to highlight the growing significance of global interactions and connectedness of present day economic/accumulation regimes. Our own preference is for yet another expression viz., Global Value Systems (GVSs), and in some of our earlier

P. Jha (✉)
Centre for Economic Studies and Planning, Jawaharlal Nehru University, New Delhi, India

P. Yeros
Universidade Federal Do ABC, Sao Paulo, Brazil
e-mail: paris.yeros@ufabc.edu.br

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_2

publications (Jha & Yeros, 2019, 2021) we have examined the analytical advantage of doing so. Essentially, our claim is that the other above-noted terms, generally speaking, remain confined to the most visible relationships of contemporary accumulation regimes, and do not engage adequately with the immanent tendencies central to the evolution of 'combined and uneven' trajectories of global capitalism, leading to the current phase of 'globalised/transnationalised' production and appropriation systems. To understand the phenomenon at hand, and its intrinsic dynamics, we think it is better to adopt a Marxist political economy framework, which investigates the systemic determinants of contemporary monopoly-finance capitalism and their consequences. The crux of our operational definition of contemporary global value systems refers to an architecture of the world economy in which: "components of a single end-use commodity/final output are conceived, designed, produced, procured and processed in different parts of the globe, before being assembled together at a specific destination for ultimate consumption, which again may have a global reach" (Jha & Yeros, 2019, p. 15).

To be sure, it must be stressed that the transnationalisation of accumulation and appropriation is almost as old as capitalism, beginning with its colonial antecedents, through a modus operandi that Marx designated as external primitive accumulation, although particular historical phases have been marked by their own specificities and peculiarities. Economic 'linkages' across continents and countries, almost invariably inscribed by unequal power relations in the course of the Industrial Revolution, were the earlier prototypes of GVSs. The era of neoliberal capitalism, which became ascendant from approximately the 1970s onwards, has reconfigured the contemporary accumulation regime in profound ways shaped, inter alia, by rapid deregulation of markets; accelerated advances of monopolies (through multiple mechanisms); growing dominance of 'capital-as-finance', which thrives fundamentally on profits through circulation and speculation; accelerated scramble by the North for natural resources (such as land, minerals, water, etc.) and other assets in the South, and to make the most of the global reserves of labour largely located in the South. It is in such a broad context that we need to locate the current phase of globalised production/value systems.

As is well documented in the existing literature, there has been a 'decentring' of production from advanced countries to a few chosen destinations in the rest of the world, as metropolitan capital has sought to seek new avenues of profits in the changed context of neoliberalism.

Shift of production from the North to the South has happened through foreign direct investments (FDI) to the latter, but much more importantly, through increased incorporation of domestic actors in a whole range of economic activities including in worldwide arrangements of value creation and appropriation, which are typically controlled by the powerful economic actors (e.g. transnational corporations); in such a system, by and large, economic entities from the South are mere suppliers. The current juncture reinforces Stephen Hymer's (1970, p. 441) claim, advanced half a century ago, that "multinational corporations were becoming substitute for the market" in the organisation of international economic transactions. We may add that the giant monopolies of today, mostly headquartered in the North, are the drivers of contemporary monopoly-finance capitalism and it is increasingly evident that developing countries typically get incorporated into the international system on terms which are seriously unequal, given the nature of asymmetric power relations, which themselves are consequent on a range of structural and conjunctural forces, many of which are analysed as laws of motion of capitalism.

Our core concerns in this article are two-fold: first, to sketch an analytical framework that may be helpful in underpinning the key conceptual correlates of contemporary GVSs, while flagging, very briefly, its historical antecedents and tracking it to its current juncture; second, to reflect on a couple of major economic implications, particularly for developing countries, associated with the current phase of the global production and appropriation regimes, ascendant since the 1970s. There is a large and contentious literature on both these broad themes covering several issues; this paper is neither intended as a survey of all the important contributions, nor as an adequate engagement with divergent views in the relevant literature. Rather, our primary objective here is to offer some theoretical reflections from a Marxian political economy perspective, on the above-noted concerns. This is done in the next two sections before we close the paper with a concluding remark.

Global Value Systems: A *Longue Durée* Analytical Sketch

If we take globally 'connected' processes of production and appropriation as the centrepiece of global value/supply/commodity/production chains or networks, or what we prefer to call global value systems

(GVSs), these are hardly new; on the contrary, as noted above, transnational accumulation regimes are as old as capitalism itself. An appropriate contextualisation of these requires their location in systemic tendencies of capitalism, and the system's evolution since its inception approximately five hundred years ago. Of course, while the current phase of GVSs is characterised by several distinct features and we highlight a couple of the most critical attributes in the subsequent discussion, it hardly needs to be emphasised that capitalism has evolved as a 'combined and uneven system' throughout its course. In fact, as Marx often emphasised, the transition from pre-capitalism to capitalism, or the genesis of capitalism itself, had profound birthmarks in 'global connectedness' through processes of primitive accumulation, which indeed have been a permanent feature of historical capitalism. Before we come to the important features of the contemporary phase of GVSs, a couple of words on its historical antecedents are in order.

A passing familiarity with the longue durée of capitalism is enough to show clear evidence of the early prototypes of globally intertwined value systems for a range of commodities. For instance, in the case of cotton textiles, which was among the leading sectors of early capitalism, raw materials or even semi-processed intermediates were procured by Europe from tropical countries for the production of finished goods destined for consumption within the continent and beyond. In general, there was a spectrum of products, many of these industrial raw materials, which could not grow or were simply not available in the cold temperate climate of Europe. In fact, acquisition of such riches was a powerful driver, apart from overall motivations of loot and plunder, underlying the colonial expansion of the European powers into tropical and sub-tropical regions. A great deal of such procurements was through outright appropriation or unequal exchange, and a range of exploitative strategies was employed by the colonial powers to achieve these ends. These are very well known and we need not recount them here, however a point worth emphasising is that globally connected exchange and production systems, in a systemic sense, were brought into being from the early days of capitalism itself. A great deal of this was facilitated via mechanisms that Marx designated as primitive accumulation of capital, which included 'undisguised looting, enslavement and murder'. While taking root in Europe, capitalism was already transforming the world far and wide: first, through 'external'

processes of primitive accumulation and, second, through systemic incorporation into the 'circuit of capital', generally on uneven terms, and often with the use of brute force.

Although we do not intend to pursue the relevant details relating to the above hinted issues in this chapter, it is important to note here that contemporary developing countries, in terms of simple and standard indicators of economic performance, were certainly not inferior and in all likelihood notably ahead of currently developed countries around the time of the latter's transition to capitalism, and well after that as well. Raychaudhuri (1985) reports that as per the estimates arrived at by Simon Kuznets, per capita incomes in modern industrialised countries, prior to their pre-industrial phase, were lower than the 'traditional societies of Asia'. Although assessments of comparative economic performance going back far into the past are fraught with statistical difficulties, there is overwhelming evidence to support the view that around the middle of the eighteenth century, taking the contemporary Third World and First World as two distinct groups of countries, the former was ahead, in terms of simple but important indicators such as gross income, per capita income, levels of industrialisation, etc. (Bairoch, 1995; Maddison, 2007). It is indeed a most remarkable statistic that in 1750, the estimated share of China and India together in global manufacturing output was around 55%; if we add a few other significant countries from the contemporary Third World, the relevant figure would be closer to 80%. In short, till the middle of the eighteenth century, the economic geography of the world was dramatically different from the picture we get for the subsequent period; in fact, it is only towards the end of the eighteenth century that the First World closes the above-noted gap and starts surging ahead of the other bloc, at a significantly accelerated pace from the second quarter of the nineteenth century. By the middle of the twentieth century, the Third World had been left far behind; to illustrate it with just one number, the combined share of China and India in total global manufacturing output had crashed to a miserable share of less than 3%!

These trends are very well documented and widely accepted by now; however, explanations pertaining to the West galloping ahead of the Rest constitute a large, complex and bitterly contested domain. Similarly, the economic consequences of the West's control over the Rest, via colonialism or otherwise, have remained controversial. It is impossible to engage with these major, and much disputed themes, even in the briefest manner here. Nonetheless, it seems clear to us that one of

the central conclusions emerging from the relevant literature is straightforward: the economic stranglehold that European powers got over the three continents of Asia, Africa and Latin America, from the sixteenth century onwards for almost four hundred years, typically through colonisation at different dates and junctures, resulted in unprecedented plunder on a gigantic scale of the countries in these continents. Apart from massive impoverishment, the underlying processes resulted in their massive structural deformities. Further, via multiple channels, this stranglehold facilitated the launching of capitalism and accelerated its momentum, across the Atlantic as well as in colonies of white settlement.

In the context of the argument that we are advancing here, pertaining to the GVSs: asymmetric economic arrangements including forced incorporation and commercialisation were the crux of the globally connected, first generation, significant versions of the supply/commodity chains that got configured from the early days of capitalism, when major trading houses headquartered in Europe played key roles in shaping global trade and production patterns. In due course, as capitalism transitioned from a merchant capital-driven stage to an industrial capital-driven stage in Europe and its settler extensions, by the late eighteenth to early nineteenth centuries there were significant reconstitutions of accumulation regimes and supply chains. Among the most profound outcomes of this entire era of globally interlinked value systems was deindustrialisation of the South along with industrialisation of the North, and massive divergence in incomes between the two blocs. These outcomes were also organically connected, inter alia, with specific nodes in these global connections, which were hardly a matter of choice for the South. A related point to be underscored here is that the trends pertaining to both the above-noted outcomes were significantly accelerated towards the closing decades of the nineteenth century, when capitalism in the North entered an oligopolistic stage, with a handful of powerful economic actors calling the shots across major sectors and markets especially in industry and finance.

As we know, concentration and centralisation of capital have grown by leaps and bounds in the subsequent period, with massive and unprecedented ramifications for GVSs, some of which we highlight later in this section. A point worth noting right away is that, building on Marx's profound insights on the laws of motion of capitalism, we have formidable contributions from several first-generation Marxist scholars focusing on the ascendancy of multinational/transnational corporations

(MNCs/TNCs), and shedding light on systemic transformations in the dynamics of value generation and appropriation globally. Absolutely brilliant analyses by Lenin (1917), Bukharin (1929 [1950]) and Luxemburg (1913 [2003]), among several others, illuminate the evolving mechanisms of accumulation and exploitation on a global scale, along with the strengthening of imperialism through GVSs, with TNCs acquiring muscle as preeminent economic actors in the global arena. We take the liberty of citing a passage from the Preface that Lenin wrote for Bukharin's classic study, Imperialism and the World Economy, in which he captures some of these features, and future tendencies, in remarkable ways. To quote Lenin:

> [i]t is highly important to have in mind that this change was caused by nothing but the direct development, growth, continuation of the deep-seated and fundamental tendencies of capitalism and production of commodities in general. The growth of commodity exchange, the growth of large-scale production are fundamental tendencies observable for centuries throughout the whole world. At a certain stage in the development of exchange, at a certain stage in the growth of large-scale production, namely, at the stage that was reached approximately at the end of the nineteenth and the beginning of the twentieth centuries, commodity exchange had created such an internationalisation of economic relations, and such an internationalisation of capital, accompanied by such a vast increase in large-scale production, that free competition began to be replaced by monopoly. The prevailing types were no longer enterprises freely competing inside the country and through intercourse between countries, but monopoly alliances of entrepreneurs, trusts. The typical ruler of the world became finance capital, a power that is peculiarly mobile and flexible, peculiarly intertwined at home and internationally, peculiarly devoid of individuality and divorced from the immediate processes of production, peculiarly easy to concentrate, a power that has already made peculiarly large strides on the road of concentration, so that literally several hundred billionaires and millionaires hold in their hands the fate of the whole world. (Bukharin, 1929 [1950], pp. 10–11)

Subsequent generations of Marxist scholars, and of course other strands in political economy, have continued with substantive contributions focusing on the growing power of TNCs, deepening of imperialism and a host of related issues that have important implications for the evolution of GVSs. Before we highlight a couple of critical dimensions pertaining to the current phase (ascendent since the 1970s), it is important to recall

that the global economic system was profoundly impacted, especially after the Bolshevik Revolution and in the backdrop of the Great Depression of the 1930s, by major developments such as consolidation of the socialist bloc, decolonisation of much of the Third World, the post-WWII phase of regulated capitalism, logic of the Cold War, etc., all of which had major implications for transformation trajectories across the globe. It is obviously a large and complex terrain with several themes that are indeed germane to the broad canvas of the global value system, but we can hardly even touch any one of these. Nonetheless, a simple and indispensable outcome associated with the above hinted developments was a significant rupture in the functioning of 'spontaneous' capitalism, which created spaces and prospects for relatively autonomous economic transformation in several countries of the South; of course, the trajectories of the countries in the socialist bloc were radically different and premised fundamentally on the rejection of capitalism. In general, however, the immediate post-WWII era was characterised by a widespread critical stance against laissez faire ideology, especially outside metropolitan countries. Metaphorically speaking, this was the 'Bandung Moment' which gave way in about four decades to the 'Berlin Moment', with the collapse of the Soviet Union, fall of the Berlin Wall and other developments that put the ideology of 'free markets' firmly in the saddle again across much of the globe. We are not in a position to pursue these issues any further here, and would only note that between the above-noted metaphorical moments the strategic shifts adopted by TNCs, and of course imperialism , resulted in significant adjustments in GVSs and implied considerable manoeuvring possibilities for a handful of countries in the South. We take up a couple of important issues with respect to the so-called 'catching-up' prospects and outcomes in the next section.

However, it is important to note that the strategic shifts by the TNCs and imperialism, even during the high noon of the post-WWII dirigiste era did not mean a retreat in any sense; on the contrary, siphoning of surplus from the periphery to the centre continued and the TNCs from the North found innovative ways of deepening their entrenchment in South. A profoundly rich Marxist literature focused on these issues during the 1950s and 1960s, exploring centre-periphery connections and highlighting dependency syndromes in global capitalism. Apart from Baran's (1957) classic tract, The Political Economy of Growth, several scholars came up with very important contributions during this period (e.g. Amin, 1974; Frank, 1967; Hopkins & Wallerstein, 1986, among others), exploring the dialectics of 'development and underdevelopment'. This

was indeed a remarkable crop of ideas, building on rich antecedents and going against dominant streams of 'developmentalism' and 'modernisation' paradigms, while examining machinations of TNCs and imperialism to deepen their hold on global capitalism. Marxist analysts were often highlighting that, during this period, capital was already waiting in the wings to reclaim the economic space through an explicit, full-scale, assault on regulated capitalism. As we know very well, the early 1970s became the 'propitious' moment to launch such an onslaught, with Allende's military overthrow in Chile, and the 'Chicago boys' becoming masters of the economic regime there, as a most brutal and powerful illustration of this phenomenon.

Subsequently the march of neoliberalism gathered momentum, with rising drum beats celebrating the so-called 'Washington Consensus', leading to what we have referred to as the 'Berlin Moment' by approximately the end of 1980s. The demise of the Soviet Union, China's embrace of market-oriented economic reforms and neoliberal globalisation, and veritable collapse of the 'legitimacy' of regulated capitalist regimes across the Global South were touted as the ultimate proofs of the folly of opposing liberal capitalism. The rage of triumphalism was all too evident in Francis Fukuyama's (1992) utterly ill-conceived but much celebrated The End of History; the ideological warfare had been won handsomely, with little regard to substantive engagements with facts or logic of the competing systems. The above-noted themes have generated a huge literature that we can hardly begin to investigate here; the point behind flagging these very briefly is to provide a sense of the backdrop of the episode of globalisation that became ascendant since the 1970s and some of its critical implications for contemporary GVCs/GVSs. We now turn to this phase with a focus on a couple of its critical specificities and implications for the South.

The Current Juncture and Some Implications for the South

Sure enough, the episode of globalisation that the world economy has witnessed for approximately the last half a century has been continuously evolving; further, it is characterised by many important and novel attributes, and has unfolded in a variety of ways across regions and countries. We abstract from these complexities and flag three crucial features,

with a focus on one of these, which have a profound bearing on the content and forms of contemporary GVSs. These are:

1. Neoliberal globalisation has been accompanied by an unprecedented ascendancy and dominance of capital-as-finance; one of the most important implications of such a development is lack of synergy, indeed growing conflict, between capital-as-finance and capital-in-production. In fact, arguably the most important hallmark of this phase is growing financialisation of the global accumulation regime, with international finance capital as the key actor, driven by a 'casino spirit'. This has huge adverse implications for almost all economic outcomes, in large measure due to significant squeezes on capital-in-production, and even more importantly, on overall economic policy space, especially in the South. There is a very impressive literature on these issues within Marxian political economy and heterodox economics, illuminating the scale and mechanisms of the depredations of 'New Finance' on overall macroeconomic outcomes.
2. Another important broad range of issues pertaining to contemporary GVSs are connected with major, indeed dramatic, transformations in the transportation and information technology (IT) sectors, which picked up pace during the post-WWII era and were significantly accelerated since the 1970s; these developments are very well known and hardly need any recounting here. Essentially, breakthroughs in the transportation sector, such as container technology, superfast air-freighting at diminishing costs, etc., have ensured that the mobility of goods through bulk trade has increased. All this has implied that the costs of long-distance transactions have continuously improved for a whole range of economic activities across the board during the last half century or so. Likewise, in the IT sector, the so-called Third and Fourth Industrial Revolutions have dramatically altered global processes of production and appropriation through continuous progress in information processing and computing, along with breathtaking leaps in artificial intelligence, automation, big data management systems, deep machine learning and so forth. These changes have contributed to phenomenal reconfigurations of GVSs.
3. Global connectedness of economic activities and processes across sectors and between North and South have witnessed spectacular

deepening in terms of the scale, intensity and speed of interactions. Thus, it is hardly surprising that measures of interdependencies pertaining to major macroeconomic indicators, such as Gross Domestic Product (GDP), trade, employment, etc., show very impressive increases for several countries during recent decades, with some of them often considered as 'poster boys and girls' in terms of economic performance. Statistics marshalled by all the well-known major international institutions, such as the UNCTAD, OECD, WTO, ILO, etc., report substantial acceleration and improvements in the share of GVCs for each one of these indicators during the recent years. For instance, UNCTAD (2013) reported that incomes from GVC-related trade jumped six-fold and five-fold, respectively for China and India between 1995 and 2009, and for developing countries as a whole, GVC trade contributed approximately 30% to GDP in 2010. Further, as per the UNCTAD estimate, of the total global trade, more than 80% was through GVCs (UNCTAD, 2013); in terms of employment, the ILO (2016) apportions more than 400 million jobs to GVCs in the OECD and Asia region alone. It hardly needs to be stressed that all these numbers are impressive testimony to the fact of significantly advanced global interdependencies, often labelled as 'Made-in-the-World', underlying contemporary accumulation regimes. Although considerable progress has been made in quantifying the relevant indicators, a lot more remains to be done, particularly with respect to methodologies of measurement, coverage of countries and sectors, but we do not pursue these important issues any further here.

It should be obvious that the three notable features of the current juncture highlighted above have very important linkages with each other; further, the overall context of neoliberal globalisation has been organically conducive to the pace and structure of their unfolding, as with several other important features pertaining to contemporary GVSs. However, as we emphasised in the foregoing, these important markers of the current phase need to be located in the deeper and systemic tendencies that have shaped the evolution of globally combined and uneven capitalism over the last few centuries, leading to the ascendency and dominance of monopoly capital and free-floating finance from the second half of the twentieth century. As we know, these have been discussed at great length in Marxian political economy as well as heterodox economic-analytic traditions, and

some of the important contributions have already been referred to in the foregoing. In some of our earlier publications, we have attempted to provide brief overviews of the major determinants leading to the current juncture, especially in relation to GVSs (see for example Dünhaupt et al., 2020; Jha & Chakraborty, 2014, 2016; Jha & Yeros, 2021; Yeros & Jha, 2020), and will not pursue these any further here. The rest of this section deals with, very briefly, an elaboration of the third feature noted above, and a couple of significant implications for the South connected with it.

The most important attribute of the contemporary connectedness underlying GVSs/GVCs is hugely enhanced direct engagement of metropolitan capital-in-production, in fact historically on an unprecedented scale (whichever way we measure it), in select destinations in the South. This has happened across sectors, including in some of the 'frontier' segments, thus resulting in a significant dilution of the traditional division of labour between core and periphery in the global economy. Such a relocation of production, from the former to the latter, is a profoundly novel feature of the current phase, as until about half a century ago this was hardly of any note; in other words, metropolitan capital remained largely confined within its own shores, and when it ventured out it was primarily to 'colonies of settlement'. In the recent decades, however, global spatial configurations of economic activities have undergone major changes, both through offshoring and outsourcing from the North, largely to a few countries in Asia and Latin America. Such a decentring, as already hinted, happens along two different axes: (a) via FDI when metropolitan capital sets up production and other activities in the South, adding to the manufacturing capabilities there; and (b) simply through the incorporation of suppliers without any export of capital or FDI, often through an elaborate specification of tasks and responsibilities.

Transnationalisation of capital from North to South via inflows of investments in production has been a major feature of the recent decades, but so has the increased incorporation of producers, including those in the so-called informal sector on a large scale, in the South for final goods and services, as also for a whole range of intermediate inputs, and increasingly for specific tasks. Both these broad channels characterise almost every sector ranging from agricultural/primary commodities to quite a few high-end segments within manufacturing and services, and these processes have been central to reconfiguration of contemporary GVSs. In

fact, increased fragmentation and segmentation of production and valorisation is the second notable attribute of contemporary economic arrangements. It is almost akin to a state of paradise for the virtuous 'division of labour' glorified by Adam Smith as one of the major (if not most important) drivers of economic progress! Thus, economic activities connected with the production and realisation of a final good or service, are not only split into major segments such as design, manufacturing, marketing, etc., but each one of these get further segmented into specialised subsegments and tasks, and are dispersed to different locations, many of these across the globe, but often within a centralised command structure. Earlier dominant models of so-called Fordist/Taylorist assembly line production have increasingly ceded significant spaces to models of dispersed production.

To be sure, it is not as if 'global connectedness' has arrived with a bang in the world economy with currently widespread models of dispersed and globally fragmented production and accumulation. Rather, we have to view the current accumulation regimes as major reconfigurations of already existing global interactions since the early days of capitalism. Further, we note right away that the current architecture of interdependencies via GVCs is fundamentally hierarchical and uneven, as typically it is 'low-end' activities and tasks, in terms of their share in value, which are largely with the South, whereas many top-end tasks are the preserves of the so-called 'headquarter economies', primarily in non-fabrication and non-production activities such as R&D, up-market retail, etc., and of course overall control. We will come back to this very briefly in a moment, but before that it may be useful to flag a couple of numbers connected with the outcomes of capital's transnationalisation in recent years.

As we pointed out earlier, by around the mid-twentieth-century countries in the Global South had become almost insignificant with respect to their share in global non-agricultural output, specifically in manufacturing. The most recent estimates from the UN Statistical Division, for December 2020 (UNIDO, 2021), show that the top ten countries in terms of their share in total global manufacturing output (shown as percentages in brackets) are: China (28.7), USA (16.8), Japan (7.5), Germany (5.3), India (3.1), South Korea (3.0), Italy (2.1), France (1.9), UK (1.8) and Indonesia (1.6). These numbers convey a very powerful story, of course the most significant element of which is the spectacular emergence of China as the 'factory of the world'. The rise of China as a manufacturing powerhouse is a complex phenomenon

which would require a separate and careful attention that is not possible within the scope of the present paper. The important point to note is the reemergence of a few countries in the South in manufacturing, and non-agricultural production in general, in the overall transformation trajectories across the globe. Around the time that China became 'the factory of the world', India had taken giant steps towards emerging as the 'office of the world' by taking advantage of its capabilities through IT-enabled outsourcing. In general, quite a few countries in the Global South emerged as significant destinations for offshoring, outsourcing, procurements, etc., through multiple transnational webs of different kinds. Thus, it is hardly surprising that there has been a very significant shift in the distribution of industrial workers between the North and the South in recent decades. It is also important to emphasise that the producers and suppliers from the South have integrated into a whole range of high-profile value networks, but of course the relevant issues to be examined are the terms, conditions and returns pertaining to such integration.

A quick word may be in order here regarding the major drivers underlying the observed shifts in the content and form of GVSs over time, in particular leading to the current phase. As one would expect, there is a large and vibrant literature straddling across different theoretical/political perspectives that we will not pursue here; rather, we reflect on one important presumed major driver that has drawn substantial attention across alternative analytical paradigms, including Marxian political economy. This hinges on significant differences in wage costs, or unit labour costs, for the same/comparable task across countries. The commonly used expression, 'global labour arbitrage', often attributed to the erstwhile chief economist of Morgan Stanley, Stephen Roach, is considered a major explanation for the above-noted North–South transnationalisation of capital and dispersed models of value systems.

As it happens, recognition of 'wage hierarchy' as a major consideration underlying transnational mobility of capital has a long history, and Marx's address to the First International took explicit note of it: "A study of the struggle waged by the English working class reveals that in order to oppose their workers, the employers either bring workers from abroad or else transfer manufacture to countries where there is cheap labour force" (Marx, 1985, p. 422; emphasis added). Several writings of Marx and Engels alluded to the significance of this issue, and these were developed further by subsequent Marxist scholars; in particular, several major contributions in the post-WWII era (e.g. Barnet & Muller, 1974; Hymer,

1979; Sweezy & Baran, 1966) highlighted the critical role of global wage hierarchy as a key element in oligopolistic rivalry. The above-noted seminal writings suggested that in a context of growing challenges to the inducement of investments in the North, and the impressive muscle and heft that TNCs had acquired through concentration and centralisation of capital, cross-border mobility of capital in search of super-profits and rents, particularly from the Third World, became powerful components of First World accumulation strategies. Broadly this trajectory of enquiry has been deepened, and extended further, through a large number of important contributions in recent Marxian political economy. Several of these studies have marshalled careful evidence to show that comparable unit labour costs in the South are generally a small fraction, typically in single digits in percentage terms, of those in the North (Ness, 2015; Suwandi, 2019).

In short, global wage hierarchy clearly seems to be an important driver of current transnational mobility of capital and differences in unit labour costs constitute a powerful weapon in the arsenal of TNCs in their worldwide strategy of accumulation in recent decades, in particular to facilitate extraction of super-profits and rents. However, as we know very well, differences in unit labour costs across countries have been a major attribute of global capitalism for most of its life, without significant cross-border flows of capital from the core to the periphery. Furthermore, it is also well known that until the recent episode of globalisation, despite low unit costs and abundant availability of raw materials as well as other critical resources (thereby implying potentially much lower production costs as a whole), Northern capital chose not to invest in the South; on the contrary, there was huge siphoning of surplus from the latter to the former, much of it through looting and plundering, which indeed contributed in significant measure to the division of the world into North and South as we know it. In other words, without adequate contextualisation the notion of 'international labour arbitrage' remains a slippery and inadequate formulation, if not a misleading slogan. For it to have an analytical substance at the current juncture, appropriate connections with the material-political context of neoliberal transition since the 1970s, briefly discussed above, is absolutely critical. To put it differently, important attributes of contemporary GVSs, including labour arbitrage, although our preferred formulation is 'labour-nature-regulation arbitrage' (Jha & Yeros, 2021), ought to be located in the current architecture

of imperialism in which TNCs from the North occupy privileged positions on the high table. As Samir Amin (1997), in his Capitalism in the Age of Globalisation, suggests that the current juncture is best described as 'capitalism of generalised monopolies' where all the major/frontier components of contemporary capitalism are controlled by the TNCs in the North.

With this, we get back to a couple of issues touched on in the foregoing pertaining to the prospects for the South in contemporary GVSs. As is well documented, a small group of developing countries managed to get on to a trajectory of 'catching up' with the North in the post-WWII era with respect to standard economic indicators such as GDP per capita, share in global income/production, levels of industrialisation, etc.; notable success stories are Japan, South Korea and a few others so-called 'Asian Tigers', on which we have a large literature. During the last four decades or so, by all accounts, China has been the most impressive performer, with respect to the above-noted indicators, emerging as a major hub of global capital accumulation. However, dramatic economic transformations of a country over a relatively short period can hardly be reduced to China's integration into GVCs, despite its well-documented importance. The same would hold for all the so-called success stories and an adequate analysis necessarily requires a deep engagement with several critical structural and policy issues which is beyond the limited scope of this chapter. In any case, the stories of so-called 'catching up' during the neoliberal globalisation era are extremely few and far between, and what we characterised as 'managerial discourses' (Jha & Yeros, 2019) seem to be overly optimistic, if not deeply flawed.

As we have argued in some of our earlier writings (Jha & Yeros, 2019, 2021; Yeros & Jha, 2020), increased engagement by metropolitan capital in the South during the neoliberal era has had a range of adverse consequences, including for indicators related to the world of work. We will not elaborate on these here and take note of only one, which is a very powerful summary of economic and social well-being of workers in general: neoliberal capitalism has been characterised by a massive divergence between labour productivity and wages everywhere in the world, along with a compression of wage share in output (Basu, 2016; Patnaik, 2016), which underscores substantial deepening of super-exploitation, organically connected with contemporary GVSs.

Concluding Remark

The major thrust of our arguments in this chapter is that the current phase of GVSs needs to be located in the broader context of imperialism and massively increased power of TNCs, mostly located in the North. The well-known African intellectual and liberation hero Amilcar Cabral famously characterised imperialism as 'piracy on dryland'; we would only add that at the current juncture, it is a piracy in every conceivable sphere, from bio to litho to hydro and stratosphere. The so-called GVCs are one among many mechanisms at the disposal of contemporary imperialism with thousands of giant corporations and global financial institutions forming cartels among themselves to subjugate humanity at large, workers everywhere, and masses in the South. We end with an indicator that powerfully conveys the continued deepening of the divide between the countries at the top and the bottom: using the World Bank database, Xu estimates that measured in constant US dollar (2021), in terms of the average per capita income, the top 20 countries in 1960 were 32 times richer than those occupying the bottom 20 slots (World Bank, 1960–2017); the comparable figure denoting the gap between them in 2015 was 123 times (Xu, 2021)!

References

Amin, S. (1974). *Accumulation on a world scale*. Monthly Review Press.

Amin, S. (1997). Capitalism in the age of globalisation: The management of contemporary society. London: Zed Books.

Bairoch, P. (1995). *Economics and world history: Myths and paradox*. University of Chicago Press.

Baran, P. (1957). *The political economy of growth*. Monthly Review Press.

Barnet, R., & Muller, R. (1974). *Global reach: The power of multinational corporations*. Simon and Schuster.

Basu, K. (2016). Globalization of labor markets and the growth prospects of nations. *Journal of Policy Modelling, 38*(4), 656–669.

Bukharin, N. (1929 [1950]). *Imperialism and the world economy*. Merlin Press.

Dünhaupt, P., Herr, H., Mehl, F., & Teipen, C. (2020). *Opportunities for development through integration in global value chains? A cross-sectoral and cross-national comparison*. IPE Working Paper 140/2020, Berlin School of Economics and Law, Institute of International Political Economy, Berlin.

Frank, A. G. (1967). *Capitalism and underdevelopment in Latin America*. Monthly Review Press.

Fukuyama, F. (1992). *The end of history and the last man*. The Free Press.
Hopkins, T. K., & Wallerstein, I. (1986). Commodity chains in the world-economy prior to 1800. *Review, X*, 157–170.
Hymer, S. (1970). The efficiency (contradictions) of multinational corporations. *The American Economic Review, 60*(2), 441–448.
Hymer, S. (1979). *The multinational corporation*. Cambridge University Press.
ILO. (2016). *Value chain development for decent work: How to create employment and improve working conditions in targeted sectors*. International Labour Organization.
Jha, P., & Chakraborty, A. (2014). *Post fordism, global production networks and implications for labour: Case studies from national capital region, India*. Institute for Studies in Industrial Development.
Jha, P., & Chakraborty, A. (2016). Global production networks and the labour process. In D. Nathan, M. Tiwari, & S. Sarkar (Eds.), *Labour in global value chains in Asia* (pp. 398–420). Cambridge University Press.
Jha, P., & Yeros, P. (2019). Global agricultural value systems and the south: Some critical issues at the current juncture. *Agrarian South: Journal of Political Economy, 8*(1–2), 14–29.
Jha, P., & Yeros, P. (2021). Labour questions in the south: Back to the drawing board, yet again. In P. Jha, W. Chambati, & L. Ossome (Eds.), *Labour questions in the global south*. Springer.
Lenin, V. (1917). *Imperialism, the highest stage of capitalism*. https://www.marxists.org/archive/lenin/works/1916/imp-hsc/. Accessed 15 Aug 2021.
Luxemburg, R. (1913 [2003]). *The accumulation of capital*. Routledge .
Maddison, A. (2007). *The world economy (two volumes)*. OECD.
Marx, K. (1985). Address to the first international, 1967. In K. Marx & F. Engels, *Marx and Engels collected works volume 20, 1965–68*. Lawrence and Wishart.
Ness, I. (2015). *Southern insurgencies: The coming of the global working class*. Pluto Press.
Patnaik, P. (2016). Capitalism and its current crisis. *Monthly Review, 67*(8), 1–13.
Raychaudhuri, T. (1985). Historical roots of mass poverty in South Asia: A hypothesis. *Economic and Political Weekly, 20*(18), 801–806.
Suwandi, I. (2019, March). Global commodity chains and the new imperialism. *Monthly Review*. https://doi.org/10.14452/MR-070-10-2019-03_1
Sweezy, P., & Baran, P. (1966). *Monopoly capitalism: An essay on American economic and social order*. Monthly Review Press.
UNCTAD. (2013). *Global value chains: Investment and trade for development*. United Nations.
UNIDO. (2021). *World manufacturing production report*. United Nations Statistical Division.

Xu, Z. (2021, March 1). The ideology of late imperialism. *Monthly Review*. https://monthlyreview.org/2021/03/01/the-ideology-of-late-imperialism/. Accessed 15 Aug 2021.

Yeros, P., & Jha, P. (2020). Late neo-colonialism: Monopoly capitalism in permanent crisis. *Agrarian South: Journal of Political Economy, 9*(1), 78–93.

CHAPTER 3

Global Value Chains—A Panacea for Development?

Petra Dünhaupt and Hansjörg Herr

Introduction

Development policy discourse has changed tremendously in recent decades, as have economic policy recommendations in general. The spectrum ranges from a policy of import substitution in the 1950s to radical market liberalization in the 1980s and 1990s. Whereas in the post-World War II era developing countries relied heavily on industrial policy to achieve post-colonial independence and also social development, the mere word and especially the strategy of industrial policy was frowned upon by the 1980s (Andreoni & Chang, 2019). Ironically, developed countries have always practiced far-reaching industrial policy in areas allowed

For helpful comments and suggestions, we would like to thank Clare Hollins, Fabian Mehl and Christina Teipen.

P. Dünhaupt (✉) · H. Herr
HWR Berlin (Berlin School of Economics and Law), Berlin, Germany
e-mail: petra.duenhaupt@hwr-berlin.de

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_3

by international treatises.[1] The financial and economic crisis of 2008–2009 then opened the way for a comeback of industrial policy (Chang & Andreoni, 2016). The rapid development of China, which has become a serious competitor to the U.S. and Europe in many sectors and has made massive use of industrial policy for catching up, certainly also plays a role for the renewed interest in industrial policy in the Global North.

During the last decades in particular, national governments as well as development agencies and international organizations have increasingly turned to participation in global value chains (GVCs) as a development strategy (Gereffi, 2013; Werner et al., 2014).[2] What makes this concept so appealing is the oft-mentioned argument that, compared to the past, an entire industry does not have to be built up; rather, countries can specialize in the production of individual tasks or assembly activities in order to integrate themselves into international trade (Baldwin, 2011). These tasks can be simple from the perspective of the needed qualification of the workforce and can be produced in big quantities for one or more companies in subsidiaries of multinational enterprises (MNEs) or legally independent subcontractors. This allows the MNEs at the top of the value chain, also known as "lead firms", to exploit economies of scale and cut costs in addition to benefiting from the low wages and in many cases low ecological and social standards found in the Global South.

The World Bank enthuses about GVCs, including in its World Development Report 2020. Among other things, GVCs are credited with enabling "an unprecedented convergence: poor countries grew faster and began to catch up with richer countries. Poverty fell sharply" (World Bank, 2020, p. 1). The World Bank also attributes many other positive effects to GVCs, and therefore recommends trade liberalization, not only for manufactured goods, but also for services and agriculture.

Other authors, such as Rodrik (2018, p. 14), are less optimistic about the role of GVCs as a development panacea, since:

[1] For the case of Germany, refer to Dünhaupt and Herr (2020a, 2020b).

[2] When we speak about integration of countries in the Global South in GVCs we speak of vertical value chains which are driven by cost advantages of countries in the Global South and not specific knowledge and capabilities of suppliers which can also be a motivation of lead firms which organize GVCs to outsource. Also, when we speak of Global South and Global North this is not a strictly geographical concept. Countries in the Global South can in certain industries have own lead firms which outsource to other countries. China is here the showcase.

> The affected sectors and activities remain a very small part of the domestic economy. New capabilities and productive employment remain limited to a tiny sliver of globally integrated firms.

Hence, the question that arises is: are the development effects of integration into GVCs large enough to warrant trade liberalization, as recommended by the World Bank? Or should countries—as Rodrik (2018) recommends—rather focus on domestic integration and thus concentrate on domestic-oriented industrialization?

In order to answer this question, this article is structured as follows: in the second part, we show how development policy recommendations and strategies have changed since World War II, and now favor integration into GVCs. In the third part, we move away from a firm focus and examine whether countries have succeeded in industrializing and how increased global competition affects terms of trade. In the fourth part, we examine whether there is a relationship between participation in GVCs and macroeconomic indicators. The last part concludes.

Shifting Development Strategies—from Import Substitution to Export Orientation to Global Value Chains

Import Substitution Development Strategy

With the end of colonial rule after World War II and the striking disparities in income and development between the Global North and Global South, many developing countries began to practice one or another variant of import substitution policies. Latin American countries were at the center of this development strategy. The main goal was to transform the structure of the economy away from a backward (agrarian) economy and dependence on the export of mineral resources toward an industry capable of producing industrial goods. The development strategy popular after World War II assumed that unregulated markets will not lead to catching up, as it was widely believed that "the market was an instrument that kept poor countries poor and rich countries rich" (Bruton, 1998, p. 905). Three strands of thinking were decisive in this development strategy (see for details Bruton, 1998).

First, based on Prebisch (1950) and Singer's (1949) research, it was found that during the decades before the 1940s the terms of trade

for developing countries showed a secular decline. The widely accepted explanation was that high productivity increases in the Global North's manufacturing sector did not lead to falling prices for manufactured goods, as the monopoly power of firms and strong trade unions kept wages and profits, and thus prices, high. In other words, the expected mechanism—that high productivity increases in countries' export sector leads to falling prices and falling terms of trade—would not work. At the same time, developing countries experienced low productivity increases in their export sectors, mainly agriculture and minerals, while surplus labor from the big traditional subsistence sector and weak trade unions also kept wages very low (Lewis, 1954). Further, it was believed that the income elasticity of demand for agricultural and mineral products was lower than for manufactured goods. The expected consequence was that developing countries would run current account deficits. As the efficiency of exchange rate adjustments were doubted from this effect, low growth in developing countries was expected. The solution was seen in building up an own manufacturing sector, by violating the market mechanism in order to support the domestic manufacturing sector and its protection via tariffs and quotas, especially in the field of durable consumption goods import.

Second, capital formation was understood to be particularly important as the source of increasing productivity and thus as a trigger for growth. It was assumed that technology embodied in capital goods could simply be imported and applied as it was in the country of origin (Shapiro, 2007). Export growth or even current account surpluses for the stimulation of demand and output were not part of the import substitution strategy. Lack of domestic saving and thus inadequate capital formation was seen as the problem. Foreign aid was therefore welcomed as an instrument to stimulate domestic capital formation, and was very much pushed by the World Bank in the 1960s (for a critique of the savings-gap approach, see Easterly, 1999). Of course, the huge private capital inflows and current account deficits that would later emerge from the 1970s onwards in some of the countries in the Global South could not be imagined at that time.

Third, there was the idea of replicating the Global North. Instead of continuing to import manufactured goods and export primary commodities, countries should industrialize themselves. Inspired by Lewis (1954), there was the belief that one day, by promoting a modern capitalist sector with high growth, the latter would be able to absorb the surplus

labor from the subsistence sector, which would one day disappear and be replaced by the capitalist sector.[3]

Although none of the countries practicing import substitution industrialization has ever reached a stage of full convergence where a modern productive capitalist sector replaced the traditional backward sector, some countries were able to achieve remarkable productivity and growth rates until the 1970s. This together with social policies allowed countries to increase life expectancy, decrease child mortality, and achieve other positive social effects (Bruton, 1998). However, in 1979 the U.S. implemented a very restrictive monetary policy to combat inflation, triggering a severe worldwide recession. As a result, most countries in Latin America, after deregulation of international capital flows and only one decade of high private capital inflows, experienced deep balance of payments crises; the debt crisis of the 1980s was then the final nail in the coffin of the strategy of import substitution industrialization (Shapiro, 2007).

By contrast, East Asian countries pursued a dual strategy after World War II, since they not only supported domestic industrialization via import substitution policies and comprehensive industrial policy, but also massively promoted exports starting with simple manufactured goods. Export promotion in these countries, and in many cases export surpluses, not only stimulated domestic demand; rather, the export successes of sectors and companies also became a criterium for successful industrial policy and government support. East Asian countries supported the internationally competitive and, in many cases, newly created industries whereas Latin America in many cases did the opposite (Stiglitz, 1996). Based on their low wages, East Asian countries also benefited from a new trend already starting in the late 1960s, when major retailers and brand-name manufacturers in the U.S. and Europe began withdrawing from their own production and sourcing from independent manufacturing suppliers in overseas developing countries (Milberg et al., 2014).

The 1980s and the paradigm shift to export-oriented industrialization

Before we discuss the paradigm shift to export-oriented industrialization, let us look more closely at how trade and foreign direct investment

[3] According to Lewis (1954), workers from the subsistence sector come from diverse backgrounds, which include subsistence agriculture, casual labor, petty trade, domestic services, but also women in households. The capitalist sector is characterized among other things by profit-oriented firms with employees, an organized market for labor, capital and credit and the accumulation of reproducible capital goods.

(FDI) developed from 1970 to 2019. From the 1970s onwards, international trade in percent of GDP substantially increased worldwide. Figure 3.1 shows the importance of goods exports as a share of GDP for various world regions for these years. There was a first wave of increasing trade integration in the 1970s and a second much stronger wave during the decade before the financial crisis of 2008–2009 and the subsequent Great Recession. Then there was a general break in the trend, with trade no longer increasing faster than GDP. Exports-to-GDP ratios even dropped substantially in Africa and Asia, indicating the poor economic development of the former and the intensifying trade war between the U.S. and China in the latter. Latin American development during this period reflects the "lost decade" of the 1980s, with massive opening up of trade following their departure from import substitution strategies. From the mid-1990s until the Great Recession, their export-to-GDP

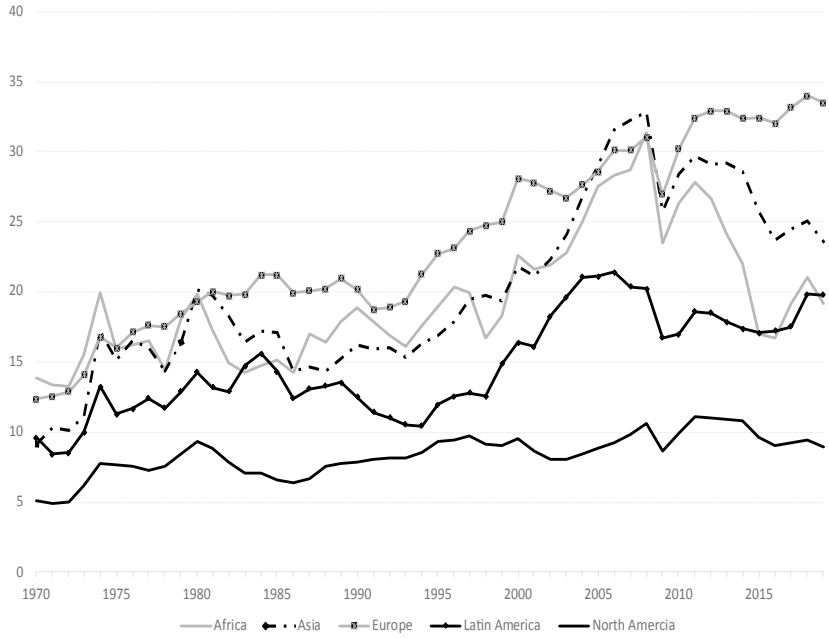


Fig. 3.1 Goods exports in percent of GDP, various world regions, 1970–2019 (*Source* UNCTAD Statistics)

shares again increased sharply. North America had relatively low export shares, mainly because of the U.S.'s size, whereas Europe had a high share because of the many relatively small countries and the market result that, as a rule, small countries tend to be deeper integrated into international trade than big countries. But also, for these regions stagnating or falling export-to-GDP ratios can be observed. For the world as a whole between 1990 and 2008, real GDP expanded at an annual rate of 3.2%, while world trade volume increased at an annual rate of 6%. After 2008 world trade did not grow faster than world GDP (Davies, 2013). Two reasons seem to be important to explain this break in international trade dynamics. First, many countries gave up aggressive export-led growth strategies (see below); second, since the financial crisis more and more protectionist tendencies and especially a trade war between the U.S. and China developed.[4]

To secure access to raw materials, companies from the Global North have already maintained enterprises around the world since the nineteenth century. By the mid-twentieth century, it was the policy of import substitution, accompanied by high import tariffs and import quotas that led to industrial manufacturing MNEs establishing production facilities in all parts of the world through FDI, thereby controlling the entire production process (Milberg et al., 2014). However, FDI flows in the 1950s and 1960s were small. Figure 3.2 displays FDI inflows in percent of GDP for various world regions for the years 1970 until 2019. It shows that even until the early 1990s, FDI inflows as a share of GDP were relatively small in all world regions, at less than 1% of GDP. However, the liberalization and deregulation of international capital flows gaining speed in the 1980s and step-for-step for most countries in the Global South by the 1990s led to a massive increase in the level of FDI inflows. It also becomes apparent that FDI flows are very volatile and pro-cyclical, increasing in boom periods and shrinking during global downturns. The enormous spikes shown in the figure can be explained by mergers and acquisitions

[4] Global Trade Alert (2021) reports that after 2008, a sharp increase of worldwide government interventions which have negative economic consequences for other countries can be observed—a total of 21,170 interventions between 2008 and 2021, from annually 1477 in 2009 to 2550 in 2020.

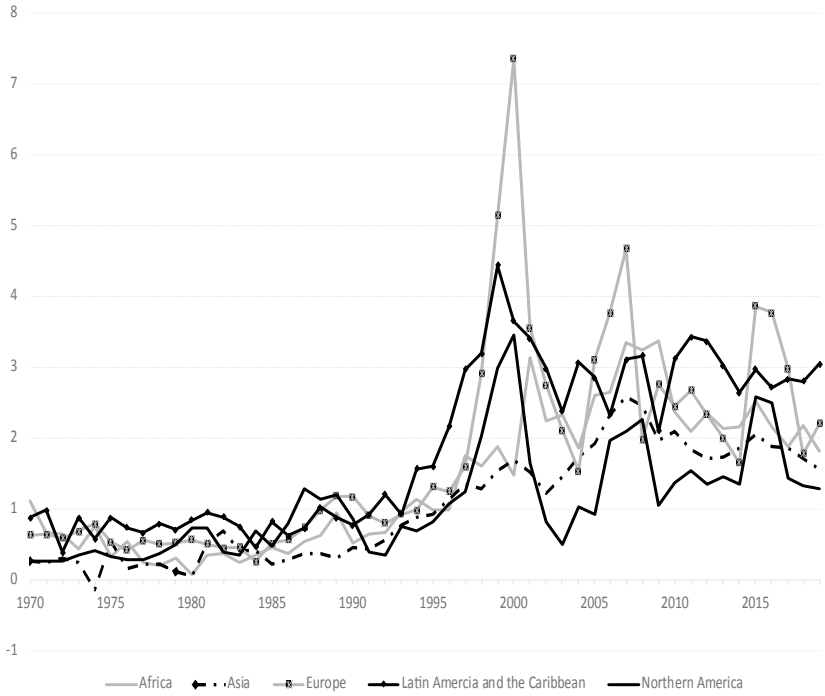


Fig. 3.2 Foreign direct investment inflows in percent of GDP, various world regions, 1970–2019 (*Source* UNCTAD Statistics)

(M&As) rather than by greenfield investment.[5] Volatility and level of FDI flows also remained high after the 2008–2009 financial crisis.

The paradigm of export-oriented industrialization prevailed in the late 1970s and in the 1980s, many developing countries shifted strategy away from import substitution policies. Successful Asian countries (first Japan, and then especially the 'Asian Tigers' Hong Kong, Singapore, South Korea, and Taiwan) utilized export-oriented development policy from the beginning for their very effective catching up strategy. But these countries also combined export orientation with import substitution and massive industrial policy, supporting own national champions,

[5] The hostile takeover of Mannesmann by Vodafone in 2000, for example, is—at 180 billion euros—still considered the most expensive takeover of all times (Spinnler, 2020).

establishing completely new industries, and developing new comparative advantages with the aim of increasing domestic value creation and international competitiveness (Wade, 2003). The new export orientation thus followed a different philosophy. It was understood that existing comparative advantages should be used and supported by foreign capital. To develop national champions and new comparative advantages in the framework, comprehensive, but also industry-specific, industrial policy disappeared. Politically this rethinking took place together with the victory of neoliberalism (Gereffi, 2013), which started with the election of Margaret Thatcher (1979) in Great Britain and Ronald Reagan (1980) in the U.S. International organizations embraced the idea of the *Washington Consensus*, which stressed privatization, deregulation, and liberalization of markets as well as the important role of FDI for development (Williamson, 1989). Due to the debt crisis of the 1980s, many developing countries, especially in Latin America (and after the Asian crisis in 1997 also a number of Asian countries) had to turn to the International Monetary Fund (IMF) and the World Bank. Both institutions began linking the provision of help in form of loans to the implementation of structural adjustment programs. These programs included the liberalization of trade, financial markets, the opening for FDI, as well as cuts in public spending (Chang, 2006; Herr & Priewe, 2005; Summers & Pritchett, 1993).

The benefits of economic openness and the new export strategy were underpinned by three strands of argument (Palley, 2011). The first line of argument relates to the Heckscher-Ohlin theory of comparative advantage, which states that countries with the same technological knowledge, but different factor endowments can benefit from free trade, if they concentrate on the production of the good which uses their abundant factor extensively. Compared to the approach of David Ricardo, who stressed the importance of different technical and educational development stages as the basis of comparative advantages, the reliance on this theory is revealing. By using Heckscher-Ohlin the main problem of development, i.e., reaching the technological and skill-level of advanced countries, is excluded by definition. The second line of argument relates to the problem of rent-seeking by companies in the Global South, which was closely associated with the strategy of import substitution and import licenses and thus protection from foreign competition, and which could be wiped out by free trade (Krueger, 1974). Rent-seeking by companies in the Global North via technological leadership and patent law

was (again, revealingly) not a point in the debate. A third line of argument pointed to a positive link between free trade and economic growth. In the neoclassical paradigm any increase in efficiency as a result of better supply conditions leads to higher growth. The demand side of economic growth and development becomes completely neglected in this framework. In addition, in an influential paper in the early 1990s, Grossmann and Helpman (1991) argued that integration in global trade would lead to productivity growth through technology diffusion and knowledge spillovers. Empirically, advocates of export-oriented industrialization seemed to be proven right by the success of the East Asian Tiger countries. But these countries, as mentioned, not only relied on export-driven growth, but also made massive use of industrial policy instruments, which has often been overlooked in the debate (Amsden, 1989; Chang, 2003; Stiglitz, 1996).

The 1990s and the Acceleration of Trade Fragmentation in the Form of GVCs

While companies and retailers initially outsourced entire production operations, by the early 1990s trade started to become increasingly fragmented (see also Chapter 1 in this book). Instead of trading only finished products, trade in components and intermediate products increased significantly. It was also no longer just simple goods such as clothing and toys that were outsourced to countries in the Global South, as it had been in the beginning. The range of industries involved increased and simple tasks for high-tech goods, for example in the production of mobile phones, as well as services were targeted by outsourcing activities (Gereffi, 2013). The trend was spurred by two further developments: innovation in transportation and information technology, leading to a sharp drop in these costs, as well as international trade and capital flow liberalization, including the creation of the World Trade Organization (WTO) in 1994. Today, the majority of global trade—estimates vary between 50 and 65%—takes place through GVCs (Dollar, 2019; World Bank, 2020).

GVCs vary from industry to industry. The GVC literature has put the spotlight on firm relationships—between the so-called lead companies, in

most cases MNEs that establish governance relationships[6] with foreign suppliers (Dallas, 2014). A lead company usually has a lot of power vis-à-vis suppliers. It decides which companies get access to a GVC in the first place and it also massively influences suppliers' chances for "economic upgrading", which refers to the ability to either realize more value added within one's own chain—be it through process, product or even functional upgrading—or even move to a new industry where more added value can be achieved (Humphrey & Schmitz, 2002).

Since the late 1990s, GVCs have also started to play a role in development policies via international organizations and foreign donors' national development agencies. GVC participation was considered an important element of national development strategies, but the main aspects of GVCs that were adopted are very market-friendly and focus on the export sector. It was hoped that GVCs would not only create market access for firms in global markets and support upgrading (Staritz, 2012), but also that GVCs would, starting from the microlevel, transform whole industries and countries (Dallas, 2014). This idea is also stressed by Gereffi et al. (2005, p. 79):

> The evolution of global-scale industrial organization affects not only the fortunes of firms and the structure of industries, but also how and why countries advance – or fail to advance – in the global economy.

Macroeconomic effects have been studied only more recently (Carballa Smichowski et al., 2020), whereas if the focus is only on individual firms and sectors, conclusions for macroeconomic developments are not possible. Baldwin (2011) argues that while industrialization became easier in times of GVCs, because countries only have to *join* a supply chain instead of *building* a whole industry, it also became less meaningful. Gereffi (2013, p. 10), not only stressing the positive effects of GVCs, argues in the same direction and points out that export-oriented industrialization (EOI) is no guarantee for successful development:

> If countries are only engaged in the simplest forms of EOI, such as assembling imported parts for overseas markets in export-processing zones, then

[6] The governance in GVCs represents the "authority and power relationships that determine how financial, material, and human resources are allocated and flow within a chain" (Gereffi, 1994, p. 97).

> they would develop neither the institutions, nor the know-how, nor the consumer markets needed to create and sustain entire industries.

It is, of course, possible that individual firms that manufacture for export will become more productive. However, whether these firms or sectors will remain isolated and create "enclave industrialization" without many positive spillovers to the rest the economy remains an open question.

Economic Development Related to Global Value Chains

In this section we will discuss macroeconomic effects of GVCs further. First, the question is asked whether GVCs led to industrialization in the Global South. Second, development of market concentration and connected with this the possibilities of rent-seeking are analyzed. Third, it is shown how terms of trade for different product categories developed.

Global Value Chains and Industrialization

At first glance, developing countries seem to have succeeded in industrializing, integrating into the international distribution of labor in the manufacturing sector, and also in breaking away from the sole dependence on primary goods exports. The aim of the import substitution period, i.e., industrialization, seems to have been—at least to a large extent—realized after the 1990s. In 1995, one quarter of all exported manufactured goods originated in developing countries (Fig. 3.3). In 2019, developing countries' share of world exports of manufactured goods even amounted to 45%. However, what also becomes apparent from the figure is the fact that this tremendous increase is mainly attributable to China—"the world's factory". Excluding China, the increase was far less impressive. Developing countries' share still accounted for approximately 27% of all manufacturing goods exports in 2019, and hence was almost the same as in 1995.

Table 3.1 gives a more detailed picture of the development and importance of the manufacturing sector for economies in different world regions. At the world level, manufacturing value added (MVA) as a share of domestic GDP almost did not change and increased only slightly from 17% in 1970 to 18% in 2013. However, the development differs in the

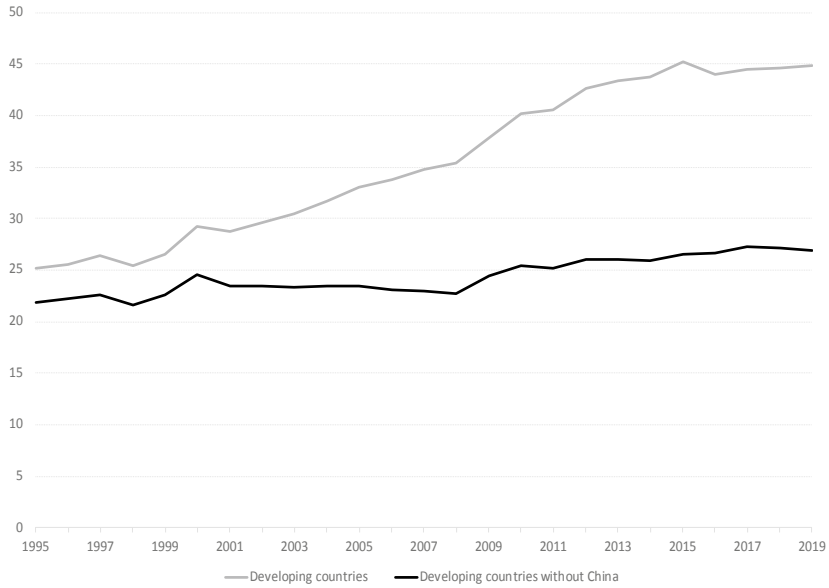


Fig. 3.3 Developing countries' share of world exports of manufactured goods, 1995–2019 (*Note* Manufactured goods [Standard International Trade Classification {SITC} 5 to 8 less 667 and 68]. *Source* UNCTAD Statistics [2021])

Table 3.1 Manufacturing Value Added (MVA) in percent of domestic GDP; various world regions, 1970–2013

	World	*United States*	*Western Europe*	*Latin America and Caribbean*	*Asia (without China)*	*China*	*Sub-Saharan Africa*
1970	17	13	22	20	16	9	14
1980	16	12	20	20	16	16	15
1990	16	12	19	19	19	18	15
2000	17	13	18	19	19	29	13
2010	28	13	18	17	21	36	11
2013	18	13	18	16	20	36	11

Source Rodrik (2015)

various parts of the world. In the U.S., the share of MVA as a percent of GDP was 13% in 1970, and remained almost the same in 2013. In the same period, the share of MVA in GDP deceased in Western Europe from 22% in 1970 to 18% in 2013, in Latin America and the Caribbean from 20 to 16% and in Sub-Saharan Africa from 14 to 11%. In Asia without China, the MVA shares increased from 16% in 1970 to 20% in 2013. Only China experienced a tremendous increase from 9% in 1970 to 36% in 2013 (Rodrik, 2015). Rodrik also shows that in 2013, the U.S. had a share of world MVA of 19%, Western Europe 13%, Latin America and the Caribbean 6%, Sub-Saharan Africa 1%, China 18% and the rest of Asia 26%. Hence, Africa never managed to industrialize to any relevant extent; indeed in Latin America and the Caribbean, as well as in Africa, there was even deindustrialization. Only Asian countries managed to industrialize to a relevant extent and the U.S., in contrast to widespread perception, actually remained relatively industrialized. Also, the countries not covered by the groups mentioned in Table 3.1, mainly countries of the former Soviet Union, deindustrialized substantially and in 2013 only realized a share of world MVA of 17%. This means the concerns of economists like Prebisch and Singer, that developing countries would not be able to industrialize to levels comparable with developed countries for many parts in the world, could not be removed.

There appear to be major regional differences in how countries in different regions of the world are integrated into GVCs: according to the World Bank (2020), countries in East Asia, North America, and Western Europe produce sophisticated industrial goods and services, and are integrated into complex GVCs with their innovative activities, while countries in Africa, Latin America, and Central Asia specialize mainly in extracting commodities, and some in limited manufacturing. This distribution is reminiscent of the "smile curve", the image that is frequently used when describing who takes on which tasks within a value chain, and which shows that the tasks with high value added take place in the Global North, while tasks with low value added are outsourced to the Global South (compare Chapter 1 of the book).

Figure 3.2 shows that FDI inflows to the Global South, especially Africa and Latin America, increased in the 1990s—pushed by the Washington Consensus which stressed opening up for FDI inflows as a key development policy. Yet despite high FDI inflows, successful industrialization did not take place. To understand this, it should be made clear that not all FDI adds to industrialization in the host country. High FDI

inflows should not be mixed up with high gross capital formation. In case of M&As there may be only a change in ownership not leading to new investment in machines or new technologies. Also, FDI can crowd out relatively high value adding domestic investment. So while FDI inflow to Latin America was high in the 1990s, gross capital formation was low or stagnated (Akyüz, 2017, pp. 178ff.). Last but not least the structure of FDI inflows plays a role. There is evidence that FDI inflows in the manufacturing sector have higher effects on productivity development than FDI inflows in the real estate sector, the financial sector, the retail sector, or the service sector in general. In addition, investment in the service sector is less export-oriented (Alfaro & Charlton, 2007; Mencinger, 2003; Peărić et al., 2021). This is highly plausible. FDI in the real estate sector is often speculative and increases asset bubbles with negative effects for long-term economic development. FDI in the retail sector can lead to a stimulation of imports as big retail companies source worldwide rather than locally. Moreover, the dominance of foreign financial institutions in domestic markets does not stimulate domestic credit expansions as foreign financial institutions lack the necessary knowledge of the domestic market or may shy away from risk and tend to channel domestic monetary wealth to financial markets they know in developed countries (Stiglitz & Greenwald, 2003).

Between 2010 and 2019 the value of worldwide annually announced greenfield FDI fluctuated around USD 800 billion. The net value of annually announced net cross-border M&As from 2010 to 2014 was around USD 400 billion, jumped to around USD 800 billion, and dropped in 2019 to USD 500 (UNCTAD, 2020, p. 16). As these data show, a substantial portion of FDI flows is minimally beneficial M&As. From the greenfield investments, the average of the years 2018 and 2019 went first of all USD 445 billion to the service sector, followed by the manufacturing sector with USD 435 billion and the primary sector with USD 33 billion. Among the top 10 industries for greenfield investment in 2018 and 2019 were construction, accommodation, and food service activities, information and communication, or financial and insurance activities, sectors which are not in the center of manufacturing (UNCTAD, 2020, p. 16).[7]

[7] The other sectors were electricity, gas, steam and air-conditioning supply, coke and refined petroleum products, motor vehicles and other transport equipment, computer,

Concentration Trends in Selling Markets of Lead Companies

Rent-seeking capacities of lead firms in GVCs depend, besides monopsony constellations on their supply side, on the market constellation in the markets they sell their products. In case of a monopoly position in a big market the power of a lead company for rent-seeking is the highest. In case of pure and monopolistic competition the big number of firms and the easy entry and exit of firms in the market prevents any rent-seeking. Between very competitive markets and a monopoly there are various degrees of oligopolistic markets which can be measured by concentration indicators.

Deregulation and liberalization of international trade and capital flows have fueled two opposing trends, which also affect GVCs. On the one hand, there is increasing consolidation at the corporate level. A giant takeover wave through M&As has contributed to a rise in global market concentration. Nolan et al. (2008) demonstrate for the example of four sectors (aerospace, automobiles, telecommunications, beverages) that not only has the degree of concentration at the level of lead firms risen sharply, but that this effect extends throughout the entire supplier network. The increasing monopolization trend is particularly pronounced in the U.S. Stiglitz (2019, p. 55) reports that the number of competitors in U.S. markets has been falling and the market share of the top two or three firms has been increasing. Between 1997 and 2012 in 75% of industries such concentration processes in the U.S. took place with the effect of a concentration of profits in the most powerful companies.

Concentration processes in final consumer markets such as the U.S. does not mean that concentration in general has increased. The liberalization of trade and capital flows and the intensification of globalization gives grounds to expect more competition in many markets. To determine how the global level of concentration has changed around the world, we follow Mayer et al. (2002) and Milberg and Winkler (2013) and measure market share concentration in world exports for several industries with a modified Herfindahl-Hirschmann Index (HHI). While the HHI usually takes into account the number of firms in an industry, the number of

electronic, optical products and electrical equipment, chemicals and chemical products and transportation and storage.

countries exporting a certain product is considered here.[8] Evaluations by government agencies are helpful for judging the index, even if they refer to the degree of concentration at the firm level. In the U.S., the competition authorities consider an HHI of 2500 already presenting a highly concentrated market (Milberg & Winkler, 2013).

Table 3.2 displays the development for export market share concentration for a selection of industries, designated at the three-digit sector level using the Standard International Trade Classification (SITC) for the years 1980, 1990, 2010, and 2018. As can be expected, the degree of concentration of exporting countries of a good has declined over the observation period, i.e., for 79% of products in all sectors, which means that a greater number of countries are now exporting these goods. This development can be attributed to increasing trade integration, triggered among other things by lower transport costs. The trend toward a decline in export market share concentration runs through all sectors' product categories, from primary goods to low-technology manufacturing goods to high-technology manufacturing goods. But a further development is striking: even if there was an overall decline in the degree of concentration between 1980 and 2018, the degree of concentration in some—mostly low-technology manufacturing sectors—intensified (again) after 1990.

Conventional wisdom suggests that when barriers to entry are low and competition intensifies, prices tend to fall. However, prices can also fall in cases of increasing concentration. If one country or producer can achieve high economies of scale and average costs and prices continuously fall, other suppliers have little chance of entering the market or are kicked out of the market, because they can no longer compete. This is what happened after China's accession to the WTO in 2001 and China taking over the role as "world's factory". Let us take the case of the garment

[8] We calculate the modified HHI for each product by taking the sum of the squared values of the market shares of all countries that export a particular product, and by multiplying the sum by 10,000:

$$HHI_i = \sum_c \left(\frac{EX_{ci}}{EX_{wi}} \right)^2 * 10{,}000$$

where EX represents the export of product i of country c as a share of world w exports EX of product i. The HHI ranges between $10{,}000/n$—which would indicate that each country *(n = number of countries)* has the same export market share in product i's total exports, and 10,000, meaning that only one country exports product i.

Table 3.2 Export-market share concentration by Standard International Trade Classification, 1980–2018[a]

SITC Code[b]	*Industry*	*1980*	*1990*	*2010*	*2018*
1	**Beverages and Tobacco**				
111	Non-alcoholic beverages	1063	1083	644	592
112	Beverages	1756	1788	1201	1135
121	Tobacco, unmanufactured	3089	1415	887	712
2	**Crude Materials, inedible, except fuels**				
261	Silk	3163	7131	6614	4532
262	Cotton	4843	1822	2100	2173
266	Synthetic fibers suitable for spinning	1328	910	791	793
4	**Animal and Vegetable oils, fats, and waxes**				
411	Animal oils and fats	2648	1511	786	685
5	**Chemical and Related Products**				
541	Medicinal and pharmaceutical products	972	868	986	1057
582	Condensation, polycondensation, and polyaddition products	1387	1092	654	601
6	**Manufactured Goods Classified Chiefly by Material**				
611	Leather	813	839	827	676
625	Rubber tires	1094	836	612	625
651	Textile Yarn	796	600	718	900
652	Cotton fabrics, woven	700	597	1793	2346
633	Cork manufactures	4702	4602	3647	3436
672	Ingots and other primary forms, of iron or steel	1265	795	585	501
673	Iron and steel bars, rods, angles, shapes, and sections	1035	605	519	512
7	**Machinery and Transport Equipment**				
721	Agricultural machinery	1165	947	908	825
722	Tractors	1671	1358	873	907
736	Metal cutting machines tools	1431	1235	1098	1050
751	Office Machines	1951	1664	1651	978
752	Automatic data processing machines	1814	1117	2519	1938
761	Television receivers (Monitors and projectors)	1684	761	1156	1541

(continued)

Table 3.2 (continued)

SITC Code[b]	*Industry*	*1980*	*1990*	*2010*	*2018*
764	Telecommunication equipment	1110	1132	1358	1944
771	Electric power machinery	1028	773	991	983
773	Equipment for distributing electricity	995	698	556	583
775	Household type, electrical, and non-electrical equipment	1059	972	1229	1401
781	Passenger motor cars	1702	1537	1074	870
785	Motorcycles	4179	1839	1121	1745
791	Railway vehicles & associated equipment	1065	838	966	861
792	Aircraft & associated equipment, and parts thereof	3206	2723	1850	1563
793	Ships, boats, and floating structures	1375	1115	1438	912
8	**Miscellaneous Manufactured Articles**				
831	Travel goods, handbags, and similar containers	1305	1046	2470	1793
842	Outer garments, men's and boy's of textile fabrics	729	497	1290	1141
844	Under garments of textile fabrics	1258	615	1218	1192
851	Footwear	1995	1110	1794	1333
873	Optical instruments and apparatus	1353	1341	746	955
894	Baby carriages, toys, games, and sporting goods	958	749	1823	1876

[a]Value of 10,000 is the highest value in case only one country is exporting the good
[b]SITC Classification Revision 2 was chosen to allow comparison of a time period as long as possible. The dataset contains 236 sectors
Source Data: UN Comtrade via World Integrated Trade Solutions (WiTS)

sector (compare SITC Code 842 and 844) as an example. The global garment industry was for a long time highly regulated.[9] The final liberalization of the sector in 2005 led to significant shifts in production and a high concentration of production in fewer countries, most notably China, where in 2018 almost 32% of all garments exported worldwide were produced. Many countries could not withstand the low-cost competition from China based on economies of scale and superior technology and

[9] The famous Multi-Fiber Agreement (MFA), in force from 1974 until 1994, gave quotas for exports of garment and textiles producing countries in the Global South. It was replaced by the Agreement on Textiles and Clothing (ATC), in force until 2005, which phased out all quotas.

were forced out of the market. This was particularly the case in Latin America. However, the "China effect" is not only seen in the apparel sector. In 2018, in 22% of all sectors, China is responsible for more than 20% of all exports.

The conclusion is that globalization increased competition in most of the markets, but there are strong tendencies toward concentration of exporting countries of a good in some markets mainly because of the China effect. Overall, intensified global competition goes along with increasing concentration, for example in the U.S. This very much supports the theoretical conclusion that in GVCs lead firms, usually MNEs, are in a double-rent-seeking position—an oligopoly constellation on the selling side and intensive competition or even monopsony constellation on the supply side.

Terms of Trade Effects of Different Groups of Goods

For the U.S., Milberg (2008) showed that import price deflation over the period 1986–2006 was very pronounced in sectors that show both fast technological development and in which GVCs play an important role. In fact, he found that over this period, real import prices in these sectors declined for the U.S. by 40%. These calculations also correspond with recent calculations by Mark Anner (compare his chapter in this volume), who has shown that real import prices of apparel items into the U.S. have fallen by 60% over the past 30 years.

Table 3.3 shows real import price changes between 2000 and 2018 for goods imports from the rest of the world to the European Union for selected industries. Particularly in the case of manufactured goods, there was a considerable decline in prices in some industries. The decline in prices was especially pronounced for the machinery of all kinds, where real import prices fell by more than 40% during the period under observation. However, we can also observe a sharp drop in prices for low-technology goods such as textiles (−32%), apparel (−28%), footwear (−10%) and miscellaneous manufactured articles (−4%), which includes toys. Also noteworthy is the substantial decrease in the prices of electronic goods (−57%) and computers (−48%).

On the other hand, real import prices of primary products increased during the period under investigation, as for example in the case of

Table 3.3 Real import price changes between 2000–2018, European Union

SITC Code	*Industry*	*price change in %*
73	Metalworking machinery	−58.48
77	Electrical machinery, apparatus and appliances. n.e.s., and electrical parts thereof (including non-electrical counterparts, n.e.s., of electrical household-type equipment)	−57.06
75	Office machines and automatic data processing machines	−47.95
72	Machinery specialized for particular industries	−46.08
87	Professional, scientific and controlling instruments and apparatus, n.e.s	−43.84
65	Textile yarn, fabrics, made-up articles, n.e.s., and related products	−31.96
93	Special transactions and commodities not classified according to kind	−31.78
59	Chemical materials and products, n.e.s	−31.48
25	Pulp and waste paper	−29.08
74	General industrial machinery and equipment, n.e.s., and machine parts, n.e.s	−28.75
84	Articles of apparel and clothing accessories	−27.69
58	Plastics in non-primary forms	−25.90
71	Power-generating machinery and equipment	−25.60
24	Cork and wood	−20.56
12	Tobacco and tobacco manufactures	−20.55
78	Road vehicles (including air-cushion vehicles)	−13.34
27	Crude fertilizers, other than those of division 56, and crude minerals (excluding coal, petroleum and precious stones)	−11.77
85	Footwear	−10.18
63	Cork and wood manufactures (excluding furniture)	−10.04
62	Rubber manufactures, n.e.s	−8.11
26	Textile fibers (other than wool tops and other combed wool) and their wastes (not manufactured into yarn or fabric)	−7.64
61	Leather, leather manufactures, n.e.s., and dressed fur skins	−7.32
89	Miscellaneous manufactured articles, n.e.s	−4.15
57	Plastics in primary forms	−2.68
64	Paper, paperboard, and articles of paper pulp, of paper or of paperboard	0.56

(continued)

Table 3.3 (continued)

SITC Code	*Industry*	*price change in %*
66	Non-metallic mineral manufactures, n.e.s	6.38
69	Manufactures of metals, n.e.s	8.18
83	Travel goods, handbags, and similar containers	8.58
07	Coffee, tea, cocoa, spices, and manufactures thereof	15.89
05	Vegetables and fruit	34.18
67	Iron and steel	37.93
76	Telecommunications and sound-recording and reproducing apparatus and equipment	43.14
54	Medicinal and pharmaceutical products	48.06
34	Gas, natural and manufactured	58.80
33	Petroleum, petroleum products, and related materials	62.16
11	Beverages	82.96
97	Gold, non-monetary (excluding gold. ores and concentrates)	88.89
28	Metalliferous ores and metal scrap	94.19
32	Coal, coke, and briquettes	95.00
96	Coin (other than gold coin), not being legal tender	133.40
41	Animal oils and fats	193.57
79	Other transport equipment	391.85

Note GDP deflator for the European Union; index 2015 = 100; n.e.s. = not elsewhere specified; SITC classification revision 4, two-digit-level
Source Import data derived from Eurostat; GDP deflator Federal Reserve Bank of St. Louis

coffee,[10] tea, cocoa (+16%), vegetables and fruit (+34%), iron and steel (+38%), gas (+59%), and petroleum (+62).

This development between 2000 and 2018 is certainly in contrast to what Prebisch and Singer predicted in the 1950s, namely that prices for primary products would relatively fall and prices for manufacturing products would relatively rise.

The explanation for the relative price increase of primary products is manifold. In general, prices for primary goods are relatively volatile because supply is inelastic in the short term and demand as well. Thus, shocks like bad harvests lead to price hikes. In addition, some commodities have become objects of speculation. Moreover, for some primary

[10] In the case of coffee, however, it must be mentioned that coffee prices were already in crisis and extremely low in the early 2000s, the starting period of our study (for an overview about the development of coffee prices, compare Amrouk, 2018).

products, the relative increase in prices can be found in the scarcity of some natural resources and the establishment of supplier cartels, the most famous being the Organization of the Petroleum Exporting Countries (OPEC). These countries were able to exploit the gifts of nature. However, a different question is who gets the rents from natural resources. In many cases the companies realizing rents are MNEs, as for example in the oil sector of Nigeria. Or as the United Nations Economic Commission for Africa (UNECA, 2016) reports, 90% of the income derived from coffee goes to the countries where MNEs have their headquarters, rather than to the countries where the coffee is produced and exported.

There are various theoretically possible explanations for the enormous drop in relative import prices that can be observed in certain manufacturing sectors. First, better technology and exploiting economies of scale increased productivity; second, lower costs caused by factors other than productivity increases, for example, lower wage costs; third, higher competition. The last two points are linked to GVCs. Shifting manufacturing tasks to the Global South substantially reduce wage and other costs. And monopsony power of lead companies increases competition and bring prices down to a minimum. For low-technology manufactured goods, we can assume that all three price-reducing factors mentioned above play a role, with the result that countries in the Global South only reap relatively small benefits from integrating in GVCs. UNECA (2016, p. 151) makes exactly this point:

> … developing countries are likely to suffer from a 'fallacy of composition' – many of them entering the production of low-technology manufacturing goods in the belief that it will significantly boost their export earnings, only to find out that the earnings are nowhere as high as expected, as the prices of those goods have fallen exactly because so many countries have started to producing them.

What we find here is that in extreme cases, the productivity increases achieved in producing export goods and respective tasks in GVCs can lead to very low welfare effects for the exporting countries and even to immiserizing growth, which means growth which does not lead to more domestically available goods and services (Bhagwati, 1958).

In the following, to test the terms of trade hypothesis by Prebisch and Singer for the period from 2000 to 2018, we look at terms of trade

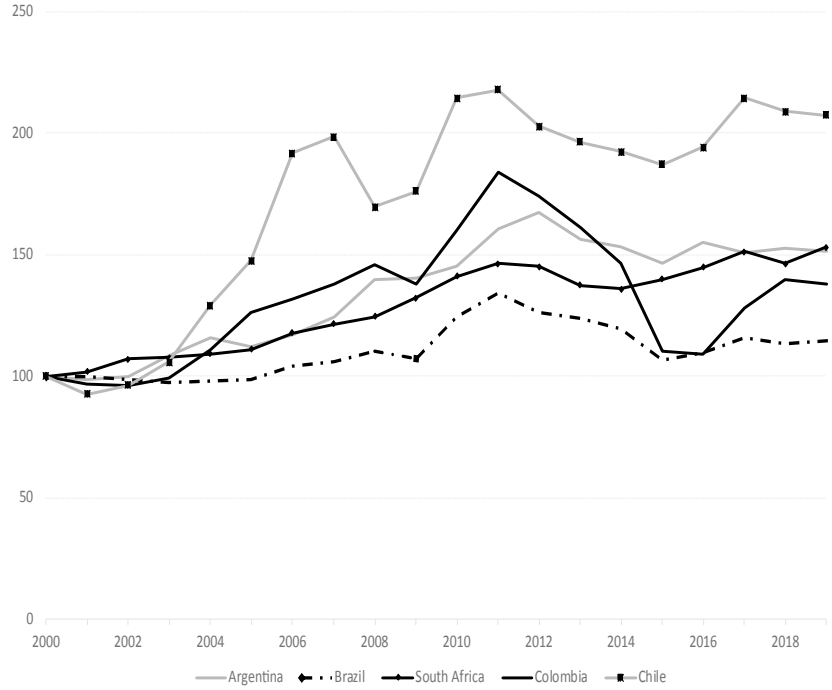


Fig. 3.4 Terms of trade index (2000 = 100); various commodity exporting countries; 2000–2019 (*Note* Net barter terms of trade index is calculated as the percentage ratio of the export unit value indexes to the import unit value indexes, measured relative to the base. *Source* World Bank [2021]; World Development Indicators)

development for country groups in the Global South mainly exporting primary goods or simple manufacturing goods. Figure 3.4 shows the terms of trade index for various countries whose exports are heavily dependent on natural resources.[11] These countries have partly benefited

[11] In 2018, 55.7% of all Argentine exports were agricultural products, and 4.6% were fuels and mining products. In Brazil, agricultural products accounted for 38.9% and fuels and mining products for 24.6% of all exports in 2018. In Chile, agricultural products accounted for 32%, and fuels and mining products for as much as 54% of all exports in 2018, while in Colombia they accounted for 17.5 and 59.2%, respectively (WTO, 2021).

from very favorable terms of trade. However, the focus on raw materials has also favored another rather negative development, in the form of poor industrial development or even tendencies of deindustrialization. Very often, resource-rich countries suffer from a persistent overvaluation of their exchange rates for the industrial sector and a shrinking industrial base, even if they realize current account surpluses. In addition, the relatively low-price elasticities of natural resources lead to high price volatility, which is reinforced by speculation in futures markets. Finally, natural resource wealth stimulates rent-seeking of domestic elites and foreign companies and can lead to the so-called "resource curse" (Humphreys et al., 2007).[12]

Figure 3.5 shows the terms of trade index for various countries whose exports are heavily dependent on low-technology manufacturing goods, in some countries especially on apparel. As can be seen in the figure, the terms of trade of these countries have deteriorated, in some cases tremendously, especially Pakistan, Bangladesh, Cambodia, but also China. These countries had to export increasing quantities to get the same quantity of imported goods. Whether the negative terms of trade effects led to immiserizing growth in some of the countries cannot be tested here, but as UNECA (2016) argues, expanding exports in these countries did not stimulate the domestic welfare effects that were probably expected. To this story also fits the fact that after the creation of the North American Free Trade Agreement (NAFTA) in 1994, Mexico's share of world manufactured exports increased significantly while its share in world manufacturing value added dropped. "This happened because as high-export, low-value-added firms in maquiladoras expanded, the traditional industries with high value added but low exports withered" (Akyüz, 2017, p. 191).

It is worthwhile mentioning that China managed significant upgrading in GVCs in comparison to many other countries. The share of foreign value added in China's processing exports fell even from 79% in 1997 to 62.7% in 2007 and in total manufactured exports from 50 to 40% (Akyüz, 2017, p. 195; Koopman et al., 2012). Obviously, China could in the classification of Humphrey and Schmitz (2002) not only manage

[12] We do not look at the group of countries which in an extreme way depend on the export of natural resources, like for example the Arab countries, Russia, or Nigeria. For this group of countries terms of trade effects and deindustrialization are even more extreme.

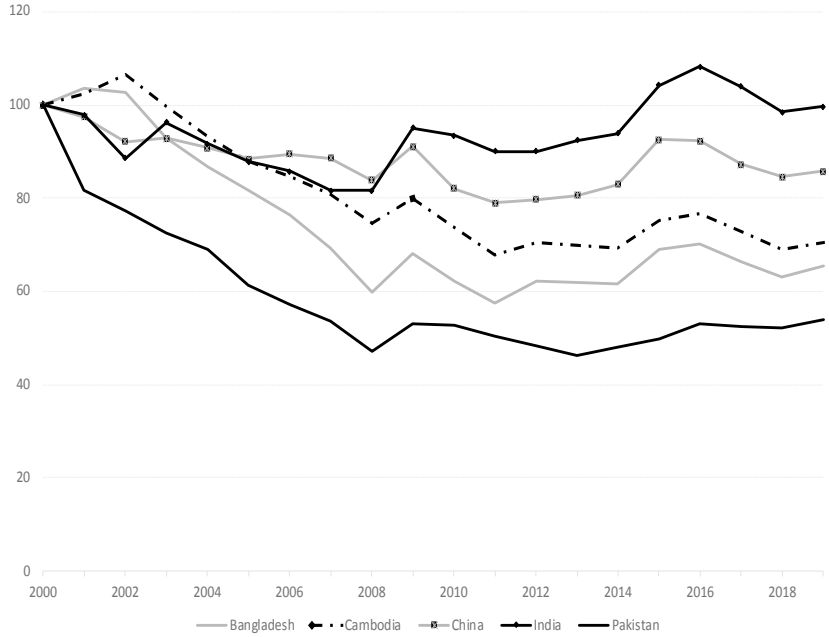


Fig. 3.5 Terms of trade index (2000 = 100); various Asian countries; 2000–2019 (*Note* Net barter terms of trade index is calculated as the percentage ratio of the export unit value indexes to the import unit value indexes. measured relative to the base. *Source* World Bank [2021]; World Development Indicators)

to achieve product and process upgrading, but also substantial functional upgrading.

Productivity and Employment Effects of Integration in Global Value Chains

In order to examine whether participation in GVCs has positive macroeconomic effects that go beyond a positive development for individual firms or sectors and could therefore represent a development strategy, we will first explain how we measure participation in GVCs and then show whether there is a correlation between participation in GVCs and macroeconomic variables such as productivity and employment.

Ever since Hummel et al. (2001)'s seminal article, participation in GVCs has typically been defined and measured in terms of vertical specialization. According to this definition, in a GVC a good must be produced in different production steps, in which at least two countries are involved, crossing at least two borders. A distinction is made between backward and forward participation. Backward participation measures the foreign value added content of exports. Here, the exporting country takes the role of the buyer of inputs. For example, the backward participation rate is very high if a country functions as an assembly platform where imported components are only assembled for export. Forward participation, on the other hand, represents the role of the seller. Here, the domestic value added contained in exports of third countries is measured. Both values taken together as a share of exports express the level of participation in GVCs. Based on this definition, it is frequently said that half of global trade today takes place within GVCs (World Bank, 2020).

However, in the present study we do not consider this indicator. We instead follow Carballa Smichowski et al. (2020), and measure GVC participation as the sum of the non-primary product portion of domestic value added in exports plus intermediate imports both together as a share of GDP.[13] This indicator is characterized by three features,[14] which we consider beneficial for our work: first, it excludes primary products, which often exhibit very volatile prices and do not add substantially to industrialization. Second, imports of finished products for domestic use are also excluded. Third, the denominator is GDP instead of gross exports. Thus, the value generated in the context of GVCs is put in relation to the value generated in the domestic economy, and not just in relation to a country's exports. Another plus point, in our opinion, is the fact that not only trade which has crossed at least two borders counts as GVC related. The two border rule overlooks, for example, the fact that imported inputs can also be processed into final products that are sold in the country and are not intended for export. For example, Brazil is a country where electronic goods are assembled with imported components primarily for sale

[13] The formal definition is $\frac{(XDVA)*(1-ppX)+ipM*(1-ppM)}{GDP}$, where XDVA is domestic value added in gross exports, ppX is the share of primary products in total exports, ipM is gross imports of intermediate products and ppM the share of primary products in total imports.

[14] For a detailed introduction and discussion of the indicator, its measurement and differentiation from the common indicator, compare Smichowski et al. (2018).

in the domestic market. In the usual definition of the GVC participation rate, this important sector would not be counted because the assembled final products are predominantly not destined for export. However, not declaring this important production as GVC participation is misleading.

Figure 3.6 shows the GVC participation rate according to our definition for 63 OECD and non-OECD countries for 2005 and 2015. In the ranking of countries, it is striking that at the bottom end, with little GVC participation, there are mainly countries that are rich in natural resources and focus on the export of raw materials which is not part GVCs in our measure. In the comparison period, the participation of these resource-rich countries in GVCs has decreased remarkably. In fact, participation in GVCs has declined for almost all countries (in more than 85% of all countries in Fig. 3.6, including a strong decline in China) over the observation period. These figures support the trend shown in Fig. 3.1, i.e., stagnation or decline of the importance of goods exports as a share of GDP since 2008. Especially in small countries like Luxembourg, Ireland, Singapore, Malta, and even Hong Kong, GVC trading plays a major role. However, this is not surprising as smaller countries are usually deeper integrated into international trade than big countries like the U.S.

In the rest of this section, we turn to analyzing several relations between GVC participation and key macroeconomic variables.

Global Value Chains and Productivity

One major factor on the road to economic development is an increase in labor productivity, shifting workers from less to more productive activities. The eminent importance of labor productivity is aptly expressed by Paul Krugman (1992, p. 9):

> Productivity isn't everything, but in the long run it is almost everything. A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker. [In the U.S.] World War II veterans came home to an economy that doubled its productivity over the next 25 years; as a result, they found themselves achieving living standards their parents had never imagined. Vietnam veterans came home to an economy that raised its productivity less than 10 percent in 15 years; as a result, they found themselves living no better – and in many cases worse – than their parents.

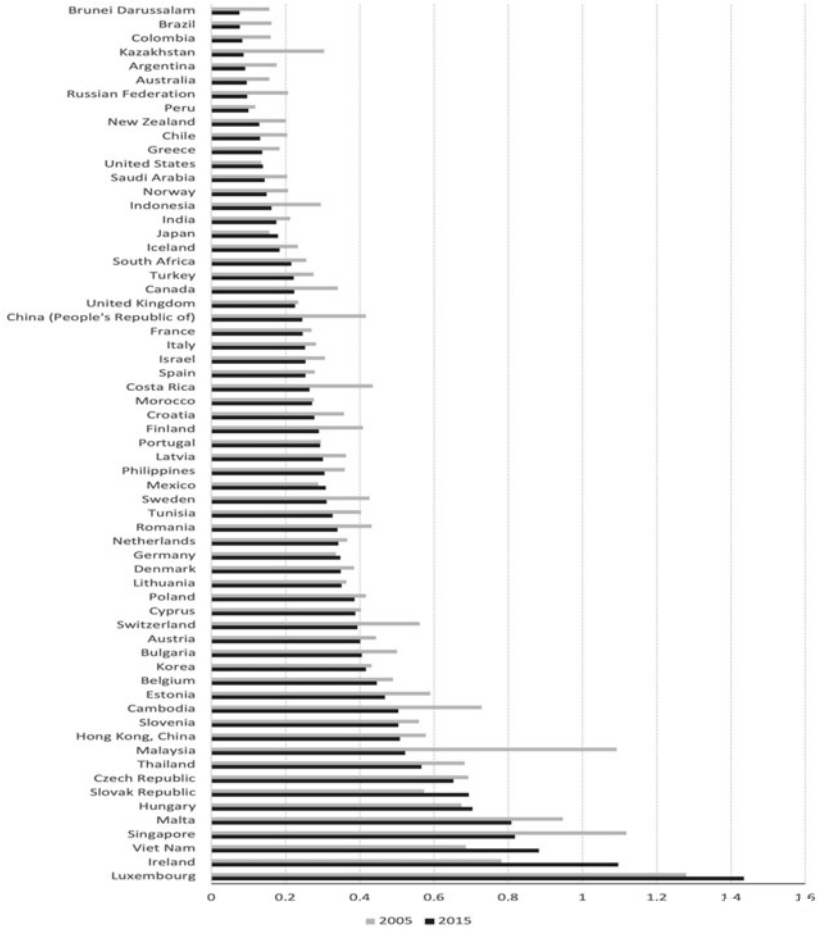


Fig. 3.6 Global Value Chain Participation excluding primary products, 2005 and 2015 (*Source* OECD TiVA Database. Version 2018; Data on primary products and total imports and exports: UNCTAD Statistics; GDP: World Development Indicators. Sorted ascending by 2015)

Current research on the relationship between participation in GVCs and productivity points out various channels via which GVC participation can stimulate productivity growth. It is assumed that the benefits arise at the firm level through specialization in core business and offshoring other tasks, importing foreign inputs that may be cheaper or of better quality, pro-competitive effects in domestic input markets, and knowledge spillover effects from MNEs (Criscuolo & Timmis, 2017). Recently, empirical studies have been conducted that examine the impact of participation in GVCs on productivity. For example, Constantinescu et al. (2017), for a panel of 13 industries in 40 countries covering the years 1995–2009, show that GVC participation—measured as the share of foreign value added in gross exports of goods and services—is a significant driver of labor productivity. Pahl and Timmer (2020) find a statistically significant effect of GVC participation for a panel of 58 countries for the years 1970–2008—measured as the imported input content in exports as a share of exports—on labor productivity growth in the export sector. Urata and Baek (2020) also present empirical findings for a panel of 47 countries and 13 manufacturing sectors covering the years 1995 until 2011 that show that both backward and forward GVC participation contribute to an increase in the productivity of countries involved in GVCs.[15] Moreover, they find that the productivity-enhancing effect is largest for developing countries that import intermediate goods from developed countries.

However, the finding that participation in GVCs increases the productivity of firms operating in the export sector is not particularly surprising. Lead firms work with suppliers that have to meet their quality standards and new technology is transferred to subsidiaries or even subcontractors. A different question is whether functional upgrading and inter-sectoral upgrading takes place which is of key importance for higher value adding and catching up with productivity levels and the innovative power of developed countries. Case studies have also consistently shown that product and process upgrading takes place in GVCs, but functional upgrading usually not (Dünhaupt et al., 2020; Chapter 20 in this book). Especially in cases of captive and vertical governance in the form of FDI, functional and even less inter-sectoral upgrading is unlikely. Humphrey and Schmitz (2000, p. 23) write about "quasi-hierarchical chain[s] ….: in

[15] The authors measure productivity by total factor productivity growth, computed as the Solow residual.

such chains, functional upgrading is limited. Local firms move into new non-strategic functions, but refrain from or are prevented from occupying the strategic functions of the chain which tend to lie in product definition (design, branding, marketing) and chain co-ordination".

The other side of the coin of Humphrey and Schmitz's convincing argument is that a domination of key sectors of the economy by foreign firms prevents functional and inter-sectoral upgrading and keeps a country always second class. Preventing the dominance of foreign firms is an important element in a catching up process and can help to explain the relatively poor development in Latin America compared with Asia. In a nutshell, as Amsden (2009, p. 413) puts it:

> If all industry were foreign-owned, a developing country would never develop top skills and highest-paying jobs (CEO, CFO, Regional Manager, Lead Scientist) that rocket the modern corporation. The developing country would never become advanced enough to earn the entrepreneurial rents that tacit technology and associated brand names earn.

A further crucial question is whether companies integrated in GVCs are industrial enclaves, or whether there are spillover effects and intensive links to the rest of the economy. For example, if all inputs for a production are imported and the output exported, in substance only labor is delivered by the host country. In such cases the positive effects for a country are relatively small. Already Hirschman (1958) stressed that internal forward and backward linkages are of key importance to increase domestic value added and to create high technology and qualification spillovers. Hence, in order to make a real contribution to development, other sectors and industries in the country would also have to benefit from integration in GVCs through linkages and spillover effects, so that overall labor productivity in the country increases. Already Singer (1950) noted that underdeveloped countries often have a dual economic structure: on the one hand, there is a relatively productive sector producing for export; on the other hand, a sector producing for the domestic economy, with low productivity. In such a dual structure it can be argued that the relatively productive sectors integrated in GVCs are not a real part of the domestic economy, and the technological spillover effects are only small.

Figure 3.7 presents a scatterplot of the intensity of GVCs participation and the development of labor productivity. On the horizontal axis, we measure the GVC participation index, as the average value for the period

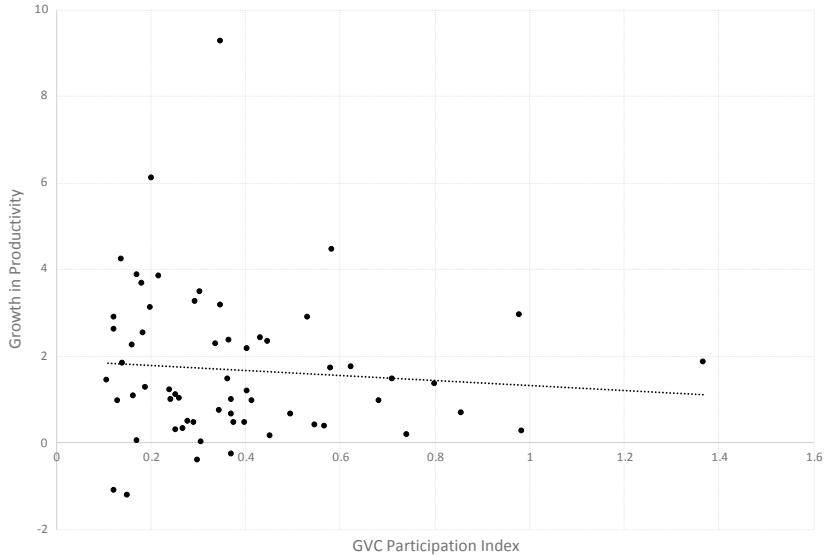


Fig. 3.7 GVC Participation and Growth in Productivity; 2005–2015 (*Source* GVC Participation Index is calculated from OECD TiVA 2018 edition; Output per worker [GDP constant 2011 international $ in PPP]—ILO modeled estimates. Nov. 2020 annual and average growth rates; average from 2005 to 2015)

2005–2015. On the vertical axis, we measure the average growth rate in productivity for the same period. Unlike the previously cited studies, however, we do not look at labor productivity in the manufacturing sector and the export sector, but rather in the country as a whole. The scatter plot suggests that there is no significant correlation between integration into GVCs and labor productivity. If anything, the correlation is negative. In fact, we see a relatively high variance in terms of productivity growth for the same level of integration. This suggests that, in aggregate terms, other factors are far more decisive for the increase or decrease in productivity than participation in GVCs.

Global Value Chains and Employment

In many countries of the Global South, not much has changed since the days of Arthur Lewis (1954) in terms of almost unlimited supplies of labor from the low productivity subsistence and poverty-driven self-employed sectors, which are usually also informal which means minimally regulated. Consequently, what many countries need are jobs in the formal sector of the economy. Since regular well-paid jobs are desperately needed, the question arises whether participation in GVCs contributes to employment growth. However, empirical studies that analyze the relationship between GVC participation and employment indicate a negative relationship. A study by Cali et al. (2016), which covers the years 1995–2011, shows that since 2001 the job intensity of exports has declined in both high- and low-income countries. The novelty of this study is that it took into account not only direct export jobs, but also indirect jobs., i.e., jobs in industries that serve the export sector. The result of this study is not surprising; the explanation is that productivity increased. The result for developing countries is a double-edged sword. Productivity increases are, as mentioned, of key importance for development and catching up. But, as mentioned as well, the welfare effects for developing countries are probably small and productivity increases reduce the employment effects of increasing output (see also Rodrik, 2018). Pahl and Timmer (2020) find no positive correlation between GVC participation and employment growth in their panel estimation which covers the period 1970–2008. The authors conclude that GVC participation is "a mixed blessing at best" (Pahl & Timmer, 2020, p. 1699). They also identify a bias in technological development against unskilled workers as a possible explanation. Since MNEs often demand and employ relatively high-skilled workers in a country, unskilled workers fall behind—apparently in all parts of the world. Farole (2016) shows that almost no positive relationship exists between the GVC participation index and the employment share of adult population, using average values between 2008 and 2013. In fact, in his investigation a higher level of GVC participation is actually related to a slightly lower employment share.

Figure 3.8 plots the GVC participation index and the employment share for averaged values from 2005 to 2015. As can be seen in the figure, there exists almost no relationship between both variables. This is in line with the findings reported above.

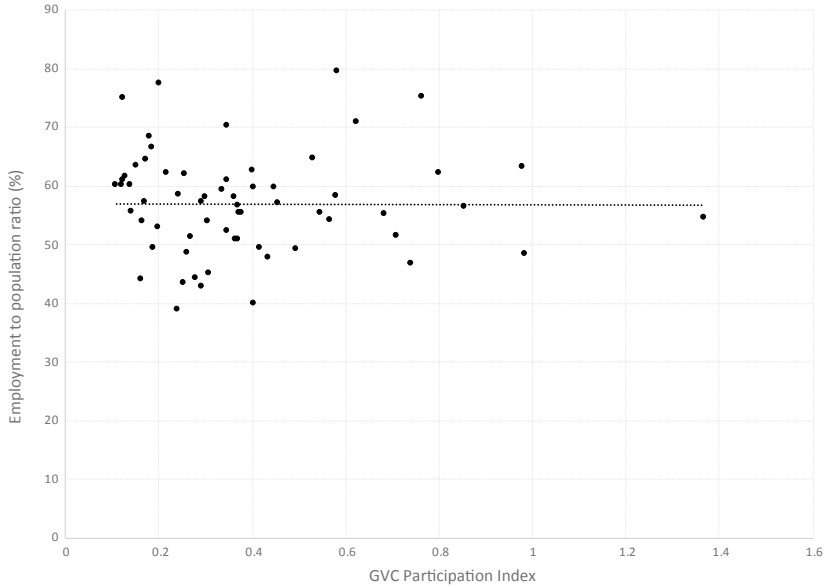


Fig. 3.8 Global Value Chain Participation and Employment Share of Adult Population; 2005–2015 (*Note* Employment to population ratio. 15+ total [%] [national estimate]. *Source* GVC Participation Index is calculated from OECD TiVA 2018 edition; Employment Share from World Bank World Development Indicators; average from 2005 to 2015)

This result should not be a surprise. Even if exports related to GVCs and employment in the affected sectors increase, other sectors may—due to higher imports—shrink. Deeper integration into world markets is not an engine of growth and employment per se. A country can be very successful in offshoring certain tasks in GVCs and at the same time realize big trade deficits which destroy domestic jobs. Or efficiency gains can lead to unemployment when aggregate demand is not increasing sufficiently. It is the combination of increasing foreign trade and simultaneously increasing foreign trade *surpluses* that usually stimulates macroeconomic growth and employment. However, such mercantilist strategies are not possible for all countries.

Rodrik (2018, p. 5) writes:

> It appears that exports are creating fewer and fewer jobs, and GVCs are certainly not helping. This is disappointing from a number of perspectives. It puts a damper on the idea of trade as an engine of growth. It suggests that the technological and organizational benefits associated with exports are not being disseminated throughout the economy. And since exports tend to be associated with better-paying jobs, it raises concerns about wage levels and inclusion.

Overall, integration in global trade and GVCs does not, in the typical developing country, create sufficient jobs to lead to inclusive growth and the absorption of traditional sectors.

Conclusion

The increasing importance of GVCs including the high levels of FDI from the 1990s onwards is often considered to be one of the key pillars to support development in the Global South. There is no doubt that GVCs can trigger positive developments in the form of growth and economic upgrading of firms and sectors, but there is neither a guarantee that this will happen nor a guarantee that, even in the positive case, only industrial enclaves will emerge that have no positive spillover effects on the rest of the country, and "remain a tiny sliver of globally integrated firms" (Rodrik, 2018, p. 14). Moreover, there are also cases in which integration in the world economy under a regime of free trade led to economic downgrading of sectors. And in general, the effects of GVCs may be too weak to have positive macroeconomic impacts.

In this article we have argued that, on the one hand, there has been consolidation on the part of the MNEs toward more oligopolistic markets and, on the other hand, globalization since the 1980s has led to more and more countries entering into the production of simple manufacturing goods; this has led, among other things, to more intensive competition and a massive drop in the real import prices for manufactured goods over the same period. Integration into GVCs facilitates industrialization, but because tasks in GVCs became so simple and thus in spite of increasing productivity in export sectors, industrialization as such is now less useful as a development strategy than it was 40 years ago. And there is an enormous power imbalance between MNEs and their suppliers, which pushes the prices and profits of many suppliers of MNEs to a minimum.

There are strong signs that integration into GVCs by countries in the Global South triggers product and process upgrading for supplying firms. But it is very unlikely that lead firms support their suppliers in functional or inter-sectoral upgrading, because it is not in their interest to nurture potential competitors. Suppliers are instead positioned in GVCs by lead firms to fulfill relatively simple tasks in a good and stable way. Thus, the conclusion is that while integration into GVCs can bring productivity increases, catching up of firms or sectors in the Global South with top firms in the global economy cannot be expected. Firms are needed in the Global South which are able to act independently of foreign-owned MNEs and which have the aim and support for functional and inter-sectoral upgrading. Part of this is the development of national champions which are able to compete with foreign-owned MNEs.

Even if GVCs develop in a positive way in single industries, this may not be sufficient for a general positive development of countries. Especially if GVCs are not well-linked with domestic production, economic enclaves develop which are more integrated with foreign countries than the domestic economy. We have demonstrated that there are virtually no positive macroeconomic spillovers—be it employment effects or productivity growth—from integration into GVCs. Moreover, it was shown that besides countries in the Global North only Asian countries managed to industrialize or defend a high level of industrialization. Latin America and Africa failed to do so. And for many countries in the Global South the export of unprocessed natural resources still plays an important role—without contributing to a positive overall economic development. Rodrik (2015) speaks about premature deindustrialization in many developing countries. This implies that many of these countries are characterized by a dual economy with a small part that is relatively developed and a big informal sector with many small and poverty-driven enterprises. In such countries the development of a strong working class with joint interests which could fight for a welfare state and participatory political structures is unlikely.

One conclusion seems to be clear: comprehensive horizontal and vertical industrial policy is needed. This can not only be concluded theoretically, but is also demonstrated by the relative positive development of Asian countries. Horizontal industrial policy means investment in general education, infrastructure, the health system, etc. There is broad consensus about this, and even the Washington Consensus stresses horizontal industrial policy (Williamson, 1989). But in addition, vertical industrial policy

is needed which supports specific sectors or even specific companies as "national champions". New comparative advantages have to be *created* which violate the logic of free trade (compare for example Chang, 2003; Chang & Andreoni, 2016; Cimoli et al., 2009). Of chief importance is the creation of clusters based on close networks between firms, employers' associations, research institutes, universities, and government. GVCs as well as regulated FDI can therefore play an important element in industrial policy. In the ideal case formulation, industrial policy on national level but also cluster level should take place in a network of all stakeholders including trade unions (see for details Dünhaupt & Herr, 2020a, 2020b, 2021; Herr, 2019).

Last but not least it seems that two groups in the Global North benefit especially from GVCs. First, lead firms following their rent-seeking strategy can increase profits and distribute them to their owners which usually reside in the Global North. There is an observable tendency in many markets where MNEs sell their products that competition reduced and rent-seeking increased. Terms of trade for simple manufacturing tasks taken over in the Global South dropped, implying that consumers in the Global North benefitted from better terms of trade. We can interpret this as a new version of the Prebisch-Singer hypothesis, but now instead of primary goods it is for simple manufacturing activities taken over in the Global South.

References

Akyüz, Y. (2017). *Playing with fire: Deepened financial integration and changing vulnerabilities of the global South*. Oxford University Press.

Alfaro, L., & Charlton, A. (2007). *Growth and the quality of Foreign Direct Investment: Is all FDI equal?* (CEP Discussion Paper dp0830). Centre for Economic Performance, London School of Economics.

Amrouk, E. (2018). Depressed International Coffee Prices: Insights into the Nature of the Price Decline. Food Outlook July 2018. Food and Agricultural Organization (FAO). http://www.fao.org/fileadmin/templates/est/COMM_MARKETS_MONITORING/Coffee_Cocoa/Documents/coffee_prices_2018.pdf. Accessed 13 July 2021.

Amsden, A. (1989). *Asia's next giant—South Korea and late industrialization*. Oxford University Press.

Amsden, A. H. (2009). Nationality of firm ownership in developing countries: Who should "crowd out" whom in imperfect markets? In M. Cimoli,

G. Dosi, & J. E. Stiglitz (Eds.), *Industrial policy: The political economy of capabilities accumulation* (pp. 409–423). Oxford University Press.
Andreoni, A., & Chang, H.-J. (2019). The political economy of industrial policy: Structural interdependencies, policy alignment and conflict management. *Structural Change and Economic Dynamics, 48,* 136–150.
Baldwin, R. (2011). *Trade and industrialisation after globalisation's 2nd unbundling: How building and joining a supply chain are different and why it matters* (NBER Working Paper 17716). https://www.nber.org/papers/w17716. Accessed 21 April 2020.
Bhagwati, J. (1958). Immiserizing growth: A geometrical note. *Review of Economic Studies, 25,* 201–205.
Bruton, H. (1998). A reconsideration of import substitution. *Journal of Economic Literature, XXXVI,* 903–936.
Cali, M., Francois, J., Hollweg, C., Oberdaberni, D., Rojas-Romagosa, H., Rubinova, S., & Tomberger, P. (2016). *The labor content of exports database* (World Bank Policy Research Working Paper 7615). The World Bank Group.
Carballa Smichowski, B., Durand, C., & Knauss, S. (2020). Participation in global value chains and varieties of development patterns. *Cambridge Journal of Economics,* 1–24. https://doi.org/10.1093/cje/beaa046
Chang, H.-J. (2003). *Kicking away the ladder—Development strategy in historical perspective*. Anthem Press.
Chang, H.-J. (2006). Policy space in historical perspective with special reference to trade and industrial policies. *Economic and Political Weekly, 41*(7), 627–633.
Chang, H.-J., & Andreoni, A. (2016). Industrial Policy in a Changing World: Basic Principles. Neglected Issues and New Challenges. Cambridge Journal of Economics 40 Years Conference. Cambridge.
Cimoli, M., Disi, G., & Stigitz, J. E. (2009). The future of industrial policy in the new millennium: Towards a knowledge-centred development agenda. In M. Cimoli, G. Dosi, & J. E. Stiglitz (Eds.), *Industrial policy: The political economy of capabilities accumulation* (pp. 541–560). Oxford University Press.
Criscuolo, C., & Timmis, J. (2017). The relationship between global value chains and productivity. *International Productivity Monitor, 32,* 61–83.
Constantinescu, C., Mattoo, A., & Ruta, M. (2017). *Does vertical specialization increase productivity?* (World Bank Policy Research Working Paper 7978). The World Bank Group.
Dallas, M. (2014). Cloth without a Weaver: Power, emergence and institutions across global value chains. *Economy and Society, 43*(3), 315–345.
Davies, G. (2013, September 29). Why world trade growth has lost its mojo. *Financial Times*. https://www.ft.com/content/9ad0678e-8c39-3eb8-8f5f-787e9a93f0f6. Accessed 7 June 2021.

Dollar, D. (2019). Executive summary. In World Trade Organization (Ed.), *Global value chain development report 2019: Technological innovation, supply chain trade and workers in a globalized world* (pp. 1–7). World Bank Publications.

Dünhaupt, P., & Herr, H. (2020a). *Catching up in a time of constraints—Industrial policy under world trade organization rules, free trade agreements and bilateral investment agreements*. Friedrich Ebert Foundation. http://library.fes.de/pdf-files/bueros/singapur/16373.pdf

Dünhaupt, P., & Herr, H. (2020b). Trade, global value chains and development: What role for National Development Banks? *Vierteljahreshefte zur Wirtschaftsforschung, 89,* 9–33.

Dünhaupt, P., & Herr, H. (2021). Global value chains—A ladder for development? *International Review of Applied Economics, 34*(3–4), 456–474.

Dünhaupt, P., Herr, H., Mehl, F., & Teipen, C. (2020). *Opportunities for development through integration in global value chains?* (IPE Working Paper No. 140/2020). Berlin: Institute for Political Economy.

Easterly, W. (1999). The ghost of financing gap: Testing the growth model used in the international financial institutions. *Journal of Development Economics, 60,* 423–438.

Farole, T. (2016). *Do Global Value Chains Create Jobs? IZA World of Labor, 291.* https://doi.org/10.15185/izawol.291

Gereffi, G. (1994). The organization of buyer-driven global commmodity chains: How U.S. retailers shape overseas production networks. In G. Gereffi & M. Korzeniewicz (Eds.), *Commodity chains and global capitalism* (pp. 95–122). Greenwood Press.

Gereffi, G. (2013). Global value chains in a post-Washington Consensus World. *Review of International Political Economy*, 1–29. https://doi.org/10.1080/09692290.2012.756414

Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy, 12,* 78–104. https://doi.org/10.1080/09692290500049805

Global Trade Alert. (2021). Global dynamics. *Global Trade Alert*. https://www.globaltradealert.org/global_dynamics. Accessed 7 June 2021.

Grossman, G. M., & Helpman, E. (1991). Trade: Knowledge spillovers and growth. *European Economic Review, 35*(2–3), 517–526.

Herr, H. (2019). *Industrial policy for economic and social upgrading in developing countries*. Friedrich-Ebert Foundation. http://library.fes.de/pdf-files/bueros/singapur/15190.pdf

Herr, H., & Priewe, J. (2005). Development strategies beyond the Washington Consensus. *Internationale Politik und Gesellschaft, 2,* 72–97.

Hirschman, A. O. (1958). *The strategy of economic development*. Yale University Press.

Hummel, D., Ishii, J., & Yi, K.-M. (2001). The nature and growth of vertical specialization in world trade. *Journal of International Economics, 54*(1), 75–96.

Humphrey, J., & Schmitz, H. (2000). *Governance and upgrading: Linking industrial cluster and global value chain research* (Institute for Development Studies Working Paper 120). Sussex: Institute for Development Studies, University of Sussex.

Humphrey, J., & Schmitz, H. (2002). How does insertion in global value chains affects upgrading in industrial clusters. *Regional Studies, 36,* 1017–1027. https://doi.org/10.1080/0034340022000022198

Humphreys, M., Sachs, J. D., & Stiglitz, J. E. (2007). *Escaping the resource curse*. Columbia University Press.

Koopman, R., Wang, Z., & Wie, S.-J. (2012). Estimating domestic content in exports when processing trade is pervasive. *Journal of Development Economics, 99,* 178–189.

Krueger, A. (1974). The political economy of rent-seeking society. *American Economic Review, 64*(3), 291–303.

Krugman, P. (1992). *The age of diminished expectations: US economic policy in the 1980s*. MIT Press.

Lewis, W. A. (1954). Economic development with unlimited supplies of labour. *Manchester School of Economics and Social Studies, 10,* 139–191.

Mayer, J., Butkevicius, A., & Kadri, A. (2002). *Dynamic products in world exports* (UNCTAD Discussion Paper No. 159). Geneva: United Nations Conference on Trade and Development.

Mencinger, J. (2003). Does foreign investment always enhance economic growth? *Kyklos, 56,* 503–536.

Milberg, W. (2008). Shifting sources and uses of profits: Sustaining US financialization with global value chains. *Economy and Society, 37*(3), 420–451.

Milberg, W., Jiang, X., & Gerreffi, G. (2014). Industrial policy in the era of vertically specialized industrialization. In J. Salazar-Xirinachs, I. Nubler, & R. Kozul-Wright (Eds.). *Transforming economies: Making industrial policy work for growth, jobs and development* (pp. 151–178). UNCTAD and ILO.

Milberg, W., & Winkler, D. (2013). *Outsourcing economics—Global value chains in capitalist development*. Cambridge University Press.

Nolan, P., Zhang, J., & Liu, C. (2008). The global business revolution, the cascade effect, and the challenge for firms from developing countries. *Cambridge Journal of Economics, 32,* 29–47.

Pahl, S., & Timmer, M. (2020). Do global value chains enhance economic upgrading? A long view. *The Journal of Development Studies, 56*(9), 1683–1705.

Palley, T. (2011). The Contradictions of Export-Led Growth. Public Policy Brief No. 119. Annandale-On-Hudson, NY: Levy Economics Institute of Bard College.

Peărić, M., Kusanović, T., & Jakovac, P. (2021). The determinants of FDI sectoral structure in the Central and East European EU Countries. *Economies, 9,* 1–16. https://doi.org/10.3390/economies9020066

Prebisch, R. (1950). *The economic development of Latin America and its principal problems*. United Nations Department of Economic Affairs.

Rodrik, D. (2015). Premature deindustrialization. *Journal of Economic Growth, 21,* 1–33.

Rodrik, D. (2018). New Technologies, Global Value Chains, and the Developing Economies. Pathways for Prosperity Commission Background Paper Series No. 1. University of Oxford.

Shapiro, H. (2007). *Industrial policy and growth* (UN DESA Working Paper No. 53). Geneva: United Nations.

Singer, H. (1949). Economic progress in under-developed countries. *Social Research, 16,* 236–266.

Singer, H. (1950). The distribution of gains between investing and borrowing countries. *The American Economic Review, 40*(2), 473–485.

Smichowski, B., Durand, C., & Knauss, S. (2018). *Participation in global value chains and varieties of development patterns* (HAL Working Paper hal-01817426). https://hal.archives-ouvertes.fr/hal-01817426

Spinnler, T. (2020, March 2). Übernahme vor 20 Jahren—Das Ende von Mannesmann. *Tagesschau*. https://www.tagesschau.de/wirtschaft/boerse/mannesmann-vodafone-uebernahme-101.html. Accessed 13 July 2021.

Staritz, C. (2012). *Value chains for development? Potentials and limitations of global value chain approaches in donor interventions* (ÖFSE Working Paper No. 31). Vienna: ÖFSE.

Stiglitz, J. E. (1996). Some lessons from the East Asian Miracle. *The World Bank Research Observer, 11*(2), 151–177.

Stiglitz, J. E. (2019). *People, power and profits: Progressive capitalism for an age of discontent*. Penguin Books.

Stiglitz, J. E., & Greenwald, B. (2003). *Towards a new paradigm in monetary economics*. Cambridge University Press.

Summers, L., & Pritchett, L. (1993). The structural-adjustment debate. *The American Economic Review, 83,* 383–389.

TrendEconomy. (2021). Vietnam. *TrendEconomy*. https://trendeconomy.com/data/h2/Vietnam/TOTAL. Accessed 14 June 2021.

UNCTAD. (2020). *World investment report 2020*. United Nations.

UNCTAD Statistics. (2021). *Data Center*. https://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_ChosenLang=en. Accessed 15 July 2021.

UNECA. (2016). *Transformative industrial policy for Africa*. United Nations Economic Commission for Africa.

Urata, S., & Baek, Y. (2020). Does participation in global value chains increase productivity? An analysis of trade in value added data. *Thailand and the World Economy, 38*(1), 1–28.

Wade, R. H. (2003). *Governing the market: Economic theory and the role of government in East Asian industrialization*. Princeton University Press.

Werner, M., Bair, J., & Fernández, V. R. (2014). Linking up to development? Global value chains and the making of a post-Washington consensus. *Development and Change, 45*(6), 1219–1247.

Williamson, J. (1989). What Washington means by policy reform. In J. Williamson (Ed.), *Latin American readjustment: How much has happened?* (pp. 7–20). Peterson Institute for International Economics.

World Bank. (2020). *Trading for development in the age of global value chains*. World Development Report 2020. The World Bank Group.

World Bank. (2021). *World development indicators*. World Bank. https://databank.worldbank.org/source/world-development-indicators. Accessed 15 July 2021.

WTO. (2021). *Statistics—Trade profiles*. World Trade Organization. https://www.wto.org/english/res_e/statis_e/trade_profiles_list_e.htm. Accessed 14 June 2021.

CHAPTER 4

Social Upgrading in Global Value Chains—The Role of Labor and Industrial Relations

Christina Teipen and Fabian Mehl

Introduction

Studies on consequences of the reorganization of global value chains (GVCs) for labor and labor's contribution to the ongoing restructurings and vice versa can look back on a rich research tradition, but also on heated debates in various theoretical disciplines. This chapter aims to discuss some of these different theoretical approaches and research traditions, in which labor is assumed to contribute to trajectories of economic and social upgrading in the Global South or in which implications for the workforce as object of restructuring are considered. It is in particular highly contested whether, why, and in what industry-specific, national, or transnational constellations social upgrading, i.e., improvements for employees, can be achieved. In many prevailing theories of development

C. Teipen (✉) · F. Mehl
HWR Berlin (Berlin School of Economics and Law), Berlin, Germany
e-mail: christina.teipen@hwr-berlin.de

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_4

economics (see a critical reflection on mainstream economists in Herr, 2019) as well as political economy, it is still assumed that integration into GVCs enables social welfare gains and economic catch-up processes in developing countries. However, this often disregards industry-specific power asymmetries, which to varying degrees overall benefit the interests of the so-called lead firms, by capturing the lion's share of the value added and allowing them to play suppliers off against each other in case of high competition. The GVC approach (Gereffi et al., 2005) aims to explain how these lead firms, depending on the prevailing mode of governance in a sector, exert their influence on suppliers or locations along the value chain. Their strategies in GVCs would then result in a constellation of global inequalities, in which higher value-added activities are kept in the hands of companies from the Global North, whereas lower value-added activities are outsourced to the Global South. Scholars of power relations within GVCs or global production networks (GPNs) (Henderson et al., 2002), on the other hand, have been criticized for not taking sufficient theoretical account of the contribution of power resources of workers and national institutions. Comparative institutionalists would highlight a country's capacity to shape the national competitive and labor market situation through a series of political measures such as labor regulation, industrial policy, and others. Approaches from the field of industrial relations would provide explanations for country-specific social upgrading dynamics. In view of institutional arbitrage and the weaknesses of labor organizations in many Global South countries, various other scholars have again emphasized the relevance of transnational labor governance.

Without being able to address the multifaceted theoretical debate on work in GVCs or GPNs in its entirety (cf. Ponte et al., 2019), we will discuss some conceptual strands and their mutual connections that we consider significant for the purpose of this book. After positioning ourselves in this theoretical debate, we will develop an analytical framework that takes into account power resources from different perspectives and thereby allows for more differentiated insights into social upgrading. We will argue that social upgrading depends, on the one hand, on the vertical, sector-specific governance mode of GVCs, in which workers possess varying degrees of structural and associational power. On the other hand, social upgrading is also determined by institutional power resources as reflected in national systems of industrial relations. While this chapter largely focuses on our theoretical framework, in Chapter 20 of this book, the framework will be applied by empirically comparing

the influence of the governance of GVCs, power resources of workers in different industry segments, and national systems of industrial relations of the Global South.

Global Value Chain Governance and Employment Relations

Before we deal with national institutions' support of or interference with social upgrading, we draw our attention to the ways in which GVCs are governed. This broadens our view to more asymmetries beyond the Global North versus Global South polarization and points to value chain-specific governance differences.

Gereffi et al. (2005) place emphasis on the vertical sequence of tasks across GVCs and in particular on the governance between companies—or within a company in the case of vertical integration. The unequal power relations between firms form the analytical core of the value chain approach. Power asymmetries between lead companies in the Global North, which often capture most of the value added, and suppliers in developing countries can contribute to an understanding of transnational economic relations. This conceptualization builds on the 'global commodity chains' approach (Gereffi, 1994), which initially differentiated between 'buyer-driven' and 'producer-driven commodity chains,' in which either buyers, i.e., retailers and related companies, or producers, i.e., companies being in charge of production, dominate commodity chains. In a later typology, Gereffi et al. (2005) distinguish five governance types: (1) market-based, (2) modular, (3) relational, (4) captive, and (5) hierarchical (vertical integration within a firm). This classification emphasizes power imbalances between lead firms and suppliers that vary according to the type of governance, which is essentially determined by the product complexity, transaction complexity, and the competence of the suppliers in an industry. While the power asymmetry in the case of market-based coordination is low, it becomes more and more pronounced in the other governance types.

In the case of modular governance, lead firms outsource all production to contract manufacturers while focusing on higher value-added functions such as research, marketing, or sales. Electronics brands such as Apple can therefore outsource typical production risks and labor conflicts arising from high labor intensity and precarious labor conditions to mass production companies in low-cost locations. These huge suppliers concentrate on

their competence to organize the complete manufacturing process based on economies of scale and specifications set by lead firms, but without intense interactions, and permanently try to economically upgrade as far as lead firms permit based on contracts and the higher market power of the lead companies (Pawlicki, 2016). While lead firms focus on high-skilled developers and branding experts, contract manufacturers pursue low road labor strategies. Whereas modular governance requires relatively high technological and organizational competences of suppliers, in the case of captive governance, for example in the apparel sector, access to 'Cut, Make and Trim' production is easier. At the same time, due to lower barriers for market access, there is high competitive pressure resulting in a strong power asymmetry between producers and global buyer firms.

This approach thus offers a clear-cut typology of suppliers' room for maneuver vis-à-vis lead firms, depending on the prevailing governance of the GVC in an industry. Hypothesizing different value chain constellations in different industries is inherent and central to it. Its advantage is that it conceptualizes different degrees of power of lead firms over suppliers in the value chain, 'ways in which powerful firms could exercise control over, or govern, others' (Bair & Werner, 2015, p. 124).

The GVC governance approach also rests on assumptions rooted in transaction cost theory mentioning mainly efficiency arguments in order to explain that outsourcing decisions depend on product requirements and the degree of task codifiability. These economic rationales are influential and can indeed partly explain why some governance forms, which then correspondingly shape power positions and prerequisites for employment conditions, prevail in certain industries. Applying the influence of governance forms between lead firms and suppliers on working conditions, which typically differs across industries, we reach the following conclusions. Both captive and modular governance imply precarious working conditions in the area of low-skilled, low-wage work for employees of supplier firms, as production and supply relations require cheap and flexible employment models. In the case of captive governance, suppliers find themselves in strong competition with each other and subjected to constant price pressure from lead firm oligopolies. In modular value chains, such as in the hardware electronics industry, the high codifiability of tasks not only facilitates outsourcing to large-scale manufacturers but also entails standardized and routine-based activities for workers. Better working conditions at suppliers could be expected in the case of relational governance, as is characteristic of the automotive industry. In this case,

we assume that the longer term and more intensive interaction requirements as well as the lower power imbalance between suppliers and brand companies demand more stable labor relations and employment conditions. These hypotheses only concern the relative comparison between the mentioned industries. This does not mean that we do not expect precarious employment in the automotive industry, for example as a result of internal segmentation and especially in lower tiers. In addition, there is the constellation of hierarchical governance between a parent company in the Global North and its subsidiaries in the Global South. In each case, a stronger influence of the prevailing industry-specific labor model in the home country is to be expected, although we assume an even stronger influence of the system of industrial relations in the target country (see below).

This argument already makes clear that besides company-centric vertical structures, there are other factors to be considered that influence employment relations and working conditions as well as the potential for social upgrading. Gereffi and Lee (2016), in their typology of different social upgrading trajectories (see introduction of this book as well as the chapter by Lohmeyer et al.), do not concede much chance of success to the paths that would rely exclusively on corporate strategies without influencing factors that lie outside the horizon of companies, as in the case of the 'market-driven path' and the 'corporate social responsibility (CSR)-driven path.' In contrast, they suggest that other paths of social upgrading must also be considered: the 'multi-stakeholder path,' the 'labor-centered path,' the 'cluster-driven path,' and the 'public governance path.' These four paths in particular reflect the impact of social and public governance beyond solely private governance by corporate activities.

One might argue that instead of the GVC approach, the alternative GPN approach should be used from the outset (Cumbers, 2015, p. 136), as it is less firm-centric than the GVC approach and emphasizes 'increasingly interconnected transnational systems of production' (Taylor et al., 2015, p. 6) between the Global North and South. In a more general and complex way it looks at 'expressions of uneven development' or 'organizational and social arrangements that reshape the geographies of uneven development' (Bair & Werner, 2015, p. 127). These arrangements are seen as being 'influenced by (…) socio-political contexts (…), especially the state' (Taylor et al., 2015, p. 7). In contrast to the GVC approach's focus on the dyadic relationship between lead firms and suppliers, which has been enriched by further aspects in a lively

and increasingly important epistemic community, the starting point of the GPN approach is from the outset a network of companies and manifold other actors (Henderson et al., 2002). On the one hand, this holistic approach avoids a priori the criticism of over-simplification that has been widely voiced against the GVC approach. On the other hand, the reconstruction leading to an understanding of the evolutionary dynamics of industrial production networks is always related to the individual case of a specific network and is, in terms of research practice, very demanding. In contrast, the typology of governance constellations according to Gereffi et al. (2005) sharpens the view on generalizable and distinct patterns of inter-firm asymmetries, which can then be empirically tested comparatively or falsified and further developed. Our epistemological interest in the relationship between GVC governance and upgrading is thus served in a sharpened way by the Gereffi et al. (2005) approach (see also Yeung, 2021). Despite the higher degree of complexity on the side of the GPN approach, however, both competing paradigms are exposed to the criticism of not having conceptualized the role of labor in a theoretically satisfactory way—notwithstanding significant empirical research traditions in the field of industrial relations in each case.

Lakhani et al. (2013), in response to this critique, have developed a theoretical proposal in which they place the stability of supplier labor relations in a two-way influence structure: on the one hand, that of the governance of the GVC exercised by the lead firms and, on the other hand, the national institutions of the suppliers. They aim to specify the type of employment relationships in different value chain configurations depending on the local institutional system which influences these relationships.

Based on the varying degree of explicit coordination among firms in different value chains according to Gereffi et al.'s (2005) classification, they assume higher stability in supplier labor relations in relational than in modular and captive chains. On the one hand, we consider this basic idea to be of further significance. On the other hand, we do not deem the approach alone sufficient to explain working conditions in GVCs. Like Gereffi et al.'s (2005) governance approach, it is based on narrow transaction cost theory assumptions about efficient configurations depending on qualification levels and product specifications. In our view, Lakhani et al.'s (2013) approach still falls short of integrating crucial explanatory factors, as it—like Gereffi et al.'s (2005) analytical scheme—remains stuck in a strongly transaction-cost-theoretical view, according to which

efficient configurations would emerge depending on the prevailing skill levels of employees. However, economic efficiency and value chain governance alone cannot determine how corporate decisions and restructuring dynamics within GVCs play out for employees. In our opinion, skepticism could be justified because of the relatively static idea of this approach, in which changes of value chain governance within industries do not seem to occur. Accordingly, it avoids explanations attentive to power in labor relations and employment conditions, which could also lead to alterations. The configurations disregard possible struggles and conflicts of actors differently equipped with power.

The Role of Labor Power for Social Upgrading in Global Value Chains

With regard to the role of labor in GVCs, three different perspectives can be distinguished: (1) work, employment, and qualifications as a production or input factor that influences the location decisions of companies (Hammer & Riisgaard, 2015; Taylor et al., 2015); (2) workers and their organizations, e.g., trade unions, as active agents in the governance of value chains (Cumbers et al., 2008); and (3) employees as objects of restructuring processes (Taylor et al., 2015). Recent contributions from labor process theory, which originally goes back to Harry Braverman (1974) and has been revitalized in recent years (Newsome et al., 2015), point to the need for GVC frameworks to conceptualize workers not merely as factors of production or as objects of restructuring processes, but also as actors who can actively shape their working conditions through unions and other forms of collective organization (Hammer & Riisgaard, 2015). Even the more complex GPN approach often only focuses on effects of industrial network organization on work and inequality, but rarely on the agency of labor policy actors. The recent turn toward the role of capital–labor relations in GVC research has brought about a renewed focus on labor agency and labor control into multi-scalar analyses of the social relations of production. 'Class-relational' perspectives emphasize the centrality of labor exploitation and disciplining for the creation and appropriation of value in global production circuits. They also place focus on the various forms of worker resistance and show how labor is actively reshaping patterns of value chain governance (Mezzadri, 2016; Selwyn, 2016). In doing so, they overcome the bias of firm-centric governance approaches which only treat labor as 'human

capital' and overlook the role of workers' agency. Different systems of labor relations on the national and industry level continually compete with each other for their enforcement. For example, bargaining power of workers may vary between industries despite the same institutional framework in one country. In some cases, strong formal rights of unions and employees in national legislation cannot be realized without the backing of collective interest representation. Besides this key analysis at the levels of the company and GVCs, labor process theory also attempts to link macro and micro dimensions of employment and work. This is true for Burawoy's (1985) distinction of 'politics in production' and 'of production' as well as for Thompson's (2013) proposal to analyze different 'institutional domains,' placing a strong emphasis on 'financialization' or 'new shareholder capitalism.' The regulation of work relations has always been a contested terrain, with historically changing dynamics and a subject of political dispute within and beyond individual companies. The labor process theory tradition emphasizes these fields of conflicts between different interests and the negotiation over working conditions.

Thus, if we want to be attentive to power in labor relations we have to consider workers' agency and the factors that enhance or restrict it. Here, we can draw on the power resources approach, which offers a theoretical and analytical framework to conceptualize and study labor agency in capital–labor relations. The approach, which in recent years has been increasingly integrated into research on labor in GVCs/GPNs, builds upon Wright's (2000) and Silver's (2003) conceptualization of 'structural' and 'associational' labor power. Structural power stems from the strategic position of workers in the work process. Workers have greater structural power if they possess scarce skills and are therefore hard to replace or if they occupy positions at crucial nodes of the production process, so that they have the ability to easily disrupt it, for example through strikes. While the degree of structural power that individual workers possess is independent of whether or not they form part of a union or other worker organization, associational power encompasses 'the various forms of power that result from the formation of collective organizations of workers' (Wright, 2000, p. 962). Thus, the ability to successfully assert their interests collectively, for example through bargaining with employers, rests on the degree of associational power. As Schmalz et al. (2018) emphasize, the power resources approach has to be understood as a relational concept, as labor power is always embedded in

societal power relations. Hence, not only workers and their organizations can mobilize power resources, but also employers.

The aforementioned conceptualizations have been further developed, amended, and adopted as an analytical framework for studying the spaces of action and mobilization strategies of workers and trade unions (Gumbrell-McCormick & Hyman, 2013; Schmalz & Dörre, 2014; Schmalz et al., 2018). Among the further types of labor power resources that scholars have differentiated are 'institutional' and 'societal' power (Schmalz & Dörre, 2014). Institutional power resources arise from constitutionally and legally enshrined rights as well as institutionalized forms of worker participation in political decision-making, which is most pronounced in countries with a corporatist tradition in economic governance and industrial relations. Institutional power is often the legacy of previous labor struggles and of the successful mobilization of associational and structural power resources. Societal power refers to the position of labor outside the production process and outside the arena of industrial relations. It encompasses 'discursive' or 'symbolic' power, i.e., the ability of workers and their organizations to shape public opinion and garner support for their interests from broader sections of society, as well as 'coalitional' or 'network' power, i.e., power that arises from the cooperation with other societal actors like non-governmental organizations (NGOs).

Within the context of GVCs, analyses of labor power have to take into account the sectoral, national, and transnational levels. We can easily elucidate the relevance of associational and structural power resources if we enquire about labor-related differences across industries. For example, workers in supplier firms in captive value chains—such as the apparel GVC, in which labor-intensive, low-wage segments dominate and where the union density is low—usually have low structural and associational power. In the automotive industry, on the other hand, there is a longer tradition of collective strategies that might count on greater influence of trade unions, including in the transnational sphere. In comparison, the electronics industry is less unionized and organizationally more divided as a result of the outsourcing wave during the last decades: labor-intensive, low-wage manufacturing is subcontracted almost entirely to transnationally organized contract manufacturing companies whose factories are often located in countries with comparatively low wages and a large supply of flexibly deployable migrant workers. Additionally, in some of those countries like China or Vietnam, there is even a state-repressive

labor regime, which denies workers fundamental rights such as freedom of association. Hereby, an organizational and geographic separation takes place between segments along the value chain that are characterized by highly qualified knowledge work and higher value added, and production-oriented segments with lower skill requirements and lower value added. This visualizes that sector-specific structural and associational power is also segmented along the value chain. In addition, there are also industries, such as IT services, that are characterized by comparatively elite high-skilled employment, but which are nevertheless hardly accessible for the collective organization due to the highly individualized working conditions, even though relocation pressure is noticeable even here.

The analysis of societal power resources within the context of GVCs is relevant in several regards. First, since the 'global shift' in the international division of labor also entails shifts in the distribution of power between the spheres of production and consumption (Hammer & Riisgaard, 2011), the mobilization of discursive power via public campaigns around labor issues in consumer countries in the Global North can exert pressure on lead firms that heavily rely on branding and reputation. This also points to the relevance of the transnational level, as it opens up the possibility for workers in production countries to at least partially substitute for the lack of structural and associational power at the lower end of GVCs. Second, the mobilization of coalitional power resources can also potentially substitute for the lack of other power resources. In many countries of the Global South there is a long tradition of social movement unionism, linking labor issues to broader struggles for social justice and democracy (Williams, 2015). In some instances, these struggles based on coalitional power resources have translated into the institutionalization of labor rights and worker participation, e.g., in post-apartheid South Africa (see also the chapter by Mashilo in this book). However, the broader political orientation of unions beyond labor relations as a consequence of social movement unionism has often resulted in the close alignment of unions with political parties and the political fragmentation of the national union movement, which can then result in the decline of discursive power of unions.

At the transnational level, cooperation between production-based labor organizations in the Global South and consumption-based actors in the Global North, such as advocacy NGOs and consumer campaigning organizations, can create new forms of coalitional power resources

(Reinecke & Donaghey, 2015), which can be used to enhance the associational power of local unions through the provision of information, funding for training and organizing as well as providing a 'shadow of protection' in hostile political environments.

However, attention has to be paid to the unequal balance of power between unions and NGOs from consumer countries in the Global North and their counterparts in the production countries of the Global South (Cumbers et al., 2008; Rahman & Langford, 2014). These power imbalances not only impact the organization and operation of transnational networks but also the position of different sections of workers in the production countries. While transnational networks of labor activism can potentially boost the associational and institutional power of some workers and labor organizations at the lower end of GVCs (Zajak, 2017), they also bear the danger of creating new dependencies in terms of funding and strategy. At the same time, labor organizations in production countries that do not have access to these networks are at risk of being sidelined and marginalized (Siddiqi, 2017).

Transnational Labor Governance

Much of the existing GVC literature assumes a dominance of global market forces over national institutional systems. It argues that, across countries, economic globalization entails similar transformations of the domestic political economy, including privatizations, flexibilization of labor markets, weakening of organized labor, and decentralization of collective bargaining. Ultimately, it assumes that these transformations will render differentiations between national institutional systems obsolete. Moreover, the '"global shift" in labor's terrain across space and scale' (Hammer & Riisgaard, 2011, p. 169) has created the urge to establish new institutions for the regulation of employment and labor relations not only at the national, but actually even more pressingly at the international level. The literature on labor and globalization highlights several developments to underpin the assertion that a 'global labor governance regime' (Hassel, 2008) is emerging. However, if we look more closely at existing transnational governance mechanisms, we find that they generally at best concern minimum standards that are less binding than legislative frameworks on the national level, and are even more dependent on public governance or local and national union power for their enforcement.

Within the realm of private governance, CSR initiatives have been proliferating in the form of company codes of conduct and certification schemes. They were established mainly as a response to public pressure in consumer countries and fears of reputational damage of brands. However, in terms of social upgrading, the 'CSR-driven path' (Gereffi & Lee, 2016) has crucial shortcomings from the point of view of labor organizations. Based on their liberal institutional heritage and ideological orientation, with a largely voluntary character (Jackson et al., 2018), CSR initiatives are often directed against collective organization via trade unions. Many multinational corporations (MNCs), in particular those from liberal market economies, prefer the non-legally binding, voluntary character of CSR instruments over public regulation. Although the original concomitance with economic liberalization was later complemented by a cultural acceptance of CSR in coordinated market economies (Kinderman & Lutter, 2018), the question remains as to what extent multinational lead firms extend their voluntary self-commitments to subsidiaries and suppliers in the Global South. Cherry-picking of desired target achievements as well as unsatisfactory monitoring and auditing processes limit the effectiveness of business-driven codes of conduct (Beck & Scherrer, 2017). Their degree of bindingness can be strengthened by national public regulation, or if lead and supplier companies are jointly brought on board with transnational organizations (Helfen et al., 2018, p. 1658), particularly via multi-stakeholder agreements (see chapter by Lohmeyer et al. in this book).

The same holds true for international public governance instruments, such as the UN Guiding Principles on Business and Human Rights or the OECD Guidelines for Multinational Enterprises. As they fall into the area of 'soft law,' they lack effective enforceability beyond the 'naming and shaming' of companies and countries based on 'social expectations' and 'moral considerations' (Scheper, 2017, p. 190), but they 'refrain from a clear assertion of legal consequences in the event of non-compliance' of companies (Scheper, 2017, p. 191). Nevertheless, they provided the conceptual foundation for recent legislative initiatives in several countries in the Global North to introduce mandatory human rights due diligence for MNCs (see also the chapter by Lorenzen in this book). Within the ILO, tough negotiations are continuing in order to achieve new binding standards in the sense of 'vertical labor governance' (Thomas & Turnbull, 2017) that would increase the accountability of lead firms over working

conditions in their supplier companies. With the exception of some innovative agreements such as the Maritime Labor Convention, the ILO's strongest sword remains 'horizontal labor governance,' which ultimately relies on the accountability of those national governments that have ratified ILO conventions. In order to broaden its scope of action, the ILO has additionally developed a number of 'soft governance' strategies such as recommendations, partnerships with other organizations or governments such as the Better Work program (see chapter by Do in this book), as well as governance by data and by best practice (Jakovleski et al., 2019).

In parallel to these developments, unions have been attempting, since the 1960s, to 'shadow' the increasing internationalization of corporations by elevating firm-level industrial relations and collective bargaining to the transnational level. Besides the establishment of regional and world company councils, global framework agreements (GFAs) have formed a crucial part of this strategy. GFAs are signed between global union federations (and at times national unions) and one MNC, usually containing a commitment by the company to respect national laws and core labor rights in all its operations. They are therefore normatively linked to the ILO's Decent Work Agenda (Papadakis, 2011). Unions seek to use the GFAs as a basis for 'scaling up' industrial relations to the transnational level and to overcome voluntary codes of conduct. There are also hopes that they will provide an entry point for local organizing and the strengthening of local union power. However, unions have only been marginally successful in broadening the contentual scope of the GFAs and extending coverage to the entire supply chain. Equally, implementation provisions have remained rather vague (Hadwinger, 2015). Since the goal of GFAs is to counter the loss of structural and associational power of labor in GVCs, there is widespread consensus 'that global agreements must be evaluated in terms of whether they help organize the unorganized and empower the organized' (Stevis & Boswell, 2008, p. 128). As the strategy on putting GFAs into effect has been mainly pursued by unions with rather strong workplace-grounded structural and associational power, the agreements are mainly restricted to MNCs from countries and sectors with strong roots in industrial relations contexts that have a tradition of social partnership arrangements. From the perspective of union power, there is therefore an inherent paradox regarding GFAs. While they are seen by international union organizations as opening up spaces for strengthening

local worker's agencies, research suggests that their effective implementation presupposes existing local union power (Fichter & McCallum, 2015).

Newer initiatives like the Accord on Fire and Building Safety in Bangladesh (the Accord), the Indonesian Freedom of Association Protocol (see the contribution by Zimmer in this book) or the agreements to combat gender-based violence and harassment in Lesotho's garment industry (Anner, 2021) build on the experience with GFAs. However, their institutional set-up resembles traditional multi-stakeholder initiatives, involving MNCs, unions, the ILO, and NGOs. Qualitative improvements of these initiatives compared to traditional global framework and multi-stakeholder agreements are their legally binding character, the involvement of multiple MNCs, and the central role of unions for implementation and monitoring. A clear limitation is that it focuses only on selected employment issues and leaves aside broader dimensions of labor rights and working conditions. As Van Buren III et al. (2021, p. 197) put it, the Accord 'was focused on ameliorating the worst features rather than challenging the actual prevailing system' of exploiting ready-made garment workers. The experience with the Accord has also shown that such instruments can have unintended side-effects as they do not fundamentally alter the structural dynamics and unequal power relations within GVCs. The risk here is that additional costs for complying with safety standards will be passed onto workers via wage cuts and the intensification of the labor process (Sinkovics et al., 2016).

Another recent and arguably the most ambitious 'labor-centered' attempt to tackle the structural asymmetries in GVCs has been the ACT initiative (Action, Collaboration, Transformation), a cooperation between global union federation IndustriALL and several MNCs of the garment industry (see the comment by Hoffer in this book). Here, the initiative's aim is to use the power of the involved global buyers as a lever to establish sectoral collective bargaining and more stable industrial relations in production countries. If successful, this would strengthen the associational and institutional power of workers in the sector.

However, despite this plethora of initiatives at the transnational level, any tangible improvements for workers in supply chains depend on the goodwill of the companies involved, opportunities for collective mobilization after scandals, as well as associational and institutional power of national trade unions. So far, neither a substantial transition from 'soft

law' approaches could be witnessed, nor could transnational labor governance reverse the loss of labor power in the globalized economy. In view of this, it remains debatable whether transnational governance constitutes the dominant level for determining social upgrading prospects in GVCs. As discussed above, we argue that industrial relations on the national level still represent a central resource when it comes to social upgrading, even if this is not to deny the need for transnational coordination.

Country-Specific Analyses of Labor in GVCs: The Role of Industrial Relations Systems

While the transnational level certainly bears importance for labor power in GVCs, an analysis of power resources requires us to draw our attention to the level of the nation state and national power resources. Therefore, we argue that—in addition to, as well as underpinning the debate around the emergence of transnational labor governance institutions—the national context still plays a decisive role in shaping industrial relations and institutional labor power. On the one hand as a resource of transnational labor governance, as in the case of GFAs and ILO conventions, and on the other hand in interaction with other transnational contexts such as GVC governance. Scholars of comparative employment relations have pointed out the path-dependent character of national institutional frameworks (Frege & Kelly, 2013). In our context, this is of importance because it implies that the governance of labor in a particular GVC will be contingent upon different pre-existing national settings.

Likewise, Anner's (2015) conceptualization of (macro) labor control regimes is also indebted to this tradition. He distinguishes between 'despotic market,' 'authoritarian state,' and 'repressive employer' control regimes, each of which relies on different domestic patterns of workforce disciplining in the context of transnational production relations. He further argues that each regime type is conducive to specific forms of worker resistance, such as wildcat strikes in the case of state labor control, international accords in the case of market labor control, and cross-border organizing in repressive employer control regimes. National systems of industrial relations (Hayter, 2018) are often path-dependent depending on legal regulations and institutions, each of which balances the interests of labor and capital in a nationally specific way. However, they can also be rebalanced if the interests of employees are given greater weight in the course of democratic transformations.

The chances of success for a 'labor-centered' path of social upgrading (Gereffi & Lee, 2016) are fundamentally affected by national systems of industrial relations or 'public governance.' Applying Anner's (2015) and Hayter's (2018) respective classifications of macro labor regimes and systems of industrial relations to the country cases analyzed in Chapter 20, we group the selected countries into three categories according to their formal institutional structure and the strength of independent trade unions. These are (1) market despotism and industrial pluralism with weak trade unions (India and Bangladesh), (2) state corporatist unitarism with state-controlled trade unions (China and Vietnam), and (3) democratic corporatism and sectorally strong trade unions (Brazil and South Africa).

In 'market-despotic' contexts we are often dealing with weak or fragmented trade unions, which in the best case are formally granted organizational rights by the legislative framework but lack the power to enforce them. In Global South countries like India and Bangladesh, despite formally guaranteed labor rights, both the state and trade unions are largely absent as actors for the enforcement of these rights (Anner, 2015). Trade union movements are politically fragmented, and union density and collective bargaining coverage are extremely low. In addition, the vast majority of workers are not covered by labor regulations simply because they are informally employed. State policies can be characterized as market-liberal and pro-business, which in the case of Bangladesh includes legal obstacles to trade union registration. Tripartite bodies and instruments of social dialogue are either non-existent or have become non-functional over time (Sinha, 2019). Minimum wage policy becomes a substitute for wage bargaining in many of these countries.

Furthermore, in a number of state-socialist countries, constellations prevail without freedom of association or participation opportunities for independent interest groups, which, following Hayter (2018, p. 13), can be described as 'state corporatist unitarism.' Here, economic upgrading could be achieved via economic and industrial policies, which would also benefit workers in the form of rising real wages. However, associational power and thus active collective participation by employees in the process of social upgrading are institutionally curbed. In China and Vietnam, despite the liberalization of the economy, the influence of the state is still considerable and the relationship between the state and trade unions is likewise based on the traditional state-socialist model. In this 'state corporatist unitarism' (Hayter, 2018) or 'quasi-corporatist' (Nölke et al., 2020, p. 62) system, there is only one officially recognized trade union

organization, which is directly controlled by the ruling communist party. Thus, trade unions cannot be considered independent representatives of workers' interests (Luce, 2014). Trade unions on the firm level rather act as an extended arm of management with the aim of securing 'industrial peace' (Liu, 2013). Despite this, wildcat strikes are a frequent occurrence in both countries. Without a system of independent collective bargaining, minimum wage setting is the preferred means of state wage policy.

In countries with a tradition of democratic corporatism, such as Brazil and South Africa, trade unions have traditionally possessed relatively strong institutional power within the systems of industrial relations. In the case of Brazil, government policies during the rule of the Workers' Party from 2003 to 2017 led to the large-scale reduction of inequality and attempts to reduce the size of the informal sector. However, the institutional power of labor has been eroding since the end of the government period in 2017. In the case of South Africa, the diagnosis of a strong corporatist system with centralized wage bargaining structures (Bischoff et al., 2018) only applies to selected industries, such as the automotive industry. Both countries are still characterized by a considerable informal sector as well as immense and growing social inequality (Hayter & Pons-Vignon, 2018). Nevertheless, we expect the highest potential for social upgrading in case of the 'public governance' constellation of 'democratic corporatism,' in which employee representatives are institutionally involved in collective bargaining as independent actors.

Conclusion: Intersecting Power Asymmetries Between Industry-Specific Vertical and Public Governance

Hence, in our attempt to conceptualize the role of labor for social upgrading in the Global South, we discussed different analytical approaches such as governance modes of GVCs, labor process theory, the power resources approach, transnational labor governance, and national systems of industrial relations. With regard to the question of whether any of the approaches alone is capable of satisfactorily conceptualizing the factors that influence social upgrading, we have discussed some limitations. In contrast, we will show below and illustrate with the example of our own empirical analyses how some of the above approaches can be gainfully combined.

As mentioned above, recent typologies (Gereffi & Lee, 2016) integrate various social governance actors besides companies such as international and national organizations as well as private and social forms of governance in their attempt to classify social upgrading paths. Based on our preliminary considerations and empirical analyses (Teipen & Mehl, 2021; see also Chapter 20 in this book), we would like to highlight the effectiveness of two paths of social upgrading: the 'labor-centered' path, which is based on the associational power of workers as central actors in enforcing improved working conditions in GVCs (e.g., through strikes or collective agreements); and the 'public governance' path, which relies on state influence and enforcement of labor laws. Yet, besides national and transnational levels of governance, a labor-oriented analysis based on the GVC approach has to consider the industry level as a decisive dimension.

From the above, we draw the conceptual conclusion that the chances of a 'labor-centered' pathway of social upgrading vary depending on both industry-specific value chain governance and country context. As the industry-specific modes of value chain governance and national labor regimes mutually influence each other, we therefore expect different outcomes with regard to employment relations in a particular sector, depending on the country under investigation. The following Table 4.1 summarizes the hypothetical assumptions and insights discussed above in various constellations, whereby this only refers to the industries and countries we examined. As a rule, we have assumed that the lead firms are located in the Global North in the case of captive and modular governance constellations of consumer-driven commodity chains, whereas only in the case of the producer-driven relational commodity chain in the automotive sector, subsidiaries of foreign lead firms or domestic lead firms are integrated into the value chain in addition to suppliers. This means that the table does not yet take into account the strengthening role of China, which has its own lead companies in the electronics sector, which in turn work with contract manufacturing companies in the same country. To further simplify this already complex table, we have not distinguished whether suppliers in the Global South are foreign- or domestic-owned firms. Overall, we assume a stronger weight of industrial relations systems of the destination countries than of the lead firms' countries of origin for social upgrading outcomes. Nevertheless, differences in income levels between foreign and domestic firms are addressed in the empirical analyses presented in Chapter 20.

Table 4.1 Expected influence of national systems of industrial relations and industry-specific value chain governance on power constellations of employees for social upgrading

Value Chain Governance	Power of Employees in Supplier Segment of the Global South	Power of Employees in Lead Firm Segment in the Global South	Institutional Power of System of Industrial Relations for Public Governance
Captive *(e.g. garments)*	Extremely low	-*	Market despotism
	Extremely low	-*	State corporatist unitarism
	Extremely low	-*	Democratic corporatism
Modular *(e.g. electronics hardware)*	Extremely low	-*	Market despotism
	Extremely low	-*	State corporatist unitarism
	Modest	-*	Democratic corporatism
Relational *(e.g. automobiles)*	Very low	Low	Market despotism
	Low	Modest	State corporatist unitarism
	Moderately strong	Medium strong	Democratic corporatism
Heterogeneous *(e.g. IT services)*	Modest	Stronger	Market despotism
	Moderately strong	Medium strong	State corporatist unitarism
	Stronger	Strong	Democratic corporatism

*Lead firms rather not located in the Global South, but in the Global North

Note Theoretical continuum (extremely low—very low—low—modest—moderately strong—medium strong—stronger—strong)

In terms of structural power, we expect differences depending on how a national sector is positioned in value chain governance according to Gereffi et al. (2005). That is, we expect the strongest structural power of workers from first-tier supplier firms in industries such as automotive, where relational governance is prevalent. Next would be the electronics industry, where we have in mind the modular governance of lead firms versus contract manufacturing firms as a typical case. The least amount of structural power is anticipated in the captive governance constellation, which is still predominant for the majority of firms in the textile and apparel sector in the countries we examined.

With regard to the sectoral cases on which we based the construction of our analytical framework, we identified the IT services value chain to be different from the other cases in that it does not fit one of the governance modes as clearly as our other examples. Here, we find a heterogeneous set of governance modes, ranging from modular to hierarchical. Although the quality of working conditions varies between different value chain segments and social upgrading dynamics are often ambivalent (see also the chapter by Noronha and D'Cruz in this book), we assume the overall bargaining power of employees in this industry to be relatively higher in comparison, due to the comparably higher and scarcer skills of employees.

In those sectors in which both lead company subsidiaries and the supplier segment are substantially represented in Global South countries—we assume this to be the case in the automotive and IT services sectors—it is still necessary to differentiate between varying degrees of associational power. This is because we assume that trade unions can achieve more favorable negotiation results at the lead firms than in the supplier segment.

In terms of the interaction of associational and institutional power, social upgrading would additionally need to depend on the degree of independence and assertiveness unions have been able to secure within national systems of industrial relations based on public governance (Hayter, 2018). The industrial relations approach emphasizes that regulation, i.e., the guarantee of formal rights, is rarely sufficient on its own. Strong trade unions or comparable civil society actors, i.e., associational power, are always needed to help enforce these rights, as the negative example of market-despotic countries shows. Here, we point to the importance of national systems of industrial relations in offering explanations for different social upgrading trajectories depending on the institutional context in target countries in the Global South. Employees of lead firms in the Global North and their representatives might have stronger assertiveness in comparison to employees of suppliers in the Global South. Employees can derive their structural power from the relative position of the value chain segment in which they work, and from the national system of industrial relations. The determinants and power resources at the industry level and between segments of the GVC can only be understood in interaction with institutional power resources and public governance as part of national systems of industrial relations. Thus, some GVC governance constellations may also be found between lead firms and suppliers in the Global North. Ultimately, however, all national systems

of industrial relations considered here are less favorable to the structural power resources of workers in the Global South than in the Global North. It is therefore a matter of understanding the various constellations at the different levels. Only then can they be seen either as challenges or as impulses for improved transnational coordination of labor power. Social upgrading, we generally conclude, is thus highly presuppositional and requires consideration of a multitude of intertwined factors at the national, industry-specific, and transnational value chain level.

References

Anner, M. (2015). Labor control regimes and worker resistance in global supply chains. *Labor History, 56*(3), 292–307.

Anner, M. (2021). Preisdruck in globalen Wertschöpfungsketten und seine Auswirkungen auf Gewalt und Belästigung am Arbeitsplatz. *WSI-Mitteilungen, 74*(1), 28–36. https://doi.org/10.5771/0342-300X-2021-1-28

Bair, J., & Werner, M. (2015). Global production and uneven development: When bringing labor in isn't enough. In K. Newsome, P. Taylor, J. Bair, & A. Rainnie (Eds.), *Putting labor in its place: Labor process analysis and global value chains* (pp. 119–134). Palgrave Macmillan Education.

Beck, S., & Scherrer, C. (2017). Overview of enforcement instruments for workers' rights along supply chains. In C. Scherrer (Ed.), *Enforcement instruments for social human rights in supply chains* (pp. 18–49). Rainer Hampp.

Bischoff, C., Masondo, T., & Webster, E. (2018). Workers' participation at plant level: A South African case study. *Economic and Industrial Democracy,* 1–19. https://doi.org/10.1177/0143831X18772185

Braverman, H. (1974). *Labor and monopoly capital: The degradation of work in the twentieth century*. Monthly Review Press.

Burawoy, M. (1985). *The politics of production: Factory regimes under capitalism and socialism*. Verso Books.

Cumbers, A. (2015). Understanding labor's agency under globalisation: Embedding GPNs within an open political economy. In K. Newsome, P. Taylor, J. Bair, & A. Rainnie (Eds.), *Putting labor in its place: Labor process analysis and global value chains* (pp. 135–151). Palgrave Macmillan Education.

Cumbers, A., Nativel, C., & Routledge, P. (2008). Labor agency and union positionalities in global production networks. *Journal of Economic Geography, 8*(3), 369–387.

Fichter, M., & McCallum, J. (2015). Implementing global framework agreements: The limits of social partnership. *Global Networks, 15*(1), S65–S85.

Frege, C., & Kelly, J. (2013). Theoretical perspectives on comparative employment relations. In C. Frege & J. Kelly (Eds.), *Comparative employment relations in the global economy* (pp. 32–50). Routledge.

Gereffi, G. (1994). The organization of buyer-driven global commodity chains: How U.S. retailers shape overseas production networks. In G. Gereffi & M. Korzeniewicz (Eds.), *Commodity chains and global capitalism* (pp. 95–122). Praeger.

Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy, 12*(1), 78–104.

Gereffi, G., & Lee, J. (2016). Economic and social upgrading in global value chains and industrial clusters: Why governance matters. *Journal of Business Ethics, 133*(1), 25–38.

Gumbrell-McCormick, R., & Hyman, R. (2013). *Trade unions in Western Europe: Hard times, hard choices*. Oxford University Press.

Hadwinger, F. (2015). Global framework agreements: Achieving decent work in global supply chains? *International Journal of Labor Research, 7*(1–2), 75–94.

Hammer, N., & Riisgaard, L. (2011). Prospects for labor in global value chains: Labor standards in the cut flower and banana industries. *British Journal of Industrial Relations, 49*(1), 168–190.

Hammer, N., & Riisgaard, L. (2015). Labor and Segmentation in value chains. In K. Newsome, P. Taylor, J. Bair, & A. Rainnie (Eds.), *Putting labor in its place: Labor process analysis and global value chains* (pp. 83–99). Palgrave Macmillan Education.

Hassel, A. (2008). The evolution of a global labor governance regime. *Governance: An International Journal of Policy, Administration, and Institutions, 21*(2), 231–251.

Hayter, S. (2018). Industrial relations in emerging economies. In S. Hayter & C.-H. Lee (Eds.), *Industrial relations in emerging economies: The quest for inclusive development* (pp. 1–26). Edward Elgar Publishing.

Hayter, S., & Pons-Vignon, N. (2018). Industrial relations and inclusive development in South Africa: A dream deferred. In S. Hayter & C.-H. Lee (Eds.), *Industrial relations in emerging economies: The quest for inclusive development* (pp. 69–114). Edward Elgar Publishing.

Helfen, M., Schüßler, E., & Sydow, J. (2018). How can employment relations in global value networks be managed towards social responsibility? *Human Relations, 71*(12), 1640–1665.

Henderson, J., Dicken, P., Hess, M., Coe, N., & Yeung, H.W.-C. (2002). Global production networks and the analysis of economic development. *Review of International Political Economy, 9*(3), 436–464.

Herr, H. (2019). *Industrial policy for economic and social upgrading in developing countries*. FES Singapore. http://library.fes.de/pdf-files/bueros/singapur/15190.pdf. Accessed 12 July 2021.

Jackson, G., Doellgast, V., & Baccaro, L. (2018). Corporate social responsibility and labor standards: Bridging business management and employment relations perspectives. *British Journal of Industrial Relations, 56*(1), 3–31.

Jakovleski, V., Jerbi, S., & Biersteker, T. (2019). The ILO's role in global governance: Limits and potential. *International Development Policy, 11*, 83–108.

Kinderman, D., & Lutter, M. (2018). *Explaining the growth of CSR within OECD countries: The role of institutional legitimacy in resolving the institutional mirror vs. substitute debate* (Discussion Paper 18/2). MPIfG.

Lakhani, T., Kuruvilla, S., & Avgar, A. (2013). From the firm to the network: Global value chains and employment relations theory. *British Journal of Industrial Relations, 51*(3), 440–472.

Liu, M. (2013). China. In C. Frege & J. Kelly, J. (Eds.), *Comparative employment relations in the global economy* (pp. 324–347). Routledge.

Luce, S. (2014). *Labor movements: Global perspectives*. Polity.

Mezzadri, A. (2016). *The sweatshop regime: Laboring bodies, exploitation, and garments made in India*. Cambridge University Press.

Newsome, K., Taylor, P., Bair, J., & Rainnie, A. (Eds.). (2015). *Putting labor in its place: Labor process analysis and global value chains*. Palgrave Macmillan Education.

Nölke, A., Ten Brink, T., May, C., & Claar, S. (2020). *State-permeated capitalism in large emerging economies*. Routledge.

Papadakis, K. (Ed.). (2011). *Shaping global industrial relations: The impact of international framework agreements*. Palgrave Macmillan.

Pawlicki, P. (2016). Re-focusing and re-shifting—The constant restructuring of global production networks in the electronics industry. In J. Drahokoupil, R. Andrijasevic, & D. Sacchetto (Eds.), *Flexible workforces and low profit margins: Electronics assembly between Europe and China* (pp. 21–44). ETUI.

Ponte, S., Gereffi, G., & Raj-Reichert, G. (Eds.). (2019). *Handbook on global value chains*. Edward Elgar Publishing.

Rahman, Z., & Langford, T. (2014). International solidarity or renewed trade union imperialism? The AFL–CIO and garment workers in Bangladesh. *Working USA: The Journal of Labor and Society, 17*(2), 169–186.

Reinecke, J., & Donaghey, J. (2015). After Rana Plaza: Building coalitional power for labor rights between unions and (consumption-based) social movement organisations. *Organization, 22*(5), 720–740.

Scheper, C. (2017). Corporate due diligence: A contribution to the enforcement of human rights? In C. Scherrer (Ed.), *Enforcement instruments for social human rights in supply chains* (pp. 186–207). Rainer Hampp.

Schmalz, S., & Dörre, K. (2014). Der Machtressourcenansatz: Ein Instrument zur Analyse gewerkschaftlichen Handlungsvermögens. *Industrielle Beziehungen, 21*(3), 217–237.

Schmalz, S., Ludwig, C., & Webster, E. (2018). The power resources approach: Developments and challenges. *Global Labor Journal, 9*(2), 113–134.

Selwyn, B. (2016). Global value chains and human development: A class-relational framework. *Third World Quarterly, 37*(10), 1768–1786.

Siddiqi, D. M. (2017). Before Rana Plaza: Towards a history of labor organizing in Bangladesh's garment industry. In V. Crinis & A. Vickers (Eds.), *Labor in the clothing industry in the Asia Pacific* (pp. 60–79). Routledge.

Silver, B. J. (2003). *Forces of labor: Workers' movements and globalization since 1870*. Cambridge University Press.

Sinkovics, N., Hoque, S. F., & Sinkovics, R. R. (2016). Rana Plaza collapse aftermath: Are CSR compliance and auditing pressures effective? *Accounting, Auditing & Accountability Journal, 29*(4), 617–649.

Sinha, P. (2019). Bridging inequalities for decent work in South Asia. *International Journal of Labor Research, 9*(1–2), 235–325.

Stevis, D., & Boswell, T. (2008). *Globalization and labor: Democratizing global governance*. Rowman & Littlefield Publishers.

Taylor, P., Newsome, K., Bair, J., & Rainnie, A. (2015). Putting labor in its place: Labor process analysis and global value chains. In K. Newsome, P. Taylor, J. Bair, & A. Rainnie (Eds.), *Putting labor in its place: Labor process analysis and global value chains* (pp. 1–26). Palgrave Macmillan Education.

Teipen, C., & Mehl, F. (2021). Global value chains and industrial relations in the Global South: Social upgrading paths in different industries. *Journal of Labor and Society, 24*(1), 214–236.

Thomas, H., & Turnbull, P. (2017). From horizontal to vertical labor governance: The International Labor Organization (ILO) and decent work in global supply chains. *Human Relations, 71*(4), 536–559.

Thompson, P. (2013). Financialization and the workplace: Extending and applying the disconnected capitalism thesis. *Work, Employment and Society, 27*(3), 472–488.

Van Buren III, H. J., Greenwood, M., Donaghey, J., & Reinecke, J. (2021). Agonising over industrial relations: Bringing agonism and dissensus to the pluralist frames of reference. *Journal of Industrial Relations, 63*(2), 177–203.

Williams, M. (2015). Transformative unionism and innovative campaigns challenging inequality. *Global Labor Journal, 6*(3), 253–266.

Wright, E. O. (2000). Working-class power, capitalist-class interests, and class compromise. *American Journal of Sociology, 105*(4), 957–1002.

Yeung, H.W.-C. (2021). The trouble with global production networks. *Environment and Planning A: Economy and Space, 53*(2), 428–438.

Zajak, S. (2017). Institutional layering and the emerging power of labor in Bangladesh. *Development and Change, 48*(5), 899–921.

CHAPTER 5

Embeddedness of Power Relations in Global Value Chains

Christoph Scherrer

The different profit margins of the firms involved in global value chains (GVCs) hint at power asymmetries in the governance of the complex interactions among actors in the field of global sourcing. Differences pertain not only to the remuneration of the actors involved but also to their working conditions and even their life expectancy (Scherrer & Radon, 2019).

While the current state of the literature on power relations in global sourcing encompasses a plurality of perspectives, most of the contributions to this subject focus on the dyadic business-to-business (B2B) relation. A prominent example is the argument by Gereffi et al. (2005) that the degree of explicit governance of a 'global value chain' determines the level of power asymmetries. According to their matrix, a low degree of power asymmetry exists in a market transaction when the complexity of the transaction is reduced and the ability to codify the transaction as

C. Scherrer (✉)
International Center for Development and Decent Work, Kassel, Germany
e-mail: scherrer@uni-kassel.de

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_5

well as the capability in the supply base is high. On the opposite side of the power spectrum, they place the hierarchical control of the chain on a focal firm (Gereffi et al., 2005, p. 87). They, thereby, underestimate the possibilities for exercising power in a more diffused market setting and overestimate these possibilities for intra-firm relations. Most notably, by focusing on a dyadic B2B relationship, their model neglects the many actors existing outside this relationship but having an impact on it such as financial institutions, accountancy firms, workers organizations, and, of course, the state.

The literature on global production networks (Henderson et al., 2002) and production systems (Barrientos & Smith, 2007) has called our attention to these other actors (and those that are excluded; Bair & Werner, 2011) and the institutions shaping their identity, interest perception, and behavior. The latter has been in the focus of sociological institutionalism which argues that the institutional context is of great importance for the possibility of exerting power among agents (Eckhardt & Poletti, 2018). At a general level, these institutions can be summed up as the capitalist relations of production. Some authors have analyzed the power relations from this vantage point (e.g., Selwyn, 2015). Inspired by neo-Gramscian theory in international political economy, David Levy (2008) has highlighted the political contestations over the governance of the global production networks (GPNs) and thereby integrated agency within broader institutions and discursive structures.

As the neo-Gramscian approach makes visible the origin and reproduction of the institutions that underpin the power of transnational corporations, I will apply its key concept, i.e., hegemony, for a better understanding of the sources of power in the GVCs. The neo-Gramscian lenses, however, should not supersede the insights of other theories of power; they should rather complement them at the macro level. Therefore, I will start with what Steven Lukes (1974/2005) calls the three faces of power—decision-making power (power over), non-decision-making power (power to prevent/preempt), and ideological power (power to influence interest perception). These power dimensions are of an agential character, i.e., they describe the possibilities of a person or a group of persons to dominate other persons. These dimensions leave out forms of power which, on the one hand, exist rather independently from individual or collective agents, and on the other hand, are enabling agents to act without implying domination. These other forms of power are studied by neoinstitutionalist authors whose analytical differentiation of

regulative, normative, and cognitive institutions will be employed in my contribution's second part to shed light on the embeddedness of the dyadic power relations in global outsourcing. The third part will then cover the emergence and reproduction of the so-called neoliberal historical bloc which provides the previously mentioned institutions with some sort of coherence.

The move through the various theories of power leads to my major claim which is that power dynamics in GVCs must be understood in the context of institutions in various fields and at different levels. While economic logic can explain certain patterns of power asymmetries, the power dynamics among particular actors at particular times and locations will be shaped by the specifics of the context. Therefore, universal claims concerning the character of power relations in global sourcing must be qualified by considerations for definite contexts.

Lukes' Three Faces of Power

Most of the literature on power in supply chains analyzes the relationship between buyer and supplier by making use of Stephen Luke's first face of power, i.e., in the Weberian manner of 'A affects B in a manner contrary to B's interests' (Lukes, 2005, p. 37). An 'effective exercise' of power is realized 'in the case where B's change of course corresponds to A's wishes' (Lukes, 2005, p. 43). In general, powerful firms will tend to shift their risks toward the less powerful entities in the supply chain (Anner, 2019; Touboulic et al., 2014).

The most prominent indicator for power imbalances in supply chains is the differential value capture. Many 'buyer-driven' value chains take on a U-shape (also called 'smiling curve' but more appropriately called 'exploitation curve' [Herr et al., 2016]), i.e., the providers of input and the distributors capture the largest share of the final price paid, while the actual producers (e.g., contract manufacturers or smallholders) receive much less in relation to the number of work hours expended (e.g., Penha et al., 2018). 'Supplier-driven' value chains resemble more an inverted 'U' as some key suppliers have been able to establish increasingly powerful positions (e.g., Raj-Reichert, 2015; Sturgeon, 2009). The extent of value capture by dominant firms seems to vary depending on the type of supply chain. Crook and Combs (2007) have suggested that the lead firm's value capture is the highest when members of a supply chain are performing standardized tasks independently in competition with each other for a

dominant buyer ('pooled interdependent tasks').[1] In such a case, it may happen that the strong supply chain members not only appropriate all the gains stemming from efficient supply chain management (SCM) but also 'a portion of weak members' pre-SCM profits' (Crook & Combs, 2007, p. 550), i.e., profits the firms performing standardized tasks had received before joining the supply chain. The authors expect sharing of SCM gains only in case of reciprocal tasks in the dependency, e.g., when firms are jointly developing products (Crook & Combs, 2007).

As the first face of power is a dyadic phenomenon, its exercise relies on a skewed balance of dependency between the business partners. 'Power over' comes to existence when either the supplier or the buyer is more dependent on the other than vice versa. The level of dependency is a question of the availability of alternatives to the utility and scarcity of the resources one depends on (Cox et al., 2000). The supplier may have resources that the buyer cannot easily obtain from another source or vice versa. The reasons can be manifold. It may be an issue of capabilities, i.e., other suppliers or buyers do not possess the same attractive capabilities. It may be the sunk costs of the relationship in the form of trust (= lower transaction costs) or dedicated equipment (= high switching costs). It may also be the consequence of oligopoly and monopoly or, respectively, monopsony and oligopsony. These limitations of the markets can be a natural outcome of scale economies that may also be the result of political intervention through regulation including the protection of intellectual property rights.

Resource dependence theory highlights various actions to reduce dependency such as 'reducing the interest in value resources, cultivating alternative sources of supply, or forming coalitions' (Casciaro & Piskorski, 2005). Other strategies mentioned are bilateral strategies of co-optation and constraint absorption. In the case of co-optation, the more dependent organization would offer 'other valuable goods, such as status, friendship, or information' (Casciaro & Piskorski, 2005, p. 168). Further, categories of resistance can be identified based on studies of labor relations: refusal, voice, escape, and creation (Fleming & Spicer, 2007, pp. 28–46; Scott, 1985, 1990). These categories can, of course, also be applied to B2B relations in the GVC. A supplier may refuse, actively or passively, contractual dictates by buyers or make use of the strategy of 'voice', i.e., arguing

[1] In the terminology of Gereffi: market-based coordination.

persuasively for one's own interests. A strategy of escape entails mental disengagement from an unfavorable situation. Examples are cynicism, skepticism, and dis-identification. The strategy of 'creation' is a subtle form of mocking the dominant counterpart by, for example, carrying out directives in an utmost punctilious manner.

Resistance will usually beget counterstrategies. Therefore, the B2B relationship can also be portrayed as a struggle (Fleming & Spicer, 2007). This adds a dynamic to the relationship. While the relatively more dependent organization may be more motivated to resist, it usually has fewer means to succeed ('Less able to absorb constraint' Casciaro & Piskorski, 2005, p. 169). The dominant organization might exercise its powers within the existing structure ('power use operations') or might attempt to change the structure in its favor ('power restructuring operations'; Casciaro & Piskorski, 2005, p. 179). Restructuring might entail broadening the supplier base or opening new marketing channels, i.e., creating alternatives to the resisting counterpart.

Lukes' second face of power, the power to prevent or to preempt,[2] draws on the insights of Peter Bachrach and Morton Baratz (1963) about 'non-decisions' in the political arena. In politics, 'non-decisions' pertain to demands that were prevented from entering the decision-making agenda, i.e., these demands (and/or actors) were not rejected by a vote, but by exclusion in the agenda-setting process. State theorists have pointed out the structural (strategic) selectivity of the state. The laws, rules, and routines reflecting a specific power balance on the terrain of the state are not open to all demands and ways of voicing the demands of societal actors (Jessop, 2009; Offe, 1972). Adapted to B2B relationships, 'non-decisions' relate to the negotiating agenda. On one pole of the spectrum, we might find outright refusal to discuss a specific issue in the negotiations by one partner, on the other pole might be specific routines or customs which prevent the partners from raising the issue in the first place. The first pole is closer to the first face of power; the second is the type of power of interest here. While B2B negotiations routinely cover price, volume, time of delivery, time of payment, etc., issues of technology transfer and training of personnel are, with few exceptions

[2] Fleming and Spicer call this 'power of manipulation' (2007, p.16). As I will argue, the more interesting source for this power are routines, not the direct exercise of power (first face) or the manipulation of interests (third face of power), though in reality the mixture of these different forms of power may result in the mentioned 'non-decisions'.

(P.R. China), no longer part of negotiations after the New International Economic Order failed to come into existence in the 1970s (Biel, 2000). This omission is especially true for environmental and labor issues. Corporate Social Responsibility (CSR) departments may call for the adherence to international conventions on the environment and labor, but until very recently (if at all), their personnel were not involved in the purchasing decisions (Schneider, 2019).

For Lukes, the third face, i.e., power as domination,[3] is the most insidious form of power as it is the power to shape counterparts' 'perceptions, cognitions and preferences in such a way that they accept their role in the existing order of things, either because they can see or imagine no alternative to it, or because they see it as natural and unchangeable, or because they value it as divinely ordained and beneficial' (2005, p. 28; see also Allen, 2016).

In the business to consumer relations, attempts at shaping consumers' preferences are well known. Businesses selling to businesses (B2B) are also spending considerable sums on marketing.[4] What a marketing budget does not reveal, however, is to what extent the advertisements are successful and what makes the message resonate with the addressees. An answer to these questions cannot be found by focusing solely on the dyads in the supply chains. It requires attention to the societal context.

Moving Beyond the Dyad: Networks

The explicit consideration of extra-firm networks can be found in the literature on GPNs. Firms' activities are said to be shaped in complex networks by organizations such as supranational organizations, government agencies, trade unions, and consumer groups (Coe, 2012, p. 390). In the main, this body of literature was originally concerned with the institutional local contexts' contribution to the ability of its firms to successfully link up with global firms and their networks. It analyzed the 'strategic coupling' of territorial institutions with complex firm networks (Coe & Yeung, 2019). This focus on 'strategic coupling' de-emphasized power relations.

[3] Lukes calls his third face 'power as domination'. I find this term not very precise; it blurs the line to the previous two faces of power.

[4] https://www.themarketingblender.com/b2b-marketing-budget/.

More recent literature within the paradigm of global production networks (also called GPN 2.0) moved away from explaining the power of actors by deriving it from the possession of certain resources. Instead, it emphasized how these resources have been mobilized, thereby highlighting the contingent and politically contested nature of GPNs (Allen, 2016; Fuller & Phelps, 2018, p. 141; Hess, 2008).

Some authors have substituted the term 'network' with 'systems'. Their perspective on global production systems (GPS) opened the vistas on workers laboring in the factories or fields as well as on civil society actors challenging the behavior of focal firms (Barrientos & Smith, 2007; Raj-Reichert, 2015). This body of literature not only described the impact of GPS on ordinary lives but also analyzed aspects of the power relations especially with a view on the forms of resistance (Bair & Palpacuer, 2015).

Both the GPN as well as the GPS literature provide elements for more comprehensive theorizing of power relations in global sourcing. A recent attempt at such a theory has been carried out by Mark Dallas et al. (2017). Using a two-by-two typology, they move beyond 'dyads' by including 'collectives' and beyond the 'direct' exercise of power by including 'diffuse' transmission mechanisms of power. Their typology names four types of power observed in GVCs: bargaining, demonstrative, institutional, and constitutive. 'Bargaining' power is direct and takes place in the dyadic relationship. It is the most analyzed type of power. Less discussed is their category 'demonstrative' power which they place in the box 'dyadic and diffuse'. As an example, they provide the spread of 'best practices' managerial models. 'Institutional' power is placed in the box 'collective and direct' and is described as the power of more formally organized collectives such as business associations or multi-stakeholder initiatives to set norms of conduct or of the state to regulate all actors' conduct. The final box 'collective and diffuse' is filled with the term 'constitutive' power which is based on social norms and conventions that can be leveraged by collective actors inside and outside the business community.

The power typology of Dallas et al. (2017) covers many power constellations to be found in GPS. Quite remarkable, however, while 'arenas of actors' and 'transmission mechanisms' of power are the key building stones of their theory, neither the term 'struggle' nor the academically more acceptable term 'contestation' appears in their theorizing. The exercise of power seems to eschew conflict. In addition, their otherwise insightful text remains silent on the sources for collective action. Its treatment of institutional power lacks the differentiations found in

the literature of sociological institutionalism. The result is an ambiguous treatment of institutions and their relation to social actors. In particular, the text is missing an analysis of how different scales of contexts impact the power relationship in a GPS.

Institutions as Bedrocks for Exercising Power

A sociological perspective on markets highlights their embeddedness within broader economic, political, and social institutions. These institutions shape the interest, worldviews, and behavior of the market participants; be it producers, brokers, or consumers (Olds & Thrift, 2005). Plentiful definitions of institutions exist (Hollingsworth, 2000), mine is the following: institutions are patterns of human meaning-making and practices (cf. Eckhardt & Poletti, 2018, p. 7). The origins of these patterns are diverse; the spectrum reaches from dictatorially imposed and enforced rules to the spontaneous, decentralized spread of ideas or practices. The distinction of regulative, normative, and cognitive institutions in sociological institutionalism (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott, 2001) provides for an analytical frame of the institutional underpinnings of power relations in global sourcing.

Regulative institutions are laws and regulations which are imposed, interpreted, and adjudicated by governments (including supranational and international organizations), regulatory bodies, and courts (cf. Bello et al., 2004). Laws as regulative institutions provide the underpinnings for authoritative power and the legitimate exercise of power. Key for the exercise of power within companies are constitutional laws enshrining the sanctity of private property. These laws provide owners with discretionary command over their property; therefore, their decisions take on an authoritative character and appear to be legitimate. Of course, constitutional law also entails certain limitations on the discretionary powers of owners which are further circumscribed by national laws, especially company and labor laws. Of great importance for focal companies in global supply chains is their status as juridical persons; a status that had to be won over an extended time period in the past (Richter, 2001). The status allows them to contract with other firms and persons and to access courts for enforcing their contractual rights (Bello et al., 2004, p. 61).

Over time, property rights have been extended to the ownership of intellectual efforts such as inventions of products, processes, and software, of names, and production regions. Patents, trademarks, and geographical

indications are protecting the first movers against imitators. The powers of the owners of intellectual property rights in global supply chains are enhanced through their enforcement by international treaties, especially through the 1995 Agreement on Trade-Related Aspects of Intellectual Property Right (TRIPS) under the World Trade Organization (WTO; cf. Panagariya, 2004).

Group values and norms constitute normative institutions that guide human behavior through social obligations and expectations (Scott, 2001). In today's business world, the key social obligation is compliance with the respective laws. However, it is also accepted that businesspersons try to interpret the law in their favor or find loopholes that exempt them from the law (e.g., banking regulation; Van Staveren, 2020). The social norms shaping organizational cultures can influence behavior more than laws (Ellickson, 1998, p. 540). The widely shared expectation concerning the behavior of businesspersons is that they pursue profits. The extent to which the pursuit of profits takes precedence over other objectives, such as the concern for the well-being of the community, is context-specific.

The rise of calls for CSR has led many focal corporations to establish respective departments. However, these concerns have not been 'mainstreamed' in most focal corporations (Schneider, 2019). The routines of most purchasing departments follow the age-old dictum 'buy cheap and sell dear'. These routines come with their own legitimation, i.e., the weight of habit and their proven functionality. In addition, they are supported by respective incentive systems and are reinforced by the competition among businesses (cf. Anner, 2019).

Cognitive institutions provide individuals and groups with frameworks for the meaning-making of events and environments. They guide actors' behavior with 'prefabricated organizing models and scripts' (Scott, 2001, p. 58). Whereas normative institutions prescribe socially acceptable behavior, 'cognitive institutions give rise to 'reflex' action, which is deeply ingrained in individuals and difficult to transcend' (Munir, 2002, p. 1412).

If applied to the question of power in GPS, a widely shared cognitive framework in the business world comes to mind: technical rationality. The focus on efficient achievement of a given end (i.e., increasing sales and lowering costs) leaves less room for objectives that might not so easily fall under the efficiency dictates such as providing support for economic upgrading of a supplier. Technical rationality usually favors the interests

of top management at various nodes in the chain (cf. Fleming & Spicer, 2007, p. 21).

Technically efficient practices diffuse through a process called 'cognitive isomorphism' (Meyer & Rowan, 1977). Businesses copy these practices from one another, whereby the spread of specific practices is accelerated by consultancies, business schools, business journals, and professional associations. The diffused practices may not be the most effective for the adopting firm but as they are generally considered to be the most appropriate; their implementation will be viewed as legitimate (Fleming & Spicer, 2007, pp. 21–22). Those implementing them, therefore, will face less resistance.

Hegemony—Origin and Reproduction of Institutions

The strength of the institutional perspective does not necessarily lie in an understanding of change, especially endogenous change (Scott, 1981, p. 187). While some interesting attempts to integrate change can be found in the recent literature (cf. Krücken et al., 2017), a more fruitful conceptualization of structure[5] and agency seems to be offered by the Gramscian theoretical framework. It allows for the integration of many of the above-mentioned insights, while its emphasis on collective actors enhances an understanding of the genesis, reproduction, and demise of institutions. Gramscianism is also more attentive to issues of power. Its application to the international level, the so-called neo-Gramscian approach (Cox, 1987; Gill, 1993), is well suited for analyzing production systems in their global dimension.

Among the key concepts of Gramscianism, the term hegemony occupies an elevated position. Hegemony will be exercised, when it can be achieved, to universalize to a large extent particular interests and to

[5] In Neo-Marxist discourses the term structure is more used than the term institution. There is much confusion about the difference of these terms. My take on the issue is that in case an institution structures human behavior and/or meaning making, it can be called a structure. Since many institutions have this quality, the term structure needs to be differentiated according to the scale and scope of human behavior/meaning making that is being structured. The larger the scale and scope of an institution's structuring capability is, the more appropriate it is to call this institution a structure. In line with Ernesto Laclau's critique of structural/essentialist Marxism (1990), I reject the notion of a closed structure.

protect them with state coercion (Gramsci, Prison Notebooks, H. 6, §88, 783). The emphasis here is on 'to a large extent' because Gramsci identified a state of domination as hegemonic not only when this domination is seen as legitimate by all—a fact often overlooked even within the Gramscian School. The 'enemies' could be located both inside and outside the community.

As it is well known, the Gramscian concept of hegemony includes the dimension of consent in addition to coercion. It thereby opens space for discourse as an important part of any explanation of social power relations. A Gramscian perspective does not remain at the level of analyzing the frames used in the debate (cp. Boin et al., 2009); it also enquires into the other power sources of actors in the field, such as their position in the accumulation process and the institutional set-up of any given society.

A Gramscian perspective focuses on actors. A ruling class is said to be hegemonic and not just dominant if it succeeds in winning approval for its authority among the members of other societal classes. The more this authority is not merely passively tolerated but actively supported, the more secure is the hegemony. The degree of approval generally rests on how far the ruling institutions address the respective interests of the other classes. One particularly effective form of hegemony by deception, Gramsci argued, is the co-option of the leadership of subordinate classes, so-called transformism. The ethical side of hegemony—leading other groups to the pinnacle of knowledge, technology, and culture—pertains only to allied classes, not to rival, 'ruled' classes (Gramsci, 2011). While in Gramscian thinking ideology is a relatively coherent articulation of meaning that shapes people's identities and interests, its effect is mediated by people's common sense. This common sense is informed by previous ideological appeals, local tradition, and everyday experiences. In other words, it is not coherent and, therefore, leaves space for resistance (Crehan, 2016; Kebir, 1991).

Another Gramscian concept is the 'historic bloc'. It refers to a period at the national or international level in which ideas, politics, ethics, and the social relations that result from the material conditions of production are interwoven. A hegemonic class in a state or with a state (or states) at the international level maintains 'cohesion and identity within the bloc through the propagation of a common culture' (Martin, 2002, p. 364). New historic blocs may come about through shifts in accumulation strategies and the accompanying rise of new dominant capital fractions as well as through counter-hegemonic struggles by subordinated classes.

In the following, I will briefly sketch the dynamics of the neoliberal historical bloc in which the global outsourcing strategies are embedded.

Genesis of the Neoliberal Historical Bloc—The Precondition for Global Sourcing

In the 1960s and 1970s, Latin American and many newly independent states challenged the post-World War II liberal world. Under the slogan of a 'New International Economic Order' (NIEO) many of them nationalized key industries and placed limitations on transnational corporations (Akinsanya, 1980). By fostering the domestic industry, they aimed at breaking out of the colonial division of labor in which their assigned place was suppliers of raw materials (Biel, 2000). In the wake of the so-called Latin American debt crisis of the early 1980s, the creditor nations 'hiding' behind the International Monetary Fund (IMF) pushed these 'catching up' countries to abandon import substitution policies in favor of export policies and attracting foreign direct investments. Many of the restrictions on transnational corporations were subsequently lifted (Devlin & Ffrench-Davis, 1995). The IMF-enforced structural adjustment programs were inspired by the static concept of comparative advantage, i.e., the countries should concentrate on their comparative advantage in resources and large unskilled labor pools (Herr & Priewe, 2005).

The backlash to the NIEO was preceded in the United States by the Business Roundtable's mobilization against the demands from the labor and the environmental movements (Ornstein & Elder, 1978, pp. 123–154). The Roundtable's international counterpart, the Trilateral Commission, engaged organic intellectuals like Samuel Huntington, an early proponent of deregulation, to write about the ungovernability of modern democracies because of an overload of the so-called popular demands on governments (Crozier et al., 1975). The means of reestablishing liberal capitalist domination were not restricted to ideas and structural adjustment programs but also included military coercion as happened early in the case of the 1973 coup against President Allende in Chile (Kohli, 2020, Chapter 5). The blood that has flowed in these acts of repression seldom receives attention in the GPN literature.

Thus, transnational corporations' political power rests on the interlaced hegemony of the US state and an emergent international capitalist/managerial class (Scherrer, 2001). The business press and business

schools contribute majorly to a shared understanding of business practices (see under 'Institutions'). This hegemony finds its institutional form in various regulative institutions as briefly mentioned in the section on neo-institutionalism, e.g., international trade, investment, and intellectual property rights agreements. In their sum, they amount to what Stephen Gill (1995a) has labeled a 'new constitutionalism'. While the 'old' constitutionalism defined the rights and freedoms of citizens vis-à-vis the king (or autocratic state), the new constitutionalism protects property holders against the modern state. The democratic as well as the developmental states have taken an expansive view of property rights: they include obligations toward the common good, for instance, universal service, accountability, or the protection of workers' health. In contrast, new constitutionalism takes a narrower view of property rights: the interests of stakeholders other than owners, such as workers, consumers, or citizens, are excluded. It aims not only at committing present governments to its definition of property rights but, furthermore, also tries to prevent future governments from undoing liberal governmental and market reforms. Comparable to constitutional rights in the national arena, a simple majority is not sufficient for withdrawal from or revision of the once agreed-upon rights of capital in international agreements.

Economically, the neoliberal historical bloc is based on the key capitalist institution, i.e., oligopolistic competition. While most of the literature considers competition quite rightfully as a key constraint on members of a production network (Coe & Yeung, 2019), competition also provides power opportunities, especially for the focal firms. The competition among focal firms forces them, on the one hand, to become ever more innovative and/or cost-efficient. It drives out weaker firms and leads to higher market concentration (Kumar, 2020, pp. 173–204). On the other hand, it provides them with an 'excuse' to demand concessions from their suppliers and workers based on the credible threat the competition poses to the overall network (Bronfenbrenner, 2000). Of course, other firms in the network can likewise support claims for more favorable contract terms vis-à-vis their business partners (and workers) who are more dependent on them than vice versa.

The power of capital is enhanced by an oversupply of labor, fueled by the stepwise opening of the People's Republic of China to foreign direct investments, the demise of the Soviet Union, and India's turn to neoliberal policies (Polaski, 2004). Materially, advances in transportation

and communication technologies made the governance of complex cross-border production systems possible.

This neoliberal hegemony could count on the active consensus of a large part of capitalists of many countries as it strengthens their position vis-à-vis labor (Robinson, 2004). Furthermore, the liberalization of current and capital accounts offers them the possibility to profit not only from export sales but also from exchanging their domestic currency money holdings into hard currency and to hide their wealth in tax havens and financial offshore centers (Palan et al., 2010). The consensus of a large swath of the working class in the rich countries has been secured by a consumer and self-actualization ideology (Gill, 1995b, p. 401). The so-called middle classes in the developing world appreciate access to advanced consumer products made possible by liberalization policies (cf. Yi, 2020). In Gramscian terms, the consumers' consensus is more of a passive kind.

The Reproduction of the Neoliberal Historical Block

The neoliberal hegemony never went unchallenged. The imposition of structural adjustment programs was met in several countries with street riots, privatizations were resisted, sometimes with success (Heigl, 2009), and land conflicts abounded (Shah, 2016). The 1990s saw a backlash against the early proponents of neoliberalism in the UK, the US, and some continental European countries. Representatives of the Third Way politics rose to power and Latin America followed in 2000 with the so-called pink tide. These challenges remained overall, with some exceptions, within the confines of the historical block (Hale et al., 2004; Vergara-Camus & Kay, 2017).

The Asian crisis of the late 1990s discredited the recipes of the Washington consensus, but again only led to cosmetic changes to the so-called post-Washington consensus (Herr & Priewe, 2005). Most importantly, the response to the Asian crisis did not stop the process of financialization, i.e., 'the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies' (Epstein, 2005, p. 3). As Arrighi et al. (2003) have pointed out, the shift from production to finance in the capitalist core has leveraged the comparative advantage of the rich countries, i.e., a large capital stock to the detriment of most countries trying to catch

up. Finance capital in the core captures most of the value created in the global economy (Foster & McChesney, 2017, p. 18).

The rising power of finance was accompanied by panoptic surveillance mechanisms imposing financial discipline on states, companies, and individuals. This 'disciplinary neoliberalism' (Gill, 1995b) not only curtailed states' ability of social spending but also had a profound impact on corporations. The huge liquid sums available to institutional investors enable them to buy or threaten to buy even the biggest corporations and, thereby, take control of or influence business decisions up to the point of selling off large parts of these corporations (Höpner & Jackson, 2006; Manne, 1965). This 'market for corporate control' forces upon stock corporations strategies for high stock market valuations. The focus on stock market valuation is reinforced by the practice in the name of the shareholder ideology to tie the renumeration of the executive managers to the stock market performance (Froud et al., 2000). The respective strategies entail, on the one hand, maximizing profits through concentration on core competencies and cost-cutting and, on the other hand, spending profits on high dividends and share repurchase (Lazonick, 2016). Therefore, even if a lead firm operates successfully in its market and is, therefore, highly profitable, it will not share those profits with ordinary employees or suppliers but with shareholders.

Some of the literature on GVCs inscribes itself in the hegemonic discourse of corporate global capitalism. Its focus on how to capture more value by economic upgrading (for an overview of studies: Pipkin & Fuentes, 2017; examples: Kelly, 2012; Taglioni & Winkler, 2016) has diverted attention away from the structural constraints fortified by the agency of corporations to the presumed agency of suppliers and their local stakeholders. Even the critical literature sheds seldomly light on the role of finance capital in ensuring a clear hierarchy of value capture along the chain. And, of course, the emphasis on value capture takes an economy of exchange value for granted instead of exploring the possibilities of an economy based on the production of use-values (cf. Levy, 2008, p. 35).

The result of disciplinary neoliberalism, the highly exploitative working conditions, has been scandalized since the late 1980s. As mentioned above, the companies have responded with codes of conduct and CSR initiatives. This 'new ethicalism' (Sum, 2010, p. 70) did not touch structural features of the global production systems (Levy, 2008; Schneider, 2019). Initiatives by International Organizations such as the United Nations' Global Compact, the ILO conventions, OECD Guidelines for

Multinational Enterprises, and social clauses in trade agreements have, with few exceptions, not fared better (Moore, 2017; Scherrer & Beck, 2017). Efforts to make lead firms' responsibilities legally binding have been stymied by the business lobby with the help especially of those ministries with a long history of close ties to the business community, such as the ministries of finance and commerce (Cantú Rivera, 2019; Schubert, 2019, p. 102). Therefore, the Supply Chain Due Diligence Act, which has been passed before the German parliamentary elections in 2021, requires special attention: Will it fulfill expectations regarding sustainable enforcement of human rights along supply chains or will its implementation be undermined in view of international competition?

Conclusion: Bringing Capitalism Back in

My journey through the manifold theoretical lenses highlighting specific aspects of power relations in GPS has taught me about the complexity not just of the governance of these systems but also of the interrelatedness of their various dimensions of power. While for some purposes it might be enough to explain power differentials by pointing out the different degrees of market concentration among contracting parties, a critique of the status quo must move beyond a narrow economic assessment of dyadic relationships within the supply chain. Already at the dyadic level, reference to economic logic fails to take account of the socio-political dimensions underlying economic power. The issues on the agenda of two negotiating parties do not follow an abstract economic logic but are the result of a complex interaction of routines and attempts of each party to strengthen their position. As we learn from Luke's third face of power, among the strategies used, one can find attempts to influence the interest perception of the counterpart.

As much as global outsourcing involves a variety of actors that do not fit on a metaphorical chain, the relationship between two actors is embedded in a complex web of institutions. Sociological institutionalism makes us aware of regulative, normative, and cognitive institutions shaping the interactions within GPS. Transnational corporations' capacity to source globally rests on their legal status as juridical persons, on intellectual property rights enforced by international treaties, and on trade agreements safeguarding them against discrimination vis-à-vis local competitors. A liberal financial regime allowing for the free flow of money across borders together with a multitude of bilateral investment

treaties enables money holders to capture a disproportionate share of value created in the production systems.

A key social obligation in today's societies is compliance with laws. However, this norm collides with the widely held expected role of businesspersons as profit maximizers. The search for loopholes is an accepted practice. The strength of this competing norm to law-abiding behavior is reflected in the comparably light punishment in case a court has determined the breach of a law. The result is large-scale tax evasion as well as violations of human rights. Among the cognitive institutions, technical rationality plays an important role in GPS. This widely shared cognitive framework leaves little room for objectives beyond narrow efficiency dictates such as stakeholders concerns.

The origin and reproduction of these institutions that underpin the power of transnational corporations is made visible by putting on Gramscian lenses. These institutions are the outcome of struggles for hegemony which are based on the interplay of material capabilities, ideas, and institutions. Subordinated social groups come also into view because their consensus to rule is necessary for hegemony, in contrast to domination. A 'historic bloc' emerges when a class or class fraction attains hegemony and key economic, political, and social institutions are somewhat coherent.

The existence of a historic bloc has major ramifications for strategies attempting to overcome the status quo. As a historic bloc stands for the interwovenness of key institutions, attempting to redress power imbalances by changing a specific institution is likely to fail. Global outsourcing gained momentum under the capitalistic neoliberal historic bloc. Corporate social responsibilities or fair-trade initiatives are addressing a far too narrow segment of this historic bloc for being able to achieve their stated objectives. Their function, perhaps unintended, is to serve as a buffer, as an absorber of critique of current standard business practices. This 'new ethicalism' complements but does not supersede neoliberalism. The focus on economic upgrading of much of the literature on GVCs stays within the confines of the neoliberal historical bloc and, thus, contributes to its legitimacy.

A historic bloc, however, is not a permanent fixture. It does not freeze hegemonic struggles. Failure to deliver the promised results, shifts in material capabilities, the spread of new ideas, and fresh strategies of resistance are among those factors that might lead to a 'critical junction', a situation of disrupted power relations. Whether such a relatively open situation can be made use of by the current 'weak interests', the ones

which are sitting at the lower end of the U-shaped 'exploitation curve', depends on too many factors to be predictable. It requires an examination of their ability to fully mobilize their power resources including their strategies for alliances.

At the current junction, the neoliberal historic bloc is fraying. The direction it takes points more toward the ascendance of authoritarian competition states (Bruff, 2014). In support of market shares and profit opportunities for their corporations, an increasing number of governments instrumentalize state power for the suppression of the organization and voices in support of those who must sell their labor power or toil on their own land.

References

Akinsanya, A. A. (1980). *The expropriation of multinational property in the third world*. Praeger.

Allen, J. (2016). *Topologies of power*. Routledge.

Anner, M. (2019). Squeezing workers' rights in global supply chains: Purchasing practices in the Bangladesh garment export sector in comparative perspective. *Review of International Political Economy*. https://doi.org/10.1080/09692290.2019.1625426

Arrighi, G., Silver, B., & Brewer, B. (2003). Industrial convergence, globalization, and the persistence of the North-South divide. *Studies in Comparative International Development, 38*, 3–31.

Bachrach, P., & Baratz, M. (1963). Decisions and nondecisions: An analytical framework. *American Political Science Review, 57*(3), 641–651.

Bair, J., & Palpacuer, F. (2015). CSR beyond the corporation: Contested governance in global value chains. *Global Networks, 15*, S1–S19.

Bair, J., & Werner, M. (2011). Commodity chains and the uneven geographies of global capitalism: A disarticulations perspective. *Environment and Planning a: Economy and Space, 43*(5), 988–997. https://doi.org/10.1068/a43505

Barrientos, S., & Smith, S. (2007). Do workers benefit from ethical trade? Assessing codes of labour practice in global production systems. *Third World Quarterly, 28*(4), 713–729.

Bello, D. C., Lohtia, R., & Sangtani, V. (2004). An institutional analysis of supply chain innovations in global marketing channels. *Industrial Marketing Management, 33*, 5–64.

Biel, R. (2000). *The new imperialism: Crisis & contradictions in North/South relations*. Zed Books.

Boin, A., 't Hart, P., & McConnell, A. (2009). Crisis exploitation: Political and policy impacts of framing contests. *Journal of European Public Policy, 16*(1), 81–106.

Bronfenbrenner, K. (2000). Raw power: Plant-closing threats and the threat to union organizing. *Multinational Monitor, 21*(12), 24–29.

Bruff, I. (2014). The rise of authoritarian neoliberalism. *Rethinking Marxism, 26*(1), 113–129.

Cantú Rivera, H. (2019). National action plans on business and human rights: Progress or mirage? *Business and Human Rights Journal, 4*(2), 213–237. https://doi.org/10.1017/bhj.2018.33

Casciaro, T., & Piskorski, M. J. (2005). Power imbalance, mutual dependence, and constraint absorption: A closer look at resource dependence theory. *Administrative Science Quarterly, 50*, 167–199.

Coe, N. (2012). Geographies of production II: A global production network A-Z. *Progress in Human Geography, 36*(3), 389–402.

Coe, N. M., & Yeung, H. W. (2019). Global production networks: Mapping recent conceptual developments. *Journal of Economic Geography, 19*(4), 775–801.

Cox, A., Sanderson, J., & Watson, G. (2000). *Power regimes: Mapping the DNA of business and supply chain relationships*. Earlsgate Press.

Cox, R. W. (1987). *Production, power and world order: Social forces in the making of history*. Columbia University Press.

Crehan, K. A. F. (2016). *Gramsci's common sense: Inequality and its narratives*. Duke University Press.

Crook, T. R., & Combs, J. G. (2007). Sources and consequences of bargaining power in supply chains. *Journal of Operations Management, 25*, 546–555.

Crozier, M., Samuel, P. H., & Watanuki, J. (1975). *The crisis of democracy: On the governability of democracies*. New York University Press.

Dallas, M., Ponte, S., & Sturgeon, T. J. (2017). *A typology of power in global value chains* (Working Paper in Business and Politics No. 92). Copenhagen Business School.

Devlin, R., & Ffrench-Davis, R. (1995). The great Latin American debt crisis. *Revista De Economia Politica, 15*(3), 117–142.

DiMaggio, P., & Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 48*, 147–160.

Eckhardt, J., & Poletti, A. (2018). Introduction: Bringing institutions back in the study of global value chains. *Glob Policy, 9*, 5–11.

Ellickson, R. C. (1998). Law and economics discovers social norms. *Journal of Legal Studies, 27*(S2), 537–552.

Epstein, G. A. (2005). Introduction: Financialization and the world economy. In G. A. Epstein (Ed.), *Financialization and the world economy*. Edward Elgar.

Fleming, P., & Spicer, A. (2007). *Contesting the corporation*. University of Cambridge Press.

Foster, J. B., & McChesney, R. W. (2017). *The endless crisis: How monopoly-finance capital produces stagnation and upheaval from the USA to China*. New York University Press.

Froud, J., Haslam, C., Johal, S., & Williams, K. (2000). Shareholder value and financialization: Consultancy promises, management moves. *Economy and Society, 29*(1), 80–110.

Fuller, C., & Phelps, N. A. (2018). Revisiting the multinational enterprise in global production networks. *Journal of Economic Geography, 18*, 139–161.

Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy, 12*(1), 78–104. https://doi.org/10.1080/09692290500049805

Gill, S. (Ed.). (1993). *Gramsci, historical materialism and international relations*. Cambridge University Press.

Gill, S. (1995a). The global panopticon? The neo-liberal state, economic life and democratic surveillance. *Alternatives, 20*, 1–49.

Gill, S. (1995b). Globalisation, market civilisation, and disciplinary neoliberalism. *Millennium: Journal of International Studies, 24*, 399–423.

Gramsci, A. (2011). *Prison notebooks* (Volumes 1, 2 & 3) (Edited and translated by J. A. Buttigieg with A. Callari). Columbia University Press.

Hale, S., Leggett, W., & Martell, L. (Eds). (2004). *The third way and beyond: Criticisms, futures and alternatives*. Manchester University Press.

Heigl, M. (2009). *Der Staat in der Privatisierung: eine strategisch-relationale Analyse am Beispiel Mexikos*. Nomos.

Henderson, J., Dicken, P., Hess, M., Coe, N., & Yeung, H. (2002). Global production networks and the analysis of economic development. *Review of International Political Economy, 9*(3). https://doi.org/10.1080/09692290210150842

Herr, H., & Priewe, J. (2005). *The macroeconomics of development and poverty reduction: Strategies beyond the Washington consensus*. Nomos.

Herr, H., Schweisshelm, E., & Vu, T.-M. (2016). *The integration of Vietnam in the global economy and its effects for Vietnamese economic development* (Working Paper No. 44). International Labour Office, Global Labour University.

Hess, M. (2008). Governance, value chains and networks: An afterword. *Economy and Society, 37*(3), 452–459.

Hollingsworth, J. R. (2000). Doing institutional analysis: Implications for the study of innovations. *Review of International Political Economy, 7*(4), 595–644.

Höpner, M., & Jackson, G. (2006). Revisiting the Mannesmann takeover: How markets for corporate control emerge. *European Management Review, 3*, 142–155.

Jessop, B. (2009). The state and power. In S. Clegg & M. Haugaard (Eds.), *The SAGE handbook of power* (pp. 367–382). Sage.

Kebir, S. (1991). *Gramsci's zivilgesellschaft*. VSA.

Kelly, S. (2012). *Smallholder business models for agribusiness-led development*. Food and Agriculture Organization.

Kohli, A. (2020). *Imperialism and the developing world: How Britain and the United States shaped the global periphery*. Oxford Scholarship Online.

Krücken, G., Mazza, C., Meyer, R. E., & Walgenbach, P. (2017). *New themes in institutional analysis: Topics and issues from European research*. Edward Elgar.

Kumar, A. (2020). *Monopsony capitalism: Power and production in the twilight of the sweatshop age*. Cambridge.

Laclau, E. (1990). *New reflections on the revolution of our time*. Verso.

Lazonick, W. (2016). *The value-extracting CEO: How executive stock-based pay undermines investment in productive capabilities* (Working Paper No. 54). Institute for New Economic Thinking.

Levy, D. (2008). Political contestation in global production networks. *Academy of Management Review, 33*(4), 943–963.

Lukes, S. (1974/2005). *Power: A radical view* (2nd ed.). Palgrave.

Manne, H. (1965). Mergers and the market for corporate control. *Journal of Political Economy, 73*, 110–120.

Martin, J. (2002). *Antonio Gramsci: Critical assessments of leading political philosophers: Contemporary applications* (Vol. IV). Routledge.

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology, 83*(2), 340–363.

Moore, M. (2017). The enforcement of workers' rights through conditional or promotional trade agreements: A comparison of US and EU social chapters. In C. Scherrer (Ed.), *Enforcement instruments for social human rights along supply chains* (pp. 155–185). Rainer Hampp Verlag.

Munir, K. A. (2002). Being different: How normative and cognitive aspects of institutional environments influence technology transfer. *Human Relations, 55*(12), 1403–1428.

Offe, C. (1972). *Strukturprobleme des kapitalistischen staates*.

Olds, K., & Thrift, N. (2005). Cultures on the brink: Reengineering the soul of capitalism—on a global scale. In A. Ong & S. J. Collier (Eds.), *Global assemblages: Technology, politics, and ethics as anthropological problems* (pp. 270–290). Blackwell.

Ornstein, N., & Elder, S. (1978). *Interest groups, lobbying and policymaking*. D.C., Congressional Quarterly Press.

Palan, R., Murphy, R., & Chavagneux, C. (2010). *Tax havens: How globalization really works*. Cornell University Press.

Panagariya, A. (2004). TRIPs and the WTO: An uneasy marriage. In K. Maskus (Ed.), *The WTO, intellectual property rights and the knowledge economy*. Edward Elgar.

Penha, T. A. M., Belik, W., João Matos, F., & Oliveira, G. M. (2018). Measuring value capture along the Brazilian melon value chain. In C. Scherrer & S. Verma (Eds), *Labor and globalization. Decent work deficits in southern agriculture: Measurements, drivers and strategies* (pp. 106–132). Rainer Hampp Verlag.

Pipkin, S., & Fuentes, A. (2017). Spurred to upgrade: A review of triggers and consequences of industrial upgrading in the global value chain literature. *World Development, 98*, 536–554.

Polaski, S. (2004). *Job anxiety is real—And it's global* (Carnegie Endowment for International Peace Policy Brief No. 30, Campaign Edition).

Raj-Reichert, G. (2015). Exercising power over labour governance in the electronics industry. *Geoforum, 67*, 89–92.

Richter, J. (2001). *Holding corporations accountable: Corporate conduct, international codes, and citizen action*. Zed Books.

Robinson, W. I. (2004). Global crisis and Latin America. *Bulletin of Latin American Research, 23*(2), 135–153.

Scherrer, C. (2001). Double hegemony? State and class in American foreign economic policymaking. *Amerikastudien, 46*(4), 573–591.

Scherrer, C., & Beck, S. (2017). The promises of new instruments for the promotion of decent work. In V. Xaxa, D. Saha, & R. Singha (Eds.), *Work, institutions and sustainable livelihood* (pp. 251–274). Palgrave Macmillan.

Scherrer, C., & Radon, K. (Eds.). (2019). *Occupational safety and health challenges in southern agriculture*. Rainer Hampp Verlag.

Schneider, A. (2019). Bound to fail? Exploring the systemic pathologies of CSR and their implications for CSR research. *Business & Society*. https://doi.org/10.1177/0007650319856616

Schubert, S. (2019). *Die umsetzung der leitprinzipien der vereinten nationen für wirtschaft und menschenrechte durch nationale aktionspläne*. Springer.

Scott, J. C. (1985). *Weapons of the weak: Everyday forms of peasant resistance*. Yale University Press.

Scott, J. C. (1990). *Domination and the art of resistance: Hidden transcripts*. Yale University Press.

Scott, W. R. (1981). *Organizations: Rational, natural, and open systems*. Prentice Hall.

Scott, W. R. (2001). *Institutions and organizations* (2nd ed.). Sage.

Selwyn, B. (2015). Commodity chains, creative destruction and global inequality: A class analysis. *Journal of Economic Geography, 15*, 253–274.

Shah, A. (2016). *Destructive creation: Analyzing contemporary socio-ecological conflicts as frontiers auf capitalist development* (New Research in GPE Working Paper 1).

Sturgeon, T. J. (2009). From commodity chains to value chains: Interdisciplinary theory building in an age of globalization. In J. Bair (Ed.), *Frontiers of commodity chain research* (pp. 110–135). Stanford University Press.

Sum, N.-L. (2010). Wal-Martization and CSR-ization in developing countries. In P. Utting (Ed.), *Corporate social responsibility and regulatory governance: Towards inclusive development?* (pp. 50–76). Palgrave Macmillan.

Taglioni, D., & Winkler, D. (2016). *Making global value chains work for development*. The World Bank.

Touboulic, A., Chicksand, D., & Walker, H. (2014). Managing imbalanced supply chain relationships for sustainability: A power perspective. *Decision Sciences, 45*(4), 577–619.

Van Staveren, I. (2020). The misdirection of bankers' moral compass in the organizational field of banking. *Cambridge Journal of Economics, 44*, 507–526.

Vergara-Camus, L., & Kay, C. (2017). The agrarian political economy of left-wing governments in Latin America: Agribusiness, peasants, and the limits of neo-developmentalism. *Journal of Agrarian Change, 17*, 415–437.

Yi, Fu. (2020). *The consumption trap*. https://www.echo-wall.eu/chinese-whispers/consumption-trap

CHAPTER 6

Social Upgrading in Global Value Chains from a Perspective of Gendered and Intersectional Social Inequalities

Martina Sproll

Introduction

In the course of neoliberal restructuring, new forms of Global Value Chains (GVCs) developed since the 1990s. A broad debate emerged on the herewith-linked violations of human and labour rights, discrimination and the lack of decent working conditions and secure employment relations. Possible development effects of GVCs have been evaluated, especially in regions of the Global South, and the concepts of industrial and social upgrading have been introduced in this context (e.g. Barrientos et al., 2011; Gereffi, 1999; Humphrey & Schmitz, 2002). Empirical findings show that there has been at least limited industrial upgrading in many cases, but this does not necessarily lead to social upgrading, but rather to mixed or even negative results—especially with regard to

M. Sproll (✉)
HWR Berlin (Berlin School of Economics and Law), Berlin, Germany
e-mail: martina.sproll@hwr-berlin.de

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_6

gender effects (Barrientos, 2014, 2019a; Bernhardt & Milberg, 2011). This problematic highlights that both analysis and the elaboration of governance or policy responses require differentiated theoretical concepts of GVCs, which systematically include power relations and processes of social inclusion and exclusion.

In this article, the focus will therefore be on the question of how far social inequalities and especially gender inequalities have been addressed in theorizing and discussing social upgrading and in how far these have been linked to inherent structures and power dynamics of GVCs.

There is undoubtedly a broad body of literature especially from feminist scholars, which partly draws on the theoretical tradition of dependency theory and world system analysis, showing that transnational production has always been linked to gendered divisions of labour and the exploitation of gender inequality (for an early period see, e.g. Elson & Pearson, 1981; Mies, 2014; Nash & Fernández-Kelly, 1983). Unfortunately, the extensive and insightful feminist research was hardly taken into account in the further development of theoretical concepts of "Global Commodity Chains" or "Global Value Chains", at least in the mainstream debates. The focus was rather on inter- and intra-firm relations and sectoral dynamics (e.g. Gereffi et al., 2005). Bair (2010) and Collins (2014) interpret this as a narrowing of earlier approaches in the tradition of world system analysis, meaning that social inequalities with regard to gender and other dimensions have been ignored and excluded from most theoretical conceptions.

This article therefore aims to sharpen the focus on social inequalities with reference to existing literature and debates. Policies against exploitation and discrimination—whether they are from international organizations, trade unions or local non-governmental organizations—cannot succeed if differences between specific groups of workers, their social profile, power resources and underlying social and cultural norms and values are not taken into account. This means that gender is not the only category of social inequality to be addressed. Rather, it is common sense in critical feminist literature that this must always be seen as interwoven with other dimensions of inequality, what is mostly referred to as "intersectional inequalities" (McCall, 2005; Roth, 2013). Thus, other categories of inequality also have a structuring effect on the shape of GVCs, such as discrimination based on race/ethnicity and class, but also region, age, religion or sexual orientation. So far, very little research has

been conducted on GVCs that considers intersectional inequalities (see, e.g. Hammer & Fishwick, 2020).

Thus, for a more systematic analysis of intersectional inequalities and a further understanding of possible shortcomings of social upgrading policies, the structural conditions for the exploitation and reproduction of inequalities in specific nodes of GVCs have to be highlighted. This refers to several dimensions:

1. Gendered divisions of labour in production: This is firstly relevant regarding the gendered division of labour in the production process. Here, the concrete form of the labour process must be taken into account, as the appropriation, control and exploitation of labour is embedded into specific arrangements of the labour process, and these are always gendered. Secondly, it refers to an unpacking of different layers of the value chain and their profile regarding the power resources of workers which might differ according to their gender and/or social origin.
2. Gendered divisions of labour between the spheres of production and reproduction: As repeatedly emphasized by many feminist scholars, the value of unpaid reproductive work, which is predominantly provided by women in private households, is captured by the firms. The form of capitalist accumulation is always accompanied by specific forms of social reproduction and vice versa, which change over time and differ in specific regions. This points to the social and cultural embeddedness of capitalist accumulation (Bhattacharya, 2017; Fraser, 2016), which also includes the corresponding institutionalization through state politics as an essential condition for the shape of GVCs.
3. Informality: The household is not only a place for unpaid reproductive work but also plays an important role as a place of production along GVCs. This is only one aspect of the dimension of informality, which, also beyond the private household, is crucial for understanding the production and reproduction of gendered and intersectional inequalities along the chains, as workers in informal labour markets, many of whom are women, are exposed to the most precarious and vulnerable conditions. However, research has mainly been focussing on formal employment relationships, following a notion of formality and informality as two distinct spheres (Hammer, 2019,

p. 338). Informality is nonetheless a constitutive part of the structure and dynamics GVCs and related processes of inequality and is of fundamental importance at many interfaces—not only at the "end of the chain" (Mezzadri, 2017). An important aspect here might be the inclusion of informal migrant workers who are especially vulnerable.
4. Fragmentation of value chains: This is not only a basic structure of all value chains, as outsourcing and subcontracting are overarching characteristics. It also enables fragmentation of workers and thus the exploitation of differences between workers. An intersectional perspective is therefore indispensable to understanding the mode of domination in GVCs.
5. A broader perspective on capitalism as a social relation also allows for a deeper understanding of conditions for struggles: This is of importance if social upgrading is perceived as a process, which is not restricted to a technocratic top-down process.

Going further, I will next reconstruct the theoretical debates rooted in the world system approach and the further development of (mainstream) theories, showing the exclusion of gender and inequality from those concepts.

Commodity Chains and Their Entanglement with the Sphere of Social Reproduction

The term "global commodity chains" has been used by many scholars from various disciplines to analyse the development of global production since the 1990s. According to Bair and Werner, "the interdisciplinary appeal of the chain heuristic lies in its ability to ground abstract-prone analysis of economic globalization in the everyday practices of firms, workers, households, states, and consumers" (Bair & Werner, 2011, p. 988). The term "commodity chains" was originally coined in the 1970s by Terence Hopkins and Immanuel Wallerstein:

> What we mean by such chains is the following: take an ultimate consumable item and trace back the set of inputs that culminated in this item - the prior transformations, the raw materials, the transportation mechanisms, the labour input into each of the material processes, the food inputs into the labour. This linked set of processes we call a commodity chain. If the ultimate consumables were, say, clothing, the chain would include the

> manufacture of cloth, the yarn, etc., the cultivation of the cotton, as well as the reproduction of the labour forces involved in these productive activities. (Hopkins & Wallerstein, 1977, p. 128)

In this famous quote, Hopkins and Wallerstein grasp the concept of commodity chains broadly and in the perspective of the world system approach. A commodity is the outcome of a spatial–temporal network of different processes, materials and actors. What is remarkable, however, is that not only production but also the labour force involved is explicitly considered here, showing that this approach goes far beyond the economic analyses of the mainstream in commodity chain research. The question of social reproduction—the labour force, its living conditions, the input in housing, nutrition, education, culture, etc. to maintain and reproduce the labour force—is an inherent part of the concept, which at the same time takes into account the racial and gendered structures of such chains. In her book "Gendered Commodity Chains" Dunaway summarizes this approach as follows: Hopkins and Wallerstein assumed that commodity chains are not only "a network of labor and production processes" (Hopkins & Wallerstein, 1977, pp. 127–128) but also that this "chained network is grounded in sexism, racism and drains of surplus from worker households" (Dunaway, 2014a, p. 2). With reference to several publications of Hopkins and Wallerstein between the 1980s and 1990s, she summarizes their main arguments—and thus basic characteristics of commodity chains—as follows:

1. the intermingling of several forms of waged and nonwaged, free and unfree labor;
2. extraction of visible and hidden surpluses from households;
3. gendered and racial exploitation of workers; and
4. economic devaluation of household-based work, especially that of housewives. (Dunaway, 2014a, p. 2)

In these four points the relevant dimensions are included that are necessary for a perspective on power and social inequality in capitalist accumulation processes, if these are understood as a social relation and as a relationship of exploitation. However, this comprehensive concept did not become the guiding pattern for the analysis of transnational relations of production. The dimension of gender and other types of inequality and discrimination, and, even more so, the importance of private households were increasingly excluded from the analyses.

New International Division of Labour—Research on Gender in Global Value Chains Since the 1970s

Research on gender in global value chains emerged in the 1970s in the course of a new wave of globalization of production. In the wake of the crisis of Fordism, a massive shift of production processes to the periphery took place, especially to Asia and Latin America. Fröbel et al. (1980) described this development as the "New International Division of Labour". According to this approach, capital-intensive processes remained in the industrialized countries, while labour-intensive processes were shifted to the periphery, where a large supply of cheap and low-skilled labour was available for production, especially in the still minimally automated textile and garment industry and in the electrical and electronics sector (Fröbel et al., 1980, p. 13; Ong, 1987). Taylorist labour processes allowed for an unrestrained exploitation of these low-skilled, low-paid and barely unionized workers who were predominantly young women without previous experience and socialization as wage labourers. Research on gender in global production originated in this period and focussed on the exploitation of these female workers. Examples include the studies of Fernández-Kelly (1983) on the maquiladora industry in Mexico; Ong (1987) on the new production zones in Asia and the resistance of the female labour force and the much-acclaimed essay "Nimble Fingers Make Cheap Workers" by Elson and Pearson (1981), which not least demonstrated the significance of gender constructions ("docile and with nimble fingers") for the exploitation of young women in world market factories. The studies highlighted the gender dimension in the globalization of work and production by showing, among other issues, that women in the global South were increasingly integrated into the formal labour market as wage labourers. Thereby, traditional forms of the gendered division of labour changed, showing that the transnational expansion of capitalist production also means a "land grabbing" of private households and the labour force of women. This underlines that social and cultural norms, the organization of social reproduction and gendered power relations are to be understood directly as part of the globalization of work and production, as Maria Mies (2014) already stated in her book "Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour", first published in 1986.

From Global Commodity to Global Value Chains and Production Networks

Since the 1990s, a new wave of globalization of labour and production, based on the neoliberal opening and deregulation of markets changed the shape of global value chains. Flexibilization and new forms of transnational entanglements of production and employment relationships mark this new wave of finance-led capitalist accumulation. The subsequent academic debate generated new theoretical concepts, especially on "Global Commodity Chains" (GCCs) and "Global Value Chains" (GVCs) (e.g. Gereffi & Kaplinski, 2001; Gereffi & Korzeniewicz, 1994). In these concepts, the main aim was to analyse the complex relationships between individual companies, suppliers, subcontractors, etc. and to understand how and by whom these chains are actually controlled, i.e. who has the power in the chain to appropriate the surplus. With its GCC approach, the group around Gary Gereffi moreover attempted to further develop the world system approach by distinguishing between different types of commodity chains, e.g. "buyer-driven" versus "producer-driven" commodity chains (Gereffi, 1996). The main interest was on the question if GCCs imply potential for "industrial upgrading" in developing countries. This new phase of globalization did not follow the patterns that Fröbel et al. (1980) had identified in their "New International Division of Labour". Instead of shifting just the labour-intensive production processes to the periphery, there was also increasing relocation of highly qualified production infrastructures to the Global South, for example, in the electronics industry (Lüthje et al., 2013) or in the automotive sector (Humphrey & Memedovic, 2003). The question therefore arose if the integration into GCCs would help developing countries to (a) improve their competitive position on the world market and (b) whether there would be a "trickle-down-effect" benefitting the workers in the respective countries and regions (Gereffi, 1999; Humphrey & Schmitz, 2002). The underlying (modernization theory-oriented) assumption is that product upgrading and higher world export market shares would translate into employment and higher wages.

According to Bair (2005), this concept broke with the tradition of the world system approach or radical development theory, which rather emphasized long-range structural asymmetries in the world system. Instead, "the GCC framework has evolved as a network-based, organizational approach to studying the dynamics of global industries" (Bair,

2005, p. 158). At the same time, despite the considerable knowledge which undoubtedly was gained from the many studies that have been conducted within the GCCs framework, the holistic perspective of the world system approach discussed above, which also encompassed social reproduction, has fallen by the wayside. This means in particular that not only the significance of gender relations but also other dimensions of social inequality and thus the insights of feminist studies have widely been neglected and ousted from the mainstream academic debates.

In the further development of theoretical concepts, the GCC approach was largely replaced by the concept of "Global Value Chains". However, even more than for the GCC framework, Bair (2005, p. 153) rightly criticizes a narrow perspective on the "meso-level of sectoral logics and the micro-level objective of industrial upgrading". In contrast, she calls for considering the larger institutional and structural environments in order to understand "the uneven social and developmental dynamics of contemporary capitalism at the global–local nexus" (Bair, 2005, p. 153).

Collins (2014) goes one step further in reconstructing how social inequality, gender and social reproduction have disappeared from such theoretical concepts. She describes how at the beginning of the 2000s several scholars around the Global Value Chain Initiative at Duke University (among others) aimed at standardizing and simplifying methods, adapting them to traditional forms of economic and business analyses in order to achieve a sharper analysis and greater relevance for the development of policy programmes. Collins sees the narrow focus on competitiveness and industrial upgrading as a mode of rendering GCC analysis "mainstream" and as an approximation to neoclassical paradigms, resulting in a systematic exclusion of perspectives on the gendered and racist structures as well as the appropriation of hidden surplus from worker's households (Collins, 2014, pp. 30–31).

Of course, the development of both theoretical approaches and empirical research has been much more differentiated than depicted so far. For example, the concept of Global Production Networks (GPNs) was presented by a group of scholars located at the University of Manchester with a background of industrial geography (Henderson et al., 2002). Here, among other issues, the role of the state or the significance of spatial distribution was given much more attention—where and why do companies actually settle and to what extent is this embedded in a historical, economic, political, social and cultural context? In this approach, therefore, power relations were addressed much more fundamentally. However,

this did not mean that gender and social inequality or social reproduction had been systematically included again.

In summary, it can be said that the findings of gender research were not integrated as a constitutive element or only in a curtailed form into the conceptual development of GVCs. Nevertheless, there has been ongoing research on gender in GVCs since the 1990s, which at the same time became more differentiated in terms of theoretical and methodological perspectives (for an overview, see, e.g. Bair, 2010). These studies have revealed regional and sectoral differences, among other things, but also differences between women, so that they are no longer generally regarded as a homogeneous group that appears solely as victims of exploitation (Mohanty, 1991). The fact that gender plays a role is the common point of departure, according to Bair (2010, p. 204), while the questions are now directed more to the "how", i.e. in what way gender is embedded in the form of capitalist accumulation. Gender and other categories of social inequality are thus not to be understood as static constants in the mode of capitalist accumulation, but rather as mutually dependent. They arise from concrete social practices and cultural norms: from a complex "set of context-specific meanings and practices [which intersect] the structure of global capitalism and its systemic logic of value extraction and capital accumulation" (Bair, 2010, p. 205).

Gender in the Context of Debates on Industrial and Social Upgrading

Gender discrimination in global value chains has also increasingly been incorporated into the agenda of international organizations such as the OECD, the World Bank and especially the ILO. These have contributed greatly to a broader political debate on gender inequality. On the one hand, this reflects gender mainstreaming policies, but on the other hand also the worldwide increasing female labour force participation rate since the 1990s. In this process, women have been more and more included in global value chains. Still, there is a significant lack of data on employment in GVCs and the corresponding gender ratio. Barrientos (2019b, p. 326) indicates that approximately 453 million jobs are linked to GVCs, according to an ILO estimation for about 40 OECD and BRIC countries. This is about one-fifth of total worldwide employment, while an estimated 190 million or 42% of these jobs are occupied by women. But these figures only represent women in formal employment and exclude

informal arrangements and household-based production. Many studies show women to be a disadvantaged and discriminated group that is more affected by precarious and informal employment relationships, unemployment, poverty and violence. This reflects gender segregation in the structure of value chains: more women are found in the low-paid service sector and in lower tier suppliers, while men tend to work in directly exporting companies (OECD, 2018), where they are more likely to find higher pay, better employment conditions and collective bargaining agreements.

Nevertheless, poor working conditions and human rights violations are a general problem in GVCs, which could not be solved nor attenuated by Corporate Social Responsibility policies and other governance approaches so far. Consequently, a broader debate on industrial and social upgrading arose both in the academic field and in institutions such as the ILO. The term "industrial" upgrading has been critiqued as too industry-centred and is therefore substituted with "economic" upgrading in order to include agriculture and the services sector, where women are predominately active. Economic upgrading means moving to higher-value activities, and thus a complex process that involves "changes in business strategy, production structure and technology, policy and the organization of markets" (Bernhardt & Milberg, 2011, p. 2). Social upgrading evolved as an attempt to address the quality of employment and the increase of real wages—a topic that was lacking in mainstream GVC literature until the mid-2000s (Rossi, 2019, p. 273). It can be defined as "the process of improvements in the rights and entitlements of workers as social actors by enhancing the quality of their employment" (Rossi, 2019, p. 273). This definition corresponds to the concept of "decent work" and the core labour standards defined by the ILO (ILO, 2016; Rossi, 2019, p. 273).

It is particularly in the course of the debate on "decent work" and "social upgrading" that gender discrimination has been included in a large number of background and position papers and policy programmes of the international organizations mentioned above. However, these papers, although not exclusively, rather follow more functionalist and governance-oriented approaches, this means rationalistic concepts which tend to neglect the importance of social relations. Only more recently, fundamental analysis has been provided regarding gender in GVCs and more specifically in the context of economic upgrading, showing that an analysis of gender relations needs refined analytical tools and perspectives (Barrientos, 2014, 2019a, 2019b).

Moreover, there was a growing attention on the topic of "work" also in the context of academic GVC analysis (Selwyn, 2012). This allows for seeing workers not only as production factors and victims but also as actors who actively shape the form of global production networks through (collective) resistance and negotiations. The claim for "bringing labour back in" also allowed researchers to focus attention on the labour process again (as was already the case in the work on the New International Division of Labour) (Taylor et al., 2013). This debate forms an important interface to the analysis of gender dynamics and the intersection of gender with other categories of inequality, such as class, race/ethnicity, religion, etc. (Hammer & Fishwick, 2020; Sproll, 2010). But still, there is very little research with an explicitly intersectional focus and opening for the interface with social reproduction—as earlier claimed by Hopkins and Wallerstein. Nevertheless, studies by the ILO (2016) point to an increasing attention on child labour, modern slave labour or migration/national origin of workers in GVCs.

In the following section, some of the dimensions necessary for the analysis of gender and intersectional inequalities will be delineated in more detail.

Gender Division of Labour in Production

Although the increasing inclusion of women in global value chains was marked by low wages, excessive working hours, deprivation of rights and violence, the proletarianization of women in the Global South has also had emancipatory effects. A wage of their own allows women economic independence from husbands and patriarchal family structures to a certain degree and gives them a status as citizens, which at least formally grants protection by labour and social law. Furthermore, collective forms of organization and resistance, and thus agency is easier to build (Trzeciak & Tuider, 2013). However, this did not result in a clear trend towards greater gender equality. The massive integration of young women into GVCs did not change traditional forms of the gender-hierarchical social division of labour. In fact, studies show a high persistence of such division of labour in private households worldwide (Ferguson, 2013). Women's unequal inclusion is also reflected in a gender division of labour in most areas of GVCs, where gender hierarchies are reproduced or even deepened. This refers to gender-specific activities in the labour process, and gendered hierarchies in companies, in and between industries/economic

sectors, or different regions (De la O, 2013). According to Barrientos (2019b, p. 326), women are also underrepresented in managerial positions in GVCs; they occupy less than 20% of top executive positions across all sectors. Activities with a female connotation usually refer to particularly low-paid, low-skilled, unprotected and precarious employment relationships. This follows powerful constructions of gender images and gender roles that discursively legitimize such hierarchization. It is interesting to note that, although the gender constructions differ in different countries and regions, very similar stereotypes can be found everywhere, such as the women with the "nimble fingers" who seem to be particularly well suited to assembling small electronic components. Or that women are more docile and patient and therefore better suited for emotional work, e.g. in call centres (Sproll, 2016). Leslie Salzinger (2003) has impressively demonstrated how such gender constructions emerge at the company level and how gender hierarchies are consolidated, although they differ from company to company. Gender asymmetries serve as a flexible resource for companies to keep labour costs and labour standards low. Thus, the female connotations of activities and sectors are not fixed but changeable. They always follow, however, a logic of devaluing female labour, showing the underlying power dynamics.

A good example of this is the Mexican maquiladora industry, where a significant change in the gender composition of the workforce can be observed over time. While in the early years (since the 1960s) a large majority of the workforce was female, the proportion of men increased, especially in those sectors that developed higher-value products with a corresponding high-tech infrastructure, such as the electronics or automotive industry (De la O, 2006). This case does not only illustrate the gendered connotation of specific industries and technology but provides another important lesson: The development of the maquiladora industry in Mexico is a prime example of successful economic upgrading regarding technology, skills and value added (Carrillo & Lara, 2003).[1] At the same time, it shows that social upgrading does not automatically result from economic upgrading, but can even cause the displacement of female workers and thus an increase in gender inequality as well as a deepening of gender divisions of labour (Quintero, 2006; Milberg & Winkler, 2013,

[1] Despite this upgrading, the overall effect on regional and national development has been very limited (Carrillo, 2014; Humphrey & Schmitz, 2002).

p. 274). The promotion of social upgrading therefore requires gender-sensitive analysis of such effects. Barrientos draws attention to another interesting example of gender effects through economic upgrading in the agricultural sector: the inequitable distribution of value capture between female and male entrepreneurs and workers. In many cases, female farm-workers carry the burden of applying international standards and certifications that indicate an upgrading process, but the women do not receive additional remuneration: "the higher price is captured by other commercial actors, this constitutes inequitable economic upgrading" (Barrientos, 2014, p. 6).

This clearly shows that for a gender-equitable upgrading, the gendered structures of the production and labour process have to be taken into account. Such analysis must also include the specific form of the labour process, which often follows neotaylorist logics. The consequence of neotaylorist labour processes is a significant polarization of qualification structures. Whereas increasing highly qualified engineering work can be noted, not only in high-tech sectors like electronics and automobiles, it continues to be accompanied by a mass of low-skilled and predominantly female production workers. This seems to be key for reducing labour costs, as it goes along with exploitation and disenfranchisement of workers through flexibilization at all levels (Lüthje et al., 2013; Sproll, 2010; Taylor et al., 2013). The displacement of women through economic upgrading or their assignment to unskilled jobs cannot be explained by higher qualification requirements, which women would allegedly not have. Rather we have to understand that qualification is not an objective dimension but a construction that implies the devaluation of female labour as unqualified or unskilled (Quintero, 2006; Wright, 2006). Neotaylorist labour processes in GVCs thus show gendered structures which result in a polarization of the workforce into qualified (predominantly male) and unskilled (predominantly but far from exclusively female) labour which can easily be replaced. These construction processes also legitimize the remuneration of allegedly low-skilled (female) work with low wages, less performance-based bonuses, etc. Gender inequality is therefore an indispensable factor for exploitation processes and domination strategies in GVCs. Consequently, this must be considered in the elaboration and evaluation of upgrading policies, for example, for a reorganization of qualification and corresponding decent wage structures.

Changing Modes of Social Reproduction: Private Households and Informality

The exploitation of low-waged and unskilled labour in GVCs points to a generalized process of "downwards" adjustments in the quality of employment relationships with major implications for gender relations. The "feminization of labour" concept, as coined by Guy Standing (1999), does not only address the low pay, poor and precarious working conditions that were considered typical for women in world market factories but also refers to men. The comprehensive process of precarization of working and living conditions, which is not limited to the Global South, indicates an overall increase in social inequalities (Sproll & Wehr, 2014) and a global crisis of social reproduction (Fraser, 2016). Such developments imply far-reaching consequences for the shape of gender relations, as poorly paid and precarious men cannot be breadwinners for the family. In this process, traditional notions of masculinity are increasingly being challenged (De la O, 2013). At the same time, women continue to carry the main burden of household, educational and care work as mothers and spouses or lone mothers, whether they are engaged with waged employment or not. In this process, "class" and "race/ethnicity" become evident drivers for the increase of gender inequality. The growing female formal employment comes with an unprecedented commodification of care and reproductive work for those who can pay for it, while it remains "privatized for those who cannot" (Fraser, 2016, p. 104). Migrant women from poor countries leave their families in order to do (paid) household chores and care work for children, elderly or sick persons in the households of richer families in the Global North (and also within regions), which has been addressed in the concept of Global Care Chains (Hochschild, 2000; Yeates, 2014). Social provisioning can of course also appear in a de-commodified way as subsidized by the state (Pearson, 2013).

Dunaway, following Hopkins and Wallerstein and referring to feminist political economy, also discusses the hidden inputs of workers' households into the value chains appropriated by transnational companies. She distinguishes between hidden "labour subsidies" through productive activities of households on the one hand and the "externalization" of costs to households on the other (Dunaway, 2014b, p. 59). The private households of workers not only provide the firms with the labour force and everything necessary for their birth, upbringing and reproduction but also bring in unpaid productive activities (e.g. women who unpaidly assist

their husbands as waged workers in agriculture) as well as informal home-based production work (e.g. in the textile or electronics industries). These hidden inputs keep labour costs low (Dunaway, 2014b, p. 60). Actually "low-wage" is a central feature of GVCs and beyond. A large number of wage earners in the world cannot count on a living wage and women are disproportionately affected (ILO, 2018a). Most workers' households therefore cannot survive without a patchwork of income provided by all household members.

To include the contribution of workers' households and the sphere of social reproduction has major implications for conceptualizing strategies of economic and social upgrading, as these structural nodes for the production of gender discrimination and intersectional inequalities usually tend to be disregarded in mainstream literature. The informal sector plays a particularly important role, although most research and data collection has been restricted to formal employment in GVCs. Therefore, it is of utmost importance to include the structural entanglements of GVCs with the informal sector into theoretical frameworks. To give an example from my research in the Brazilian electronics industry: A 35-year-old worker of a multinational electronics contract manufacturing company told me in an interview that he could not survive on his wage for manufacturing high-tech telecommunications infrastructure. Every morning, therefore, he sells chocolate-coated peanuts as a street vendor, which his mother produced at home before he starts working the late shift at the company (Sproll, 2010, p. 193). This shows the household as a network in which different family members contribute to survival through formal, informal and reproductive work. It is a place where paid and unpaid work, formal and informal work interact. Informality therefore has to be considered a constitutive element of GVCs as these do not only appropriate the surplus of informal and/or unpaid reproductive work but are also actively producing informal structures, which are for most informal workers intrinsically linked to formal companies (Chen, 2005).

The second point mentioned by Dunaway, the externalization of costs to private households and women, is of equal importance and has consequences for the form and existence of the households themselves. She refers to changes in the composition or even disruption of households through migration (driven by economic hardship), with the subsequent increase and reproduction of inequality within families. Externalization also affects health or a subsistence economy due to the concentration of land and the degradation of ecosystems by transnational companies

(air, water, soil), which often hits women particularly hard (Dunaway, 2014b, pp. 59–71). Consequently, food self-sufficiency is also declining in many countries in the Global South and threatening the livelihoods and health of numerous people. This points to the significance of including the consumer side more systematically into analysis, as this is not only an important part of GVCs, which has widely been overlooked but also has a gender dimension. Buying decisions in sectors such as the global food industry are dominated by women (Barrientos, 2014, p. 10). Moreover, the consumer side is relevant not only as an essential part of social reproduction and its conditions but also representing complex interdependencies and asymmetries, e.g. between producers in the Global South and consumers in the Global North (Brand & Wissen, 2021).

A gender-sensitive analysis of GVCs therefore requires a broader perspective on social reproduction, which includes not only workers' households but also the community outside the workplace. Kelly (2009, p. 450) developed an interesting concept of Global Reproduction Networks which calls for a broader understanding of networks that incorporates households and provides a perspective on the diverse allocation of waged and unwaged forms of labour. Thus, analysis is not spatially fixed to the firm but allows for integrating, i.e. "The absorption of new migrants, the processing of waste materials in local environments, and the de-agrarianization of village life […]" (Kelly, 2009, p. 450). Such a perspective appears to be more open to seeing collective resistance of diverse civil society organizations, including women, migrants, trade unions, environmental activists, etc.

Barrientos (2019a, pp. 89–103) further develops the Global Re-Production Network (G(r)PN)-approach from a gender perspective by integrating the following three dimensions:

1. Embedded tensions (e.g. the tension between quality and cost/efficiency, p. 92). This refers to the imperative of profit maximization, low cost and speedy delivery as a "mantra" of firm strategies which contradicts a more comprehensive understanding of quality (of work, production, products and the related social and environmental dimensions) and the respective expectation of consumers (p. 93). Such perspectives would include the question of what is essential and for whom—a question which gained increased significance in the current Covid-19 pandemic. In the sphere of reproduction, the well-being of families does not and

cannot follow a capitalist logics of profit maximization, but different (non-monetarized) parameters of quality.

2. Gendered articulations and disarticulations (e.g. between the spheres of production and reproduction and the underlying "power asymmetries based on the subordinate role of women", p. 92). Barrientos argues that the nexus between the two spheres has changed with the growing importance of women for sustaining low-cost global production. Insecure employment conditions allow for a flexible allocation of (paid and unpaid) female work between households and firms, thus illuminating how the societal undervaluation of women's work "affects value creation, enhancement and capture" (p. 95).
3. Contested outcomes (the struggles around these articulations involving "diverse groups of workers (female and male) both within and across value chains and locations", p. 92). Barrientos discusses the controversy between seeing the exploitation of female workers and their inferior status on the one hand versus potential empowerment through paid work and social engagement on the other hand. "Gendered power asymmetries and bargaining positions [...] shape women's ability to move in and out of work, or between jobs, differently to men" (p. 100). Gender asymmetries therefore influence individual ability as well as collective agency and capabilities.

Both Kelly and Barrientos thus advocate for a broader understanding of social reproduction. This is by no means limited to the reproduction of the labour force in a narrow sense, but more generally points to the political, social and cultural embeddedness of capitalist production and to the significance of contestation for its specific shape and the related gender relations (Bhattacharya, 2017).

The Importance of an Intersectional Perspective for Agency

In recent years, global inequality research has moved beyond a traditionally narrow focus on socio-economic inequality. Postcolonial constellations, gender, race/ethnicity, religion, sexual orientation, etc. were given greater attention (see, e.g. Bashi Treitler & Boatcă, 2016). However, so far there is little research that refers to global value

chains with an explicitly intersectional perspective and considering the named categories in their multidimensionality and interdependence (see Hammer & Fishwick, 2020). One of the structural patterns that produces different axes of inequalities is the fragmentation of GVCs that results from the relocation of production sites to other regions, and the associated continuous and very extensive processes of outsourcing and subcontracting. This process is driven by intense competitive pressures. The subsequent strategies particularly focus on the reduction of labour cost through flexibilization and precarization of employment which impact on a diversification of forms of employment (such as fixed-term contracts, part-time work, informal work, self-employment, temporary labour, zero-hours-contracts, etc.) (Flecker, 2010). Organizational fragmentation means hierarchical segmentation of workers, which differentiates between (comparatively privileged) core and—more or less—marginal workers (without employee status, freelancers or informal workers, undocumented workers, those in modern slave relationships, etc.). Gender and race are among the most important categories that are structuring such processes of hierarchical segmentation. This creates pressure of competition between workers and causes a loss of solidarity, so that specific power relations are established. The fragmentation and division of workers along lines of discrimination based on gender, class/caste, or ethnicity/race, is thus constitutive of power relations in GVCs, which strategically draw on the exploitation of such differences.

For strategies of social upgrading aiming at addressing these discriminatory and exploitative strategies and power asymmetries and for successful organizing strategies of trade unions, it therefore seems indispensable to consider such differences. This does not mean to strengthen identity politics, but calls for an understanding of the underlying processes of inequality. For instance, the example of migrant workers shows that the formation of GVCs has triggered an unprecedented level of regional and transnational migration. This movement often follows former colonial paths and reflects structures of exploitation, racism and the devaluation of people based on their ethnicity or religion. It is therefore by no means enough to include gender in the analysis. It is also necessary to differentiate within categories such as gender or race. Not all female employees, not all migrants or ethnic minorities are “unskilled” production workers in precarious conditions, but they also differ in terms of their employment relationship, their position in the company, their class or caste affiliation, age, religion, legal status, sexual orientation, etc.

The intersectionality of inequalities can only be seen and conceptualized within a broader perspective on capitalism as social relation. This forms the background to a better understanding of conditions for struggles and contestation. It is indeed a big challenge for trade unions to redefine their strategies and to build agency with regard to intersectional gender rights in a structurally adverse environment in GVCs. This requires politics which go beyond a narrow workplace-related focus but include fields such as housing, health, welfare, labour market and citizenship-related rights (Connolly et al., 2014, p. 7) as well as gender rights. It also requires coalitions with a broad variety of actors: the full range of non-state actors, but also "states at various scales" (Kelly, 2009, p. 451).

The state plays a central role not only for industrial policy (which has rightly been emphasized in mainstream GVCs) but also for regulation in the fields of family, gender and labour market as well as migration and (anti-)discrimination policies. The exploitation of differences within GVCs is based on specific frameworks of state regulation, which institutionalize inequality in specific ways. Thus, despite the growing power of transnational corporations, the state is still one of the most important actors in controlling and actively shaping the form and dynamics of GVCs. It sets the rules of the game for how companies can fall back on gender-specific or migration-related inequalities, whether legally or illegally, and whether with recourse to formal, informal or slave labour markets. Differing state regulation has become one of the most important drivers for company decisions on the location of production sites. This shows that nation-state-based forms of regulation are far from mitigating the still ongoing increase of social inequalities.

Conclusion

Despite broad efforts for social upgrading, results have been modest and in some cases even contradicting gender equality. This requires a change of perspective in terms of analytical, empirical and policy-approaches. The deep fragmentation of workers is of course not a new insight, nevertheless, intersectional inequalities have not sufficiently been integrated into analytical frameworks of GVCs. On the contrary, especially the comprehensive development of feminist theory and empirical findings has mostly been excluded from mainstream literature. Intersectional approaches, which also consider other dimensions of inequalities, such as

class/caste, race/ethnicity, religion or sexual orientation have even more been neglected and only came into consideration more recently.

Given the severe and global crisis of social reproduction it seems urgent to conceptualize social upgrading for integration into the field of social reproduction, as GVCs are embedded into a wider field of social, cultural and political dynamics. It has been shown that the herewith-linked asymmetrical power relations are being used by transnational corporations in GVCs for the exploitation of differences between workers—to the detriment of women, migrants, ethnic and other minorities. It is therefore indispensable for counterstrategies to analyse and consider the mechanisms that produce and reproduce inequalities in GVCs. That is all the more important, as the underlying structural patterns such as the intermingling with the informal sector (and the connected gendered and racist dynamics) are on the rise almost everywhere in the world. The ILO states more than 60% of the world's workforce is employed in the informal sector, meaning more than two billion people work unprotected under precarious conditions (ILO, 2018b, pp. 1, 31). In addition, the Covid-19 pandemic further aggravates the situation of workers, not only in GVCs, that are threatened by the loss of their livelihoods in an unprecedented manner. Increasing digitalization will even accelerate such processes.

Trade unions have to counteract these developments and the increasing development of racist and misogynous movements, with femicides and killing of black people being just the tip of the iceberg. In the context of trade union renewal this requires a profound cultural change which opens trade unions for women, migrants, religious and ethnic minorities, LGBTQI people, etc. This in turn requires strategies that include the sphere of reproduction and coalitions with a wide range of actors. The feminization of strike movements (Artus et al., 2020) might be an example and a starting point for redrafting social upgrading policies, which are not restricted to a technocratic top-down process.

References

Artus, I., Bennewitz, N., Henninger, A., Holland, J., & Kerber-Clasen, S. (Eds.). (2020). *Arbeitskämpfe sind Geschlechterkämpfe*. Westfälisches Dampfboot.

Bair, J. (2005). Global capitalism and commodity chains: Looking back going forward. *Competition and Change, 9*(2), 153–180. https://doi.org/10.1179/10245905X45382

Bair, J. (2010). On difference and capital: Gender and the globalization of production. *Signs: Journal of Women in Culture and Society, 36*(1), 203–226. https://doi.org/10.1086/652912

Bair, J., & Werner, M. (2011). Commodity chains and the uneven geographies of global capitalism: A disarticulations perspective. *Environment and Planning A, 43*, 988–997.

Barrientos, S. (2014). *Gender and global value chains: Challenges of economic and social upgrading in agri-food* (European Working Paper RSCAS 2014/96).

Barrientos, S. (2019a). *Gender and work in global value chains: Capturing the gains?* University Press. https://doi.org/10.1017/9781108679459

Barrientos, S. (2019b). Gender dynamics in global value chains. In G. Ponte, G. Gereffi, & G. Raj-Reichert (Eds.), *Handbook global value chains* (pp. 324–338). Edward Elgar Publishing.

Barrientos, S., Gereffi, G., & Rossi, A. (2011). Economic and social upgrading in global production networks—Challenges and opportunities. *International Labour Review, 150*(3–4), 319–340.

Bashi Treitler, V., & Boatcă, M. (2016). Dynamics of inequalities in a global perspective: An introduction. *Current Sociology, 64*(2), 159–171. https://doi.org/10.1177/0011392115614752

Bernhardt, T., & Milberg, W. (2011). *Does economic upgrading generate social upgrading? Insights from the horticulture, apparel, mobile phones and tourism sectors* (Capturing the Gains Working Paper, University of Manchester, 2011/7).

Bhattacharya, T. (Ed.). (2017). *Social reproduction theory: Remapping class, recentering oppression*. Pluto Press.

Brand, U., & Wissen, M. (2021). *The imperial mode of living: Everyday life and the ecological crisis of capitalism*. Verso.

Carrillo, J. (2014). ¿De que maquila me hablas? Reflexiones sobre las complejidades de la industria maquiladora en México. *Frontera Norte, 26*(spe3), 75–98.

Carrillo, J., & Lara, A. (2003, April 9–11). *¿Maquiladoras de cuarta generación? Coordinación centralizada. Ponencia presentada en el cuarto congreso nacional de estudios del trabajo.* Paper presented to the IV Congreso Nacional de Estudios del Trabajo, Hermosillo, México.

Chen, M. A. (2005). *Rethinking the informal economy: Linkages with the formal economy and the formal regulatory environment*. UNU World Institute for Development Economics Research, Research Paper No. 2005/10.

Collins, J. (2014). A feminist approach to overcoming the closed boxes of the commodity chains. In W. A. Dunaway (Ed.), *Gendered commodity chains: Seeing women's work and households in global production* (pp. 27–37). University Press.

Connolly, H., Marino, S., & Martínez Lucio, M. (2014). Trade union renewal and the challenges of representation: Strategies towards migrant and ethnic minority workers in the Netherlands, Spain and the United Kingdom. *European Journal of Industrial Relations, 20*(1), 5–20.

De la O, M. E. (2006). El trabajo de las mujeres en la industria maquiladora de México: balance de cuatro décadas de estudio. *Revista de Antropología Iberoamericana, 1*(3), 398–419.

De la O, M. E. (Ed.) (2013). *Género y trabajo en las maquiladoras en México: Nuevos actores en nuevos contextos*. Ediciones de la Casa Chata.

Dunaway, W. (2014a). Introduction. In W. A. Dunaway (Ed.), *Gendered commodity chains: Seeing women's work and households in global production* (pp. 1–24). Stanford University Press.

Dunaway, W. (2014b). Through the portal of the household: Conceptualizing women's subsidies to commodity chains. In W. A. Dunaway (Ed.), *Gendered commodity chains: Seeing women's work and households in global production* (pp. 55–71). Stanford University Press.

Elson, D., & Pearson, R. (1981). Nimble fingers make cheap workers: An analysis of women's employment in third world export manufacturing. *Feminist Review, 7*, 87–107.

Ferguson, L. (2013). Gender, work, and the sexual division of labor. In G. Waylen, K. Celis, J. Kantola, & S. L. Weldon (Eds.), *The Oxford handbook of gender and politics*. Oxford Handbooks Online. https://doi.org/10.1093/oxfordhb/9780199751457.013.0013

Fernández-Kelly, M. P. (1983). *For we are sold, I and my people: Women and industry in Mexico's frontier*. State University of New York Press.

Flecker, J. (2010). Fragmenting labour: Organisational restructuring, employment relations and the dynamics of national regulatory frameworks. *Work Organisation, Labour and Globalisation, 4*(1), 8–23.

Fraser, N. (2016). Contradictions of capital and care. *New Left Review, 100*, 99–117.

Fröbel, F., Heinrichs, J., & Kreye, O. (1980). *The new international division of labour: Structural unemployment in industrialised countries and industrialisation in developing countries*. University Press.

Gereffi, G. (1996). Global commodity chains: New forms of coordination and control among nations and firms in international industries. *Competition and Change, 1*(4), 427–439.

Gereffi, G. (1999). International trade and industrial upgrading in the apparel commodity chain. *Journal of International Economics, 48*(1), 37–70.

Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy, 12*(1), 78–104.

Gereffi, G., & Kaplinski, R. (Eds.). (2001). Value of value chains. *IDS Bulletin, 32*(3). https://doi.org/10.1111/j.1759-5436.2001.mp32003001.x

Gereffi, G., & Korzeniewicz, M. (Eds.). (1994). *Commodity chains and global capitalism*. Praeger.

Hammer, A. (2019). Comparative capitalism and emerging economies: Formal-informal economy interlockages and implications for institutional analysis. *Review of International Political Economy, 26*(2), 337–360.

Hammer, A., & Fishwick, A. (2020). *The political economy of work in the global south: Reflections on labor process theory*. Red Globe Press.

Henderson, J., Dicken, P., Hess, M., Coe, N., & Wai-Chung Yeung, H. (2002). Global production networks and the analysis of economic development. *Review of International Political Economy, 9*(3), 436–464.

Hochschild, A. R. (2000). Global care chains and emotional surplus value. In W. Hutton & A. Giddens (Eds.), *On the edge: Living with global capitalism* (pp. 130–146). Jonathan Cape.

Hopkins, T., & Wallerstein, I. (1977). Patterns of development of the modern world-system. *Review, 1*(2), 111–145.

Humphrey, J., & Memedovic, O. (2003). *The global automotive industry value chain: What prospects for upgrading by developing countries* (UNIDO Sectorial Studies Series Working Paper). Vienna.

Humphrey, J., & Schmitz, H. (2002). How does insertion in global value chains affect upgrading in industrial clusters? *Regional Studies, 36*(9), 1017–1027.

International Labour Office. (2016). Decent work in global supply chains. In *Report IV, International Labour Conference, 105th Session*. ILO.

International Labour Office. (2018a). *Global wage report 2018/19: What lies behind gender pay gaps*. ILO.

International Labour Office. (2018b). *Women and men in the informal economy: A statistical picture* (3rd ed.). ILO.

Kelly, P. (2009). From global production networks to global reproduction networks: Households, migration, and regional development in Cavite, the Philippines. *Regional Studies, 43*(3), 449–461.

Lüthje, B., Hürtgen, S., Pawlicki, P., & Sproll, M. (2013). *From Silicon Valley to Shenzhen: Global production and work in the IT-industry*. Rowman and Littlefield.

McCall, L. (2005). The complexity of intersectionality. *Signs, 30*(3), 1771–1800.

Mezzadri, A. (2017). *The sweatshop regime: Labouring bodies, exploitation and garments made in India*. University Press.

Mies, M. (2014). *Patriarchy and accumulation on a world scale: Women in the international division of labour*. Zed Books.

Milberg, W. & Winkler, D. (2013). *Outsourcing economics: Global value chains in capitalist development*. Cambridge University Press.

Mohanty, C. T. (1991). Under Western eyes: Feminist scholarship and colonial discourses. In C. T. Mohanty, A. Russo, & L. Torres (Eds.), *Third world women and the politics of feminism* (pp. 51–80). Indiana University Press.

Nash, J., & Fernández-Kelly, M. P. (1983). *Women, men, and the international division of labor*. SUNY Press.

OECD. (2018). *Women in global value chains*. Organisation for Economic Cooperation and Development. https://www.oecd.org/sdd/its/Women-in-GVCs.pdf. Accessed 22 Oct 2020.

Ong, A. (1987). *Spirits of resistance and capitalist discipline: Factory women in Malaysia*. SUNY Press.

Pearson, R. (2013). Gender, globalization and the reproduction of labour: Bringing the state back in. In S. M. Rai & G. Waylen (Eds.), *New frontiers in feminist political economy* (pp. 19–42). Routledge.

Quintero, C. (2006, August 21–25). Female work in Mexican maquiladoras: "Naturally" unskilled work or creating unskilled work for women workers? In *Panel of Gender Studies of XIV International Economic History Congress*, Helsinki, Finland.

Rossi, A. (2019). Social upgrading. In G. Ponte, G. Gereffi, & G. Raj-Reichert (Eds.), *Handbook global value chains* (pp. 272–285). Edward Elgar Publishing.

Roth, J. (2013). *Entangled inequalities as intersectionalities: Towards an epistemic sensibilization* (desiguALdades.net Working Paper Series, 43). desiguALdades.net.

Salzinger, L. (2003). *Genders in production: Making workers in Mexico's global factories*. University of California Press.

Selwyn, B. (2012). Beyond firm-centrism: Re-integrating labour and capitalism into global commodity chain analysis. *Journal of Economic Geography, 2012*(12), 205–226. https://doi.org/10.1093/jeg/lbr016

Sproll, M. (2010). *High-Tech für Niedriglohn: Neotayloristische Produktionsregimes in der IT-Industrie in Brasilien und Mexiko*. Westfälisches Dampfboot.

Sproll, M. (2016). Missing links in service value chain analysis—Space, identity and inequality in Brazilian call centres. In J. Flecker (Ed.), *Space, place and global digital work* (pp. 105–125). Palgrave.

Sproll, M., & Wehr, I. (Eds.). (2014). *Capitalist peripheries: Perspectives on precarisation from the global south and north*. Journal für Entwicklungspolitik (JEP), 30(4).

Standing, G. (1999). Global feminization through flexible labor: A theme revisited. *World Development, 27*(3), 583–602.

Taylor, P., Newsome, K., & Rainnie, A. (2013). Editorial: putting labour in its place: Global value chains and labour process analysis. *Competition and Change, 17*(1), 1–5.

Trzeciak, M., & Tuider, E. (2013). Trabajo digno. La conceptualización del poder de actuar y la maquiladora en el norte de México. Espacios de

género. In *ADLAF, Friedrich-Ebert-Stiftung, Fundación Foro Nueva Sociedad* (pp. 220–238). Argentina.

Wright, M. (2006). *Disposable women and other myths of global capitalism*. Routledge.

Yeates, N. (2014). Global care chains. Bringing in transnational reproductive laborer households. In W. A. Dunaway (Ed.), *Gendered commodity chains: Seeing womens' work and households in global production* (pp. 175–189). Stanford University Press.

PART II

Insights from Different National Sectors

CHAPTER 7

Social Upgrading, a Mixed Bag: The Indian IT/ITES Sector

Ernesto Noronha and Premilla D'Cruz

Introduction

The emergence of global value chains (GVCs)/global production networks (GPNs)[1] has been made possible by the deregulation of trade and capital flows, rapid advances in transport and data communications and information technology (IT) that enables the fragmentation of production and its relocation across international borders coordinated and controlled rather than owned by multinational corporations (MNCs) (Barrientos et al., 2011). Not surprisingly, the United Nations Conference on Trade and Development (UNCTAD, 2013) estimates that 80 per cent of world trade that is coordinated by lead firms[2] is now organised through GPNs. Furthermore, in 2013, 453 million jobs were

[1]We use the terms GVCs and GPNs interchangeably in this paper.
[2]In this paper we use the terms lead firms and clients synonymously.

E. Noronha (✉) · P. D'Cruz
Indian Institute of Management Ahmedabad, Ahmedabad, India
e-mail: enoronha@iima.ac.in

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_7

GPN-related in 40 OECD (Organisation for Economic Co-operation and Development) and emerging economies (ILO, 2015).

However, much of the GPN research has focussed on lead firms based in the Global North with the consequent neglect of suppliers based in the South (Coe et al., 2008; Noronha et al., 2020). Besides this, despite the growing trend of outsourcing of IT and IT-enabled service (IT/ITES) sectors, GPN analysis has focussed almost exclusively on manufacturing (Flecker & Meil, 2010; Noronha et al., 2020; Zhu & Morgan, 2018). For instance, despite India being the worldwide offshore IT services market leader with a share of 55 per cent of the global outsourcing industry and exports contributing USD117 billion to the aggregate revenues of about USD154 billion in financial year 2017, the IT industry has not been analysed using the GPN framework. Further, the sector also contributes 7.7 per cent as a proportion of national GDP and with regard to its share in total exports it is around 22.5 per cent in 2017. Further, it provides direct employment to 3.9 million workers and indirect employment to ten million (NASSCOM, 2017).

In this chapter we begin by providing a literature review of the employment relations in the GPN sector, after which we describe the evolution of the IT/ITES industry in India and its facilitation by the state. The following section then debates the interface of the Indian IT/ITES industry's insertion in the GPN with social upgrading. Finally, we discuss the issue of workers' voice.

Employment Relations and GVC/GPNs

It is often argued that developing countries have become increasingly dependent on lead firms to access developed country markets (Gereffi et al., 2001). Consequently, large firms in the West limit themselves to their core competencies while outsourcing other parts of their productive systems to spatially dispersed developing country locations beyond the firm (Dicken, 2015). Thus, higher value-added portions of chains are located with lead firms in developed countries, while the commoditised and cost-driven portions of the value chains are situated with suppliers in developing economies (Noronha & D'Cruz, 2016a). Thus, the common theme in GVCs is the outsourcing or subcontracting of simple, low cost and labour-intensive parts of the work to developing countries (Lakha, 1994; Noronha et al., 2016). However, the control that lead firms exert

over their suppliers in international supply chains is exercised not through ownership but through governance[3] (Robinson & Rainbird, 2013).

The GVC literature highlights three aspects of governance: driving, coordinating and normalising (Lee & Gereffi, 2015). 'Governance as driving' means lead firms set the performance criteria in terms of price, quality and delivery standards that shape the behaviour of their suppliers (Lee & Gereffi, 2015). Lead firms who control the chain are assumed to set the parameters for other firms to follow and be very demanding about controlling costs, raising quality and increasing speed of delivery. They enforce these requirements through a system of auditing and inspection which ultimately lead to the decision of keeping or discarding a supplier (Humphrey & Schmitz, 2001). Thus, while the parameters are pre-set by lead firms via designed product and process specifications, exact content and rhythm of the labour process are decided by suppliers (Selwyn, 2016). This increases the pressure on firms at the lower end of the chain to compete and deliver quality goods within the shortest time frame at the lowest price (Ferus-Comelo, 2008).

However, some argue that the complex, varied and dynamic governance mechanisms are insufficiently described by these simplistic notions of 'driving' (Coe et al., 2008; Hess & Coe, 2006; Yang & Coe, 2009). Given this criticism, the concept of 'governance as coordination' was introduced, which highlights the varied forms of inter-firm linkages in GVCs including market, modular, relational, captive and hierarchical (see Gereffi et al., 2005 for details; Lee & Gereffi, 2015). Nonetheless, this expanded governance framework, though a major improvement in the buyer-driven and producer-driven chains conceptualisation, remains a set of ideal types (Yang & Coe, 2009). Moreover, while the five GVC governance types describe aspects of linkage coordination, they do not describe the governance of the whole chain (Ponte & Gibbon, 2005). Thus, the third aspect of governance that highlights 'governance as normalising' deals with various standards and relevant normative frameworks that shape the overall conditions of GVC participation and upgrading (Lee & Gereffi, 2015). In this regard, Ponte and Gibbon (2005) argue that lead firms have been able to embed complex quality information into widely accepted standards, as well as codify and certify procedures as a

[3] Governance is defined as 'the capacity to exercise control through the specification of the product, quality standards, quantities, delivery dates and price' (Robinson and Rainbird 2013, p. 97).

pre-qualification mechanism of inclusion and exclusion in the chain. Such measures are intended to increase the predictability of transactions, the efficiency of production and the profitability of the lead firm (Selwyn, 2016).

Nonetheless, according to Lee and Gereffi (2015) a central argument of the GVC approach is that the type of governance structure significantly affects upgrading. Upgrading refers to the process by which countries and firms 'climb the value chain' from low-value assembly activities to relatively high-value activities, enhancing competitiveness along four economic dimensions: product, process, functional and chain (Barrientos et al., 2011),[4] by enhancing their use of technology, skills and knowledge (Humphrey & Schmitz, 2002). Moreover, it was assumed that if suppliers can increase profits through economic upgrading, social upgrading outcomes in terms of measurable standards (wages, benefits, etc.) and enabling rights (freedom of association, collective bargaining, etc.) would follow. While GPNs have brought employment and economic growth to many developing economies, particularly in Asia, they are also associated with exploitative employment relations, environmental irresponsibility and recurrent ethical dilemmas (Clarke & Boersma, 2017). For instance, to survive, firms may need to intensify or extend the labour process (Baglioni & Campling, 2017). Consequently, moving up the value chain in GVCs does not automatically translate into good jobs, stable employment, better wages and working conditions (Barrientos et al., 2011; Xue & Chan, 2013). Rather, poor wages and working conditions, precarious employment, work intensification, health and safety risks and minimal investment in employee development are commonly identified consequences of GPNs (Wright & Kaine, 2015). In the worst case, the kind of jobs created are low-skilled manual tasks that are casual and flexible, often associated with poor working conditions and low incomes (Gereffi, 2014; Noronha et al., 2016, Noronha et al., 2020).

Further, progress made in measurable standards (e.g. the size and type of employment, wages and working hours) may not extend to enabling

[4] There are four types of economic upgrading: (1) process upgrading makes the production process more efficient by substituting capital for labour; (2) product upgrading introduces more advanced product types that enhance the features of the product; (3) functional upgrading changes the mix of activities performed; (4) chain upgrading shifts to more technologically advanced production chains requiring them to move to new industries or product markets that utilise different marketing channels and manufacturing technologies (Barrientos et al., 2010).

rights (e.g. freedom of association and the right to collective bargaining), with many export sectors having an extremely low level of unionisation (Barrientos et al., 2012) resulting in social downgrading (Coe, 2014). Moreover, corporate globe-trotting bolstered by partisan state policies and the industry's decentralised structure pose tremendous barriers to labour organising. GVCs allow companies to circumvent labour laws, deflect their employment responsibilities and keep their transnational workforce divided along organisational and national boundaries. These practices render labour organising difficult in an era of globalisation (Ferus-Comelo, 2008). Thus, outsourcing of production has enabled firms to distance themselves from traditional labour relations and to break out of the unionised industrial areas, turning the global supply chain into a barrier to organising and collective bargaining. However, even though GPNs are constructed to escape domestic institutional constraints such as industrial relations systems and employment regulation, they are fundamentally influenced by the concrete socio-spatial, institutional and cultural contexts that constitute and are reconstituted by the economic, social and political arrangements of the places they inhabit (Coe et al., 2008; Hess & Coe, 2006).

In fact, firms and states are continuously engaged in an intricately negotiated process over investment projects. Firms attempt to take advantage of national differences in regulatory regimes (Coe et al., 2008), whereas states try to embed MNC activities as strongly as possible in the local/national economy (Liu & Dicken, 2006). For instance, states have often facilitated governance in GPNs by developing policies aimed at creating competitive advantages for places and facilitating 'strategic coupling' between global firms and regional contexts (Selwyn, 2016). Thus, regulatory governance strategies encompass not only active regulation but also active deregulation—that is, the maintenance of unregulated environments or the 'outsourcing' of regulatory functions including standard setting to private actors (Alford & Phillips, 2018). However, Selwyn (2016) argues that despite capital's strategies to fragment global labouring classes and reduce their bargaining power, workers enjoy new

forms of structural[5] and associational power[6] which can be used to ameliorate their circumstances and generate progressive human developmental outcomes. In addition, workers in export-oriented industries in developing countries exercise their agency through their micro-level decision-making processes that focus on how workers seek and terminate particular types of employment, make incremental improvements in their working lives and are embedded in broader social and community relations (Lund-Thomsen, 2013; Noronha et al., 2020).

With this background, we first describe the evolution of the Indian IT industry and then use the GPN framework to analyse the industry.

Evolution of the Indian IT Industry

With globalisation and the rapid improvements in communications technologies, the decoupling of hardware from software opened a window of opportunity for countries rich in human capital (Arora et al., 2001; see Noronha & D'Cruz, 2016a for details) such as India to become involved in the IT value chain. Consequently, by the late 1980s and early 1990s, most software companies in India acted as sub-contractors, executing assignments onsite (at client's premises) through human power contracts popularly known as 'bodyshopping' (Nath & Hazra, 2002; Russel et al., 2016). The Indian software firm largely provided software programmers and analysts on a temporary basis to the client who managed and supervised them (Arora & Asundi, 1999). Later, large American corporations began to take advantage of wage arbitrage for software skills and established operations in India (Nath & Hazra, 2002). This resulted in the emergence of the onsite-offshore model (lean staff onsite and large workforce offsite) as the better value-added model of software service delivery (Athreye, 2004) governed by service-level agreements (SLAs) that specify the quality standards and quantitative requirements that remote suppliers must deliver to clients and end-customers in the 'home' geographies

[5] 'Structural power' accrues to workers from their ability to disrupt the production process through suspension of work. New 'choke points' create the possibility of 'bullwhip effects', where stoppages of work in one node of the value chain disrupt the functioning of other nodes, and of the value chain as a whole (Selwyn, 2016).

[6] 'Associational power' is generated through workers organisations, such as trade unions and political parties, that can, if sufficiently well organised, use workers' structural power as a means of forcing employers to ameliorate worker's pay and conditions (Selwyn, 2016).

(Noronha and D'Cruz 2009a, 2009b; Noronha et al., 2016; Taylor, 2010).

However, this was not enough to overcome the separation of production and consumption in software work, and therefore processes such as the ISO (International Organization for Standardization), CMM (Capability Maturity Model), Six Sigma,[7] etc. were held to be necessary for creating unambiguous and uniformly understood sets of conventions and practices (Fernández-Stark et al., 2011). To this effect, MNCs played a significant role in this 'process' and 'functional' upgrading as the Indian software industry began to shift from bodyshopping to offshore services (Parthasarathy & Aoyama, 2006). Since then, Indian IT firms began to offer all IT-enabled services (ITES) in the value chain, such as business process outsourcing (BPO) which included call centres, knowledge process outsourcing (KPO) and a significant number of advanced services for specific industries such as law, finance and health care that were once strictly considered to be the preserve of the industrialised world (Fernández-Stark et al., 2011).

The State as a Facilitator

The emergence of the Indian software industry is an outcome not only of an explosion in global demand for high-skill and low-wage software professionals but also of the changing role of the Indian state (Parthasarathy, 2004). From its very early years, the government was very active in promoting the software industry by first being a regulator and producer and later taking on the role of a promoter and supporter (Aggarwal, 2013; Heeks, 1996). The genesis of Bengaluru's (formerly known as Bangalore) emergence in the 1990s as a hub in the global knowledge economy may be traced back to the central government's decision in the 1950s to locate the strategic public sector defence and electronics industry in the city (Parthasarathy, 2004). Consequently, had it not been for the state's investment in technological and educational infrastructure in the 1960s and 1970s—designed for import-substitution industrialisation—the IT services industry would not have been in the position to exploit the emerging opportunities in the 1980s (D'Costa, 2011). Later, the state increasingly embedded itself in private capital by

[7] Six Sigma is a statistical-based, data-driven approach for eliminating defects in a product, process or service.

making policies based on discussion with industry (Parthasarathy, 2004). This growing embeddedness of the state was reflected in the establishment of the software technology parks (STPs) in 1990. As export zones dedicated to the software industry, the STPs offered data communication facilities, uninterrupted electricity, concessional land, centralised air conditioning, tax free status for 100 per cent export-oriented firms, financial and marketing support and financial incentives for firms to provide offshore services (Aggarwal, 2013; Chatterji, 2013; D'Costa, 2011; Parthasarathy, 2013). The STPs not only provided the necessary infrastructure to reinforce the skill advantages which a region like Bengaluru already possessed but were also instrumental in firms shifting from 'bodyshopping' services (means 'labour hire' function where Indian workers were hired by domestic capital for the sole purpose of 'renting' them out to foreign [mainly American] firms) to offshore services by establishing operations in India (Russell et al., 2016). This shift to offshore services marked the beginning of a new relationship between the Indian software industry and global markets (Parthasarathy, 2013), leading to its integration into the global division of labour (Lakha, 1994).

In addition to national policies, in recent years governments at the state level have also competed to announce their own IT policies to attract investment (Noronha and D'Cruz, 2016c). The state governments offer a range of fiscal benefits to the IT/ITES sector, which include: rebates in property registration fees and stamp duty exemption; entry tax and sales tax exemption and reduced power tariffs. Besides this, IT/ITES projects also receive several additional exemptions from city-level zoning regulations which include location policy irrespective of local area master plans, additional building heights or floor area ratio (Chatterji, 2013). The dialogue between government and IT/ITES firms aims at allowing the sector to function with minimal red-tape and maximum labour flexibility (Penfold, 2008). Almost all states have extended certain regulatory exemptions related to labour and environmental laws to the IT sector, which enable them to run 24/7 schedules for 365 days on a shift basis, to serve their clientele spread across several time zones on a real-time basis (Chatterji, 2013).

Social Upgrading: A Mixed Bag

In this context of deregulation, employers argue that they have formulated their own working norms, guidelines and practices that provide

employees with facilities and fair treatment that go beyond the provisions of any law. The IT/ITES sector is also often applauded for providing exceptionally good grievance redressal procedures via open forum meetings, open door policies, town hall meetings, organisational social media, video messages or chats, counselling and suggestion schemes, non-hierarchical structures, informal work culture, merit-based promotions, career growth through tieups with educational institutions and gender equality (Donnelly, 2018; D'Cruz & Noronha, 2012; Noronha & D'Cruz, 2009a; Sahay et al., 2003), challenging the hegemonic traditional management practices, which were both overly paternalistic and hierarchical by often employing caste in their working (D'Cruz & Noronha, 2012; D'Mello & Eriksen, 2010). Besides this, the explosive growth of the industry gives these professionals the ability to negotiate aggressively and demand high concessions in terms of compensation and career advancement from companies. This has prompted firms in the IT/ITES sector to explicitly introduce human capital management strategies such as high salaries, opportunities to work abroad, quick promotions, flexitime, parental leave, provide more congenial and satisfying work environments, transport facilities, the option to telecommute from home, stock option plans, cafeterias, sports facilities, destress rooms, onsite childcare and health facilities comparable to those of their strongest competitors in the US and elsewhere (Arora & Athreye, 2002; Penfold, 2009; D'Cruz & Noronha, 2006). Further, most employer organisations mandated by their US clients sought to provide physical work environments of international standards resembling those in the West in the process illustrating how the national labour markets for professional services are increasingly intertwined with the global value chain (Kuruvilla & Noronha, 2016). There was also an effort to create fun in the workplace, particularly in the BPO sector with cultural activities and get-togethers such as organised events for their employees' family members, team outings, team parties and office gatherings organised frequently (Noronha & D'Cruz, 2009a). In fact, some researchers have argued that well-being and job satisfaction form the pivot of HR practices implemented in the Indian IT sector, which are supposed to be highly innovative, professional, formal, structured and world-class (Thite & Russell, 2009). Thus, Barrientos et al. (2011) conclude that workers in this sector have moved towards better-paid employment associated with progressive social upgrading—a clear instance of a 'race to the top' (Arora & Athreye, 2002).

Commodified Work

However, despite paying substantially above Indian standards and providing employees with numerous benefits, the difficulty in retaining talented professionals remained. What remains hidden behind the 'chic and yuppie image' of the industry, however, are the mundane, labour-intensive manufacturing processes (Ferus-Comelo, 2008, p. 142).

Quite naturally, with the shift from the onsite to the offshore model, the tedious, low-end, labour-intensive work, the unrelentingly monotonous and low paying execution tasks of low-level design, coding, testing, support and maintenance performed by bodyshoppers (Ethiraj et al., 2005) were among the first to be outsourced (Blomqvist et al., 2015). The knowledge requirement for these tasks was minimal, as they require less business user involvement and could be executed at offshore locations with fewer risks and lower cost. Besides this, early life cycle tasks such as design and user requirement analysis were considered more difficult to outsource, as they required more intimate knowledge of the firms' work practices and were often tacit and difficult to convey over long distances (Sahay et al., 2003). Even in the case of turnkey projects entailing design and high-level systems integration, the work done in India is of low value such as coding, conversion, debugging and testing and customisation of multinational products, most of which are carried out offshore for cost reasons (D'Costa, 2003). Thus, the origin of the Indian software industry was firmly rooted in performing low-end, technically less demanding and labour-intensive work for the global IT industry and exploiting labour cost arbitrage opportunities between India and developed country markets. Faced with a small and undeveloped domestic software services market, this suited Indian software firms that focussed primarily on the export market (Ethiraj et al., 2005).

Similarly, Noronha et al. (2016) hold that Legal Process Outsourcing (LPO) organisations concentrate on low-end, low-value document review and routine support functions that have limited scope, while the more sophisticated and strategic work is performed by lawyers in the client's country. Thus, the majority of the work outsourced to foreign attorneys constitutes 'lowend' or 'commodity' legal work that is divisible and generic in nature, requiring only minimal firm-specific knowledge (Noronha et al., 2016). Thus, even Knowledge Process Outsourcing (KPO), which some argue entails genuine complexity and high-value services (see Taylor & Bain, 2006), has been subjected to standardised

processes solutions rather than being customised (Noronha et al., 2016; Russell et al., 2016). Even in reference to BPO work, Taylor (2010) holds that companies commonly route to India only the 'mass market' calls which are highly standardised, codified and routinised, with premium or privileged customers being serviced domestically. This suggests that there are certain limitations on the ability of India to move up the value chain even in the case of call centre work (Taylor & Bain, 2006). In short, the recent focus on ITES as a driver of software exports reinforces the low-wage segment of the value chain (D'Costa, 2004).

Not surprisingly, from a GVC perspective, many of the IT jobs in India are routine, monotonous, noninnovative, tedious, uncreative, less skilled and lowend, and involve activities such as development, maintenance, testing, coding, low-level design, data conversion and online technical support based on the instructions and specifications given by the client (Agrawal et al., 2012; Arora & Asundi, 1999; Arora et al., 2001; D'Costa, 2003, 2004; Lakha, 1994; Nath & Hazra, 2002). In fact, while Fernández-Stark et al. (2011) argue that process upgrading facilitates workforce development and industry upgrading, Prasad (1998) holds that defining and documenting the software development methodology and the pressures to standardise products has resulted in deskilling and breaking of the individual employee's monopoly of knowledge over the labour process. This rationalisation has turned software work into a mechanical activity that is constantly monitored and measured in terms of time, effort and productivity, which blurs the distinction between IT and ITES work (Upadhya, 2010). In fact, Noronha and D'Cruz (2016b) argue that most work would fall within the scope of the definition of workman[8] under India's Industrial Dispute Act 1947, as it was mostly repetitive clerical work.

The service-level agreements (SLAs) between these lead firms and their clients are further routinising work (Noronha et al., 2016). These SLAs keep the client satisfied, through quantitative and qualitative parameters regarding accuracy, workload targets, data security and ethical standards (Noronha et al., 2016). With every renewal of contract, clients

[8] The Industrial Dispute Act 1947, governing industrial relations in India defines a 'workman' as any person employed to do manual, unskilled, skilled, technical, operational or clerical work. It exempts the defence forces, police, managers, administrators and supervisors drawing wages exceeding 10,000 rupees per month (Noronha & D'Cruz, 2016b).

wanted improvements in performance. Under pressure to win bids, Indian suppliers committed to infeasible deadlines and were held responsible to deliver on their commitments. Clients also defined supplier key performance indicators (KPIs) and imposed penalties if project deadlines were not met (Noronha et al., 2020). The outsourcing providers in India are under constant pressure by their clients to reduce operating costs and increase service levels, resulting in a 'sacrificial HR strategy' that compromises employees' well-being and job satisfaction in favour of company objectives. In some cases, this leads to depersonalised bullying (D'Cruz and Noronha, 2009a; D'Cruz, 2012). Given the nature of their work, employees are considered replaceable, expendable and dispensable commodities on the assembly line rather than knowledge workers. As a result, Indian suppliers do not endow their employees with high-end skills valued by the market, or invest in training and certifications both in terms of time and money. Labour is seen as a cost rather than a potential asset and investing in the quality of the labour force is virtually unheard of (Noronha et al., 2020).

Implications for Employees

In terms of other parameters like job security, working with constant deadlines, paid annual leave, freedom of association, etc., the IT sector fares badly against comparable jobs in other sectors (Sarkar et al., 2013). The blanket exemption from the Industrial Employment (Standing Orders) Act 1946 allows employers to be abusive. Further, employees are forced to comply with management under threat of being blacklisted or deprived of relieving letters, which would then restrict their future mobility. In fact, the inhumane methods of terminating workers' employment through forced resignations and bullying have been rampant, especially during a downturn (D'Cruz et al., 2014). Legislation that gives those employed for over six months a right of appeal against dismissal without reasonable cause is not often invoked by IT/ITES employees, given the difficulty and delays in the legal system, the ease of finding another job in the sector (Penfold, 2008) and the perception of being professionals (Noronha & D'Cruz, 2006, 2009b). Besides this, benefits are withdrawn without a dialogue and companies do not provide procedures for acting against sexual harassment (Noronha & D'Cruz, 2017). Further, though legislation requires the availability of maternity leave,

evidence suggests that those seeking to take maternity leave are often encouraged to resign (Penfold, 2008).

Further, project-based work with unpredictable workloads and the requirement to deliver projects consistently within the stipulated time often requires employees to work several overtime hours at home as well as on weekends, national holidays and festival days (Noronha & D'Cruz, 2017). Even when working onsite, Indian employees are always expected to accede to unreasonable requests made by clients, as it is difficult for Indian suppliers to coerce non-Indian employees to do so. Indian managers forced their Indian employees to work long hours by invoking their single status, applying peer pressure or threatening their continuity on the onsite assignment. The Indian workers live under the constant threat of being sent back to India and are subjected to aggressive yelling or screaming, strict monitoring and abuse amounting to workplace bullying. Therefore, Indian employees never call in sick and even leave that was granted to them in advance was cancelled by managers at the last moment (D'Cruz & Noronha, 2015; Noronha et al., 2020; Russell et al., 2016). However, working late does not imply being paid overtime. The salary is fixed, regardless of the hours worked. Odd working hours usually impacts workers' health, manifesting in several symptoms of mental and physical illness such as nervousness, chronic fatigue, stiff neck, sore eyes, backaches and headaches, impaired vision, numbness in fingers, body ache, fever, asthma, sore throats, nausea, dizziness, rashes, insomnia, anxiety, restlessness, irritability, depression, drowsiness, loss of appetite, changes in body weight, decreasing vigilance and gastrointestinal problems (McMillin, 2006; Noronha & D'Cruz, 2006). It was also noticed that employees develop poor eating habits, overeating, smoking, drinking excessive coffee, etc. to cope up with the psychological and physical strain (McMillin, 2006). Upadhya (2010) concludes that from the perspective of decent work, problem areas are job security, social protection, working hours and work–life balance. Overall, this according to Salminen-Karlsson (2015), could be interpreted as denoting exploitative paternalism.

Experience with Employee Voice

Despite this, the sector lacks virtually any kind of workers' association. There are no unions, employees' committees or representatives, or any other democratic measures or policies for collective influence. Even European managers working in India did not import such traditions from back home (Salminen-Karlsson, 2015). The challenges stem from several sources such as an anti-union corporate culture, state complicity in this culture, the ways in which the complex GPNs and manufacturing processes are currently organised, and the priorities and politics of unions themselves (Ferus-Comelo, 2008).

The anti-union corporate culture disregards the basic freedoms provided by the Indian Constitution. Most IT/ITES firms backed by the employer association, the National Association of Software and Service Companies (NASSCOM), persistently lobbied against unionisation in the sector. Employees also harboured the view that a collectivist agenda is at odds with business interests and pursuing such a path would unleash conflict. By juxtaposing the unsavoury picture of union-related conflict and its consequences with the attractive image of peace and cooperation in the absence of unions, employers tried to avert union formation. Indeed, management's subtle references to conflict paid off, because the presence of unions creates tension, anxiety and disruption through the use of strike and job action (Noronha & D'Cruz, 2006, 2009a, 2009b). Undoubtedly, the very nature of capital being able to shift to low-cost destinations enabled employer organisations to propagate this view among employees. When clients can readily source labour from multiple locations, the possibility of work being taken elsewhere discourages labour from pressing for even the most legitimate demands (Penfold, 2008; Noronha & D'Cruz, 2006). Corporations use this exit strategy to deny workers their freedom of association and the fundamental right to collective bargaining (Ferus-Comelo, 2008). In fact, the codification and standardisation of tasks enabled by new technologies (Noronha et al., 2016) coupled with lower capital intensity and sunk costs, as well as weaker links with local suppliers, makes the offshoring of services more footloose than manufacturing (UNCTAD, 2004).

In addition, employers argue that sophisticated human resource management (HRM) strategies have significant potential to take care of the interests of educated 'executives' who have a voice of their own. In fact, in the Indian context, high commitment management practices

are advocated to ensure union avoidance (Noronha & D'Cruz, 2006, 2009b). Further, the highly individualised wages linked to performance systems and the lack of time and space hampered the development of long-term relationships and collective mobilisation. It is not surprising then that employees in this sector came to believe that union formation would only precipitate problems for employer organisations, clients and employees themselves, threatening the continuity of the industry, and in turn, of their own employment (Noronha & D'Cruz, 2006, 2009a, 2009b; Noronha et al., 2020). Staying away from unions and avoiding conflict, even in instances where their rights were violated, was the preferred option. Hence it was not uncommon to find employees quitting their current jobs and seeking fresh appointments within India's booming sector rather than engaging third-party intervention to redress their grievances (Noronha & D'Cruz, 2009a; Penfold, 2009).

Further, mobilising membership was impeded by the employee self-concept of being 'professional' and participants did not consider themselves to fall within the purview of collectivisation endeavours (D'Cruz & Noronha, 2009b, 2013b; Noronha & D'Cruz, 2006, 2016b). It was difficult to convince IT/ITES employees about the need for a union. They saw no relevance for unions and they associated these with blue-collar workers. Slogan shouting on the streets and picketing ITES organisations was seen as detrimental to their professional image. Believing in the relevance of merit as the means of career progress, employees feared that the presence of unions would reverse these trends by introducing a levelling effect through attempts to protect the less capable (Noronha & D'Cruz, 2006, 2009b). In their view, intelligent, qualified, motivated, responsible and upwardly mobile professionals like themselves, whose jobs provided good returns, whose work environments were modern and chic, and whose employers looked after their wellbeing, were not in the same category as factory workers (D'Cruz & Noronha, 2009b; Noronha & D'Cruz, 2006, 2009b). Naturally, the two initiatives of organising (see Noronha & D'Cruz, 2009a, 2009b, 2017 for details) failed. Even possibilities for onsite collectivisation were impacted by the typical disdain for unions espoused by knowledge workers and the essential nature of GPNs which divides workers (Noronha et al., 2020). Overall, while capital has well and truly globalised, effective working-class organisation across complex production networks remains the most daunting challenge of all (Russell et al., 2016).

Attempts at Individual Resistance

Not surprisingly, Indian employees have had to fend for themselves. In call centres, participants of studies described a range of breathers, releases, outlets and pauses as manifestations of disorganised coaction, collegial coping and concertive (quasi)supervision, subsuming several variants that some of them and/or their colleagues occasionally resorted to. Participants underscored that these activities and behaviours provided them with means of gaining some respite from and power over their stringent work context and did not symbolise any antiwork or antiemployer sentiment. Specifically, breathers, releases, outlets and pauses not only provided agents with some slack time but also allowed them to maintain their performance records. In other words, agents engage in these activities despite their sense of professionalism, while also knowing that if their employers discovered their behaviour, they would face punishment up to the level of dismissal. While undoubtedly indicative of unauthorised and oppositional resistance, these behaviours stand in contrast to traditional and conventional forms of resistance such as protests and mass movements that are formal, active, organised, overt, targeted, sustained, collective and intentionally disruptive working-class revolutions (D'Cruz & Noronha, 2013c). Further, employees can express their voice through external websites such as Facebook and Glassdoor, with the latter providing anonymity (Donnelly, 2018).

Conclusion

With the emergence of GPNs, developing countries can now industrialise by inserting themselves into these chains rather than by building their own value chains from scratch (Gereffi, 2014). With regard to the IT/ITES industry, globalisation and the rapid improvements in communications technologies, the decoupling of hardware from software opened a window of opportunity for countries rich in human capital such as India to involve themselves in the IT value chain. Towards this end, the Indian state created the enabling conditions for Indian IT firms to engage with global markets particularly by enhancing the quality of human resources, and providing tax holidays and infrastructure facilities. Further, the state has increasingly withdrawn from the regulation of the sector. The dialogue between government and IT/ITES firms aims at allowing the sector to function with minimal red-tape and maximum

labour flexibility as various state governments have granted labour legislation exemptions to the IT/ITES sector. Thus, the IT/ITES industry has shaped local institutions through its ability to lobby and influence national and state governments (Noronha & D'Cruz, 2016c). Nonetheless, employees across the IT/ITES industry have benefited in terms of higher salaries, better working conditions and mobility in terms of status in society. At the same time, issues related to job security, social protection, working hours and work–life balance show shortcomings. Moreover, given that the work outsourced to India is at the lower end of the value chain, a highly educated workforce has been relegated to mundane and dead-end jobs in terms of employment. Thus, the gains from participation in the global economy do not seem to be effectively disseminated.

Regarding enabling rights, the fear of reprisals by employers has made joining trade unions ineffective in practice. Employers dissuade employees from joining unions with their subtle and overt aversion to unions. Added to this, the possibility of work being outsourced to other destinations discourages labour from pressing for even the most legitimate demands. Framework agreements relating to offshored work, commonly negotiated between unions and large corporations like HSBC in the UK, have been non-starters in supplier countries like India (Noronha & D'Cruz, 2016a, 2016b). Thus, while integration into the GPN may result in product and process upgrading (Gereffi et al., 2005), the essential nature of GPNs also divides workers along the IT value chain. Union organising is confronted by familiar issues of professional identity, individualism, transparency, political affiliations, internal democracy and gender neutrality (D'Cruz & Noronha, 2013b). The challenge remains for unions to grasp the emerging opportunities and ally themselves with other civil society organisations to confront the practices of the IT/ITES industry courageously and creatively (Ferus-Comelo, 2008). In the meantime, individual workers must fend for themselves. Most workers in export-oriented industries in developing countries rarely engage in outright resistance strategies. Rather, they exercise their agency through micro-level decision-making processes that focus on how to seek and terminate particular types of employment, make incremental improvements in their work lives and their embedding in broader social and community relations (Lund-Thomsen, 2013; Noronha et al., 2020). This is true of both onsite and offshore employees, including client and supplier employees.

References

Aggarwal, S. N. (2013). *Government bytes: Industrial policy in the Indian software industry* (Berkeley APEC Study Center Working Papers Series BWP) (pp. 13–02).

Agrawal, N. M., Khatri, N., & Srinivasan, R. (2012). Managing growth: Human resource management challenges facing the Indian software industry. *Journal of World Business, 47*(2), 159–166.

Alford, M., & Phillips, N. (2018). The political economy of state governance in global production networks: Change, crisis and contestation in the South African fruit sector. *Review of International Political Economy, 25*(1), 98–121.

Arora, A., & Asundi, J. (1999). *Quality certification and the economics of contract software development: A study of the Indian software service companies* (NBER Working Paper 7260). National Bureau of Economic Research.

Arora, A., Gambardella, A., & Torrisi, S. (2001). *In the footsteps of Silicon Valley? Indian and Irish software in the international division of labour* (SIEPR Discussion Paper No. 00–41).

Arora, A., & Athreye, S. (2002). The software industry and India's economic development. *Information Economics and Policy, 14*, 253–273.

Athreye, S. S. (2004). Role of transnational corporations in the evolution of a high-tech industry: The case of India's software industry—A comment. *World Development, 32*(3), 555–560.

Baglioni, E., & Campling, L. (2017). Natural resource industries as global value chains: Frontiers, fetishism, labour and the state. *Environment and Planning A, 49*(11), 2437–2456.

Barrientos, S., Gereffi, G., & Nathan, D. (2012). *Economic and social upgrading in global value chains: emerging trends and pressures, Capturing the Gains Summit Briefing*, University of Manchester, Retrieved on Novemeber 2, 2021 from https://www.capturingthegains.org/pdf/CTG-GVC.pdf

Barrientos, S., Gereffi, G., & Rossi, A. (2010). *Economic and social upgrading in global production networks: Developing a framework for analysis* (Capturing the Gains Working Paper No. 03).

Barrientos, S., Mayer, F., Pickles, J., & Posthuma, A. (2011). Decent work in global production networks: Framing the policy debate. *International Labour Review, 150*(3–4), 297–317.

Blomqvist, M., Peterson, H., & Dhar-Bhattacharjee, S. (2015). You feel the threat from Asia: Onshore experiences of IT offshoring to India. *Nordic Journal of Working Life Studies, 5*(4), 41.

Chatterji, T. (2013). Localizing production of the globalized knowledge enclaves: The role of the sub-national states in development of the IT-ITES clusters in India. In P. Cooke, G. Searle, & K. O'Connor (Eds.), *The economic geography of the IT industry in the Asia pacific region (Regions and cities)* (pp. 243–263). Routledge Taylor and Francis Group.

Clarke, T., & Boersma, M. (2017). The governance of global value chains: Unresolved human rights, environmental and ethical dilemmas in the apple supply chain. *Journal of Business Ethics, 143*(1), 111–131.

Coe, N. M. (2014). Missing links: Logistics, governance and upgrading in a shifting global economy. *Review of International Political Economy, 21*(1), 224–256.

Coe, N. M., Dicken, P., & Hess, M. (2008). Global production networks: Realizing the potential. *Journal of Economic Geography, 8*(3), 271–295.

D'Costa, A. P. (2003). Uneven and combined development: Understanding India's software exports. *World Development, 31*(1), 211–226.

D'Costa, A. P. (2004). The Indian software industry in the global division of Labour. In A. P. D'Costa & E. Sridharan (Eds.), *India in the global software industry: Innovation, firm strategies and development* (pp. 1–26). Palgrave Macmillan.

D'Costa, A. P. (2011). Geography, uneven development and distributive justice: The political economy of IT growth in India. *Cambridge Journal of Regions, Economy and Society, 4*(2), 237–251.

D'Cruz, P. (2012). *Workplace bullying in India*. Routledge.

D'Cruz, P., & Noronha, E. (2006). Being professional: Organizational control in Indian call centers. *Social Science and Computer Review, 24*(3), 342–361.

D'Cruz, P., & Noronha, E. (2009a). Experiencing depersonalized bullying: A study of Indian call centre agents. *Work Organization, Labour and Globalization, 3*(1), 26–46.

D'Cruz, P., & Noronha, E. (2009b). Redefining Professional: The Case of India's Call Center Agents. In D. Jemielniak & J. Kociatkiewicz (Eds.), *Handbook of Research on Knowledge-Intensive Organizations* (pp. 529–551). IGI Global.

D'Cruz, P., & Noronha, E. (2010). Employee dilemmas in the Indian ITES-BPO sector. In J. C. Messenger, & N. Ghosheh (Eds.), *Offshoring and working conditions in remote work* (pp. 60–100). Palgrave Macmillan and Geneva: ILO.

D'Cruz, P., & Noronha, E. (2012). High commitment management practices re-examined: The case of Indian call centres. *Economic and Industrial Democracy, 33*(2), 185–205.

D'Cruz, P., & Noronha, E. (2013a). Workplace bullying in the context of organizational change: The significance of pluralism. *Industrial Relations Journal, 45*(1), 2–21.

D'Cruz, P., & Noronha, E. (2013b). Hope to despair: The experience of organizing Indian call centre employees. *Indian Journal of Industrial Relations, 48*(3), 471–486.

D'Cruz, P., & Noronha, E. (2013c). Breathers, releases, outlets and pauses: Employee resistance in the context of depersonalized bullying. *The Qualitative Report, 18*(72), 1–24. http://www.nova.edu/ssss/QR/QR18/dcruz72.pdf

D'Cruz, P., & Noronha, E. (2015). Ambivalence: Employee responses to depersonalized bullying at work. *Economic and Industrial Democracy, 36*(1), 123–145.

D'Cruz, P., Noronha, E., & Beale, D. (2014). The workplace bullying-organizational change interface: Emerging challenges for human resource management. *The International Journal of Human Resource Management, 25*(10), 1434–1459.

D'Mello, M., & Eriksen, T. H. (2010). Software, Sports Day and Sheera: Culture and identity processes within a global software organization in India. *Information and Organization, 20*(2), 81–110.

Dicken, P. (2015). *Global shifting: Mapping the contours of the world economy* (7th ed.). Guilford Press.

Donnelly, R. (2018). Using involvement to enhance employee engagement in IT firms: Examining leadership initiatives in a key developing national context. *New Technology, Work and Employment, 33*(2), 187–201.

Ethiraj, S. K., Kale, P., Krishnan, M. S., & Singh, J. V. (2005). Where do capabilities come from and how do they matter? A study in the software services industry. *Strategic Management Journal, 26*(1), 25–45.

Fernández-Stark, K., Bamber, P., & Gereffi, G. (2011). The offshore services global value chain. *Economic upgrading and workforce development*. Durham, NC: Duke University Center on Globalization, Governance and Competitiveness.

Ferus-Comelo, A. (2008). Mission impossible? Raising labor standards in the ICT sector. *Labor Studies Journal, 33*(2), 141–162.

Flecker, J., & Meil, P. (2010). Organisational restructuring and emerging service value chains: Implications for work and employment. *Work, Employment and Society, 24*(4), 680–698.

Gereffi, G. (2014). Global value chains in a post-Washington Consensus world. *Review of International Political Economy, 21*(1), 9–37.

Gereffi, G., Humphrey, J., Kaplinsky, R., & Sturgeon, T. J. (2001). Introduction: Globalisation, value chains and development. *IDS Bulletin, 32*(3), 1–8.

Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy, 12*(1), 78–104.

Heeks, R. (1996). *India's software industry: State policy, liberalisation and industrial development*. Sage Publications Inc.

Hess, M., & Coe, N. M. (2006). Making connections: Global production networks, standards, and embeddedness in the mobile-telecommunications industry. *Environment and Planning A, 38*(7), 1205–1227.

Humphrey, J., & Schmitz, H. (2001). Governance in global value chains. *IDS Bulletin, 32*(3), 19–29.

Humphrey, J., & Schmitz, H. (2002). How does insertion in global value chains affect upgrading in industrial clusters? *Regional Studies, 36*(9), 1017–1027.

ILO. (2015). *World employment and social outlook 2015*. Geneva: International Labour Organisation.

Kuruvilla, S., & Noronha, E. (2016). From pyramids to diamonds: Legal process offshoring, employment systems, and labor markets for lawyers in the United States and India. *ILR Review, 69*(2), 354–377.

Lakha, S. (1994). The new international division of labour and the Indian computer software industry. *Modern Asian Studies, 28*(2), 381–408.

Lee, J., & Gereffi, G. (2015). Global value chains, rising power firms and economic and social upgrading. *Critical Perspectives on International Business, 11*(3/4), 319–339.

Liu, W., & Dicken, P. (2006). Transnational corporations and 'obligated embeddedness': Foreign direct investment in China's automobile industry. *Environment and Planning A, 38*(7), 1229–1247.

Lund-Thomsen, P. (2013). Labor agency in the football manufacturing industry of Sialkot, Pakistan. *Geoforum, 44*, 71–81.

McMillin, D. (2006). Outsourcing identities: Call centres and cultural transformation in India. *Economic and Political Weekly, 41*(3), 235–241.

Merk, J. (2009). Jumping scale and bridging space in the era of corporate social responsibility: Cross-border labour struggles in the global garment industry. *Third World Quarterly, 30*(3), 599–615.

NASSCOM. (2017). *The IT-BPM sector in India. Strategic review*. National Association of Software and Service Companies.

Nath, P., & Hazra, A. (2002). Configuration of Indian software industry. *Economic and Political Weekly, 37*(8), 737–742.

Noronha, E., Chakraborty, S., & D'Cruz, P. (2020). 'Doing dignity work': Indian security guards' interface with precariousness. *Journal of Business Ethics, 162*(3), 553–575.

Noronha, E., & D'Cruz, P. (2006). Organising call centre agents: Emerging issues. *Economic and Political Weekly, 41*(21), 2115–2121.

Noronha, E., & D'Cruz, P. (2009a). *Employee identity in Indian call centres: The notion of professionalism*. Sage/Response.

Noronha, E., & D'Cruz, P. (2009b). Engaging the professional: Organising call centre agents in India. *Industrial Relations Journal, 40*(3), 215–234.

Noronha, E., & D'Cruz, P. (2016a). Still a distance to go: Social upgrading in the Indian ITO-BPO-KPO sector. In D. Nathan, M. Tewari, & S. Sarkar (Eds.), *Labour in global value chains in Asia* (pp. 423–449). Cambridge University Press.

Noronha, E., & D'Cruz, P. (2016b). Deciphering the discourse of 'The Professional': Consequences for union formation in the Indian IT/ITES sector. In K. R. Shyam Sundar (Ed.), *Dynamics of globalization and industrial relations in India* (pp. 205–225). Daanish.

Noronha, E., & D'Cruz, P. (2016c). Creating space: The role of the state in the Indian IT-related offshoring sector. In *Space, place and global digital work* (pp. 151–168). London: Palgrave Macmillan.

Noronha, E., & D'Cruz, P. (2017). New identities require new strategies: Union formation in the Indian IT/ITES sector. In S. George, & S. Sinha (Eds.), *Redefined Labour Spaces: Organising workers in post-liberalised India* (pp. 181–207). Routledge India.

Noronha, E., D'Cruz, P., & Banday, M. U. L. (2020). Navigating embeddedness: Experiences of Indian IT suppliers and employees in the Netherlands. *Journal of Business Ethics, 164*(1), 95–113.

Noronha, E., D'Cruz, P., & Kuruvilla, S. (2016). Globalisation of commodification: Legal process outsourcing and Indian lawyers. *Journal of Contemporary Asia, 46*(4), 614–640.

Parthasarathy, B. (2004). India's silicon valley or silicon valley's India? Socially embedding the computer software industry in Bangalore. *International Journal of Urban and Regional Research, 28*(3), 664–685.

Parthasarathy, B. (2013). A half century of envisioning in future in Bangalore: From autarky to innovation in the global information economy. In P. Cooke, G. Searle and K. O'Connor (Eds.), *The Economic Geography of the IT Industry in the Asia Pacific Region (Regions and Cities)* (pp. 221–242). New York, NY: Routledge Taylor & Francis Group.

Parthasarathy, B., & Aoyama, Y. (2006). From software services to RandD services: Local entrepreneurship in the software industry in Bangalore, India. *Environment and Planning A, 38*, 1269–1285.

Penfold, C. (2008). Off-shoring and decent work: Worlds apart? *The International Journal of Comparative Labour Law and Industrial Relations, 24*(4), 573–594.

Penfold, C. (2009). Off-shored services workers: Labour law and practice in India. *The Economic and Labour Relations Review, 19*(2), 91–106.

Ponte, S., & Gibbon, P. (2005). Quality standards, conventions and the governance of global value chains. *Economy and Society, 34*(1), 1–31.

Prasad, M. (1998). International capital on 'Silicon Plateau': Work and control in India's Computer Industry. *Social Forces, 77*(2), 429–452.

Robinson, P. K., & Rainbird, H. (2013). International supply chains and the labour process. *Competition and Change, 17*(1), 91–107.

Russell, B., Noronha, E., & D'Cruz, P. (2016). Transnational class formation: A view from below. In J. Sprague (Ed.), *Globalization and transnational capitalism in Asia and Oceania* (pp. 122–138). Routledge.

Sahay, S., Nicholson, B., & Krishna, S. (2003). *Global IT outsourcing: Management of software development projects*. Cambridge University Press.

Salminen-Karlsson, M. (2015). Expatriate paternalistic leadership and gender relations in small European software firms in India. *Culture and Organization, 21*(5), 409–426.

Sarkar, S., Mehta, B. S., & Nathan, D. (2013). *How social upgrading drives economic upgrading by Indian IT majors: The case of telecom IT services* (Capturing the Gains Working Paper No. 27). http://www.capturingthegains.org/pdf/ctg-wp-2013-27.pdf

Selwyn, B. (2016). Global value chains and human development: A class-relational framework. *Third World Quarterly, 37*(10), 1768–1786.

Taylor, P. (2010). *'The missing link': Analysing the global call centre value chain*. Paper presented to the 28th International Labour Process Conference. Rutgers State University of New Jersey.

Taylor, P., & Bain, P. (2006). *An investigation into the offshoring of financial services business processes*. University of Strathclyde.

Thite, M., & Russell, B. (2009). Human resources management in Indian call centres/business process outsourcing. In M. Thite & B. Russell (Eds.), *The next available operator: Managing human resources in the Indian business process outsourcing industry* (pp. 33–58). Sage.

UNCTAD. (2004). *World Investment Report 2004: The shift towards services*. United Nations.

UNCTAD. (2013). *World Investment Report 2013: Global value chains: Investment and trade for development*. United Nations.

Upadhya, C. (2010). Taking the high road? Labour in the Indian software outsourcing industry. In A. Posthuma & D. Nathan (Eds.), *Labour in global production networks in India* (pp. 300–320). Oxford University Press.

Wright, C. F., & Kaine, S. (2015). Supply chains, production networks and the employment relationship. *Journal of Industrial Relations, 57*(4), 483–501.

Xue, H., & Chan, A. (2013). The global value chain: Value for whom? The soccer ball industry in China and Pakistan. *Critical Asian Studies, 45*(1), 55–77.

Yang, D. Y. R., & Coe, N. M. (2009). The governance of global production networks and regional development: A case study of Taiwanese PC production networks. *Growth and Change, 40*(1), 30–53.

Zhu, J., & Morgan, G. (2018). Global supply chains, institutional constraints and firm level adaptations: A comparative study of Chinese service outsourcing firms. *Human Relations, 71*(4), 510–535.

CHAPTER 8

India's Automobile and Textile Industries in Global Value Networks: An Assessment

Praveen Jha and Dinesh Kumar

Introduction

It is generally well-acknowledged that the global capitalist system has undergone a significant reconfiguration in its spatial organisation of production in almost every sector, particularly in manufacturing and services, over the last few decades. A much-talked about feature of this configuration is the accelerated 'trans-nationalisation' of economic activities or the growing salience of global production networks (GPNs). The de-centring of production under neoliberal capitalism is characterised by a shift of production from advanced capitalist countries to a handful of developing countries where metropolitan capital has strengthened its presence to take advantage of, *among other things*, relatively inexpensive

P. Jha (✉)
Centre for Economic Studies and Planning, School of Social Sciences, Jawaharlal Nehru University, New Delhi, India

D. Kumar
Delhi University, New Delhi, India

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_8

labour and raw materials as well as to tap the markets. Thus, in a whole range of activities, the 'value chains' underlying a manufactured good (or service) for final consumption may well crisscross different corners of the globe before it is finally assembled at a particular destination. There is no doubt that the 'trans-nationalisation' of economic activities has created some opportunities for low and middle-income countries to participate in GPNs. However, there are apprehensions about whether greater integration into the global value chains (GVCs) has resulted in substantial economic gains; and further, whether such gains have translated into social upgrading. This paper attempts to engage with the relevant issues with a focus on the automobile and textile and clothing industries (T&Cs) in India and has the following core objectives:

1. Explore whether greater integration into the GVCs by the aforementioned industries has resulted in the economic upgrading of the sector or not.
2. If economic upgrading has taken place in these industries, whether this upgrading has translated into social upgrading.
3. If social upgrading has taken place, an examination of the strategies adopted by the principal agents to attain it.

The structure of the paper is as follows: 'A Brief Profile and Structure of the Indian T&Cs and Automobile Industries' section gives a brief profile of the Indian automobile and T&Cs industries and maps their geographical distributions; 'Data and Methodology' section provides an overview of the data and methodology; 'Policy and Regulatory Framework' flags a few recent policies adopted by the Union government in order to deepen India's participation in 'GVCs'; using a couple of indicators and examines certain aspects of economic and social upgrading in both the organised and unorganised sector[1]; 'Some Impacts on India's Economic and Social Upgrading' in both the organised and unorganised sectors in both these industries; 'Conclusion' section concludes the chapter with a recap of major findings.

[1] As per the Factories Act, 1948, which categorises an establishment with 10 workers or more and using power (electric energy) or 20 workers or more without power, as 'organised', and the rest as unorganised. Typically, in the larger literature, organised sector came to be associated with term 'formal' and the unorganised sector with the term 'informal'; the terms often being used interchangeably.

A Brief Profile and Structure of the Indian T&Cs and Automobile Industries

Textile and Clothing

The Indian textile industry, in particular, is one of the oldest and leading industries in the world as it has a significant raw material base and its strength lies across the manufacturing value chain. In terms of raw materials, India is the largest producer of cotton and raw jute with more than 50% of global production; it is also the second-largest producer of silk. India is the second-largest exporter of cotton goods in the world and it is also a significant producer of jute products. The distinct feature of this industry lies in its comparative advantage, both in the hand-woven sector and capital-intensive milling segments. As per the Annual Report of the Ministry of Textile [Government of India (GOI), 2017–2018], India has the second-largest production capacity in the world with 3400 textile mills with an installed capacity of more than 50 million spindles and 842,000 rotors. As far as employment is concerned, in the textile industry, mainly handloom, handicrafts and small-scale power-loom units provide livelihoods for millions of people both in rural and semi-urban areas. Another unique feature of the sector is that it has inherent linkages with agriculture, culture and traditions because it produces versatile goods which cater to the needs of both domestic and global demand.

In relation to manufacturing output, employment and export earnings, the Indian T&Cs industry contributed 2016 to around 2% of India's gross national product (GNP), 7% of industrial output, 10% of manufacturing production, 15% of India's total exports, 5% of global exports (WITS, World Bank Database)[2] and employed 45 million workers directly and 60 million indirectly (GOI, 2017–2018). The geographical spread of T&Cs units is uneven, and clusters have developed either in the developed states or in close proximity to them.

[2] It includes HS (Harmonized Commodity Description and Coding System to classify traded products) Chapters 50–60.

Automobile Industry

Like the T&Cs industry, the automobile industry is another vital component of the Indian manufacturing sector which has emerged as a significant entity in the world economy in recent years. In the automobile industry, India is the fourth-largest market in the world at present (March 2018)[3] in terms of the number of automobiles, including passenger and commercial vehicles sold. India is the largest worldwide manufacturer of two-wheelers, second-largest manufacturer of heavy busses, third-largest manufacturer of heavy trucks, fourth-largest manufacturer of cars and seventh-largest manufacturer of commercial vehicles (SIAM, 2018–2019).

The inception of the automobile industry in India can be traced to the 1940s through the initiative of few leading industrial houses, which led to the establishment of Hindustan Motors (Birla Group), Premier Ltd. (Walchand Group), Tata Group and Mahindra & Mahindra (Mahindra Group). However, for almost four decades after Independence, its growth rate remained quite slow before the so-called economic reforms of the early 1990s, both due to supply-side factors (e.g., the regulatory regime, technological know-how, etc.) and demand-side factors (inadequate purchasing power, the narrow social basis for luxury goods in general, etc.). The most significant development in the industry was in the early 1980s when Maruti Udyog Ltd and Suzuki (Japan) signed a joint venture. After 1991, however, this industry attained significant expansion with major policy changes such as de-licensing and the permission of 100 % foreign direct investment (FDI).

As per the recent estimates, the automobile industry[4] contributes nearly 7–7.5% of GDP, 26% of industrial GDP,[5] 49% of manufacturing GDP, 6% to export earnings and employs 8 million people directly and over 29 million people indirectly (SIAM, 2017–2018). Typically, the auto sector is divided into 'original equipment manufacturers' (OEMs) and 'manufacturers of the auto component'. The OEMs, which contribute

[3] https://economictimes.indiatimes.com/industry/auto/india-pips-germany-ranks-4th-largest-auto-market-now/articleshow/63438236.cms.

[4] HS 87 (HS is the Harmonized Commodity Description and Coding System to classify traded products): vehicles other than railway or tramway rolling stock, and parts and accessories thereof.

[5] Industrial GDP comprises contribution of manufacturing, mining, electric and gas industries.

22% of India's manufacturing GDP (Dash & Chanda, 2017), can be divided into segments such as passenger vehicles, commercial vehicles, two-wheelers and three-wheelers (including auto-rickshaws and tractors).[6] The auto components industry is also a significant part of the automobile sector, and contributes 2.3% to the overall GDP and 25.6% to India's manufacturing GDP; it contributes 4% to exports and provides direct and indirect employment to 3 million people (ACMA, 2016–207). This industry is comprised of nearly 850 firms in the organised sector and includes a very large unorganised sector. The primary function of the automobile component industry is to serve the requirements of OEMs operating in the country. Additionally, it also serves the needs of the global economy through supplying a range of inputs such as raw materials for parts, components to chassis, brake lines and engines, etc.

In this industry, the development of agglomerations of automotive manufacturers and components is driven by an industrial policy that has incentivised the development of clusters to reduce costs of production and reap economies of scale through access to common labour supply pools, local markets and infrastructure. Automobile manufacturers are mainly concentrated around four large automotive clusters, namely Delhi–Gurgaon–Faridabad–Manesar in the North, Mumbai–Pune–Nasik–Aurangabad in the West, Chennai–Bengaluru–Hosur in the South and Jamshedpur–Kolkata in the East. In the state of Gujarat, Sanand and Halol constitute an emerging automotive cluster (Dash & Chanda, 2017). We see that the development of the industry is uneven in its geographical spread, with fairly 'developed' states housing most of the major automobile hubs. Further, the hubs are organised into specialised zones with product specifications. Additionally, the concentration of the components industry in the North and the West indicates the uneven development within the industry itself.

[6] Within the Indian domestic market, in terms of volume of production, the share of passenger vehicles is 13%, whereas the share of two-wheelers is as high as 81%.

Data and Methodology

This paper uses simple quantitative techniques for measuring participation of the automobile and T&Cs industries in GVCs and assessing their contributions to economic and social upgrading in the Indian economy. Given the available data sources, a comprehensive mapping of GVCs is an exceedingly difficult task; nevertheless, we have used a couple of well-known indicators such as backward participation, which measures the value addition made by other countries in India's exports, and forward participation, which measures the Indian value added in third countries exports, to make an overall assessment concerning the Indian rate of participation in GVCs.

A comprehensive measure of economic and social upgrading is fraught with serious conceptual and empirical difficulties, some of which are insurmountable. We must confess to having opted for an easy way out in following a parsimonious approach developed by Bernhardt and Milberg (2011) (see also Salido & Bellhouse, 2016). Within this framework, a country is said to experience economic upgrading in a particular sector when its (a) market share in global export increases, which is an indicator of the competitiveness of exports in the international market and (b) export unit value[7] increases, which is an indicator of the production of higher-value-quality products.[8] These two indicators imitate 'product upgrading' or 'functional upgrading'. However, it is important to note that both of these indicators are not free from limitations.[9] They suggested that both these indicators should be used together to correctly measure economic upgrading.

[7] Export unit values are calculated by dividing the total value of a country's exports of a particular commodity in a given period by the quantity or volume of these exports.

[8] Li and Song (2011) argued in their paper that higher quality of the products is reflected by higher prices (higher export unit value). Generally, export unit values are used as proxies for prices which in turn reflect proxies for product quality (Aiginger, 1997).

[9] Even with the decline in market share, a particular country can attain economic upgrading as production is being continuously shifted to other countries during the contemporary period or GVCs era. For example: the decline of China's share in garment production and the shifting of its production to other countries is a sign of economic upgrading. Similarly, declining or stagnant export unit value as a result of better technologies (or higher productivity) can also reflect economic upgrading. For example, in Vietnam, better technologies in the electronics industry led to falling prices and no increases export unit value in spite of higher productivity.

The social upgrading/downgrading of a particular sector can be measured using (a) the increase/decrease in employment and (b) the increase/decrease in real wages indicating improvement/decline in social standards. There is no doubt that an increase in real wages is a robust indicator for measuring social upgrading. However, using an increase in employment as a measure of social upgrading can be misleading since a reduction in manpower can also mean that better technology is used and thus process upgrading takes place.[10] Along with these two indicators, some scholars (such as Bernhardt & Milberg, 2011) also insisted on the examination of improvement in labour standards for a more nuanced understanding of social upgrading.[11]

Policy and Regulatory Framework

As indicated earlier, outcomes in both of these sectors need to be contextualised in the broader strategy of so-called economic reforms during the last three decades. As is well known, since the early 1990s, there has been a very significant restructuring of the economic regime in the country, which is generally accepted as a transition from a *dirigiste* to a market-led paradigm. Although some incremental changes started in the 1980s, it is in the period since 1991 that very dramatic changes in the regime have materialised. It may be useful to flag some of the policy measures with significant implications.

[10] For example: In Germany, the garment industry has almost disappeared in recent decades as production has shifted to other countries. Although employment in the garment sector in Germany has decreased, it is a sign of economic upgrading rather than downgrading.

[11] We use four databases for measuring GVCs participation, economic upgrading and social upgrading. All the figures calculated below are based on these sources. We have mainly used the world integrated trade solution (WITS) from the World Bank database from 1988 to 2016 to measure economic upgrading. In order to measure economic upgrading and the participation of manufacturers in GVCs, we have used the trade in value-added (TIVA) database of the Organisation for Economic Co-operation and Development (OECD) which is available from 1995 to 2015. For measuring indicators of economic and social upgrading, we have drawn on the Annual Survey of Industries (ASI) from the Government of India (GOI), for the organised sector which is available from 1999–2000 to 2014–2015. However, ASI data is not designed to cover the unorganised sector of the industry (factories not registered under the Factories Act, 1948). Due to this major limitation of the ASI data, we have National Sample Survey Organisation (NSSO) survey of unincorporated non-agricultural enterprises database (56th round: 2000–2001, 67th round: 2010–2011 and 73rd round: 2015–2016) for the unorganised sector.

Automobile Industry

Concerted policy attention in the automobile sector can be traced to the 1980s with the introduction of certain manufacturing policies which boosted the growth of local component industries by imposing the requirement of using a certain proportion of locally produced inputs in domestic OEMs; this policy continued until 1992 (Miglani, 2019). With progressive opening up after 1991, FDI and external collaborations were facilitated on a significant scale. For instance, in 1997, the central government approved FDI of up to 51%; this limit was further raised to 100% in 2001. These developments resulted in progressive de-licensing and tariff elimination on imports of inputs which in turn led to considerable competition within the sector, leading to substantial changes such as process and product upgradation, technology innovation and improvements in the component industry. In fact, the automotive sector is among the few sectors which experienced important changes through the aggressive promotion of India as a potential global hub of the auto sector as a whole. The country was marketed as a setting that had the capacity and resources to provide cost-effective assembly and hubs for the production of parts. The development of clusters became one of the thrust areas of the government's manufacturing policy, which has been quite conducive to the strengthening of supply chains. Subsequent policy initiatives such as the National Manufacturing Policy, 2011, and Make in India programme (for details see Jha, 2018) have tended to deepen such an orientation.

It is worth noting that a major thrust of the policy regime has been to make the automobile sector technologically competitive so that it meets global environmental and safety standards (see for details Miglani, 2019). These initiatives at upgradation have been spearheaded through R&D and clean fuel initiatives in collaboration with automobile majors. The Government of India initiated an Automotive Mission Plan (AMP) 2006–2016 to outline a targeted growth-oriented roadmap for attaining technological competence, world-class status in automotive manufacturing and to promote forward and backward linkages for sustainable automotive growth. As per government's own assessment many of the goals of this plan have already been accomplished with the support of automobile majors who have been active collaborators in different policy initiatives, including in the National Electric Mobility Mission Plan (NEMMP) 2020 which was launched in 2013. The primary focus of

NEMMP is to attain efficient, environmentally friendly, affordable electric vehicles by 2020 (for details see Jha, 2018).

The previously mentioned AMP 2016–2026, which sets targets for production and growth, also sets goals for minimising carbon footprints and attaining a high level of technological competence and maturity. In order to facilitate increasing technological maturity in this sector, the government has provisioned for an R&D hub aimed at innovations in this sector under the National Automotive Testing and R&D Infrastructure Project (NATRiP), which involves a network of publicly funded research institutes and laboratories. The Green Urban Transport Scheme (GUTS) has also been launched under this larger project to encourage low-carbon sustainable public transport systems. GUTS will focus on setting up non-motorised transport infrastructure and will facilitate the adoption of intelligent transport systems (ITS), leading to increasing access to public transport and use of clean technologies. It is worth emphasising here again that these measures have important implications not only for a 'cleaner' auto industry but also for the overall global economic prospects of this sector, for instance through greater acceptance in external markets (NITI Aayog, 2017).

These policy initiatives have been backed by regulatory frameworks that follow European and other multilateral standards for promoting a climate-friendly transportation system, an essential feature of an export-oriented strategy. Hence successive governments have regulated emission norms and tightened standards since 1991.

However, it is important to highlight that the overall policy regime for this sector has tended to rely largely on big economic actors, mostly large corporations, which has resulted in a very uneven distribution of gains, with a few big firms cornering a major portion of the profits (Narayanan & Vashisht, 2008, p. 15). As per the recent statistics, in 2018, the top five companies controlled 85.4% of the production in the commercial vehicle segment; 87.4% in the passenger vehicle category; 99.6 and 93.5% of production in the two and three-wheeler categories, respectively (Taumar et al., 2019).[12] Thus, these exacerbating and deepening inequalities should be kept in mind while making conclusions with respect to economic and social upgrading.

[12] https://auto.economictimes.indiatimes.com/news/industry/complete-india-auto-sales-analysis-2018-cv-sales-crosses-a-million-mark/67549073.

Textile and Clothing Industry

To counter the challenges emerging due to globalisation, and enhance opportunities in the T&Cs industry, through the Eighth Five Year Plan (1992–1997), the Union government put a lot of emphasis on value-added production, product diversification, efficiently utilising capacity, raising quality standards of the products and encouraging sophisticated product-mixes (Ghosh, 2000). Further, through Uruguay Round of Trade Negotiations (1986–1994), the Agreement on Textiles and Clothing (ATC) resulted in the growing integration of trading in textiles and clothing in the multilateral trading system (Manoj & Muraleedharan, 2016). This agreement set the aim of dismantling the 1973 Multi Fibre Agreement (MFA) over a period of ten years (1995–2004). During this period FDI inflows in the T&Cs industry were low, in comparison to other countries export processing zones most likely did not play an important role in India. Notwithstanding these developments, including the low inflow of FDI, the textile industry contributed 30% to India's global exports during late the 1990s (Ghosh, 2000).

A National Textile Policy was launched by the Government of India in 2000, with the aim of upgrading and empowering this industry in terms of technology, human resources, product quality and price competitiveness (Nath et al., 2001). In the post-MFA era (i.e., between 2005 and 2012), India's exports in the T&Cs industry showed a mixed picture across segments. Manmade textiles registered the highest growth rates and this was followed by cotton textiles. Further, labour productivity improved between 2005 and 2012 in comparison with the pre-MFA period. On the other hand, there was a decline in capital productivity in spite of rising capital intensity in products such as spinning, weaving and finished textile goods and the manufacture of other textiles. The main reason for this was the rising cost of inputs which resulted in sub-optimal capacity utilisation (Manoj & Muraleedharan, 2019).

The main factor behind India's relatively sluggish performance in the post-MFA era may be the stiff competition faced by the Indian T&C firms from a host of countries, particularly Bangladesh, Vietnam and China, as well as the high cost of raw materials, which made their products about 15–30% more expensive in the international market. Apart from this Indian T&C firms also faced constraints because their export basket consisted largely of low end and low value-added products; further,

structural rigidities and the absence of contemporary designing facilities impacted their capacity to provide quality value-added fabrics and garments (Manoj & Muraleedharan, 2019).

To deal with this evolving situation, the Union government has developed some significant policy initiatives in recent years which focus on infrastructure improvement, upgradation of technology, fostering innovation, enhancing skill and traditional strengths, in order to increase the T&C industry's contribution to GDP and employment (GOI, 2017–2018).

First, a special package of Rs. 60,000 million (around 800 million US dollar) was announced for the textile and apparel industry (including the made-up segment), in 2016. The main features of this package are the following: (1) the government labour law reforms in the sector with a slew of measures favouring the employers with announcements of subsidies and fixed term employment, so that a further flexbilisation of employment was thus supported; (2) The Amended Technology Upgradation Fund Scheme (ATUFS) for technology upgradation, providing a one-time capital subsidy to entrepreneurs in the textiles, garments and weaving segments through 2022[13]; (3) Financial and tax incentives were announced such as the lowering of levies under Goods and Services Taxes, income tax reduction in cases of increased employment by firms in the sector and a scheme to drawback excise duties paid by exporters.

Second, the Union government launched a 'Merchandise Exports from India Scheme' (MEIS) to counterbalance infrastructural inefficiencies and related costs. The scheme covered exports of readymade garments and made-ups which has the potential to expand employment. Exporters could be repaid customs duties to the tune of 4% through June 2018.

Third, an Integrated Processing Development Scheme (IPDS) was launched to equip the textile industry with world-class infrastructure facilities, with the primary objective of setting up a common effluent treatment plant with suitable technology. Showcasing India's capabilities in this sector was also to be done through the Scheme for Integrated Textile Parks (SITP) with a support subsidy of 40% to promoters (GOI, 2018–2019). In 2014, infrastructure was also promoted through the 'Scheme for Incubation in Apparel Manufacturing' (SIAM). The primary purpose

[13] For details see Government of India (2019–2020), Standing Committee on Labour, Ministry of Textile, 6th Report.

of the scheme is to encourage new entrepreneurs in the apparel industry by giving them an integrated workspace with complete ecosystems.

Fourth, the Union government set up schemes to upgrade technologies and skills in the small and unorganised segment of T&Cs. For example there was a scheme to provide energy efficient power looms, motors and rapier kits to small and medium power looms. In 2016, it also launched the Integrated Skill Development Scheme (ISDS) to enhance skills and to provide employment.

These schemes, however, have not had the desired impact due to sluggish implementation and slow progress as highlighted by the Standing Committee on Labour, Ministry of Textile (GOI, 2019–2020) and have led only to limited social and economic upgrading in selected segments.

Some Impacts on India's Economic and Social Upgrading

An assessment of economic and social upgrading needs to be contextualised in the patterns of integration of different segments of these industries in GVCs. An important indicator for evaluating gains is the participation of players from different countries in backward linkages and forward linkages. The *backward linkage* is defined as the foreign value added in gross exports of a country. The *forward linkage* is defined as domestic value-added embodied in foreign countries' exports. A country can only get maximum gains from GVC participation if their contribution to forward linkages is higher than backward linkages (Banga, 2016).

Economic Upgrading in India's T&Cs and Automotive Industry

Figure 8.1 shows forward and backward linkages for the Indian T&Cs. In T&Cs, the value of backward linkages at constant prices (2015) has increased from USD 960 million in 1995 to USD 6186 million in 2015, whereas forward linkages increased from USD 1333 million to USD 4631 million. A measure for the integration of an industry in GVCs is the participation rate of the sector of a country. It is defined as a ratio of total participation (backward and forward linkage) to its gross exports. Although, in this industry India's participation rate has increased from 23% in 1995 to 29% in 2015, the value of forward linkages has remained low, especially after 2005, implying that this sector is not gaining much from GVC participation, at least from the perspective of trade (Fig. 8.1).

It is important to note here that this declining trend started only at the beginning of the twenty-first century because in the period before this (i.e., 1995–2000) the value of forward linkages was higher than that of backward linkages.

From the above analysis, it emerges that the participation of the T&Cs industry in GVCs occurs more through its integration in backward rather than forward linkages, indicating relatively lower gains. Further, using Bernhardt and Milberg's (2011) criterion, we found that economic upgrading has taken place in only 268 of the 809 T&C products at HS

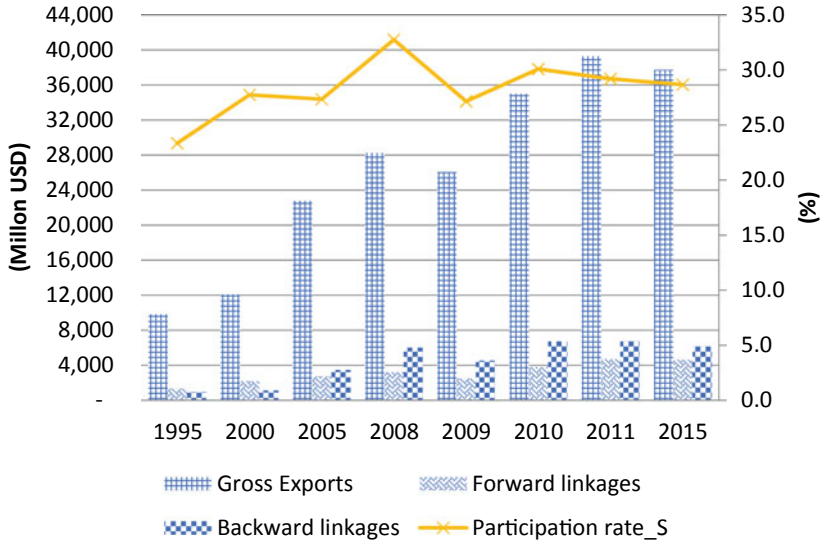


Fig. 8.1 Trend of Participation of India's textiles, wearing apparel, leather and related products industry in the GVCs, constant prices (2015) in (in Million USD)[14] (*Source* OECD, TIVA database [October, 2015], *Note* _S denotes Secondary axis, backward linkages: foreign value added in gross exports of a country, forward linkages: domestic value-added embodied in foreign exports, GVC participation rate: ratio of total participation [Backward and Forward Linkage] to gross exports)

[14] In order to control overtime movement of the prices, exports, backward and forward linkages are deflated using using US GDP deflator, 2015 as a base.

six-digit level, i.e., concurrently satisfies both an increase in export unit value[15] and an increase in global share.[16]

Further, it is worth emphasising that this economic upgrading took place more often in inputs (171 out of 268) in the T&Cs industry than in final products (97) which is further supported by indicators such as value of exports or number of products exported. This increase in the growth of exports in inputs in the T&Cs (especially in low value-added products) kept the gains from the GVCs participation at a low level. In addition to this, volatility of both profit per employee and gross capital formation suggests that economic upgrading in the T&Cs industry was not very substantial.

In the automobile industry India's GVCs participation rate fluctuated considerably during the study period (Fig. 8.2). However, it is important to note that the value of forward linkages has remained higher when compared with backward linkages throughout the period of 1995–2015, indicating consistent rising economic gains from GVCs participation in the automobile industry.

A comparative analysis shows that the Indian automobile industry appears to have made some gains, particularly from trade, through participation in the GVCs. But in overall terms, both industries have registered a decline of domestic share in exports over the period of time considered in this analysis.

In the automotive industry, we observed that 29 out of 76 HS six-digit products satisfy Bernhardt and Milberg's (2011) minimum criterion of economic upgrading, i.e., a concurrent increase of both export unit value (constant prices) and global share. It is important to note that 18 out of 29 products belong to final products. Further, most indicators, such as number of factories, gross value added, productivity per employee, gross capital formation, the value of output, except profits, support the results

[15] In order to control overtime movement of the prices, we have deflated export unit values using US GDP deflator, 2015 as a base.

[16] It is worth highlighting the research undertaken by various researchers such as Anner (2020), Harrigan and Barrows (2009), etc., who observed a decline in prices of apparel products to USA and Europe, especially after the elimination of the Multi-Fibre Agreement in 2004 due to competition and unequal bargaining power of the exporting firms vis-à-vis lead firms (for instance Bangladesh). Therefore, the economic upgrading in T&Cs industry could also take place when there is a decline in export unit value. Our result is based on Bernhardt and Milberg's (2011) criterion, thus, underestimating economic upgrading in the T&Cs industry.

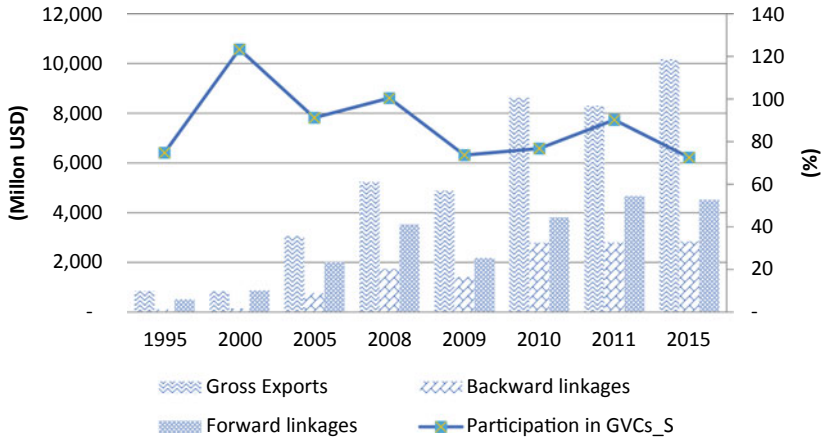


Fig. 8.2 Trends of India's Participation in Automobile GVCs, constant prices (2015) in US dollar (in Million USD) (*Source* OECD, TIVA database [October 2019]. *Note* _S denotes Secondary axis, backward linkages: foreign value added in gross exports of a country, forward linkages: domestic value-added embodied in foreign exports, GVC participation rate: ratio of total participation [backward and forward linkage] to gross exports)

of economic upgrading. In sum, in an aggregate sense, the available data and information suggest economic upgrading in the automotive industry in terms of both product and process upgrading.

Social Upgrading in the Automobile Industry

Based on the ASI data, we flag trends related to a couple of indicators of social upgrading, namely employment and real wages in the organised sector. In the automobile industry, the rate of increase in the number of workers was quite small between 1980–1981 and 2002–2003. According to ASI, workers are defined as '*all persons employed directly, informally or formally or through contractor on payment of wages or salaries and engaged in any manufacturing process or its ancillary activities like cleaning any part of the machinery or any premises used for manufacturing or storing materials or any kind of work incidental to or connected with the manufacturing process*'. The number of workers increased from around 0.15 million in 1980–1981 to 0.2 million in 1996–1997 and remained more

or less at this level till 2002–2003. But this trend has seen an upward swing since then and the total number of workers in the industry rose to around 0.7 million in 2014–2015. A similar trend is observed for the number of employees. They are defined by ASI as '*workers and persons receiving wages and holding clerical or supervisory or managerial positions engaged in administrative office, store keeping section and welfare section, sales department as also those engaged in purchase of raw materials,* etc. *or purchase of fixed assets for the factory as well as watch and ward staff*'. The number of employees increased from about 0.28 million in 2002–2003 to 0.9 million in 2014–2015. During the same period, the share of supervisory and managerial (S&M) staff and other employees (clerical, etc.) increased from around 40,000 and 30,000 to about 0.1 million. As a result of this increase, the share of workers in total person engaged increased from 71% in 1999–2000 to 77% in 2014–2015 whereas share of S&M staff encountered a decline from 17% to 11%, and the share of other employees remained more or less at the same level.

The number of workers can further be divided into directly employed workers and contractual workers (see Fig. 8.3). For directly employed

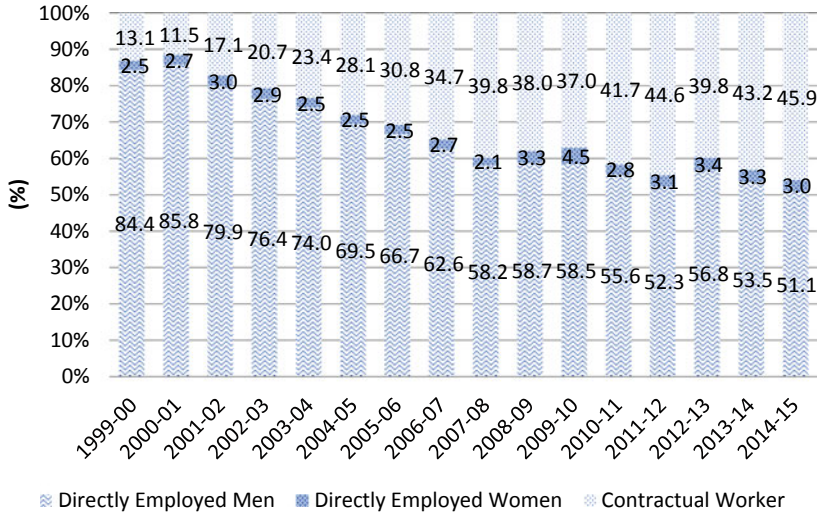


Fig. 8.3 Category-wise Share in Number of Workers in the Automobile Industry (%) (*Source* EPW online database)

workers, trends between men and women can be distinguished, for contractual workers this is not possible. All persons who are not employed directly by a factory owner/employer but engaged through a third party, i.e., agency/contractor, are termed as contract workers. In India, these contract workers are not generally provided any social security or other supportive provisions. While total employment in the automotive sector increased during the study period, the number of contract/casual workers grew faster, showing an increase in pace of exclusion from formal social protection. As a consequence of this, the share of contractual workers increased significantly from 13% in 1999–2000 to 46% in 2014–2015 while the share of directly employed men recorded considerable decline from 84% to 51%. This change is the result of employers' desire to reduce labour costs since contract workers are not provided with any social security benefits and can be hired temporarily in periods of high demand.

Figure 8.4 gives the development of real wages in the automotive sector. Overall real wages after 1999 did not increase, or even decreased, except for S&M staff and other employees. In relation to average monthly real wages (2011–2012), the S&M staff recorded a significant increase from Rs. 32,800 in 1999–2000 to more than Rs. 63,050 in 2014–2015

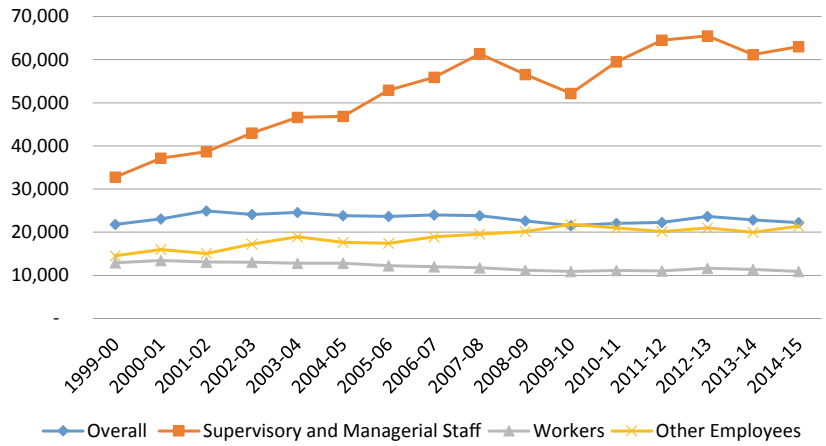


Fig. 8.4 Category-wise Average Monthly Wage Rates (in Rs.) at Constant prices (2011–2012) (*Source* EPW online database. *Note* Other Employees: clerical, administrative office, storekeeping section and welfare section, sales department, etc.)

and for other employees, it rose from Rs. 14,550 to Rs. 21,400. In the same period, however, wages of workers registered a significant decline from around Rs. 12,950 to Rs. 10,930, partly because of the degradation in employment contracts. On the other hand, average monthly per person payments for the provident funds (PF)[17] and other benefits per employee rose from Rs. 4850 to Rs. 7840 at constant prices, between 1999–2000 and 2001–2002; but this was only a short-term increase and it declined after this through the entire period, with the year of 2006–2007 being an exception. Likewise, the average monthly bonus per employee moderately increased from Rs. 980 in 1999–2000 to Rs. 1700 in 2007–2008 at constant prices, but it has declined since then to Rs. 1180 in 2014–2015.

Although employment of workers in the organised automobile industry has increased, the share of contract workers has increased from 13% to 46%, while the share of directly employed workers has declined from around 84% to 51%. However, in relation to real wages, the performance of this industry has remained on the negative side. Thus, the organised automobile industry does not satisfy the minimal criterion for social upgrading given by Bernhardt and Milberg (2011), i.e., simultaneous increase in employment and real wages.

As noted earlier, ASI data is not designed to cover the unorganised sector and those not registered under the Factories Act, 1948. It is significant that most OEM units are in the organised sector, whereas a significant portion of the components industry, in terms of the number of firms, is in the unorganised sector. As of 2015, the component industry included 10,000 firms in the unorganised sector and 700 in the organised sector (Sabnavis & Kansara, 2017). In terms of the turnover of component industry, however, the organised sector accounts for approximately 85%. The unorganised sector largely serves as a 'residual' category, manufacturing mostly low value products. Nevertheless, a significant number of enterprises are in the unorganised sector contributing approximately 15% to turnover in 2015.

The automobile industry recorded a decline in the number of workers (i.e., working owners, hired workers and helpers & others) in the unorganised sector from 107,200 in 2000 to 94,991 in 2015. While all

[17] Under the PF scheme, an employer has to make certain contributions towards social security and an equal contribution is also made by the employee. At the time of retirement, the employee gets a lump sum amount including both the self and employer contribution, with interest on both.

categories registered a decline in employment between 2000–2001 and 2010–2011, there has been some increase in the two broad categories of 'working owners' and 'helpers & others' after 2010–2011. In spite of this, the overall total number of workers employed declined as hired workers constituted a two-thirds share of workers. A significant chunk of hired workers is employed in 'Establishment'[18] (99%) mostly as informal workers[19] (90%).

In the unorganised part of the automobile industry, real wages in cash & kind[20] for all hired workers (formal and informal) increased from nearly Rs. 53,400 per year in 2000–2001[21] to nearly Rs. 79,200 per year in 2015–2016. Even at a disaggregated level, 'Establishment' and 'Own Account Enterprises', the trend of increasing real wages persisted. However, in relation to group benefits[22] at constant prices, this industry registered a decline from nearly Rs. 2500 per year to nearly Rs. 2000 during the same period, owing to the decline in group benefits of both 'Establishment' and 'Own Account Enterprises' workers.

In the 'Establishment' category, real wages of formal hired workers paid in cash & kind increased from approximately Rs. 77,000 per year to Rs. 84,000 between 2010–2011 and 2015–2016 and for informal workers, it increased from nearly Rs. 66,330 to Rs. 78,600. However, in relation to group benefits and PF, the formal workers recorded a decline from Rs. 4100 per year & Rs. 8700 to Rs. 3100 & Rs. 4400, respectively. A similar trend has been observed for informal workers with respect to group benefits.

[18] Establishments are defined by NSSO as '*enterprises employing at least one hired worker on a fairly regular basis in the reference year*' and Own Account Enterprises as 'enterprises that do not employ hired workers on a fairly regular basis in the reference year'.

[19] In the NSSO database, the distinction between formal and informal workers is made on the basis of whether workers are receiving the benefit of provident fund (PF) or not. Only formal workers are entitled to receive PF benefit.

[20] Cash & Kind includes: salary/wages, house rent allowances, transport allowance, bonus and other individual benefits directly payable to the worker.

[21] Combined cash & kind (formal and Informal) for rounds 67 and 73 is calculated by adding formal and informal cash & kind, and PF and Combined group benefit are calculated by adding group benefit of formal and informal.

[22] Group benefit: Employer's contribution to canteen, health clinic, child care centre, etc.

Like the organised sector, the unorganised sector of the automobile industry did not fulfil the minimal criterion of social upgrading developed by Bernhardt and Milberg (2011) as this sector has encountered a consistent and significant decline in employment since 2000–2001.

Social Upgrading in the Textile and Clothing Industry

As in the automobile industry, we have examined the performance of both the textile and clothing industries in relation to social upgrading using a couple of indicators, namely measuring increases in employment and in real wages.

In the textile industry, the number of workers after 1999 either declined or remained stagnant through 2001–2002. Since then, however, the number of workers has increased from 1 million to 1.6 million in 2014–2015. A similar trend was observed for other employees,[23] i.e., the number of workers declined from 1999 to 2002, but it then rose close to 0.15 million in 2014–2015. The number of S&M staff increased from 86,000 in 1999–2000 to 0.1 million in 2014–2015.

In the clothing industry, however, the number of workers increased continuously throughout the period after 1999 from around 50,000 to 0.6 million during the same reference period. Similarly, the number of S&M staff and other employees rose from around 21,000 and 24,000 in 1999–2000 to 60,000 and 81,000 in 2014–2015, respectively.

Using the ASI categorisation of the number of workers in terms of directly employed men, women and contract workers, we see that, in the textile industry, the number of directly employed men declined from around 0.9 million in 1999–2000 to 0.75 million in 2003–2004; thereafter rising continuously to more than 0.9 million in 2006–2007. Then, it declined between 2006–2007 and 2009–2010, prior to another increase since 2010–2011 (see Fig. 8.5). Over the entire period, the number of directly employed women and contractual workers has increased. The share of directly employed men in the total workforce declined from 82% in 1999–2000 to 69% in 2014–2015; this trend reflects the increasing share of directly employed women and contractual workers from 9.3 and 8.6% to 17 and 15%, respectively.

[23] Other Employees: clerical, administrative office, storekeeping section and welfare section, sales department, etc.

Fig. 8.5 Category-wise number of workers in the textile industry (*Source* EPW online database)

In contrast to the above-mentioned trend, in the clothing segment there was a rise in the number of directly employed men at a higher rate in comparison with the rise in women employees of the same category. Over the same period, the number of contractual workers has increased from 12,000 to around 0.1 million (see Fig. 8.6). In 1999–2000, the clothing industry was made up of 61% directly employed women, 34% directly employed men and 5% contractual workers. However, in 2014–2015, the share of directly employed women declined to 46% while the share of men (in the same category) and the contractual workers increased to 44% and 11%, respectively.

In regard to workers' wages,[24] both the textile and apparel industries performed differently during the study period except when considering S&M staff. In both industries, the real monthly wages of S&M staff have increased significantly from Rs. 17,750 between 1999–2012 to about Rs. 33,000 in 2014–2015. However, the real monthly wages of workers in the textile industry improved only marginally from around Rs. 6900 to 7200 between 2000 and 2015 in the textile industry; for the apparel industry, it increased from Rs. 4600 to Rs. 6300 during the same period. In the textile industry, the real monthly wages of other

[24] ASI database doesn't provide data on wages for contractual workers.

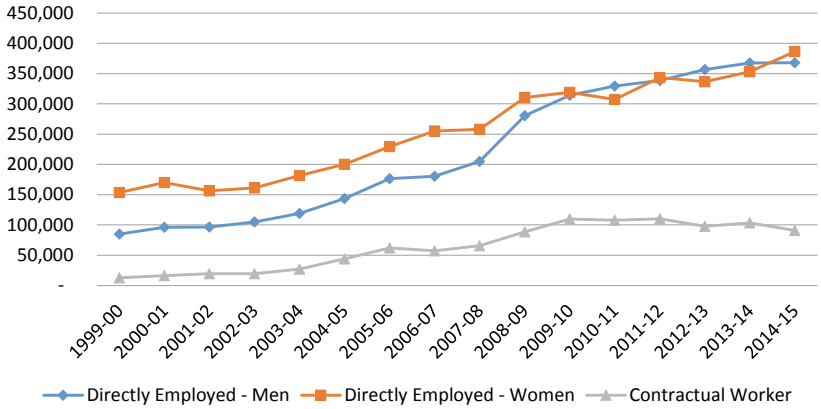


Fig. 8.6 Category-wise number of workers in the apparel industry (*Source* EPW online database)

employees increased from around Rs. 9400 to Rs. 11,100 and for the apparel industry, it surged from Rs. 8750 to Rs. 12,800. It is worth pointing out here that wages paid to workers in 2014–2015 (Rs 9269 in nominal terms, in the textile industry) were higher than the minimum wage fixed for unskilled workers (Rs. 7380 in nominal terms) by the government. Recently (2019), the expert committee recommended a new benchmark monthly wage (Rs 9750 in nominal terms), irrespective of sectors, skills, occupations and rural–urban locations.[25]

Further, it is important to note that the average monthly provident fund and other benefits, in real terms, in both the textile and apparel industries, have declined while average monthly bonuses have remained almost stagnant throughout the reference period (Figs. 8.7, 8.8).

[25] The Ministry of Labour and Employment had constituted an expert committee on 17 January 2017 to review and recommend methodology for fixation of National Minimum Wage (NMW). The report has recommended to fix the need based on national minimum wage for India at Rs. 375 per day (or Rs. 9750 per month) as of July 2018, irrespective of sectors, skills, occupations and rural–urban locations for a family comprising of.

3.6 consumption unit. It has also recommended to introduce an additional house rent allowance (city compensatory allowance), averaging up to Rs. 55 per day, i.e., Rs. 430 per month for urban workers over and abovethe NMW (Urbanworkerwage: Rs.11,180 per month). http://pib.nic.in/PressReleaseIframePage.aspx?PRID=1564590.

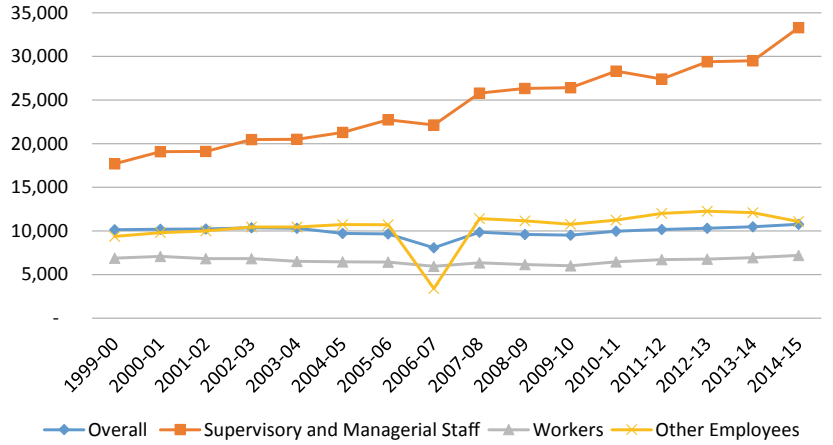


Fig. 8.7 Category-wise average monthly wage rate at constant prices in the textile industry (in Rs.) (2011–2012) (*Source* EPW online database. *Note* Other Employees: clerical, administrative office, storekeeping section and welfare section, sales department, etc.)

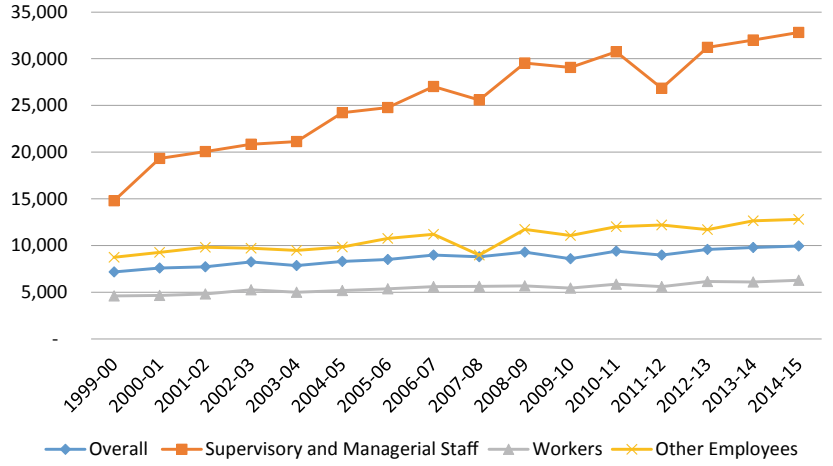


Fig. 8.8 Category-wise average monthly wage rate at constant prices in apparel industry (in Rs.) (2011–2012) (*Source* EPW online database. *Note* Other Employees: clerical, administrative office, storekeeping section and welfare section, sales department, etc.)

The previously mentioned social upgrading outcomes are solely based on data analysis of the organised sector. The unorganised segment of the workforce also contributes significantly to both employment and productivity. In the organised sector, almost 87% of the workers were employed as formal workers and the rest were employed as informal workers. In the NSSO database, the distinction between formal and informal workers is made on the basis of whether workers are receiving the benefit of provident fund (PF) or not. Only formal workers are entitled to receive the PF benefit. But the unorganised sector is almost entirely dominated by informal workers as their share of the sector was 93% in 2015–2016. Therefore, findings based on ASI data reflect only a partial picture of the Indian textile and apparel industry.

In the apparel industry, the number of unorganised workers who have been employed for all categories (i.e., workers, owner, hired worker and helper & others) registered a significant increase (3.2 million) between 2000–2001 and 2015–2016. But it is important to note that more than 80% (2.6 million) of that increase is accounted for by the category of 'owner'. At a disaggregated level, the number of hired workers in 'Establishments' has significantly increased from 0.96 million in 2000–2001 to 1.4 million in 2015–2016, whereas, in 'Own Account Enterprises', the number of workers initially increased by 40,000 between 2000–2001 and 2010–2011, but then fell dramatically to 15,300 in 2015–2016. Establishments are defined by the NSSO as '*enterprises employing at least one hired worker on a fairly regular basis in the reference year*'….. and Own Account Enterprises as 'enterprises that do not employ hired workers on a fairly regular basis in the reference year'.

On the other hand, the trend in unorganised workforce in the textile industry shows that the number of employed workers in all categories has declined by more than one million between 2000–2001 and 2015–2016; the number of workers declined in the category of owner, hired workers and helper & other are 0.22 million, 0.37 million and 0.62 million, respectively. In contrast, employment in the apparel industry has risen mainly due to an increase in employment in establishments during the same period. In both segments, there is a large dominance of male workers in informal labour.

When we look at wages, we have to distinguish between the textile and the apparel industries and also between developments in different time periods. Interestingly, in relation to wages, the unorganised sector outperformed when compared to organised sector. With respect to real

wages [cash & kind] for hired workers in the formal and informal sectors, the textile industry registered an increase from about Rs. 39,400 per year in 2000–2001[26] to approximately Rs. 55,400 per year in 2015–2016, and in relation to group benefits, it increased from nearly Rs. 800 per year to nearly Rs. 1700 per year. Even at a disaggregated level (OAEs and Establishments), textiles performed quite well with respect to both real wages and group benefits. In OAEs, annual real wages per hired worker (formal and informal) increased from nearly Rs. 19,800 to around Rs. 38,250 and annual group benefits increased from Rs. 170 to Rs. 2320. Similarly, in Establishments, wages rose from about Rs. 39,800 to approximately Rs. 55,800 and group benefits rose from Rs. 800 to Rs. 1700.

However, a separate examination of the interim phase between 2010 and 2016 reveals a different development. A comparison of the wages and group benefits for formal and informal workers from 2010–2011 onwards, shows that in the textile industry emoluments for formal sector hired workers decreased from nearly Rs. 50,400 per year in 2010–2011 to about Rs. 48,500 in 2015–2016 because of a fall in real wages in all types of enterprises. Only for informally hired workers was there an increase in real wages from nearly Rs. 49,500 to nearly Rs. 56,000 in both OAEs and Establishments. In comparison, annual emoluments per hired worker in apparel industry, for both formal and informal workers, have increased, respectively, from about Rs. 42,900 & Rs. 43,600 in 2010–2011 to nearly Rs. 57,900 & Rs. 58,200 in 2015–2016. Thus, at a disaggregated level (OAEs and Establishments), this industry has performed quite well for both formal and informal workers.

In the apparel industry, real wages for formal and informal hired workers rose from nearly Rs. 36,000 per year in 2000–2001 to about Rs. 56,700 per year in 2015–2016 mainly due to increase in real wages of the workers employed in establishments. However, the workers of OAEs benefited from a comparatively lower rise during this period; real wages rose marginally from nearly Rs. 32,100 per year in 2000–2001 to around Rs. 35,700 in 2015–2016.[27] In Establishments, real wages registered a significant increase from nearly Rs. 36,000 per year to nearly Rs. 57,000

[26] Combined cash & kind (formal and Informal) for rounds 67 and 73 is calculated by adding formal & informal cash & kind and PF and Combined group benefit is calculated by adding group benefit of formal and informal.

[27] In fact, the real wages for OAEs workers declined between 2000–2001 and 2010–2011 (Rs. 21,300 per year).

per year. Consequently, the difference in annual emoluments of OAEs workers and Establishment workers went up from a mere Rs. 4500 to Rs. 21,700. In relation to the group benefit, for formal and informal hired workers in the apparel industry, there was an increase from approximately Rs. 950 per year to nearly Rs. 1460 per year because of a rise in group benefits for workers of both OAEs and establishments.

Consequently, there was a noteworthy increase in wage gap from Rs. 4500 to Rs. 21,700 between workers in the 'establishments' and the OAEs. This assessment shows that some segments of the apparel industry may have realised social upgrading as per the criterion of Bernhardt and Milberg (2011), i.e., simultaneous increase in real wages and employment.

Conclusion

This chapter has provided an overview of the major issues and outcomes which are largely driven by accelerated participation of both the automobile and T&Cs industries in GVCs, especially after the Indian government liberalised its economy in the early 1990s. This accelerated participation has been driven by a macroeconomic regime characterised by the growing importance of foreign capital and the deepening penetration of multinational companies. It should also be seen in the context of the relatively disappointing performance of the overall manufacturing sector, with stagnant shares in GDP and manufacturing over the last few years. Given this context, the two sectors studied, the automobile and T&Cs industries, belonged to that group of industries which performed relatively better. Given near stagnation of manufacturing in terms of contribution to the GDP and employment, the automobile industry has been a reasonable success story in terms of its contribution to both GDP and employment, and its improved performance in the world economy with respect to the number of automobiles, including passenger and commercial vehicles sold. Within the textile and apparel industry, it is the apparel industry whose performance throughout has been remained relatively superior on the multiple accounts, namely, contribution to GDP, employment, global exports, wage growth, etc. In both the sectors, organised and unorganised, real wages have remained higher in the automobile industry when compared to the T&Cs industry. Interestingly, in both industries wages grew much more in the unorganised sector in comparison to the organised sector. In the automobile industry, the organised sector encountered

a significant decline in real wages in absolute terms during the study period, while the T&Cs industry registered an increase. Consequently, in the organised sector, the yearly wage gap between the automobile and T&Cs industries declined from around Rs. 90,500 at constant prices in 2000–2001 to around Rs. 50,000 in 2014–2015. On the other hand, in unorganised sector, the automobile industry recorded significant growth in real wages when compared to the T&Cs industry. As a result, the yearly wage gap between these two industries increased from around Rs. 18,190 at constant prices to Rs. 25,200. Since the automobile industry is highly capital-intensive while the T&Cs industry is more of a labour-intensive industry, this could be one of the reasons for higher wages in the former industry in comparison to the later.

As noted at the outset, participation in GVCs began when the public and private sector companies entered into joint ventures with transnational companies in the mid-1980s. This trend has gained momentum since the 1990s through the introduction of neoliberal policies. Seen in the context of such a push, it is important to note that between the automobile and T&Cs industries, when looking at trade the former is doing relatively better, because the value of forward linkage integration in GVCs is higher vis-à-vis the value of backward linkage integration; in the latter, backward linkages have been more pronounced, consequently it has gained less from global participation. Further, between the two industries, it is the automobile sector which has attracted a relatively high share of FDI, as noted earlier, which has contributed to its improved functioning along with different economic parameters (Miglani, 2019).

With respect to social upgrading, we observed contrasting results when compared with the results of economic upgrading in both industries. The automobile industry, both organised and unorganised, failed to fulfil the minimal criterion of social upgrading developed by Bernhardt and Milberg (2011), i.e., simultaneous increase in real wages and employment for workers. On the other hand, within the T&Cs industry, it is the apparel industry which has attained social upgrading in both organised and unorganised sector, while the organised sector of the textile industry has attained very little improvement in real wages of the workers over 16 years. It is important to note that the dynamics across these sectors are significantly different from each other due to market forces and other considerations which we have briefly noted above. Likewise, the forces and drivers that determine wages are also different. Hence, it would not be appropriate to talk of real wage in a sector or across sectors.

Another matter of concern in both the automobile and T&Cs industries is the increased contractualisation and informalisation of workers, which is reflected in a declining trend of group benefits. But, as our analysis shows, even in the automobile sector, which has done significantly better than T&Cs in terms of increased share in overall manufacturing GDP in India or in share of exports, the gains have been modest and limited. Thus, a summary assessment of the integration of the two sectors in GVCs would be that there have been limited and uneven economic gains in regards to most indicators of economic and social upgrading.

References

ACMA (Automotive Component Manufacturers Association of India). (2016–2017). Future of Mobility, New Delhi,

Aiginger, K. (1997). The use of unit values to discriminate between price and quality competition. *Cambridge Journal of Economics, 21*(5), 571–592.

Anner, M. (2020). Squeezing workers' rights in global supply chains: Purchasing practices in the Bangladesh garment export sector in comparative perspective. *Review of International Political Economy, 27*(2), 320–347.

Banga, K. (2016). Impact of global value chains on employment in India. *Journal of Economic Integration, 31*(3), 631–673.

Bernhardt, T., & Milberg, W. (2011). *Does economic upgrading generate social upgrading? Insights from horticulture, apparel, mobile phones and tourism sectors, Capturing the Gains*. (Working Paper 2011/07, November).

Dash, A., & Chanda, R. (2017). *Indian firms in automotive global value chains: Sectoral analysis, centre for WTO studies* (Working Paper No. 40).

Ghosh, J. (2000). The impact of government policies on the textile and garment industries of India. *Wisconsin Geographical Society, 15–16*, 18–27.

GOI (Government of India). (2017–2018). Ministry of Textiles, Annual Report.

GOI (Government of India). (2018–2019). Ministry of Textiles, Annual Report.

GOI (Government of India). (2019–2020). Ministry of Textiles, Annual Report.

Harrigan, J., & Barrows, G. (2009). Testing the theory of trade policy: Evidence from the abrupt end of the multifiber arrangement. *Review of Economics and Statistics, 91*(2), 282–294.

Jha, P. (2018). *India's macroeconomic policy regime and challenges of employment: A case of the manufacturing sector* (Working Paper 20) International Centre for Development and Decent Work.

Li, K., & Song, L. (2011). The technological content of China's exports and the need for quality upgrading. In L. Song & J. Golley (Eds.), *Rising China: Global challenges and opportunities* (pp. 69–84). ANU Press.

Manoj, G., & Muraleedharan, S. (2016). Impact of Multi Fibre Agreement (MFA) phase out on Indian textile exports. *Pacific Business Review International, 8*(8), 109–119.

Manoj, G., & Muraleedharan, S. (2019). Productivity of Indian Textile Industry in the Post Multi Fibre Agreement (MFA) Regime. *Asian Review of Social Sciences, 8*(1), 123–131.

Miglani, S. (2019). The growth of the Indian automobile industry: Analysis of the roles of government policy and other enabling factors. In K. C. Liu, & U. Racherla (Eds.), *Innovation, Economic Development, and Intellectual Property in India and China. ARCIALA Series on Intellectual Assets and Law in Asia*. Springer.

Narayanan, B.G., & Vashisht, P. (2008). *Determinants of competitiveness of the Indian auto industry* (ICRIER Working Paper, No. 201, January).

Nath, P., Mrinalini, N., & Sandhya, G. D. (2001). National textile policy and textile research. *Economic and Political Weekly (EPW), 36*(5), 489–496.

NITI Aayog. (2017). India leaps ahead: Transformational mobility solutions for all. Retrieved on 27 June 2019. https://niti.gov.in/writereaddata/files/document_publication/RMI_India_Report_web.pdf

Sabnavis, M., & Kansara, D. (2017). Automobile components: Structure and prospects. Retrieved on 27 June 2019. https://www.careratings.com/uploads/newsfiles/AutoCompmarch2017.pdf

Salido, J., & Bellhouse, T. (2016). *Economic and social upgrading: Definitions, connections and exploring means of measurement, Economic Commission for Latin America and the Caribbean (ECLAC)*. LC/MEX/L.1208.

SIAM (Society of Indian Automobile Manufacturers) (2017). Key Policy and Regulatory Initiatives in Indian Automotive Industry since 2006: Impact, Challenges and Opportunities. Retrieved on 27 June 2019. http://www.siamindia.com/cpage.aspx?mpgid=42&pgidtrail=87

SIAM (Society of Indian Automobile Manufacturers) (2017–2018). Building the Nation, Responsibility, Annual Report 2017–18. https://www.siam.in/uploads/ar/20-20thAnnual%20Report2017-2018.PDF

SIAM (Society of Indian Automobile Manufacturers). (2018–2019). Building the Nation, Responsibility, Annual Report 2018–19. https://www.siam.in/uploads/ar/21-21stAnnualReport2018-2019.pdf

Taumar, D., Nangia, P., & Mishra, S. (2019, February 12). Complete Indian Auto Sales Analysis 2018: CV sales cross one million mark. ET Auto.Com, The Economic Times. Retrieved on 27 June 2019. https://auto.economictimes.indiatimes.com/news/industry/complete-india-auto-sales-analysis-2018-cv-sales-crosses-a-million-mark/67549073

CHAPTER 9

Collective Bargaining During and After Apartheid: Economic and Social Upgrading in the Automobile Global Value Chains in South Africa

Alex Mohubetswane Mashilo

Introduction

Collective bargaining in South Africa has received much attention against the background of the struggle by Black workers for recognition, equal treatment at work, and access to workers' rights.

For example, Webster (1985) looks at collective bargaining from the perspective of the labour process and trade unionism in the foundries up to 1985. Forrest (2011) presents the history of the National Union of Metalworkers of South Africa (NUMSA) and covers its engagement and that of its predecessors with collective bargaining up to 1995. Godfrey,

A. M. Mashilo (✉)
Southern Centre for Inequality Studies, University of the Witwatersrand, Johannesburg, South Africa
e-mail: mohubetswane.mashilo@wits.ac.za

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_9

Maree, du Toit, and Theron (2011) discuss collective bargaining from the perspective of labour law development without a specific industrial focus. While building on existing literature, this chapter goes beyond the colonial–apartheid period that lasted until 1994. The chapter specifically covers contemporary collective bargaining in the automobile manufacturing value chains, in which NUMSA is a decisive player building on the leading role it has historically played towards inclusive collective bargaining.

The central argument in this chapter is that the social upgrading improvements realised by workers in the automobile manufacturing value chains did not automatically trickle down from economic upgrading, despite economic upgrading being important for sustainable social upgrading, but were ultimately the results of labour agency—defined in this chapter as the initiatives by workers to improve their position. This definition is premised on the emphasis by Herod (2001) of a focus on workers as actors in production and its relations. In this chapter, the initiatives by workers to organise into but not only a trade union, build their own power, and engage in struggle or other forms of action, including, notably, collective bargaining, to secure their rights and social upgrading improvements form part of labour agency.

This chapter is organised into three parts. Part I covers the integration of South Africa into the automobile manufacturing global value chains (GVCs). It presents the structure of the automobile manufacturing GVCs in South Africa—our empirical case in which lies the collective bargaining bone of contention, the distribution of production income. Part II covers the historical struggles fought by workers to realise recognition and labour rights, including collective bargaining rights. Part III turns to social upgrading through collective bargaining. This is followed by a concluding section.

The methods used include literature, constitutional and legislative reviews, examination of collective bargaining processes and agreements, and interviews with long-standing trade unionists. Besides these sources, the author could also draw from direct participant observation and own experience as a former engineering maintenance functionary in automobile manufacturing, former NUMSA automobile and tyre manufacturing chief negotiator, and as the overall head of organising, campaigning, and collective bargaining department. The approach followed in this chapter includes a comparison to India, an emerging economy with greater automotive manufacturing, but which exhibits different social upgrading outcomes than South Africa.

Part I: The Automotive Manufacturing Value Chain in South Africa, with a Comparison to India

South Africa is integrated into the automobile manufacturing GVCs through Original Equipment Manufacturers (OEMs), lead firms in the industry. In South Africa, the OEMs form the final vehicle manufacturing assembly sector. They also govern and coordinate their components manufacturing (Mashilo, 2019a) and vehicle dealer networks.

There are seven OEMs manufacturing vehicles, and having export programmes, in South Africa. All of them are functionally integrated subsidiaries of foreign-controlled multinational OEMs.[1]

The OEMs are the main motor of automobile manufacturing employment in South Africa, however, with most employment in the supportive components manufacturing sector (Fig. 9.1).

South Africa is also host to several medium, heavy, and extra-heavy commercial vehicle and bus companies and others involved in semi-knockdown operations[2] and vehicle sales. In this category falls the Beijing Automotive Industrial Corporation,[3] MAN Truck & Bus, and UD Trucks, a subsidiary of the Volvo Group, and others (Automotive Industry Export Council, 2020).

Automobile manufacturing in South Africa dates to 1924 (Automotive Industry Export Council, 2013), while in India it dates to the 1940s (Nag & De, 2020). Major foreign-controlled multinational OEMs have established operations in India, however, India also has domestic OEMs, such as Tata, Mahindra, or Hero (Barnes, 2017), unlike South Africa.

As Dünhaupt and Herr (2020) state, GVCs involve asymmetric governance structures which create not only positive but also negative effects for developing countries. On the positive side, as the Automotive Industry Export Council (2020) states, automobile manufacturing is South Africa's leading manufacturing industry. In 2019, the wider automobile industry

[1] Of which three are from Germany (BMW, Mercedes-Benz, and Volkswagen), one from the US (Ford) and three from Japan (Toyota, Nissan, and Isuzu). Isuzu took over General Motors' manufacturing facility after the latter withdrew from manufacturing in South Africa in 2017 (Automotive Industry Export Council, 2018).

[2] Semi-knockdown operations involve the assembly of vehicles imported in sets of major subassemblies, components and parts partly put together from their origin.

[3] The Industrial Development Corporation, a South African public development finance institution, has a 35% stake in the Beijing Automotive Industrial Corporation.

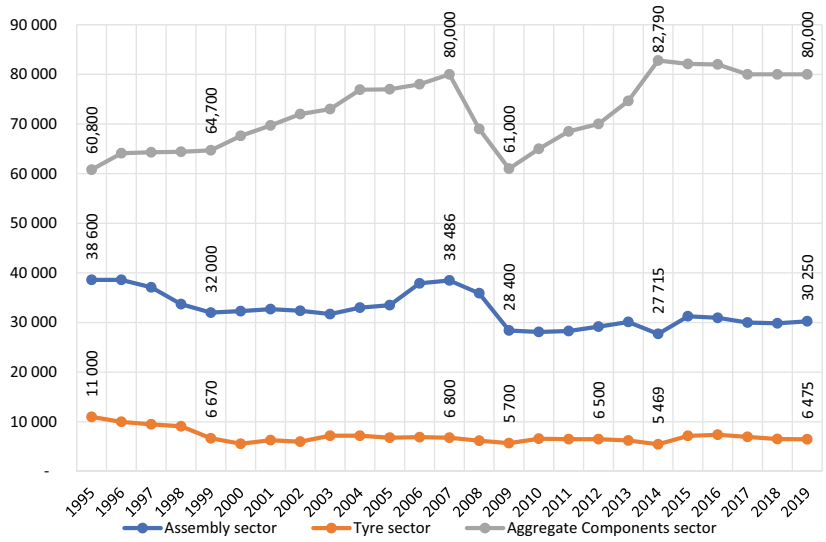


Fig. 9.1 South African automobile manufacturing employment (*Source* Author's Design[4])

contributed 6.4% to South Africa's gross domestic product (GDP) (Automotive Industry Export Council, 2020), a slight decrease from previous years (Mashilo, 2019b), while vehicle and components manufacturing accounted for 27.6% of manufacturing output. In India, the automobile industry is of similar significance for the economy, contributing 7.1% to GDP and accounting for 22% of manufacturing output in 2019 (Nag & De, 2020).

[4] Adapted from Mashilo (2019b) based on data supplied by the National Association of Automotive Components and Allied Manufacturers and the National Association of Automobile Manufacturers of South Africa covering the components manufacturing and assembly sectors (1995–2017), with changes made using aggregate data from the Automobile Industry Export Council (2020) covering the components and assembly sectors (2018–2019), data from Barnes and Black (2014) covering the tyre manufacturing sector (1995–2012), and data from the National Association of Automotive Components Manufacturers/South African Tyre Manufacturers Conference covering the tyre manufacturing sector (2013–2019).

On the negative side, in South Africa, the domestic manufacturing value addition (MVA), defined as the total value of locally produced vehicles less their imported value, is smaller than the imported MVA. The domestic MVA of the vehicles produced in South Africa averaged 37.85% between 2013 and 2016, meaning that a significant 62.15% of the average value of those vehicles was imported (Mashilo, 2019b). Therefore, South Africa still needs to do a lot to raise its domestic automobile MVA.

In India, automobile manufacturing is strong across all vehicle segments and key components (Nag & De, 2020). This is consistent with countries that have strong domestic automobile MVA. Those countries have deep domestic value chains, in which a wide range of manufacturing activities takes place.

In contrast, in South Africa the first tier and top-end OEMs operations play a more dominant role as suggested, above, by the proportion of the domestic MVA being significantly less than the imported value in vehicles produced in the country.

Furthermore, downstream functions, especially vehicle research and development mainly take place outside South Africa, in countries headquartering the respective multinational OEMs. On this score, alone the fact that India has domestic OEMs suggests that it is involved in vehicle research and development.

The components manufacturing sector is organised into three tiers, as stated above. The first tier specialises in vehicle systems, modules, and subassemblies supplied to the OEMs. The second tier manufactures the components and subcomponents built into complete vehicle systems, modules, and subassemblies. The third-tier processes raw materials and manufactures the parts used in the components and subcomponents.

In 2019, there were 180 first-tier components manufacturers in South Africa, of which 75% were foreign-controlled multinational corporations (Automotive Industry Export Council, 2020). South African-owned companies are also 'more represented within the second- and third-tier supplier bases that supply the sub-parts built into completed components' (Automotive Industry Export Council, 2020, p. 81).

In total, there were 430 components suppliers, which manufacture or assemble catalytic converters, engine parts, radiators, seats, body parts, glass, brake parts, and numerous other components (Automotive Industry Export Council, 2020).

In contrast to South Africa, India has emerged as an outsourced component manufacturing hub for multinational OEMs such as Ford,

General Motors, Daimler Chrysler, Fiat, Volkswagen, and Toyota (Nag & De, 2020).

Although tyre manufacturing forms part of the components manufacturing sector, a focused reflection on this sub-sector is important in the South African context since it has a dedicated collective bargaining centre, the New Tyre Manufacturing Industry Bargaining Council.

In 2019, there were four foreign-controlled tyre manufacturing multinational corporations manufacturing tyres and involved in export programmes in South Africa, namely Bridgestone, Continental, Goodyear, and Sumitomo. The tyre market is shared between locally produced and imported tyres, with the tyre manufacturers also involved in imports focusing on the tyres they do not produce in South Africa (Automotive Industry Export Council, 2020).

South African Automotive Manufacturing's Economic Upgrading Through Industrial Policy

Mashilo (2019b) highlights the role of industrial policy towards automotive manufacturing significance in South Africa. In short, combined with the lifting of sanctions against apartheid South Africa in 1994 following the country's transition to its democratic dispensation (Barnes, 2000), the Motor Industry Development Programme and the Automotive Production Development Programme were the key drivers of the country's automobile manufacturing post-1994 (Barnes, 2000; Lamprecht & Tolmay, 2017). The lifting of the sanctions and the adoption of the new automobile industrial policy in 1995 encouraged increased investment. Although the reduction in trade tariffs was more rapid and went deeper than the country's obligation under the World Trade Organization, the Motor Industry Development Programme facilitated phased-in liberalisation in the context of intensifying globalisation by gradually reducing the industry's protections.

For instance, complete built-up vehicles duty was gradually reduced from 65% in 1995 to 25% in 2012 (Automotive Industry Export Council, 2013), still offering a degree of protection for local production development to withstand competitive pressures from the increasingly liberalised global operating environment. The policy further provided incentives to encourage increased production volumes. For example, it incentivised exports by tax-based import rebate credits allowing vehicle exporters reduced duty or duty-free imports of the components they did not source

domestically or other vehicles they did not produce in South Africa. OEMs rationalised model platforms and others reduced their production facilities to single platform vehicle plants in favour of increasing production volumes.

The South African government adopted the Automotive Production Development Programme in 2013 to replace the Motor Industry Development Programme, a shift compliant with the World Trade Organisation away from what could be construed as exclusive export subsidisation. The Automotive Production Development Programme comprised mainly four pillars, namely import duty, Vehicle Assembly Allowance, Production Incentive, and the Automotive Investment Scheme (introduced in July 2009) supporting automobile manufacturing in South Africa with investment and production incentives.

The increased investment by OEMs also involved functional integration of domestic production facilities into their global production systems and upgraded those facilities to world-class production standards, including through process upgrading involving new work methods, coordination of production, and increased automation and use of robotics. Those facilities were, until then, too far away from being globally competitive, in part, due to the disinvestment and lack of investment that occurred in compliance with the sanctions against apartheid.

Process upgrading doubled productive capacity in the assembly sector, as indicated by output per worker or vehicles per head, from 10.1 in 1995 to 20.4 in 2014, with overall production output increasing from 388 442 vehicles in 1995 to a pre-2008 economic crisis peak of 625 965 (Mashilo, 2019b). However, while productivity increased as a result of process upgrading, employment fell, as indicated by Fig. 9.1 above, from 38 600 in 1995 to 27 715 in 2014, highlighting a contradiction between economic and social upgrading in the assembly sector.

Part II: Collective Bargaining: Building Workers' Power, Turning the Tide Against Exclusion

Before 1924, South Africa experienced 'industrial conflicts in which white workers demanded protection against the perceived threat of "cheap" African labour, culminating in an armed uprising of white mineworkers in 1922' (Godfrey et al., 2011, p. 18). The state reacted violently, and through legislation by adopting the Industrial Conciliation Act of 1924.

Conceding to the demands of White workers, this legislation established collective bargaining under a system of Industrial Councils with only White workers or 'non-African' trade unions and employers as the bargaining agents (Godfrey et al., 2011; Lerumo, 1980).

The Industrial Conciliation Act of 1924 formed the structural foundation on which the South African collective bargaining system was subsequently developed through various legislative iterations (Godfrey et al., 2011). The iterations included, before the end of the apartheid regime in 1994, the Industrial Conciliation Act of 1937, the *Bantu/*Native Labour (Settlement of Disputes) Act of 1953, the Industrial Conciliation Act of 1956, the *Bantu/*Black Labour Relations Regulations Amendment Act of 1977, and the amendments of the Industrial Conciliation Act 1979. These laws, except for the Industrial Conciliation Act of 1979, were anchored in, and others reinforced, the 1924 exclusion of Black workers from collective bargaining.

However, while the Industrial Conciliation Act of 1979 paved the way for the recognition of the right of African workers to form, join, and participate in the activities of trade unions, thus allowing the registration of those unions and entitling them to join Industrial Councils, it imposed restrictions that still made it difficult for the Black workers to unionise freely and participate fully in collective bargaining (Webster, 1985). The opening of the Industrial Councils was restricted to African workers with the so-called permanent urban residence rights, excluding African workers who were either migrants or commuters from Bantustans,[5] and contract workers with the so-called temporary urban residence rights (Godfrey et al., 2011).

Additionally, the apartheid regime intended to grant the Bantustans independence, with the effect of excluding many members of the new trade unions covering Black workers in their scope from coverage under the Industrial Conciliation Act of 1979 and Industrial Councils. Through the restrictions, the apartheid regime curtailed the affected trade unions' chances to achieve representativity to engage in collective bargaining. Furthermore, as Godfrey et al. (2011) point out, the Industrial Conciliation Act of 1979 gave the pre-existing bargaining partners, historically

[5] The so-called self-governing territories based on ethnic groups to which the apartheid regime confined the citizenship of the Africans it deprived of permanent urban residence rights.

White workers' unions and employers, the right to veto the admission of any new bargaining partner in the Industrial Councils.

Thus, industrial relations in South Africa remained racially segregated in the context, on the one hand, involving collaboration between successive colonial–apartheid regimes, employers, and White workers' trade unions. The historical prohibition of African workers from collective bargaining under the Industrial Council system was underpinned by their exclusion from the definition of an employee and fortified by their forbidding to organise into trade unions (Godfrey et al., 2011; Webster, 1985) on the other. That was reinforced by multiracial/non-racial unionisation also being prohibited.

To enforce their racial repressive agenda, the colonial–apartheid regimes further adopted laws such as the Native Administration Act in the 1920s, the Suppression of Communism Act in 1950, and the Unlawful Organisations Act in the 1960s. Structures such as the so-called 'joint' liaison committees, of employers and African workers, were introduced in the 1970s through an amendment of the *Bantu* Labour (Settlement of Disputes) Act of 1953. The 'joint' liaison committees maintained the exclusion of Black workers from collective bargaining. They were used to ward off Black workers' trade unions under colonial–apartheid consolidation of capitalism in South Africa (Webster, 1985).

Webster (1985) identifies the use of the 'joint' liaison committees under the managerial tactic of pre-emption, in addition to the other tactics that managements used, fear-mongering, and smear campaigning. Some progress towards inclusive labour rights and collective bargaining seemed to emerge in 1981 when, through their intensifying struggles, the Black workers finally compelled the apartheid state to expand the definition of an employee to cover all African workers and remove racial restrictions to unionisation. Despite this, the effects of the previous dispensation lingered on.

There were three major thrusts of struggle by the Black workers before the 1970s towards the changes that ultimately occurred: the first took place in the 1920s, the second during the Second World War, and the third in the 1950s and early 1960s. The colonial–apartheid state reacted with repression in every case, yet another major thrust of workers' struggle followed in the 1970s. In January 1973, the Black workers embarked on a wave of strikes, starting in Durban, to support wage increase demands, among other triggers of the strikes. This led to the

1979–1981 labour law reforms by the apartheid regime, albeit imposed with restrictions (Webster, 1985).

Rapid unionisation followed the 1973 strikes, and with it the formation of the Metal and Allied Workers Union. The following decade, in May 1987, the Metal and Allied Workers Union merged with, notably, the Motor Industry Combined Workers Union and the National Automobile and Allied Workers Union to form NUMSA (Forrest, 2011).[6]

Industrial Councils and Centralised Bargaining

The merger that resulted in the formation of NUMSA consolidated workers' power in the automobile manufacturing value chains, as it did in other metal, engineering, and related industries.

Before its merger with the other NUMSA predecessors, the Metal and Allied Workers Unions had achieved an increased number of company-level recognition agreements, from its first one in September 1980. It had, following serious internal disagreements, eventually chosen to apply for registration and enter the Industrial Council system (Webster, 1985). Striking a delicate balance between the two sides of the debate, for and against registration, the decision was to register: provided the registration application would be accepted without racial restrictions on the union's scope of organising and prohibition on organising migrant and contract workers. An additional principle, called worker control, was that workers had to exercise control in the collective bargaining process. This would entail the union consulting workers democratically to decide bargaining demands, and to accept or reject settlement agreements.

The Metal and Allied Workers Union, which first preferred company-level bargaining, eventually entered the National Industrial Council for the Iron, Steel, Engineering, and Metallurgical Industries (Webster, 1985). Guided by those principles, it not only resolved to enter but also sought to transform the Industrial Council. This influenced NUMSA's

[6] The merger was motivated by an organising principle called 'One industry, one trade union' adopted by the Congress of South African Trade Unions (COSATU), formed in 1985, a federation with which NUMSA affiliated immediately following its founding. COSATU terminated NUMSA's affiliation in November 2014 following a dispute affecting the same organising principle (Congress of South African Trade Unions, 2014).

approach to Industrial Councils in the automobile manufacturing value chains.

Veteran trade unionist Silumko Nondwangu (2020)[7] recalled that wages and other conditions in the National Industrial Council for the Motor Industry, whose scope covered the components manufacturing sector, were determined without direct worker involvement. Nondwangu was referring, already highlighted, to collective bargaining taking place under Industrial Councils that excluded Black workers. He was himself directly affected as a worker from 1985 to 1987 at a Mercedes-Benz and Volkswagen harness supplier, Kromberg & Schubert. In entering the National Industrial Council for the Motor Industry, NUMSA pushed the same transformative principles advanced by its predecessor in the Iron, Steel, Engineering, and Metallurgical Industries.

In the assembly sector NUMSA's predecessor, the National Automobile and Allied Workers Union, believed in centralised bargaining. As documented by Forrest (2011), the union started first by entering a regionally based Eastern Cape Industrial Council for the Automobile Manufacturing Industry, but after building power at the company level by organising most hourly rated workers. Following its formation, NUMSA advanced the sectoral centralised bargaining strategy, although not without internal contradictions.

In the automobile assembly and tyre manufacturing sectors, it was NUMSA that built centralised bargaining against opposition by employers. This was achieved, as Forrest (2011) states, through a strategy to formulate and negotiate common demands. NUMSA sent the demands to employers and invited them to negotiate at a central venue. While some employers arrived, others refused, resulting in NUMSA mobilising workers to demonstrate and engage in work stoppages to compel their employers to agree to sectoral centralised bargaining. That is how NUMSA created the automobile National Bargaining Forum (NBF) to facilitate centralised bargaining in the assembly sector. The NBF replaced the regionally based Eastern Cape Industrial Council for the Automobile Manufacturing Industry, and its first agreement was signed in 1989.

[7] NUMSA general secretary (2000–2008), delegate to NUMSA's launching congress in 1987 where the union adopted centralised collective bargaining as its strategy, and successively, NUMSA local organiser in Queenstown, regional education officer and regional secretary in the Eastern Cape (1990–2000).

NUMSA successfully managed the internal contradiction from those within its ranks who pushed company-based bargaining believing that they could reach better agreements at the company level. Before then, a major strike had broken out at Mercedes-Benz in 1990, lasting for seven weeks (Forrest, 2011). Nondwangu (2020) highlighted the complexity underpinning the strike and the fine balance that NUMSA had to reach in driving the transition from company level to centralised sectoral collective bargaining. The difficulty was that workers at companies such as Mercedes-Benz were relatively better off than others, while NUMSA had to equalise conditions by building centralised bargaining.

Having overcome that tension, and after building associational power by organising the shop floor rank-and-file workers, NUMSA used its structural power, deriving from the location of its members in automobile manufacturing, to compel employers to agree to centralised sectoral collective bargaining.[8] Centralised collective bargaining was also a strategy towards equal treatment at work in the entire industry and therefore not only at single workplaces.

While structural and associational power were key determinants, NUMSA found itself faced with another hard reality. Once it had brought them into centralised sectoral collective bargaining, the employers made it clear that they will not engage in collective bargaining at the company level. This was called avoiding two-tier collective bargaining, referring to bargaining centrally at the sectoral level and then at the company level. That meant sectoral collective bargaining agreements had to prevail as final and binding on all bargaining matters. NUMSA affirmed centralised collective bargaining as the single bargaining system, but this had wider implications, as later referred to in terms of the associated 'peace' and 'no further claims undertaking' clauses in the automobile manufacturing value chains' sectoral agreements. Committed to combining local factory worker struggles and industry-wide struggles as a single struggle, NUMSA pioneered centralised bargaining as its strategy in the tyre manufacturing sector. The union expanded the regionally based

[8] Workers' structural power refers to the power that results simply from their location within the economic system—such as the individual power that directly results from tight labour markets, and collective power resulting from their strategic location within a key industry. Workers' associational power refers to the power that derives from their various forms of collective organisation—including trade unions, political parties, community organisations, and other forms of institutional representation (Wright, 2015).

Eastern Cape Industrial Council for the Tyre Manufacturing Industry to become a country-wide centralised bargaining institution covering the tyre manufacturing sector (Forrest, 2011).

Centralised Collective Bargaining in Post-apartheid South Africa

As hinted already, labour agency went beyond the workplace and extended to the entire sphere of the broader political struggle because of the historical connection between labour exploitation by capital at the workplace and society-wide racial oppression. This culminated in the country's post-apartheid Constitution adopted in 1996 enshrining labour rights. These included freedom of association, i.e. the right of workers to form or join trade unions and participate in their activities, and, linked with it, their right to engage in collective bargaining.

Furthermore, the Labour Relations Act adopted in 1995 established a framework for orderly collective bargaining. The Act introduced Bargaining Councils, replacing the Industrial Councils whose roots lay in racial exclusion at the expense of Black workers. This was based on the constitutional democracy dispensation attained in 1994, inclusive of guaranteed labour rights for all workers without regard to race and gender.

A Bargaining Council's functions include the powers to: conclude and enforce collective bargaining agreements; prevent and resolve labour disputes; establish and administer a fund for that purpose; and create and administer retirement, medical aid, sick pay, and holiday schemes or funds, or any similar schemes or funds for the benefit of one or more of their affiliated organisations, bargaining parties, or their members. The Labour Relations Act recognised trade union organisational rights, such as the recognition of trade unions as workers' bargaining agents, trade union access to the workplace, the right of workers to have trade union representatives (so-called shop stewards) and the granting of leave for shop stewards to attend their trade union activities.

The automobile National Bargaining Forum (NBF) continued as a bargaining forum without registering as a bargaining council. The NBF facilitates collective bargaining on wages and other substantive conditions of employment under the Labour Relations Act. However, it does not exercise the full powers and functions of a Bargaining Council. Typically, Bargaining Councils such as the Motor Industry Bargaining Council have designated agents responsible for enforcing their collective agreements,

and have an autonomous Dispute Resolution Centre accredited by the Commission for Conciliation, Mediation, and Arbitration (CCMA). The CCMA is funded by the state from the national fiscus and has its own governing body nominated by the National Economic Development and Labour Council (NEDLAC).[9]

Unlike a Bargaining Council, when a dispute arises at the automobile National Bargaining Forum level its parties jointly appoint an independent arbitrator or mediator to resolve the dispute by mediation and agreement (National Bargaining Forum, 2014), while employee disputes that occur at the company level, such as unfair labour practice and unfair dismissal disputes, are referred to the Commission for Conciliation, Mediation, and Arbitration.

South African Automobile Manufacturing Bargaining Units and Trade Union Agents

Table 9.1 summarises the automobile manufacturing value chain's collective bargaining organisation, bargaining agents, and industry bodies.

To comply with the Labour Relations Act, the Industrial Council for the Tyre Manufacturing Industry became the New Tyre Manufacturing Industry Bargaining Council (NTMIBC). The National Industrial Council for the Motor Industry became the Motor Industry Bargaining Council (MIBCO). MIBCO has a wider scope covering component manufacturing, motor vehicle and parts sales, and after-sale services, including repairs, panel beating, vehicle body building, remanufacturing, and fuel retail.

The National Association of Automobile Manufacturers of South Africa (NAAMSA) is the industry body for the OEMs, and the other final vehicle corporations, while the National Association of Automotive Components and Allied Manufacturers (NAACAM) is the authority of the components manufacturing sector. The latter's membership in 2019 comprised approximately 130 companies, of which approximately 80% were first-tier suppliers, and had 30 allied service providers (Automotive

[9] NEDLAC is a quadripartite economic development and labour policy consultative body comprising the representatives of organised labour, organised business, community-based organisations, and the government.

Table 9.1 Automobile manufacturing collective bargaining organisation

Sector	*Bargaining Council/Forum*	*Bargaining agents*		
		Trade unions	*Employers' organisation*	*Industry body: Mandating principals organisation*
Automobile manufacturing assembly sector	Automobile National Bargaining Forum: NBF	National Union of Metalworkers of South Africa: NUMSA	Automobile Manufacturers Employers' Organisation: AMEO	National Association of Automobile Manufacturers of South Africa: NAAMSA
Automobile components manufacturing sector	Motor Industry Bargaining Council: MIBCO	National Union of Metalworkers of South Africa: NUMSA	Retail Motor Industry: RMI	National Association of Automotive Components and Allied Manufacturers: NAACAM
Tyre Manufacturing sector	New Tyre Manufacturing Industry Bargaining Council: NTMIBC	National Union of Metalworkers of South Africa: majority Trade union Solidarity: minority	New Tyre Manufacturing Employers Association: NTMEA	South African Tyre Manufacturers Conference: SATMC

Industry Export Council, 2020). The industry body for the tyre manufacturing industry is the South African Tyre Manufacturers Conference (SATMC).

It should be noted that white-collar workers fall outside the industry bargaining units. Their employment conditions and salary adjustments are determined in company-specific arrangements. NUMSA's strength is anchored in the blue-collar, hourly rated workforce.

In the automobile National Bargaining Forum, NUMSA is the sole trade union bargaining agent and thus the only labour signatory representing workers.

In the automobile assembly sector, the question of whether or not an hourly rated worker belongs to NUMSA is immaterial, since non-unionised hourly rated workers pay a bargaining fee to the National Bargaining Forum that is equal to NUMSA's membership fee of 1%

of basic wages per week/month. Thus, most workers prefer to join the union, rather than pay the bargaining fee and only enjoy collective bargaining settlements without trade union representation on other matters.

In the Motor Industry Bargaining Council and the New Tyre Manufacturing Industry Bargaining Council, NUMSA is the deciding trade union bargaining agent, based on its majority status. This means that, for a main collective bargaining agreement to stand, NUMSA should agree with it.

Significantly smaller than NUMSA, another trade union signatory to the Motor Industry Bargaining Council agreements is the Motor Industry Staff Association (MISA). Historically, the latter was a White-only clerical staff association, consistent with the past era of colonial–apartheid racial segregation and exclusion of Africans from unionisation (Forrest, 2011). However, its primary base is the motor retail sector, hence NUMSA is the deciding trade union bargaining agent for the components manufacturing bargaining unit.

In the tyre manufacturing sector, trade union Solidarity is another labour signatory to some of the collective bargaining agreements. Historically, Solidarity evolved from successive White-only trade unions of the colonial and apartheid past. Solidarity's constituency in the tyre manufacturing bargaining unit is centred in a quantitively insignificant, although qualitatively important, section of workers, the engineering, and other technical occupations. Related to this, under the colonial–apartheid segregated labour relations there was a job reservation system, for many years depriving Black workers, and women workers, of appointment in certain occupations or professions. Engineering, other technical, and managerial occupations were part of these. The struggles waged by the excluded workers to gain labour rights were also aimed at ending the racial and patriarchal job reservation system, towards inclusive social upgrading.

While NUMSA made progress in advancing its strategy of centralised sectoral bargaining by establishing the automobile National Bargaining Forum, the New Tyre Manufacturing Industry Bargaining Council, and by becoming the deciding trade union bargaining agent in the Motor Industry Bargaining Council for the components manufacturing workers, the union is yet to consolidate a single automobile manufacturing industry-wide centralised bargaining out of the three. It is also yet to achieve organisational strength among the salaried staff and their inclusion in the three bargaining units.

NUMSA has, however, secured a concession from the employers in the automobile National Bargaining Forum for the establishment of an automobile manufacturing industry-wide Bargaining Council (National Bargaining Forum, 2014). This would bring together, albeit under separate chambers, the assembly sector, components manufacturing sector, vehicle bodybuilding operations, and the tyre manufacturing sector. Implementing the agreement would mark a step towards a single automobile industry-wide centralised bargaining. However, resistance by the employers is continuing, as not all have come to the party.[10]

Hourly rated workers from the medium, heavy, and extra-heavy lorries and bus companies MAN Truck & Bus, and UD Trucks benefit from the automobile National Bargaining Forum settlements. They gained representation in the forum, albeit on an observer status, under their NUMSA shop stewards. However, they enjoy full participation rights in NUMSA's automobile sector shop steward councils bargaining sessions.

In the tyre manufacturing sector, workers from an automobile rubber-products manufacturing company, Veyance Technologies, are covered by the New Tyre Manufacturing Industry Bargaining Council agreements. They also gained representation in the council on an observer status by their NUMSA shop stewards, but they enjoy full participation rights in the union's tyre manufacturing sector shop steward councils bargaining sessions.

The concessions benefitting workers from the MAN Truck & Bus, UD Trucks, and Veyance Technologies came from NUMSA's success to unionise, build workers' power and use that power to compel their employers to comply with the respective sectoral collective bargaining agreements, and the employers' organisations in the two bargaining institutions to recognise the representation of the workers.

[10] Herman Ntlatleng (2020), former NUMSA national auto and tyre sector coordinator (2002–2009), Tshwane local organiser (1989–2002) and shop steward at Ford Motor Company (1979–1989), believes that more pressure on employers could have resulted, or still can result, in the creation of the automobile manufacturing industry-wide Bargaining Council. In the same vein, Irvin Jim (2016), NUMSA general secretary (2008–present), Eastern Cape regional secretary (2000–2008), shop steward at Firestone Tyres (1993–2000), reaffirmed the union's commitment towards constituting centralised collective bargaining along value chains.

Employers' Organisations, and the Extension of Bargaining Agreements

Employers' membership of the automobile National Bargaining Forum, Motor Industry Bargaining Council, and New Tyre Manufacturing Industry Bargaining Council is through their respective associations.

The Automobile Manufacturers Employers' Organisation (AMEO) is the only employer body in the National Bargaining Forum, representing the seven OEMs with manufacturing operations in South Africa. The mandating principals of the Automobile Employers' Organisation—chief executive officers or executive directors/presidents of the OEMs—are organised under the National Association of Automobile Manufacturers of South Africa (NAAMSA) as their industry body. Despite their hourly rated workers benefitting from the automobile National Bargaining Forum settlements, MAN Truck & Bus, and UD Trucks as employers are not part of the Automobile Employers' Organisation, and by extension also the bargaining forum.

The New Tyre Manufacturing Employers Association represents the tyre manufacturing companies in the New Tyre Manufacturing Industry Bargaining Council.

The association's mandating principals are organised in the South African Tyre Manufacturers Conference as their industry body. While the workers from Veyance Technologies benefit from the New Tyre Manufacturing Industry Bargaining Council settlements, their employer is not part of the New Tyre Manufacturing Employers Association, and by extension also the bargaining council.

In the Motor Industry Bargaining Council, employers are represented by the Retail Motor Industry (RMI) association, the National Employers Association of South Africa (not limited to a specific industry), and the Fuel Retailers' Association of Southern Africa (representing fuel retailers). The Retail Motor Industry association represents the components manufacturing sector as an employers' bargaining agent. However, the components manufacturing sector's mandating principals are organised in the National Association of Automotive Components and Allied Manufacturers (NAACAM) as their industry body.

The Motor Industry Bargaining Council's collective bargaining agreements are extended to non-parties falling under its scope, namely the workers and employers neither affiliated to the trade unions nor employer organisations represented in the bargaining council. The extension is done

under the Labour Relations Act, which allows the Minister of Employment and Labour to extend collective bargaining agreements concluded by bargaining councils—provided one or more registered trade unions whose members are the majority of trade union members represented in the bargaining council vote in favour of the extension and, similarly, if one or more registered employers' organisations whose members employ the majority of the workers employed by the employers' organisations represented in the bargaining council vote in favour of the extension.

Collective bargaining agreements concluded in the three bargaining institutions prohibit company-level bargaining. Known as the 'Peace clause', the prohibition in the Motor Industry Bargaining Council also prohibits participation in any form of industrial action on any dispute or matter covered in its collective bargaining agreements. Known as the 'No further claims undertaking' in the automobile National Bargaining Forum and the New Tyre Manufacturing Industry Bargaining Council, the restriction does allow engagements at the company level on matters not covered in their agreements—provided those engagements shall not involve any 'coercion', meaning industrial action, and shall not result in on-cost expenditure. Without exercising power if no agreement is reached, bargaining is ineffectual. This is innovative prohibition of bargaining at the company level.

Part III: Labour Agency and Social Upgrading

The Basic Conditions of Employment Act adopted in 1997 gives effect to the constitutional provision of fair labour practices by establishing and regulating basic conditions of employment. The Act allows a variation of its basic conditions by the Minister of Employment and Labour, and by collective agreements—provided that variation does not reduce the basic protections afforded to workers by the Act. The basic conditions include working time regulations, leaves, payment of remuneration, and matters relating to employment termination, such as the notice period and severance pay. Like the labour rights enshrined in the Labour Relations Act, the basic conditions prescribed in the Basic Conditions of Employment Act are a product of the decades-long labour agency—the workers' struggles summarised in the preceding sections.

NUMSA's Three-Year Collective Bargaining Strategy, and the Challenge of a Strong, United Trade Unionism in India

The National Union of Metalworkers of South Africa (NUMSA) shaped the social upgrading improvements gained by workers through a three-year collective bargaining strategy it developed in the early 1990s, building on the decades of struggle waged by workers before its founding. Forrest (2011) succinctly summarises the key elements of the strategy: a living wage campaign mainly driven through demands for wage increases, benefits and their improvements, skills training, and other collective bargaining demands. One more pillar was the restructuring of the colonial–apartheid grading that excluded Black workers from relatively better-paying jobs, engineering, and other technical occupations. Through this transformation, NUMSA sought to achieve a non-racial and non-sexist grading system based on skills.

The new grading model would systematically eliminate colonial–apartheid wage gaps. Wage differentials would be articulated according to the skills acquired from a combination of education or recognition of prior learning and workplace training. Thus, progression from the entry-level up would not depend on subjective decision-making by supervisors. It would be automatic upon a worker acquiring the skills weighting for the next upper Skills Level. Thus, wage improvements would not depend on negotiated annual wage increases only. Furthermore, they would not be based on the skills applied only but also on a recognition of the skills acquired, even if they are not applied at a certain moment.

NUMSA led the struggle for provident funds to take care of workers' retirement, medical aid schemes to take care of workers' healthcare needs, sick pay funds to take care of workers' pay during medical absence, better maternity leave payment, and the other funds, highlighted below. The social upgrading improvements realised by workers were not delivered automatically by the employers through economic upgrading. They were an outcome of labour agency, the initiatives taken by workers to unionise, build collective power, campaign, and wage the struggles for the improvements by building and advancing collective bargaining, among others.

While collective bargaining does not eliminate labour exploitation by capital but merely regulates the conditions under which that capital relation takes place, the importance of the improvements achieved by workers cannot be overemphasised. Collective bargaining does have an influence

on how much of the value created from the labour process goes to workers' income share of production and purchasing power, which has an influence on the demand for consumer goods and services.

The strong and united NUMSA-led trade unionism in automobile manufacturing in South Africa contrasts with the situation in India. Andrew Chirwa (2021), NUMSA president (2013–present), and deputy president (2012–2013), visited India around 2009/2010 for a short period. The visit was arranged by Ford, where he was employed from 2001, in preparation for a new investment in South Africa.

In his feedback, he characterised his automobile manufacturing counterparts in India as, in certain instances, either lacking or not having a well-organised trade union voice and representation. He found trade unionism in India to be fragmented. This included company-based trade unions, with others associated more with management than the aspirations of ordinary workers. This implied the existence of a repressive labour relations regime. The International Labour Organization (ILO) (2018) confirms that observation, for instance, by highlighting instances where management paid compensation to leading trade union leaders to quit, and unorganised workers were reluctant to form unions fearing that the labour commissioner's office—to which they had no direct access—could inform management of their intention, and that management could react by dismissing potential trade union leaders.

Chirwa noted in India more exploitative practices that workers in automobile manufacturing and NUMSA would not allow in South Africa. Some exploitative practices bordered on what in South Africa would be viewed as either abuse or unfair labour practices, such as unilateral extensions of the working day, in which cases workers were told at the end of the working day, when they were supposed to go home, that their shift is extended. This adversely affected their family life.

So entrenched in India was the use of the so-called contractual labour practice, in which workers were employed by a third party, like what in the sections that follow is defined in the South African context as labour brokers. Those workers were worse off in almost every respect, including wages, compared to their directly employed counterparts in a permanent employment relationship. What shocked Chirwa more was to hear that some workers in India reportedly committed suicide with workplace-related stress as a contributor. Recent literature identifies some of the issues noted worryingly by Chirwa (2021) as persistent problems in India.

For instance, the ILO further found that effective collective bargaining in India is quite low due to a lack of statutory support to it: 'Overall, trade union density in India is relatively low compared to other emerging economies such as Brazil and South Africa, which indicates the limited scope unions have to bargain for improvements in working conditions' (ILO, 2018, p. 67).

Moreover, Nair and Friedman (2021) identify wider poor labour regulations enforcement and widespread legal evasion by employers in India. These, they argue, were more likely to stand in the way of India's 2014 labour law reforms to limit contractual/casual labour, also called 'dispatch labour', to 10% of the workforce.

Unlike in the automobile manufacturing value chains in South Africa where negotiations are relatively well organised, Nair and Friedman (2021) report numerous fragmented company-based strikes in India, in which workers seek improvements.

The following section presents and discusses the collective bargaining achievements that have resulted from NUMSA's relatively strong and united trade unionism in South Africa.

Social Upgrading in the Automobile Industry in South Africa

NUMSA has succeeded in securing improvements in the basic conditions of workers through collective bargaining. Collective bargaining in the automobile National Bargaining Forum has been a benchmark for the other sectors. Nevertheless, there are certain achievements that NUMSA is yet to realise in the automobile assembly bargaining unit but has attained in the tyre manufacturing bargaining unit.

While NUMSA secured an agreement in the early 2000s in the automobile assembly bargaining unit to combine company-based provident funds and build a single, and thus stronger, industry provident fund, by 2021 the fund had not yet been created. This is attributed to a combination of internal union weaknesses and reluctance by the employers to implement the agreement (Ntlatleng, 2020). Thus, in the automobile National Bargaining Forum provident funds remain company based, while in the tyre manufacturing bargaining unit the union has achieved an industry provident fund. However, both bargaining units have secured a service leave for workers, the amount being dependent on seniority.

NUMSA also negotiated a work security fund for assembly and tyre manufacturing workers to assist with education and co-operatives schemes

Table 9.2 Automobile assembly and tyre manufacturing bargaining units Grades/Skills levels and wage differentials

Skill level/Grade	*Wage differentials*	
	Entry rate/Grade minimum	*Qualified rate/Grade maximum*
1	Skills level/Grade 1 Entry Rate	Skills Level/Grade 1 entry rate + 10%
2	Skills level/Grade 1 qualified rate	Skills Level/Grade 2 entry rate + 10%
3	Skills level/Grade 2 qualified rate	Skills Level/Grade 3 entry rate + 10%
4	Skills level/Grade 3 qualified rate	Skills Level/Grade 4 entry rate + 10%
5	Skills level/Grade 4 qualified rate	Skills Level/Grade 5 entry rate + 10%
6	Skills level/Grade 5 qualified rate + 20%	Skills Level/Grade 6 entry rate + 20%
7	Skills level/Grade 6 qualified rate + 20%	Skills Level/Grade 7 entry rate + 20%

Source Automobile Manufacturing Industry National Bargaining Forum (NBF) Agreement: Wage Increase and Conditions of Employment (2007). Pretoria: NBF

and funding for other projects that can help them in the event of retrenchment. Another recent achievement, secured in 2016, is an annual transport allowance for assembly workers. NUMSA was also successful in equalising the conditions of employment of permanent and short-/fixed-term contract workers, for example, by securing the latter's inclusion into company-based medical aid schemes and ensuring that their wages comply with their respective Grades/Skills Levels.

The automobile assembly and tyre manufacturing bargaining units have a similar grading model, comprising seven Grades, called Skills Levels in the automobile assembly bargaining unit. Each Grade/Skills Level has an Entry Rate/Minimum, and a Qualified Rate/Maximum[11] (Table 9.2).

The Skills Level 6 population comprises multiskilled artisans, while Skills Level 7 population comprises multiskilled artisans with a higher skill weighting than Skills Level 6, and technicians.

[11] The bargaining terms 'Skills Level', 'Entry Rate', and 'Qualified Rate' are used in the automobile assembly bargaining unit, while the bargaining terms 'Grade', 'Minimum', and 'Maximum' are used in the tyre manufacturing bargaining unit.

In the automobile assembly bargaining unit, occupational identities from Skill Level 1 to 4 had been eliminated. This was driven by multi-skilling. However, by 2020, in the tyre manufacturing bargaining unit the Grades remained largely occupation-based.

Multi-skilling in the automobile assembly bargaining unit was also shaped by technological change resulting from the adoption of global production systems by the foreign-controlled multinational OEMs when they functionally integrated their respective South African-based operations into their GVCs post-1994.

The above changes ushered in 'world-class' standards and a flexible labour utilisation regime in the automobile assembly bargaining unit based on high skills requirements. The multiskilled production workers, trained on all tasks falling in their respective areas of operation (body construction, paint, assembly line, and vehicle testing operations, etc.), could thenceforth replace each other or cover for absentees at a stroke.

Flowing from the multi-skilling framework, NUMSA achieved automatic progression of workers from Skills Level 1 Entry Rate to Skills Level 4 Qualified Rate, something that it still aspires to achieve in the tyre manufacturing bargaining unit. The automatic progression enables assembly workers to move from the Entry Rate to the Qualified Rate of their respective Skills Levels, or from the Qualified Rate of those Skills Level to the upper Skills Level upon acquiring the required skills weighting through a combination of education or recognition of prior learning and skills training.

NUMSA had to build a strong shop-floor organisation to push multi-skilling, which required successful engagement in contested issues such as the release of workers from production lines when necessary to attend education and skills training activities. Supervisors were not always keen to release workers because of production target pressures.

The social upgrading success, especially the automatic progression from Skills Level 1 to Skills Level 4, was reflected in Skills Level 4 hosting most of Skills Levels populations, 49%, in 2016, with almost no worker in Skills Level 1. The second-largest hourly rated population, 24%, was in Skills Level 2. The rest of the workers, a minority, were in Skills Levels 3, 5, 6, and 7. Recruitment in Skills Levels 5, 6, and 7 is vacancy-driven, unlike from Skills Levels 1 to 4. The population characteristics of Skills Level 5, 6, and 7 make them structurally small—artisans, multiskilled artisans, technicians, and team leaders (Skills Level 5).

Because of their labour market power, deriving from their skills being scarce and critical, multiskilled artisans and technicians in Skills Levels 6 and 7 are paid way above-negotiated wage rates. The companies seek to keep them against their competitors. Additionally, the multiskilled artisans and technicians in most OEMs still benefit from their respective Skills Levels across-the-board percentage annual wage increases negotiated by NUMSA. Over and above that, they have company-specific benefits not included in the automobile assembly bargaining unit agreement.

Among the most remarkable achievements of NUMSA—especially in comparison to India as well as global automobile production generally—is the ban on labour brokering (also known as temporary agency work) in assembly and tyre manufacturing since 2010. Workers employed under labour brokering have historically been more exploited, typically paid less than their directly employed counterparts in permanent employment relationships, despite performing work of the same value. In many instances, they were deprived of the benefits such as medical aid schemes and provident fund coverage received by their directly employed permanent counterparts. Their employment contracts were easily terminated, leading to a lack of employment security.

The employers did not serve the collective bargaining achievements realised by the workers on a silver platter (Mashilo, 2019b). The workers had to unite, build, and exercise their power, including through strikes (Table 9.3), to secure the social upgrading achievements and concessions from the employers.

Similarly, Petrus Nxumalo[12] (2020), experienced automobile assembly and tyre manufacturing bargaining units' negotiations facilitator, reminded us about the strikes in the tyre manufacturing sector (Table 9.4).

Yet, there were real wage decreases in certain years. As Mashilo (2019b) indicates, in the automobile assembly bargaining unit there was a negative 3.8% difference between the across-the-board wage increase negotiated for 1993–1994 and the corresponding average inflation rate, and an average negative 0.7% wage increase for 2007–2009.[13]

[12] Previously, NUMSA auto and tyre sectors co-ordinator (1999–2002), worker at Nissan (1988–1999).

[13] This settlement was concluded without a strike.

Table 9.3 Automobile assembly sector bargaining unit strikes from 1994

One month in 1994 for a one-year bargaining agreement
Two weeks in 1995 for a three-year bargaining agreement
Two weeks in 1998 for a three-year bargaining agreement
Three weeks in 2001 for a three-year bargaining agreement
About two weeks in 2010 for a three-year bargaining agreement
Three weeks in 2013 for a three-year collective bargaining agreement

Source Author's Collective Bargaining Records (The author was the National Union of Metalworkers of South Africa's (NUMSA's) Chief Negotiator for the Automobile Assembly Sector and New Tyre Industry Manufacturing Sector and Head of Department for Bargaining, Organising, and Campaigns)

Table 9.4 Tyre manufacturing bargaining unit strikes from 1994

About three weeks in 1995 for a three-year bargaining agreement
Three weeks in 2001 for a three-year bargaining agreement
Four weeks in 2007 for three-year bargaining agreement
Four weeks in 2010 for a three-year bargaining agreement

Source Author's Collective Bargaining Records and Interview with Petrus Nxumalo, former Chief Negotiator for the Automobile Assembly Sector and New Tyre Industry Manufacturing Sector and Negotiations Facilitator: Nxumalo, P. (2020, October 7). Numsa Auto and Tyre Sector Co-ordinator (1999–2002), Automobile manufacturing worker at Nissan (1988–1999). (A. M. Mashilo, Interviewer)

It has to be noted, however, that in the components manufacturing sector (apart from tyre manufacturing), workers' achievements have been relatively lower compared to those of the assembly sector. This can be attributed to the asymmetric power relations between the OEMs and components manufacturers, as components manufacturers depend on the OEMs for inclusion in their GVCs (Mashilo, 2019a).

In competition with each other for greater market share and profit maximisation, the OEMs robustly use their outsourced components manufacturing to pursue low-cost production competition between the

components manufacturers seeking entry into or to maintain inclusion in their GVCs. The OEMs also exercise control over their outsourced components manufacturing profit margins. The competitive requirements they demand include production and labour cost cuts as well as components price reductions. Consequently, this downward pressure also leads to a race to the bottom regarding working conditions.

As part of labour cost curtailing strategies, labour brokering in the components manufacturing sector was very high before 2010. Other employers had labour brokered workers as most of their hourly rated workforce. NUMSA demanded a ban on labour brokers in 2010. However, unlike in the automobile assembly and tyre manufacturing bargaining units, the result in the components manufacturing bargaining unit was not a ban but only a reduction in the labour brokered workforce by every employer to 35%.

After years of struggle to ban labour brokers led by the Congress of South African Trade Unions (COSATU), with NUMSA playing a key role, South Africa adopted amendments to the Labour Relations Act in 2014. The amendments regulated labour brokering instead of banning them, and extended collective bargaining agreements to labour brokered workers, but limited the continuous duration of their labour brokered relationship to three months. After three months, the labour brokered worker is deemed to be the direct employee of the client of the labour broker if that employee continues to render their service for that client.

A dispute arose after the amendments, with some employers arguing the 2014 labour law reforms were not intended to achieve the above regulation. Finally, as Mashilo (2019a) reports, NUMSA challenged the employers, and after a long legal battle ultimately won the case in 2018 at the Constitutional Court.

The grading model in the components manufacturing bargaining unit differs from the philosophy followed in the automobile assembly bargaining unit. Rather than a multi-skilling model, grading in the components manufacturing bargaining unit is based on, and confines workers to defined occupational identities and their respective job descriptions. This makes it difficult for the affected workers to move up the grades ladder unless they gain an appointment to an occupation in a higher grade. A lot still needs to be done to restructure the grading model and advance a multi-skilling framework in the components manufacturing sector based on recognised components manufacturing and assembly qualification certificates (Mashilo, 2019a). The number of

workers who so far have achieved a certificate in the qualification is negligible, as a percentage of the total workforce.

Attention on technological change and its impact on work(ers) is perhaps a key weakness in all three automobile manufacturing bargaining units. Engagements on the introduction of new technology and labour process restructuring are referred to the company level as company-specific competition issues. However, the engagements are governed by the limitations from the peace clause in the components manufacturing bargaining unit and the no further claims undertakings in the automobile assembly and tyre manufacturing bargaining units.

There are, for example, agreements in the automobile assembly and tyre manufacturing bargaining units for companies to give a three months' notice before introducing new production technology. This notice period was too short, however, as companies would have been engaged in production process research and development for a long time. This left workers with little they could do within the three months' notice period (Ntlatleng, 2020).

The agreements refer retrenchments based on technological changes and company restructuring to the Labour Relations Act procedures for dismissals of the affected workers based on the employer's operational requirements (retrenchment). Notwithstanding the importance of better severance packages, for instance, those secured by NUMSA in the automobile assembly and tyre manufacturing bargaining units than those in the Basic Conditions of Employment Act, retrenchments amount to social downgrading. Retrenchments in the automobile assembly bargaining unit, accounting for the decline in the workforce from 1995 resulted from increasing capital intensity (and outsourcing) (Mashilo, 2019a). As Hlatshwayo (2014) found, labour still needed to develop effective strategies to handle technological change. To create employment in the automobile manufacturing value chains would require more production volumes in the automobile assembly sector, supported by increasing parts and components manufacturing localisation, and thus deepening and widening domestic manufacturing value addition in the components manufacturing sector (Mashilo, 2019a).

Conclusion

Rather than economic upgrading automatically, it was through their own initiatives that workers ultimately realised their rights, including

the right to unionise, participate in the activities of their unions, and engage in collective bargaining. NUMSA played a key role in driving inclusive collective bargaining in the automobile manufacturing value chains, leading the charge to establish the automobile National Bargaining Forum and the New Tyre Manufacturing Industry Bargaining Council. NUMSA used centralised sectoral bargaining in both, and in the Motor Industry Bargaining Council where it attained a majority trade union status in the components manufacturing bargaining unit, to pioneer the social upgrading improvements realised by workers.

It is inconceivable that without their own agency, they would have realised the social upgrading improvements they gained. This could be an important lesson for their Indian counterparts. It must be noted, of course, that other actors, such as the national government, also play a crucial role through legislation and industrial policy.

It could be argued that the repressive or more exploitative elements of the labour relations regime in India were a part of the measures adopted by the employers to reap more 'rewards' from production. The key problem is that the race to the bottom affecting labour goes against social upgrading. Thus, building a strong and united industry-wide trade unionism to drive inclusive collective bargaining can play an important role towards social upgrading in India, as it relatively did in South Africa.

In pursuit of social upgrading, recognising it still has more to realise (with components manufacturing workers requiring more attention), NUMSA has a goal to establish an automobile manufacturing industry-wide Bargaining Council bringing the entire automobile manufacturing value chain under one roof.

From the above, it is safe to conclude by highlighting a contradiction that tells an interesting story, about a particular observable relationship between economic and social upgrading forged in the Global South. This is depicted by the contrasts between South Africa and India.

On the one hand, additional to having domestic original equipment manufacturers, India has attracted more investment in automobile manufacturing, as indicated by its relatively strong automobile output than South Africa. The labour relations regime in India comprises, however, more adversarial, or repressive, elements towards social upgrading. On the other hand, South Africa has, albeit still far from attaining its goals, a relatively strong and united inclusive social upgrading movement represented by NUMSA.

References

Automotive Industry Export Council. (2013). Automotive Export Manual. Pretoria: Automotive Industry Export Council.

Automotive Industry Export Council. (2018). Automotive Export Manual. Pretoria: Automotive Industry Export Council.

Automotive Industry Export Council. (2020). Automotive Export Manual. Pretoria: Automotive Industry Export Council.

Barnes, J. (2000). *The competitiveness of the South African automotive component industry: Findings from the 1999 follow-up study*. Industrial Restructuring Project, University of Natal.

Barnes, T. (2017). Industry policy in Asia's demographic giants: China, India and Indonesia compared. *The Economic and Labour Relations Review, 28*(02), 218–233.

Barnes, J., & Black, A. (2014). The Motor Industry Development Programme 1995–2012: What have we learned? Johannesburg: ResearchGate. https://www.researchgate.net/publication/281237290_The_Motor_Industry_Development_Programme_1995-2012_What_have_we_learned. Accessed 30 Jul 2020.

Chirwa, A. (2021, February 20). President of the National Union of Metalworkers of South Africa. (A. M. Mashilo, Interviewer).

Congress of South African Trade Unions. (2014, November 11). Decision to expel NUMSA binding on all affiliates – COSATU. Politicsweb. https://www.politicsweb.co.za/party/decision-to-expel-numsa-binding-on-all-affiliates-. Accessed 4 Feb 2021.

Dünhaupt, P., & Herr, H. (2020). Global value chains – A ladder for development? *International Review of Applied Economics*, 1–19. https://doi.org/10.1080/02692171.2020.1815665

Forrest, K. (2011). *Metal that will not bend: The National Union of Metalworkers of South Africa, 1980–1995*. Wits University Press.

Godfrey, S., Maree, J., du Toit, D., & Theron, J. (2011). *Collective bargaining in South Africa: Past, present and future?* Juta & Co.

Herod, A. (2001). *Labor geographies: Workers and the landscapes of capitalism*. Guilford Press.

Hlatshwayo, M. (2014, September). NUMSA and solidarity's responses to technological changes at the ArcelorMittal Vanderbijlpark plant: Unions caught on the back foot. *Global Labour Journal, 3*(5), 283–305.

International Labour Organization. (2018). *India wage report: Wage policies for decent work and inclusive growth*. International Labour Organization.

Jim, I. (2016, April). *Comment. Numsa News*. National Union of Metalworkers of South Africa.

Lamprecht, N., & Tolmay, A. (2017). Performance of South African automotive exports under the African Growth and Opportunity Act from 2001 to 2015. *International Business & Economics Research Journal, 16*(2), 131–142.

Lerumo, A. (1980). *Fifty fighting years: The Communist Party of South Africa, 1921–1971* (2nd ed.). Inkululeko.

Mashilo, A. (2019a). *Economic and social upgrading in global production networks: The auto components sector in Gauteng*. Ph.D. thesis, University of the Witwatersrand, Johannesburg.

Mashilo, A. (2019b). *Auto production in South Africa and components manufacturing in Gauteng Province*. International Labour Organisation (ILO).

Nag, B., & De, D. (2020). The Indian Automobile Industry: Technology enablers preparing for the future. In C. V. Alex, & S. M. Ramírez Perez (Eds.), *New Frontiers of the Automobile Industry: Exploring Geographies, Technology, and Institutional Challenges* (pp. 301–321). Palgrave Macmillan.

Nair, M., & Friedman, E. (2021). Regimes, resistance and reforms: Comparing workers' politics in the automobile industry in China and India. *Global Labour Journal, 12*(1), 18–38.

National Bargaining Forum. (2014, June 12). *Automobile manufacturing industry agreement: Wage increases and conditions of employment*. National Bargaining Forum.

National Union of Metalworkers of South Africa. (2013). About—[NUMSA] History. NUMSA. https://www.numsa.org.za/history/. Accessed 17 June 2020.

Nondwangu, S. (2020, September 9). Numsa General Secretary (2000—2008), before then successively Numsa Local Organiser, Regional Education Officer and Regional Secretary (1990–2000). (A. M. Mashilo, Interviewer).

Ntlatleng, H. (2020, September 27). Former Numsa Organiser (1989–2002) and National Auto and Tyre Sector Co-ordinator (2002–present). (A. Mashilo, Interviewer).

Nxumalo, P. (2020, October 7). Numsa Auto and Tyre Sector Co-ordinator (1999–2002), Automobile manufacturing worker at Nissan (1988–1999). (A. M. Mashilo, Interviewer).

Webster, E. (1985). *Cast in a racial mould: Labour process and trade unionism in the foundries*. Ravan Press.

Wright, E. (2015). *Understanding class*. Verso.

CHAPTER 10

Economic and Social Upgrading in Global Value Chains: The Automotive Industry in Brazil

Anselmo Luis dos Santos, José Dari Krein, Denis Maracci Gimenez, and Hugo Dias

Introduction

For over 20 years, the Brazilian economy has faced enormous challenges as a result of neoliberal structural reforms, economic stagnation, and external crises, particularly after the Latin American crisis of the late 1990s to early 2000s and after 2014. Deep economic structural changes and fluctuations in the pace of growth profoundly affected Brazilian production and consumption, various sectors of activity, and the social and working conditions of the population.

A. L. dos Santos (✉) · J. D. Krein · D. M. Gimenez · H. Dias
Institute of Economics, University of Campinas (UNICAMP), Campinas, Brazil
e-mail: anselmoc@unicamp.br

Centre for Studies in Trade Unionism and Labour Economics, CESIT/IE/UNICAMP), Campinas, Brazil

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_10

One of the largest and most historically significant industrial sectors in Brazil is the automotive industry. When evaluating the transformations and socio-economic developments in the industry since the late 1990s, the aforementioned macroeconomic factors certainly played a central role in the advances and setbacks over the period. These developments coincided with the changing nature of labour relations in the automotive industry. While working conditions in the industry have greatly improved since the beginning of the 2000s, with worsening macroeconomic conditions since 2014 the Brazilian labour movement's ability to continue achieving an upwards trajectory for workers seems to be under threat.

This analysis focuses on the automotive industry as a point of reference to better understand Brazil's economic development since the late 1990s, the challenges inherent to integration in global value chains (GVCs) and how all of these factors influence working conditions and the ability of organised labour to achieve improvements.

In the following section, we present an overview of the economic and political developments in Brazil over the last 20 years. We will then examine the parallel advances and setbacks of the automotive industry, followed by an analysis of the changes in the automotive industry related to working conditions and Brazilian trade union activity. The final section summarizes and concludes the chapter.

An Overview of the Brazilian Economy, 1997–2017

After the Latin American debt crisis and "lost decade" of the 1980s, Brazil faced another deep financial and foreign debt crisis in 1997 that led to capital flight and a foreign exchange crisis in 1999. High interest rates were implemented to attract foreign capital, and public spending was reduced. The crisis had profound impacts on Brazilian society, leading to rising unemployment, precarious work, and high credit default rates, as well as precipitating growing violence and a sharpening social crisis.

Deepening resentment for the neoliberal reforms of the 1990s and the reaction to the crisis led to a political shift and the election of Luiz Inácio Lula da Silva of the Workers Party (PT) as President in 2002. Contrary to the expected break from neoliberal orthodoxy, the Lula administration's policy options were restricted in the context of rising inflation, fear of capital flight, high public debt and consistent current account deficits, and it maintained orthodox economic policies throughout 2003, including

high interest rates, in the hope of "calming markets" (Carcanholo, 2006, p. 679).

However, from 2004 the international commodity boom boosted Brazilian exports in agriculture and mining and led to current account surpluses until 2007. This was an exceptional situation for Brazil, as before and after this period their current account was in deficit. The commodity boom also encouraged capital inflows, ameliorating Brazil's external financial fragility and thus the need for further International Monetary Fund (IMF) "adjustment" policies.

From 2006, GDP growth was further underpinned by the expansion of public and private investment and domestic consumption. Stronger credit expansion took place due to the favourable external position. At the same time, real minimum wages increased substantially and social welfare programmes like Bolsa Família were implemented. Public development policies were implemented, including sectoral and regional programmes, research and development (R&D) support, etc. In addition, the expansion of public and private credit, with interest rates still very high, was supported by the National Bank for Economic and Social Development (BNDES), a big development bank. Strong expansion of consumer credit associated with the increase of wages and income associated with social policies played an important role in stimulating demand and output as well.

The impacts of the 2008–2009 global financial crisis initially hit the Brazilian economy hard, but successful countercyclical policies were implemented in 2009 and 2010, enabled by Brazil's favourable external position after 2003. The robust countercyclical expansion of public spending, credit programmes, and tax reductions stimulated consumption, especially of cars, appliances, and building materials, and led to the resumption of GDP growth in 2010, the final year of Lula's second term.

Due to the economic and social improvements in the second term, the PT gained political traction and Dilma Rousseff was elected in 2011. However, in the same year, an economic slowdown started (see Fig. 10.1), intensified by a worsening external situation, higher interest rates, and restrictive fiscal policy (de Paula & Ferrari, 2015).

After achieving re-election in 2014, Rousseff implemented another set of liberalisation policies which further impacted negatively on levels of employment, income, consumption, and industrial production. Following the impeachment of Rousseff and inauguration of Michel Temer as President in 2016, as well as the further implementation of even deeper

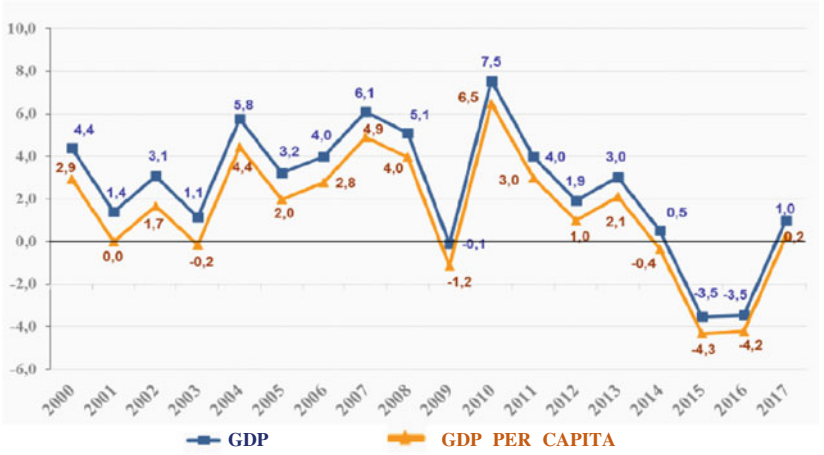


Fig. 10.1 Annual Growth Rate (in percent) of GDP and GDP Per Capita. Brazil, 2000–2020. *Source* IBGE, 2018. Authors' elaboration

neoliberal reforms including labour law reforms and privatisations, the negative impacts on the labour market and Brazilian social situation have progressively intensified. President Bolsonaro was elected in the October 2018 elections and took office on January 1, 2019. Between 2017 and 2019, the economy had grown by an average of only 1 percent per year. In the first quarter of 2020, the economy showed no sign of recovery, having declined 4.1 percent due to the outbreak of the COVID-19 pandemic.

Key Developments in the Automotive Industry

Insertion into GVCs and Dominance of Foreign Companies

Already in 1950, due to the policy of import substitution, car imports were by and large banned, and imports of car parts were subject to extremely high tariffs (Sarti & Borghi, 2017). At the same time, foreign multinational companies were allowed to enter the Brazilian market. Under these conditions, an industry developed which was characterised by the dominance of foreign companies. These foreign corporations had complete control over the production and assembly of vehicles, extensive

leadership in the whole national production chain, and a strong presence in the manufacture of auto parts—though in this segment, Brazilian companies were also existent. During this period, companies such as Volkswagen, Ford, General Motors, and FIAT (from the 1970s) had an essential presence in the production of automobiles and utility cars, while mainly Mercedes and Scania were specialised in the production of trucks and buses.

In the early 1990s, neoliberal policies were implemented, which also led to major changes in the Brazilian automotive industry. As part of this, a process of rapid trade opening and exposure of Brazilian firms to international competition occurred, which had profound impacts on production and the restructuring of Brazil's automobile companies. Investment in the sector was high in the 1990s and at the same time, a consolidation of the industry took place. As in other sectors, outsourcing processes took place first in support activities, but later outsourcing was expanded to several activities in the production process, including in maintenance and tooling. This changed the organisational form of productive activities away from vertical integration to a value chain structure with several companies as suppliers in different spheres of activity, each participating in activities previously internalised in fully vertical plants (e.g. in-process R&D, manufacturing, testing, and packaging) and led to the progressive expansion of parts and components imports (Brito, 2016).

In the 2000s, the structure of the Brazilian automotive assembly segment was further altered by the entry of even more foreign automakers, mostly from East Asia, than in the previous decade. This was encouraged by the robust expansion of domestic consumption and credit and higher rate of economic growth, but also driven by Brazilian policies to support the modernisation and growth of the sector in that period. Because of this constellation, the Brazilian automotive industry saw a steady expansion of sales, installed additional capacity via high investment, improved production technology, and increased the quality of vehicles. For example, the fleet of "flex-fuel" vehicles (powered by gasoline and ethanol) expanded. Overall, Brazil became at its peak in 2013 the seventh-largest producer of vehicles globally (International Organisation of Motor Vehicle Manufacturers [OICA], 2013).

However, the more foreign companies dominated the production chains, the more national companies were relegated to the position of auxiliary companies and located at the lowest levels of power relations in the value chain. Foreign companies, marked by advantages associated

with size, scale, technology, and market power, occupied the higher levels in the Brazilian chain of auto production and had higher capacity for international insertion in GVCs than Brazilian firms.

A lack of effective industrial policy meant that Brazilian companies' capacity for centralisation and concentration of capital, research, and technological innovation was not supported, which reduced their international competitiveness in the face of the globalisation of the industry from the 1990s onwards (Cardoso et al., 2012). Due to the resulting domination of the industry by foreign companies, a spiral of lacking research and technological development and reduced competitiveness developed, since "most of these research activities and patent registries remain strongly concentrated in the headquarters and subsidiaries of the developed countries" (Lima, 2016, p. 43).

Productivity

The productivity of the Brazilian automotive industry at the beginning of the 1990s was characterised by significant technological, organisational and competitive disadvantages, compared to the most developed countries. Namely, higher levels of automation and robotisation, scale of production, investment in R&D, training and professional qualification, and economic and financial power in the international market gave foreign companies a dominant position. In Brazil the insertion of companies into GVC in the 1990s, however, led to a progressive expansion of parts, pieces, and components imports (Brito, 2016). The 2000s era was especially characterised by the automotive industry's further insertion in GVCs, which was associated with increases in and a diversification of investment in new production technologies and forms of work organisation. Despite the non-existence of Brazilian lead firms in automotive GVCs, the restructuring of the industry led to improved technologies and better quality of vehicles. Efficiency increases that were driven by the industry's expansion also allowed companies to exploit economies of scale, especially based on greater specialisation in the production of low-cost vehicles. Production costs could be reduced. The regional dispersion of plants in low-cost regions and incentives from Brazilian states and municipalities for firms also played a role in cost reductions. (For a discussion of these factors see Lima, 2016, Sarti et al., 2008, and Almeida et al., 2006).

A survey conducted by Brazil's Intersyndicate Department of Statistics and Socioeconomic Studies (DIEESE, 2012), using data from the National Association of Automotive Vehicle Manufacturers (ANFAVEA) and the Brazilian Ministry of Labour and Employment (MTE), indicates that between 1998 and 2011, vehicle production per worker per year rose from 16.4 to 27.2—an increase of 65.9 percent in productivity. According to another study, when considering the Value of Industrial Transformation (VIT)[1] per person employed in the sector, labour productivity increased by 50 percent between 2000 and 2009 (Utzig, 2015).

Forward and Backward Linkages and the Auto Parts Sector

In addition to its relatively significant size in the world market, the Brazilian automotive industry maintained a share of around 20 percent of the Brazilian industrial GDP from 2011 to 2019 (ANFAVEA, 2020), with strong domestic links to various raw materials industries, industrial products, and services and significant impacts on the internal economy. Forward and backward linkages of the automotive industry are crucial for the industrial structure of the Brazilian economy. Because of this, between 2004 and 2013 the automotive industry was able to stimulate the growth of the Brazilian economy as a whole due to the expansion of domestic automotive production (Ministry of Industry, Foreign Trade, and Services [MIDIC], 2019).

The Brazilian auto parts segment was paradoxically not able to benefit greatly from the size and boom of the automotive industry. This is largely due to the fact the automotive industry is owned by foreign multinational companies and these expanded their participation in GVCs. These companies producing in Brazil substantially increased imports of auto parts and were able to reduce their reliance on domestically produced parts. In addition, foreign companies did not use Brazil as an export base for automobiles. As a result of these developments, the auto parts industry in Brazil experienced significant losses of competitiveness, suffered low growth rates, and was to a large extent taken over by foreign owners (Cardoso et al., 2012). While the share of foreign companies in the auto parts segment did not accelerate greatly in the 2000s, the

[1] The Value of Industrial Transformation (VIT) per employed person is as a proxy for value added per person.

remaining Brazilian firms were specialised in less complex activities than foreign-owned firms (Lima, 2016).

Thus, the lack of domestic ownership in the Brazilian automotive industry including the auto parts segment has undermined the chance for developing an internationally competitive industry with its own globally active lead firms, despite the huge domestic market in Brazil. This underlines the necessity of effective development policy not only in the automotive industry.

Industrial Policies

From 2003 under Lula, various industrial and development policies were implemented to support the overall development of Brazilian industry, but none were aimed explicitly at the automotive industry. Later in 2011, the so-called *Greater Brazil Plan* was devised by the Dilma Government, with the goal of especially supporting the automotive industry. With the support of innovations and technological and organisational modernisation, it was part of a broader vision to strengthen all Brazilian industries (Mastronardi, 2015). According to Lima (2016, p. 48), "in addition to the expansionary stimulus from the fiscal and monetary policy point of view" the main objective of the *Greater Brazil Plan* "was to rebuild the domestic industry, especially the automotive sector, [through] various measures to stimulate production". These include tax and export exemptions, financing for investment and innovation, and import restrictions (Guardado & Bolle, 2013).

The most crucial policy focused on the automotive industry was the *Program of Incentives for Technological Innovation and the Densification of the Automotive Vehicle Production Chain,* short *Inovar-Auto*, from 2013 to 2017. Its main objectives were to incentivise improvement in the energy efficiency, quality, and safety of vehicles, technological development and innovation, and enforce higher environment standards (MIDIC, 2016). This policy included reductions in national and state taxes, including those on industrial products (IPI), goods and services (ICMS Tax), as well as urban property (IPTU), and also offered land and specific infrastructure by state governments and/or municipalities (Brito, 2016, p. 34).

While the focus was on all segments of the automotive industry, problems arose from the fact that the policy also supported companies that only sold vehicles but were not engaged in manufacturing. The policy also

did not distinguish between companies which already invested in Brazil and ones with new investment projects (Lima, 2016). This reduced the policy's capacity to contribute to the creation, expansion, and strengthening of domestic companies in the automotive industry and to support R&D and functional economic upgrading to high value creating activities like design, development of new engines or developing own brands. In addition, the policy was not restricted to domestic companies, but also included foreign companies, which fostered the dominance of foreign-owned firms in the whole sector (Lima, 2016, p. 50). Overall, industrial policy was not focused enough and did not deliver a coherent package of measures to develop national champions as for example Asian countries did.

Summary

Several studies have highlighted important structural weaknesses, acting together, which contribute to the fact that the automotive industry in Brazil has not managed to initiate a catch-up process to higher value-adding production nor raise its international competitiveness through participation in GVCs—despite advances in productivity, technology, and management methods (Estevadeordal et al., 2013). The shortcomings include: i) low investment in R&D, which contributes to the dominance of foreign companies. The latter is more interested in serving the large Brazilian market with existing car models and technology, rather than developing Brazilian brands or producing for the world market. Foreign companies also concentrate R&D, design, and branding in their countries of origin; ii) high transaction and infrastructure costs (e.g. transport, communications, increased cost of electricity with the privatisation of utilities, etc.); iii) insufficient specialisation and lack of exploiting economies of scale especially by Brazilian firms in the automotive industry; iv) a lack of effective government development policies.

When considering these factors, especially the enlarged role of foreign-owned companies and increasing vulnerability to external shocks as a result of ongoing neoliberal reforms, it is clear that they have undermined the ability of Brazil's automotive industry to catch-up to a globally competitive level. To achieve this, effective industrial policy would have been necessary. However, despite the various public policies implemented for the Brazilian automotive industry in the last 30 years, these often did not have the intended effects and were not able to counteract the

increasing role of foreign companies. Especially after the stagnation of the Brazilian economy after 2014, it becomes clear that industrial policy has not had a significant effect on the catching up of the industry. Even *Inovar Auto*—aimed directly at the automotive industry—did not prove itself to be a long-term project capable of expanding investments for R&D, promoting structural changes in favour of national companies in the most technology-intensive areas and their ability in production chains to move up to higher value-adding segments (Lima, 2016, p. 43).

In the next section, we will see how these broader developments of the Brazilian economy and structural changes within the automotive industry have impacted on social and labour indicators of the automotive industry.

Social Upgrading in the Automotive Industry in Brazil

First, we will deal with socio-economic indicators related to the quantity and quality of available jobs in the automotive industry. While during the last two decades, informality among Brazilian workers varied between 45.7 percent in 2002 and 32.9 percent in 2012 (Krein & Manzano, 2014), this reality is less pronounced in the manufacturing sector and negligible in the automotive industry. Hence, the analysis is limited to the formal economy. Second, aspects related to labour rights, union organising and social dialogue are analysed, with consideration given to key actors of Brazilian labour relations. This is followed by two case studies to illustrate conclusions from the preceding analysis.

Changes in the Quality and Quantity of Employment

Regarding the quantity of people employed in the Brazilian automotive industry, there are at least three major periods with varying patterns of job growth which follow the key economic periods described earlier. In the first period, from 1997 to 2007, employment almost doubled, while in the second period, from 2008 to 2013, the rate of growth slowed somewhat. During the third period, the period of crisis in the Brazilian economy from 2014 to 2017, employment in the industry fell by over 25 percent (see Fig. 10.2).

Despite the high rates of formal employment in the automotive industry, the crisis of 2014 did not encourage the increased use of precarious employment contracts in the sector. Also, the number of workers

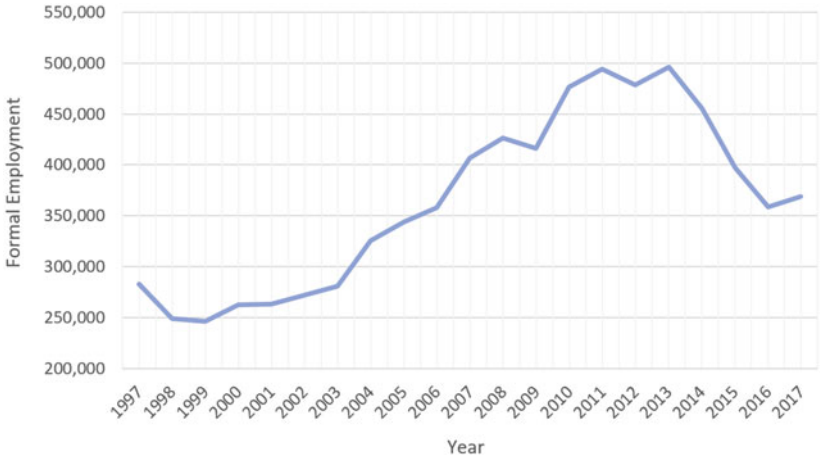


Fig. 10.2 Employment in the Manufacture and Assembly of Motor Vehicles, Trailers, and Bodywork, Brazil 1997–2017. *Source* RAIS/MTE (2019). Authors' elaboration

with temporary contracts (fixed-term contracts lasting for less than two years, including apprenticeships) rose only slightly (see Table 10.1). However, in absolute numbers, the number of workers employed under temporary contracts rose significantly in the 2000s—especially during the financial crisis—and never returned below pre-2007 levels. In fact, when comparing 2005 and 2017, the number of workers on temporary contracts more than doubled while the number of workers with permanent contracts stayed nearly the same.

Unjust dismissals fell slightly from 13.1 percent to 10.4 percent between 1997 and 2017. Terminated contracts increased from 0.7 percent to 1.9 percent and lawful dismissals increased from 1.9 percent to 2.3 percent during the same period (RAIS/MTE, 2019).

It is interesting to note the growing participation of women in the manufacturing and assembly of motor vehicles, trailers, and bodies between 1997 and 2017. This occurred mainly during the period of economic growth from 2004 to 2012, when female participation in the automotive workforce rose from 10.8 percent to 15.8 percent. However, from 2013 onwards female participation stagnated or even slightly declined, indicating that women's jobs were hardest hit by the

Table 10.1 Workers in the Manufacture and Assembly of Motor Vehicles, Trailers, and Bodywork by Type of contract, Brazil 1997–2017

Year/Type of contract	*Permanent*	*Temporary*[b]	***Total***
1997	281.728	948	282.917
1998	246.556	2.171	248.912
1999	243.076	3.013	246.230
2000	259.415	2.916	262.450
2001	257.918	5.049	263.087
2002	269.449	2.475	272.044
2003	276.520	4.470	281.124
2004	319.600	5.988	325.714
2005	338.442	5.386	343.967
2006	352.176	5.816	358.161
2007	396.071	10.467	406.701
2008	412.717	13.667	426.558
2009	405.522	10.417	416.122
2010	460.281	15.693	476.221
2011	475.332	18.410	493.932
2012	463.072	15.487	478.702
2013	479.320	16.790	496.244
2014	444.358	10.855	455.319
2015	387.782	9.220	397.109
2016	349.790	8.578	358.473
2017	356.330	12.473	368.898
~1997 to 2007	40.6 percent	1004.1 percent	43.8 percent
~2007 to 2017	– 10.0 percent	19.2 percent	– 9.3 percent
~1997 to 2017	26.5 percent	1215.7 percent	30.4 percent

Source RAIS/MTE (2019). Authors' elaboration
[a]Consolidation of Labour Laws (CLT), the Brazilian Labour Code.
[b]Temporary, Fixed-Term, and Apprentice contracts included.

crisis in Brazil (RAIS/MTE, 2019). The increased participation of women in the automotive industry led to particular demands from female metalworkers not only at the enterprise level, but also in matters of national politics.[2]

[2] For example, in a 2018 meeting of the Women's Collective of the National Confederation of Metalworkers (CNM) of the Trade Union Central (CUT) female trade unionists issued "letters of commitment" to candidates in the 2018 presidential elections on two issues that directly impact women: paternity leave and the quality of public day care. The

Another significant shift within the automotive industry relates to workers' levels of education. From 1997 to 2017, the proportion of workers with complete secondary school education rose from 17.2 percent to 55.5 percent; those with full tertiary education increased from 6.8 percent to 23.8 percent (see Fig. 10.3). These changes can be understood as the result of the enormous expansion of higher education in

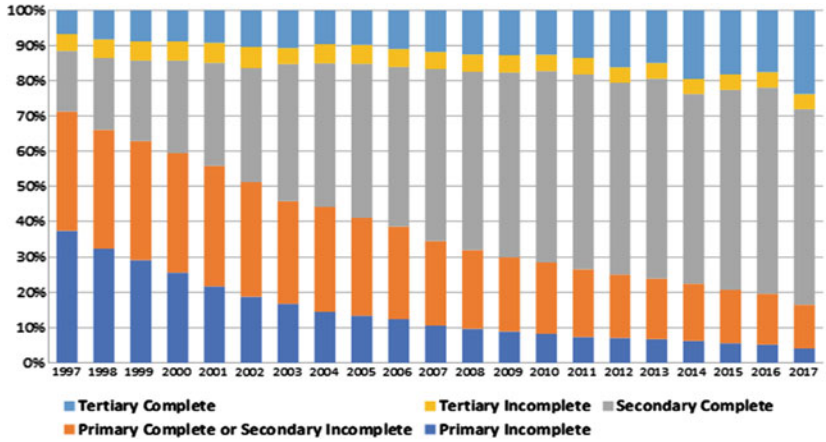


Fig. 10.3 Distribution of Workers in the Manufacture and Assembly of Motor Vehicles, Trailers, and Bodywork by Education, Brazil 1997–2017 (percentage of all workers in the industry). *Note* Primary Incomplete: have not completed the initial nine-year study; Primary Complete: has completed the initial nine-year study; Secondary Incomplete: has not completed three years of high school; Secondary Complete: has completed three years of high school; Tertiary Incomplete: has not completed higher education; Tertiary Complete: has completed higher education. *Source* RAIS/MTE (2019). Authors' elaboration

CNM/CUT Women's Collective, in addition to the demand of equal pay, highlighted that although the Early Childhood Legal Framework delivered progress in allowing male workers from benefitting from 20-day paternity leave, "the abyss remains latent between the mother and father's responsibilities with the child. (…) Our society lacks a more egalitarian human education; our children deserve the paternal presence and its teachings, and women can no longer carry the responsibility for the creation of their children alone. Men need to develop their role as caregivers and the state cannot escape its own role. That is why we demand a real paternity leave and the right to quality public day-care" (FEM/CUT/SP, 2018).

Brazil since 2002, growing from 3.5 million university students to more than 8 million in 2016. With the exit of older workers, younger and more highly educated workers entered the automotive industry. Another contributing factor may be the increased female participation in the automotive industry, since the education levels of Brazilian women in the automotive sector are generally higher than those of men (RAIS/MTE, 2019).

The Brazilian labour market is historically characterised by a big low-wage sector. According to the last official census, 72 percent of the total number of employed people receive up to two times the minimum wage (IBGE, 2012). As is shown in Fig. 10.4, workers in the automotive industry are relatively well-paid with respect to the minimum wage (over 50 percent receiving an equivalent income of more than three times the minimum wage).

Because the minimum wage rose sharply between 1997 and 2015, the data presented by these income ranges do not confirm that there was a stagnation of the income of workers in the sector. However, it can be assessed that minimum wage earners, in general, gained in relation to the rest of employees and vis-à-vis workers in the automotive industry.

Organised Labour and the Brazilian Automotive Industry

The Brazilian military dictatorship from 1964 to 1985 coincided with the first period of growth of the Brazilian automotive sector and its consolidation as a significant industry. During the struggle for redemocratisation in the late 1970s and early 1980s, worker mobilisations occurred across many sectors. Widescale strikes occurred also in the automotive industry of the ABC Region of São Paulo—the heavily industrialised region around São Paulo city, named after the three major smaller cities Santo André, São Bernardo do Campo, and São Caetano, where the automotive sector was concentrated until the end of the 1990s. Automotive workers and the Metalworkers' Union of the São Paulo ABC Region were at the forefront of offensive struggles and became a role model for the Brazilian trade union movement.

At the end of the 1990s, the Metalworkers' Union of the ABC Region had a union density of 88 percent in the automotive industry, the highest level in the country (Moura, 2011). Strong union presence led to changes in labour regulations in the sector, as collective bargaining strengthened and assumed a more significant role in determining the rules that govern

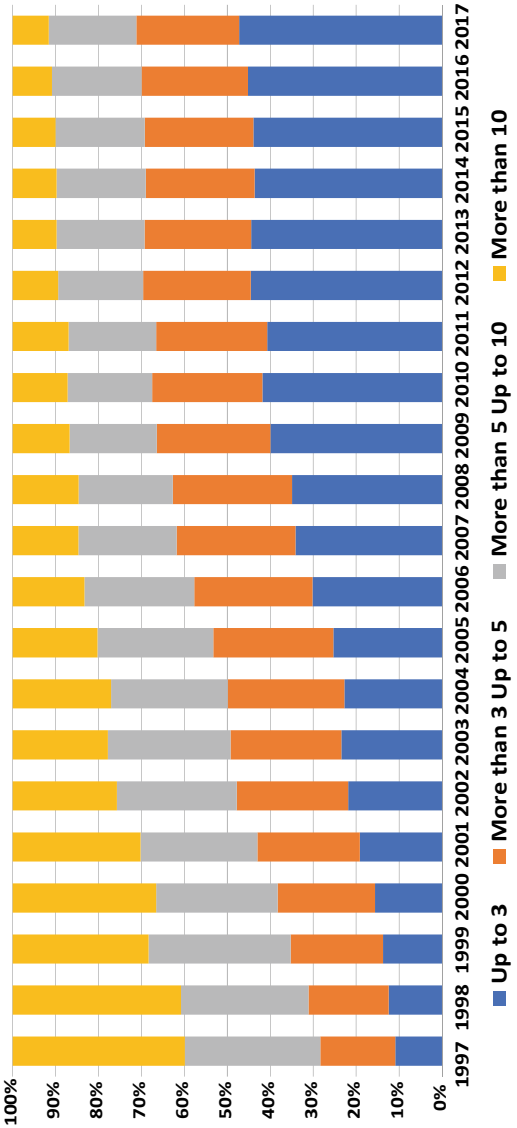


Fig. 10.4 Workers' Salary in the Manufacture and Assembly of Motor Vehicles, Trailers, and Bodywork in numbers of minimum wages, Brazil 1997–2017 (percentage of all workers). *Source* RAIS/MTE (2019). Authors' elaboration

employment relationships. With the economic growth of the 2000s and policies stimulating the purchase of automobiles (particularly between 2004 and 2014), prospects for organised labour were even better. There was an increase in employment and income of workers throughout the sector. In addition, the automotive unions and all unions in the ABC Region became strong allies in the election campaign of President Lula da Silva who was leader of the São Bernardo do Campo Metalworkers' Union.

The system of labour relations in Brazil has always been characterised by the predominance of rule of law and a great influence of state regulation in governing employer–employee relationships and union organisation (Noronha, 1998). This extensive state regulation of trade unionism includes the following elements: 1) the principle of unicity only allows one local trade union by sector or industry in each municipality and bans factory-based unions; 2) a vertically organised system with confederation at national level, federation at state level, and trade unions for each economic sector and each profession (any kind of horizontal organisation was formally banned until 1986 and only officially legalised in 2008); 3) collective bargaining takes place between a trade union and a corresponding employers' association; 4) collective bargaining is permitted at the company level, though it is predominant at the sectoral level; 5) trade union presence at company level, such as the existence of works councils, is not legally recognised; 6) while there is trade union presence in most automobile companies, it is absent in the auto parts sector; 7) all workers are covered by the outcomes of collective bargaining, regardless of whether or not they are unionised (Krein & Dias, 2018).

In Brazil, there are currently 17 trade unions representing autoworkers, each with autonomy over their organisation and negotiation in their respective sectoral and geographical spheres of representation. The unions are officially affiliated with two different federations of the automotive sector: the National Confederation of the Metallurgical Worker (CNTM), associated with the trade union Força Sindical; and the National Confederation of Metalworkers (CNM), affiliated to CUT. The former has a more moderate profile than the CUT, but both have a tradition of collective bargaining. Also, there are two other unions affiliated to more left-wing trade union federations.

As mentioned before, collective bargaining is a prerogative of trade unions, and federations can only establish guidelines and build common

policies. Nevertheless, there are often attempts to go beyond the ideological divisions of federations and trade unions, of building unity in action, especially among workers of the same company, by establishing national and international factory committees.

Collective bargaining in the automotive industry occurs on two levels. The first level is the collective bargaining convention, which governs the employment relationship of the entire industrial sector represented by the union and is generally regionally based. All unions in a region sign a collective agreement for all metalworkers, effective for up to two years. The second level comprises the collective bargaining agreement, which is an instrument for each company within the region. It covers only the workers of a given company and typically pertains to specific issues such as working hours, variable remuneration, health and safety, and company reorganisation, among others.

However, since the end of the 1990s, legal changes have progressively increased the power of the employer vis-à-vis unions and workers in determining the conditions and remuneration of work, while also weakening state regulations and labour institutions. This is especially apparent in the Labour Reform of 2017, which changed key elements of employment relations and trade union organisation. In the first instance, changes related to the creation of new atypical forms of employment contracts, namely of intermittent work, drawing inspiration from British Zero Hour contracts. With regard to trade union organisation, the prevalence of that which is negotiated over that which is legislated, except for the areas protected by the Constitution, is allowing collective agreements with standards lower than what the legal framework stipulates; the end of guaranteed state funding via compulsory contributions, namely the trade union tax and bargaining fees; the regulation of workplace representation, without the interference of unions or the State; the exclusion of unions from individual contractual negotiations for workers earning more than BRL 3,000 a month; and the end of unions' supervisory role in attesting to the correct termination of contracts (Krein, 2018). President Bolsonaro created in 2019, a working group to debate possible additional alterations to labour laws, social security, and freedom of association, without advancing any concrete proposals until now.

Challenges for Organised Labour, Labour Rights, and Social Dialogue

Regarding structural changes in the automotive industry with significant effects on organised labour, a geographic restructuring process has been occurring since the 1990s. While at the beginning of the 1990s, production was mostly concentrated in the southeast region of Brazil (in the states of São Paulo, Minas Gerais, and Rio de Janeiro), an ongoing displacement of production sites to other regions led to the rapid growth in the number of plants in the 2000s and a geographical deconcentration of production from the Southeast to other Brazilian regions (DIEESE, 2015). This was motivated at first by tax cuts granted by central and regional governments which led to the installation of new factories in other regions of the country, but then became increasingly driven by international companies seeking to avoid the relatively high wages, labour rights, and social benefits for which metalworkers in the ABC Region had fought, and therefore relocating production specifically to regions which lacked a strong tradition of trade unionism. The size of the consumer market, the strong potential of expanding demand, some cost advantages in raw materials and labour remuneration, regional integration policies such as the formation of MERCOSUR (Southern Common Market) are some of the other elements highlighted as attractive factors for these new companies.

The result of this displacement of production was not entirely negative, as it contributed to the reduction of regional economic inequality in the country (DIEESE, 2015). The number of trade unions representing metalworkers increased, eventually encompassing 34 factories with different degrees of mobilisation and negotiation capacity between them. The highest number of strikes and other actions in the automotive sector in Brazil were carried out in these newer factories established since the end of the 1990s, as employees sought to emulate the patterns of the existing factories in the ABC region and achieve the same rights and wage levels. However, there still exists a clear discrepancy with respect to the wages, labour rights, and social protections between the metalworkers of the ABC Region and the workers at newly installed plants in other parts of Brazil. In at least six newer factories—mostly owned by FIAT and Nissan—union repression is intense, and trade unionism, therefore, remains very fragile.

Even in the ABC region, a pattern of reducing rights and weakening workers' collective action has prevailed in recent years, despite a long

tradition of social dialogue and collective bargaining in the sector. The primary difficulties for unions in the ABC region are remaining competitive with other regions and the threat to move jobs out of the ABC region. These challenges developed after the 1990s when fiscal incentives led to new locations of factories in the automotive industry in Brazil and new automakers from East Asia entered the market. We will illustrate these challenges for unions and workers in the automotive industry stemming from regional competition using two cases studies below. The first, the Volkswagen plant of São Bernardo do Campo in the ABC Region, exemplifies a traditionally organised older plant aiming to keep itself open and maintain competitiveness, where unions have had to weigh employers' demands for regional and international competitiveness with the demands of labour; the second, the Renault plant of Paraná, was recently established in a locality with little union tradition, and labour dialogue mostly surrounds issues of working conditions and payment.

The Volkswagen Case: An Exemplary Tradition of Collective Bargaining

Volkswagen (VW) began operating in Brazil in 1953 and currently has five assembly plants in Brazil: São Bernardo do Campo, Taubaté, and São Carlos (São Paulo State); Resende (Rio de Janeiro State); and São José Dos Pinhais (Paraná State). In all of them, there is an organised factory committee that coordinates with a national committee to participate in *VW's World Works Council*. The following analysis concentrates on the experience of the São Paulo ABC Region (for this part see Araújo, 2019). With the establishment of newer and more modern factories in Brazil in the 1990s, the challenge of modernising the old assembly plants moved into the centre of debates and conflicts. The constant restructuring of production in the old plants led to an environment of intensified disputes with trade unions due to the associated threats of layoffs—as well as threats to close the plant in the ABC Region completely. There was a need in the old plants to attract investment and new car models despite better average salaries and working conditions in the old plants compared to the new ones. Trade unions were forced to engage in partnership relations with VW management in order to sustain the factory. The necessary compromises defined the experience of workers and organisers in the ABC Region factory for most of the 2000s. While workers at the São Bernardo plant continued to benefit from higher wages and working standards, the

tendency was one of adjustment of wages and standards in the different plants in the automotive industry in Brazil in the different regions.

Over the last 20 years, negotiations and direct actions were fundamental to safeguard workers' interests in the old plants while maintaining their competitiveness. As a productive reorganisation in the old plants was required to keep them competitive, a key point of conflict was the reduction of the workforce. There were permanent negotiations to organise dismissals through natural fluctuation and incentive programmes that allowed employees to receive additional financial compensation for leaving the company voluntarily. The trade union agreed to an agenda of flexibilisation of working time, a reduction in wages, and outsourcing, in exchange for maintaining the plant in São Bernardo and allowing new investments that would keep it open. In concrete terms, the period saw a workforce reduction from 23,000 to 6,000 employees in the plant.

VW management used an aggressive strategy to demand concessions from the union in exchange for keeping the plant open. During the last 20 years, the only exception was the period between 2007 and 2014 when sales of vehicles increased sharply, leading to higher investments and a reduction in planned layoffs. During this period, the trade union was able to increase wages primarily through the negotiation of a profit-sharing programme linked to the performance of the plant.

Despite the tense nature of these conflicts, it must be emphasised that social dialogue prevailed. Virtually, all changes in employment and labour relations were subject to a process of collective bargaining, albeit articulated and influenced heavily by the need to maintain the company's competitive edge and preserve the plant in São Bernardo do Campo. Through frequent mobilisations and strikes, the trade union continued to maintain the capacity for collective action and workers' representation despite their weakened position.

With the worsening economic situation after 2014 new threats to close the plant appeared. In 2015, with the abrupt dismissal of over 2000 workers and proposed freezing of wages for two years by VW management, an 11-day strike was triggered. Negotiations led to an agreement to freeze wages for one year and limit real wage increases to 1 percent in the following three years in exchange for employment stability.

The Renault Case: Social Dialogue Built from the Global Framework Agreement

Renault entered production in Brazil in 1998 (Bridi, 2008) with a large factory in Curitiba in Paraná State, based on the most modern production methods, in a region that had little trade union tradition. It is important to emphasise that in the Volvo plant in Paraná, the only other assembly plant in the region, working conditions, benefits, and wages were closer to the standards in factories in the more unionised regions of the country, a standard that was rather determined by the human resources policy of the former Swedish company than by union action.

However, this reality changed rapidly in the 2000s, with Renault workers becoming represented by the Metalworkers' Union of Curitiba, linked to Força Sindical. After a first strike and strategic use of the Global Framework Agreement signed in 2004 between the Renault Group, the Renault Group Works' Council, and IndustriALL Global Union, that acknowledged the company's responsibility for supplier and subcontractor relationships, a factory committee representing workers from the Renault factory and the supplier companies installed in the Ayrton Senna Complex was established and developed an intense rapprochement and articulation with the trade union (Bridi, 2008). The need for articulation is necessary because the Factory Committee does not have the power to sign collective agreements, which is an exclusive prerogative of trade unions under Brazilian law. Relations between workers' representatives and the company have manifested in frequent conflicts, both on the shop floor and at the administrative level, and the period between 2000 and 2017 was characterised by frequent organised actions and strikes.

These conflicts ultimately led to negotiations that resulted in extensive collective bargaining agreements, which incrementally raised labour standards and became more closely aligned to the wages and working conditions of those existing in the oldest plants in São Paulo. However, the negotiations were concluded with some concessions from the union. For example, the unions accepted increasing flexibilisation of working hours through the creation of a working time account that allows for a maximum of 56 h a week, a much higher number of working hours than was permitted in factories in São Bernardo do Campo which allowed a maximum working week of 44 h. Following a strike in 2011 to contest these working time rules, workers managed to eliminate

them in the subsequent collective bargaining agreement. These negotiations also resulted in a ban on temporary contracts, although this did not prevent the continued reliance upon and expansion of subcontracting and outsourcing. During the crisis of 2015, the flexibilisation of working hours and precarious hiring practices via temporary contracts were reinstated.

In the Renault factory, negotiation of variable pay was a widely used practice and introduced through the Profit-Sharing Program, introduced in 2003, linked to production results, which fluctuated rapidly with the shifting economic situation.

After the start of the deep crisis in the automotive industry in 2015, participation in collective action in the Renault factory remained high and negotiations therefore continued. Nevertheless, workers were unable to negotiate stable employment levels, which left the company free to make seasonal adjustments of the workforce.

Overall, workers' representatives in both the union and the factory committee used a pragmatic approach in negotiations which took the wider economic context into account, while still emphasising strikes and collective actions. Unlike at the older VW plant, the Renault plant was not in danger of being closed given that increasing competitiveness was not so much in the centre, as in the ABC Region. Besides, the wage agreements mainly covered flexible standards of labour regulations that followed industry trends.

Final Considerations

During the 1990s, Brazil was plagued by the effects of neoliberal economic policies, including increased levels of unemployment and inflation, low economic growth, and increasing levels of informal employment and precarity—especially following the 1998 currency crisis. During this period, the automotive industry faced significant structural problems due to the dominance of foreign companies, limited R&D and innovation, and relatively low productivity and wages. This historical context finally shifted in 2004, thanks to the election of Lula from the Workers' Party as Brazilian President and a more favourable international constellation. Until 2014, the Brazilian economy saw overall steadily rising levels of production, consumption, investment, and exports. The automotive industry in this period profited from the implementation of new technologies, higher productivity, higher output, and increasing employment.

At the same time, a regional decentralisation of the industry took place in favour of the poorer and less developed regions.

The general economic advancement in Brazil under the Lula period came alongside greater social and labour protection as well as a significant increase in formal employment. Employment growth and a marked increase in real wages reduced income inequality in less developed regions with lower levels of formal employment and lower average wages. This development was supported by sharply increasing national minimum wages, but also by the higher bargaining power of trade unions.

However, economic and social improvements were profoundly reduced from 2014 onwards, especially with the deep drop in GDP in 2015–2016 and meagre economic growth of around 1 percent in the period 2017–2019. These advances were also negatively affected by fundamental changes in the regulatory framework, with profound and highly unfavourable impacts for workers due to changes in Labour Laws being approved in 2017 by the Temer Government after the fall of President Dilma Roussef.

Economic and political developments after 2014 steadily weakened the power and political influence of trade unions and forces close to them. This also affected the automotive industry. There was pressure to renegotiate working conditions in order to reduce production costs. For example, early 2019 saw a number of unfavourable decisions for workers at two major factories:

(1) Ford announced the closure of the São Bernardo do Campo plant, justifying the decision based on insufficient profits. This happened without trade union negotiations, against the outcome of previous negotiations in 2018 which secured concessions with respect to wages and benefits in exchange for temporary job stability until November 2019. Although the union has vocally challenged this closure through many actions, it has failed to secure the public and governmental support necessary to counter the company's plan. Finally, in January 2021, Ford announced the shutdown of all its plants in the country.

(2) Another example of an automotive company which came under pressure is the GM plant in São José dos Campos, São Paulo. In spite of a highly mobilised and confrontational trade union in the plant, workers held a vote and agreed to a 30 percent salary reduction, a wage freeze, a 50 percent reduction in profit sharing and productivity bonuses, and more flexible working hours. Although the deal prevented the plant from

closing, this came at a significant cost to workers (Rede Brasil Atual, 2019).

Finally, it is essential to highlight two central points concerning the dynamic of the automotive industry in Brazil. First, it strongly depends on the dynamics of the Brazilian economy and the development of the domestic market. Second, it has a historical structural weakness rooted in its dependence on foreign companies for investment, R&D, innovation, and technological development. A return of economic growth in Brazil is needed to overcome the deep crisis in the Brazilian automotive industry. To overcome the structural problems, industrial, regional, R&D, and innovation policies are needed to increase the role of Brazilian companies, gain greater control over the strategic orientation of the industry and boost participation in GVCs. The depth of the current economic and political crises in Brazil (writing this in Spring 2021), accentuated by the COVID-19 pandemic, is reflected by the fact that only 2.01 million vehicles were produced in 2020, the lowest level of production in the last 17 years, corresponding to a drop of 31.6 percent from the previous year (ANFAVEA, 2021). This illustrates the enormous challenges for the Brazilian economy and society and the automotive industry as one of its important sectors.

Acknowledgements This chapter is a result of the research project "Global Value Chains - Economic and Social Upgrading", co-coordinated by Christina Teipen, Hansjörg Herr, Petra Dünhaupt und Fabian Mehl from the Berlin School of Economics and Law. We thank the enormous collaboration of the Berlin coordination team and the other colleagues participating in the aforementioned project.

References

Almeida, C. C., Cario, S., Mercês, R., & Guerra, O. (2006). Indústria automobilística brasileira: Conjuntura recente e estratégias de desenvolvimento. *Indicadores Econômicos FEE, 34*(1), 135–152.

ANFAVEA. (2020). Anuário da Indústria Automobilística Brasileira. ANFAVEA. https://anfavea.com.br/anuario2020/anuario.pdf. Accessed 21 Apr 2020.

ANFAVEA. (2021). Anuário da Indústria Automobilística Brasileira. ANFAVEA. https://anfavea.com.br/anuario2021/anuario.pdf. Accessed 5 Mar 2021.

Araújo, A. (2019). *From international solidarity to the institutionalisation of partnership: The experience of the Volkswagen and Daimler-Mercedes-Benz World Workers' Committees*. Ph.D. thesis. IFCH/UNICAMP, Campinas, SP.

Bridi, M. A. (2008). *Ação coletiva e comissões de trabalhadores em plantas flexíveis: o espaço da política. (Tese de Doutorado)*. UFPR.

Brito, F. L. (2016). *Análise da Estrutura Industrial do Setor Automotivo Brasileiro e do Papel das Políticas Setoriais*. Monografia. Universidade Estadual de Campinas.

Carcanholo, M. D. (2006). Orthodox Economic Policies of the Lula Administration. *Economic and Political Weekly*, *41*(8), 679–681. Accessed 25 Feb 2006.

Cardoso, A., Junior, F. A., Lima, F., Lacerda, H. F., Pinheiro, I., Serrão, R., Soares, W. B., & Santana, Z. M. C. (2012). *A indústria automobilística no Brasil. Diagnóstico do setor e análise do novo regime automotivo*. DIEESE.

DIEESE. (2012). *A Indústria Automobilística no Brasil - Diagnóstico e Propostas elaboradas pelos Metalúrgicos da CUT*. DIEESE.

DIEESE. (2015). Desenvolvimento e estrutura da indústria automotiva no Brasil. Nota Técnica Número 152. www.dieese.org.br/notatecnica/2015/notaTec152IndustriaAutomotiva.pdf. Accessed 22 Apr 2020.

Estevadeordal, A., Blyde, J., & Suominen, K. (2013). As cadeias globais de valor são realmente globais? Políticas para acelerar o acesso dos países às redes de produção internacionais. *Revista Brasileira De Comércio Exterior, 115*, 6–25.

FEM/CUT/SP. (2018). Metalúrgicas pedem compromisso de candidatos com pauta das mulheres. http://fem.org.br/noticia/15847/metalurgicas-pedem-compromisso-de-candidatos-com-pauta-das-mulheres. Accessed 19 Apr 2020.

Guardado, F. & Bolle, M. (2013). Estabilizadores automáticos e política industrial. In E. Bacha, & M. Bolle (Eds.), *O futuro da indústria no Brasil: desindustrialização em debate*. Civilização Brasileira.

IBGE. (2012). Censo Demográfico 2010 – Trabalho e Rendimento. Rio de Janeiro: IBGE. https://biblioteca.ibge.gov.br/visualizacao/periodicos/1075/cd_2010_trabalho_rendimento_amostra.pdf. Accessed 25 Apr 2020.

IBGE. (2018). Sistema de Contas Nacionais Trimestrais. https://www.ibge.gov.br/estatisticas/economicas/contas-nacionais/9300-contas-nacionais-trimestrais.html. Accessed 21 Apr 2020

Krein, J. D. (2018). O desmonte dos direitos, as novas configurações do trabalho e o esvaziamento da ação coletiva: Consequências da reforma trabalhista. *Tempo Social, 30*(1), 77–104.

Krein, J. D., & Dias, H. (2018). The CUT's Experience during the Workers' Party Governments in Brazil (2003–2016). *Global Labour Journal, 9*(2), 199–214.

Krein, J. D., & Manzano, M. (2014). Notas sobre a formalização – Estudo de caso: Brasil. FORLAC/Escritório Regional da OIT para a América Latina e o Caribe.

Lima, U. M. (2016). *O Brasil e a Cadeia Automobilística: uma avaliação das políticas públicas para maior produtividade e integração internacional entre os anos 1990–2014. Texto para Discussão n. 2167*. IPEA.

Mastronardi R. (2015). *Plano Brasil Maior: Análise de Medidas de Redução do Custo de Fatores de Produção, Capital e Comércio Exterior. Trabalho de Conclusão de Curso*. Instituto de Economia. Universidade Estadual de Campinas.

MIDIC (2016). Ministério da indústria, Comércio Exterior e Serviços. Inovar-Auto. http://www.mdic.gov.br/competitividade-industrial/inovar-auto.

MIDIC (2019). Ministério da indústria, Comércio Exterior e Serviços. Setor Automotivo. http://www.mdic.gov.br/index.php/competitividade-industrial/setor-automotivo. Accessed 15 Mar 2020.

Moura, M. M. (2011). *Discurso e prática dos sindicatos dos metalúrgicos do Estado de São Paulo*. Ph.D. thesis, Universidade Estadual de Campinas, Instituto de Filosofia e Ciências Humanas. http://www.repositorio.unicamp.br/handle/REPOSIP/281652. Accessed 25 Apr 2020.

Noronha, E. G. (1998). *O modelo legislado de relações de trabalho e seus espaços normativos: 1998*. Thesis (Ph.D. in Political Science). Universidade de São Paulo.

Organisation Internationale des Constructeurs d'Automobiles (OICA) (2013). 2013 Production Statistics. https://www.oica.net/category/production-statistics/2013-statistics/. Accessed 20 Apr 2020.

de Paula, L. F., & Ferrari, F. (2015). A critical analysis of the macroeconomic policies in Brazil from Lula da Silva to Dilma Rousseff (2003–2014). *Brazilian Keynesian Review, 1*(2), 218–227.

RAIS/MTE (2019). Relação Anual de Informações Sociais – RAIS. Ministério do Trabalho e Emprego. Brasília. Banco de Dados. Brasília. http://www.mte.gov.br/index.php/rais. Accessed 15 Mar 2020.

Rede Brasil Atual. (2019). Trabalhadores na GM em São José aceitam proposta que altera direitos. https://www.redebrasilatual.com.br/trabalho/2019/02/trabalhadores-na-gm-em-sao-jose-aceitam-proposta-que-altera-direitos/. Accessed 20 Apr 2020.

Sarti, F., Araújo, R. D., Mello, C. H., & Bresciani, L. P. (2008). *Relatório de acompanhamento setorial, autopeças*. ABDI Unicamp.

Sarti. F. & Borghi. R. (2017). Evolution and challenges of the automotive industry in Brazil – Contribution to the Debate. In R. Traub-Merz (Ed.), *The automotive sector in emerging economies: Industrial policies, market dynamics and trade unions. Trends & Perspectives in Brazil, China, India, Mexico and Russia* (pp. 41–64). Friedrich-Ebert-Stiftung.

Utzig, P. P. (2015). *A Indústria Automobilística no Brasil. Uma análise de alguns indicadores de estrutura, conduta e de desempenho a partir dos anos 1990. Monografia de Graduação*. Universidade Federal de Santa Maria.

CHAPTER 11

Locked Between Buyer-Driven Global Value Chains and State Control: An Analysis of the Stagnation of Economic and Social Upgrading in the Garment and Electronics Industries in Vietnam

Do Quynh Chi

Introduction

After the economic success of East Asian economies such as Japan, South Korea, Hong Kong and Taiwan, many countries in the region copied the economic formula of developing export-oriented manufacturing industries, attracting foreign direct investment (FDI), integrating into and moving up global value chains (GVCs) with strong technological progress. Unfortunately, none of these 'following' countries in Asia have achieved the level of economic success of the original four East Asian

D. Q. Chi (✉)
Research Centre for Employment Relations (ERC), Hanoi, Vietnam

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_11

'tigers'. In some countries, while the industries gained certain degrees of economic upgrading, it has not led to social upgrading. Where social upgrading has occurred, it has been uneven among different groups of the labour force (Barrientos et al., 2011).

There have been many debates about the reasons for the stagnation of economic and social upgrading among developing countries. The GVC literature argues that the industries of developing countries are locked into global production networks that are mainly driven by powerful buyers from developed countries. These asymmetrical relationships have hampered export-oriented industries in developing countries from moving up the value chain and resulted in adverse impacts on the working conditions of workers in the supplying firms (Anner, 2019; Do, 2017). Economists have argued that developing countries are trapped into the low-cost-low-value economic model due to a shortage of appropriate industrial policy (Dünhaupt & Herr, 2020). Without proper state incentives to develop new products and technology, developing countries are pushed to low-tech, labour-intensive production according to their comparative advantages, which does not lead to economic catch-up and social upgrading (Herr, 2018).

This chapter contributes to this debate by analysing the case of Vietnam with a focus on the garment and electronics industries. In the late 1980s, Vietnam followed in the footsteps of the East Asian economies by pursuing an export-oriented policy focused on manufacturing industries and the attraction of FDI. The country has gained certain economic successes with high GDP growth rates, constant growth of exports and FDI inflows. However, while the garment and electronics industries have become the export champions of the country, they have shown limited economic upgrading at the enterprise level and few improvements in working conditions. Apart from analysing the lack of economic and social upgrading in the garment and electronics supply chains, the chapter will also review the industrial and labour policies of Vietnam to argue that economic policies that discriminate against the domestic private sector and suppress basic labour rights, combined with the purchasing practices of the buyer-driven GVCs, have prevented Vietnam's industries from substantially catching up.

Participation in Global Value Chains, Industrial Policy and Economic Upgrading

Participation in GVCs has played a central role in the industrialisation strategies of many developing countries. Engaging in GVCs and particularly attraction of FDI spark hopes that GVCs will lead to a transfer of technology and skills from lead firms to the suppliers. Starting from the simple tasks in GVCs, developing countries attempt to exploit economies of scale and slowly move into higher value-added production (Bair & Gereffi, 2003). However, participation in GVCs does not automatically result in economic upgrading in developing countries (Humphrey & Schmitz, 2002; Kaplinsky & Morris, 2001). Lead firms are generally more supportive of process and product upgrading than functional upgrading as the latter may encroach into their core competencies. Hence, lead firms tend to limit technology transfer to suppliers, or seek to diversify their supply base to weaken suppliers' bargaining power. Lead firms may further pressure governments to provide them with tax holidays and exemption from other requirements such as joint ventures, skill development, and local content rules, which prevents local spillovers and economic catch-up (Morris & Staritz, 2019).

Economic upgrading in GVCs has become increasingly difficult for low-income countries as the power imbalances between the lead firms and the assembly suppliers have grown much wider. The value in the GVCs has increasingly been captured by input suppliers (primarily yarn and fabric) as well as up-front and end-market services such as research and development (R&D), design, marketing and retail. Actual assembly operations (primarily stitching and embellishment) and logistics costs have been squeezed and the main actors have had little positional or negotiating power vis-à-vis the lead firms. The fragmentation and globalisation of each segment has prevented backward and forward linkages, which has trapped many low-income countries in the least value-added sections of the GVCs.

Apparently, participation in GVCs alone is insufficient to trigger economic upgrading; instead, additional policies are needed (Herr, 2018). A good example for the combination of GVC engagement and industrial policy is China. In the 1970s, China started by expanding low-tech, labour-intensive production. Later, with its massive and comprehensive industrial policy, China moved to higher value-added and more capital- and technology-intensive production from the 1990s onward (Lo & Wu,

2014). It is argued that the priority of the industrial policy within the GVC context should thus 'shift from creating fully blown, vertically integrated national industries to moving into higher-value niches in GVCs' (Gereffi & Sturgeon, 2013, p. 338).

However, there have been very few examples of successful industrial policies in developing countries that resulted in economic and social upgrading in the GVCs. State policies to promote upgrading, for instance in garments, have mostly resulted in export expansion but not necessarily upgrading to higher value sections of the GVCs, nor have they always led to increases in employment and wages. The reasons for these failures range from weak institutions for policy-making, the shortage of public–private coordination in policy-making, and corruption (Rodrick, 2004). Particularly, overdependence on FDI is one of the primary causes for the failure of low-income countries to achieve economic upgrading within GVCs (Balasubramanyam et al., 1996). To make FDI beneficial for a country, it must have intensive backward and forward linkage to the local economy so as to spur spillovers of advanced technology and skills (Amendolagine et al., 2017; Hirschman, 1958). Unfortunately, a lot of FDI, especially in GVCs, has been largely isolated from local industries. For instance, while electronics lead firms have moved their manufacturing base to Vietnam, only a small number of local suppliers are engaged in the electronics supply chain, and even so, they are often assigned with low-technology production such as packaging. Almost all intermediate products are imported and Vietnam has only taken over assembly tasks (Do, 2017).

Linkage Between Economic and Social Upgrading

Social upgrading is defined by GVC researchers as the 'process of improvement in the rights and entitlements of workers as social actors, which enhances the quality of their employment' (Barrientos et al., 2011, p. 324). Framed by the Decent Work Agenda of the International Labour Organisation (ILO), social upgrading is generally broken into two dimensions: measurable standards and enabling rights. The former includes the tangible working conditions—such as wage levels, contractual terms, working hours and social protection. The latter is based on workers' freedom of association and their rights to engage in bargaining processes.

Earlier, GVC studies tended to focus only on economic upgrading with the assumption that successful economic upgrading will eventually lead to

social development as workers get better wages and working conditions. However, recent empirical works pointed out that economic upgrading may lead to, at best, mixed outcomes for workers and in many cases, increases in workers' vulnerability in terms of informalisation, insecurity and job precariousness. A major inter-disciplinary research project, 'Capturing the Gains: Economic and Social Upgrading in Global Production Networks', based on case studies in the garment, electronics, horticulture and tourism sectors of many developing countries, found that in the very few instances where economic upgrading happens, it does not automatically lead to social upgrading (Newsome et al., 2015; Rossi, 2013).

In parallel with expanding literature on when and how economic upgrading results in social upgrading in GVCs, development economists argue that a lack of social upgrading will prevent economic upgrading (Herr, 2019). Neves et al. (2016) conclude that there is a negative relationship between higher inequality and growth, especially in developing countries. The IMF and a number of economists seem to agree that too-high inequality is detrimental for economic growth (Berg & Ostry, 2017; Boushey & Price, 2014). On the supply side, it is argued that workers who enjoy better living standards tend to be healthier and more productive. Also, improved education for women and gender equality can unleash the economic power of the female labour force, which was one element of the economic miracle of East Asian countries after World War II. On the demand side, a relatively equal income distribution and the economic progress that is inclusive of all social groups create a Fordist model, with its high consumption demand, high investment and high productivity increases (Milanovic, 2012).

In contribution to the emerging literature on industrial policy in the context of GVCs, this study examines the economic policy of Vietnam and its impacts on the garment and electronics GVCs. I argue that state policies not only fail to promote economic upgrading in the GVCs but may even push back the efforts of the private sector to upgrade. In this case, government policies combined with the effects of buyer-driven GVCs may render the suppression of labour rights not merely a transitional step to economic upgrading but rather a long-lasting model in Vietnam to sustain economic growth.

Vietnam's Economic Policy

Discriminatory Economic Policy Against the Domestic Private Sector

After the first decade of successful economic reform from the centrally planned economy to a multisector, market-oriented one, the Vietnamese government initiated a discriminatory industrial policy that steered resources towards the state-owned sector and offered massive incentives to attract FDI, usually at the expense of the domestic private sector.

Prior to Vietnam's accession to the World Trade Organisation (WTO) in 2007, the government decided to preserve the primacy of the state-owned enterprises (SOE) sector via the formation of big corporations and conglomerates, which was later dubbed by many scholars as '*a reverse SOE reform*' (Vu, 2016). To support the state-owned conglomerates, the government granted them extensive privileges compared to other economic sectors with respect to their access to critical resources—such as land, credit and natural resources—as well privileges in the field of public investment and government procurement. Additionally, the SOEs were allowed to not pay dividends to their owner (the state) for a prolonged period.[1] SOEs are generally not subject to hard budget constraints and virtually never face bankruptcy. Instead of using their national resources and privileges to build up their technological prowess so as to become national champions, the state conglomerates engaged in numerous speculative ventures in banking, real estate and securities. With the end of the property boom in 2008, most of these state conglomerates collapsed as a result. By the end of 2011, it is estimated that SOEs accounted for more than half of non-performing loans (Pincus, 2015).

The state-owned conglomerates not only failed economically but also adversely affected the growth of the whole economy as the loss-making SOEs absorbed many resources (Pincus, 2015; Vu, 2016). As estimated by the Vietnam Chamber of Commerce and Industry, by 2015, nearly 60% of the private small- and medium-sized enterprises had never been able to access bank credit (VCCI, 2015). The shortage of credit also pushed the private domestic enterprises a step back in economic upgrading. For instance, many private domestic export enterprises reported that they had to refuse the more profitable 'free on board'

[1] See Decree 204/ND-CP/2013 dated 5 December 2013.

(FOB) contracts[2] and had to accept assembly orders instead due to the lack of capital (Do, 2017).

In parallel with an industrial policy that favours SOEs, the government has also been providing massive incentives to attract FDI at the expense of the private domestic sector. After the launch of Vietnam's *Doi Moi* reform period in 1986, the government opened up for FDI but with certain limitations: the foreign investor had to find a local partner to form a joint venture. At the end of 1998, the number of joint ventures accounted for 59% of total FDI projects and 69% of total registered foreign capital (Prema-Chandra & Tien, 2012). In 1998, the Prime Minister issued Decision No. 233 to decentralise the issuance of foreign investment licenses to provincial authorities and remove the limitation of ownership for FDI. Later in the 2000s, the government allowed provincial authorities to offer better incentives than those available on the national level to encourage FDI inflows. As a result, provinces competed with one another to attract FDI; for instance, Bac Ninh and Thai Nguyen provinces offered Samsung Electronics an exemption from corporate tax for four years and 50 percent tax reduction for the next 9 years, much higher than the national incentives for foreign investors. The provincial governments also strongly support foreign investors in clearing land for factory development, which is usually not the case for domestic investors (Vu, 2017). FDI companies are exempted from taxes on importing machinery while the domestic companies are not.

Thanks to these initiatives, Vietnam has successfully achieved a constantly growing inflow of FDI (see Fig. 11.1). The FDI sector plays a dominant role in the Vietnamese economy, accounting for 70.7% of export value and almost 60% of import value in 2019 (World Bank, 2021). On the other hand, the flow of FDI has not created the needed tax returns and spillover effects for the provinces (Vu et al., 2007; Ministry of Planning and Investment [MPI], 2018). The technologies imported into Vietnam are only ranked at the medium or medium-advanced levels compared to other countries in the region and only 6% of the FDI projects are using advanced technologies (MPI, 2018).

[2] In FOB contracts, the exporter quotes the garment buyer a price that includes all costs up to and including delivery of goods to the border. In this case, the exporter calculates the price by adding fabric cost, accessories cost, cost of making, overhead cost and commission and transportation cost from factory to port.

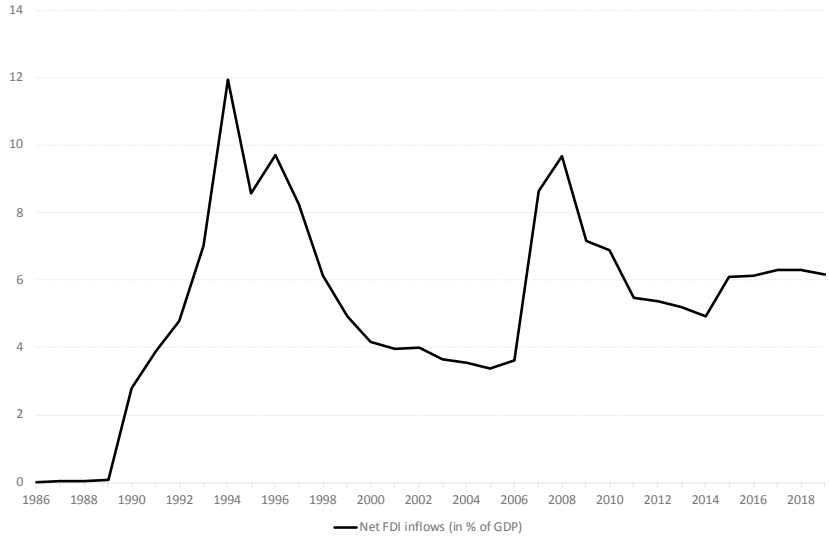


Fig. 11.1 Foreign direct investment, net inflows (in % of GDP), 1986–2019. *Source* World Bank (2021); World Development Indicators

Despite the government's support for the SOE and FDI sector, the private enterprise sector outperformed the other two sectors in terms of the contributions to GDP and share of employment (see Table 11.1).

However, the discriminatory industrial policy has resulted in a trend of reducing the size of private companies: medium-sized firms accounted for only 1.4% of total private enterprises in 2017, which is a drop from 2.5% in 2007, meanwhile, the proportion of micro-enterprises (enterprises with fewer than 10 employees) has increased from 61.7% in 2007 to 75.9% in 2017 (Le, 2018). Small size and informality deter the ability of the domestic business sector to take advantage of economies of scale, specialisation, improving business sophistication, investment into R&D and technological change. As found in the next section, there has been limited economic upgrading at the enterprise level in both the garment and electronics industries.

Table 11.1 Performance of different sectors in Vietnam (% contribution to GDP, employment and total exports), 2018

	2018
Private sector	
Contribution to GDP	42.08
Contribution to employment	60.8
Contribution to total exports	26.3
SOE enterprise sector	
Contribution to GDP	27.67
Contribution to employment	8.3
Contribution to total exports	3.7
FDI sector	
Contribution to GDP	20.28
Contribution to employment	30.9
Contribution to total exports	70

Source General Statistics Office (2020)

The Garment and Electronics Supply Chains in Vietnam

The shaping of garment and electronics supply chains over the past decades demonstrates the impacts of Vietnam's discriminatory industrial policy. Both industries are characterised by the domination of FDI firms (see Table 11.2) and the downsizing of domestic companies. This section demonstrates that apart from the impacts of government policy, the efforts towards economic upgrading by the domestic companies have been further obstructed by the powerful international buyers' supply chain strategy. As the companies are trapped in the lowest value-added section of the supply chain, adverse pressure on workers has intensified.

Table 11.2 Overview of the Garment and Electronics Industries in Vietnam, 2020

	Garment	*Electronics (phone and parts)*
No. of enterprises	6500	1000
Labour force	1,900,000	800,000
No. of FDI enterprises	1,300	340
FDI contribution to export value	60%	99%

Source General Statistics Office (2020)

Garments

With 95% of garment exports from Vietnam manufactured through global supply chains, international brands such as Nike, Adidas, Levi's and Inditex, among others, have played a crucial role in shaping the Vietnamese garment industry. The brands normally enter into FOB contracts with either vendors or first-tier (direct) suppliers. In some cases, vendors such as Li&Fung do not manufacture themselves but rather subcontract to material suppliers and manufacturing firms. For the latter case, the contract is usually a cut-make-trim (CMT)[3] one with the materials selected and prices negotiated by the vendor in advance.

As many as 65% of garment companies in Vietnam are producing on CMT contracts, which means the local suppliers have little negotiating power and thinnest profit margin in the supply chains. According to a 2016 survey of the garment supply chains in Vietnam, the CMT prices in US dollars have not increased since 2012. In some cases, the CMT prices have even decreased by 5–10 percent/year over the past few years (Do, 2017).

Electronics

The growth of the electronics industry in Vietnam since 2005 has been characterised by the growing domination of large-scale, foreign-owned companies in terms of the number of enterprises, production, employment and sales. The top 20 electronics companies, all of which are foreign-owned, employed 49.4% of the labour force of the whole industry in 2016 (ILO, 2016).

Most domestic Vietnamese companies only assemble imported components and parts and then sell the products to local markets. Low technology, lack of capacity in components and spare parts design and development, small business size, and minimal technical and business expertise hold back the development of private enterprises in the sector. As a result, electronics supply chains mainly consist of foreign lead firms and their FDI suppliers. For instance, in 2019, Samsung had over 300

[3] In CMT manufacturing, the buyer pays the manufacturers for the cut (cutting fabric), make (stitching) and trim (trimming of uncut threads tails, finishing and packaging) process. Pre-production processes like the order processing, product development, pattern making and pattern grading, and post-production process such as shipping of goods are handled by the buyer.

first-tier suppliers in Vietnam but only 42 of them were local firms (Môc & T´ê, 2020). The lead firm often enters into global contracts with the FDI supplier firms and when the lead firm moves to a new production site, the suppliers set up their subsidiaries nearby to ensure 'just-in-time' supply. In Vietnam, the FDI suppliers' plants import materials and assemble the components in their Vietnamese subsidiaries.

The assembling prices for the electronic suppliers are fixed by the lead firms. As the price of a mobile phone model tends to be gradually lowered after launch, the prices of components purchased by the lead firms are also reduced accordingly (Do, 2017). The new component prices are posted on the lead firms' website and the suppliers then have to adjust their labour force and production plan in accordance with the new prices (CDI, 2019; Do, 2017).

Economic Upgrading?

Economic upgrading is defined as a process by which firms and regions improve their positions in the international hierarchy of value-added activities to increase their benefits (e.g. security, profits, value-added, capabilities) from participating in GVCs (Bair & Gereffi, 2003). Humphrey and Schmitz (2002) set out four dimensions of economic upgrading by firms: 1) process upgrading as increasing efficiency through improved production processes or technology; 2) product upgrading as moving into more complex and higher value products; 3) functional upgrading as increasing the range or changing the mix of activities to higher-value tasks such as logistics, design or marketing; and 4) chain upgrading as moving into higher-value industries or product categories. Based on the definition of Humphrey and Schmitz (2002), this study examines the level of economic upgrading in the garment and electronics supply chains in Vietnam.

Garments

A study by the ILO (2016) on technology innovations in the textile, clothing and footwear industries found that innovation has largely been driven by major brands and transnational manufacturers investing targeted proportions of their returns into R&D. In the case of Vietnam, buyers that target middle and high-end markets tend to build longer term relationships with their suppliers to ensure both quality and contract security.

In CMT arrangements, for instance, it is quite common for buyers to send their technicians to suppliers, in order to help them upgrade their production processes and ensure delivery of quality products, which is considered by Vietnamese firms as the main source of technological transfer from buyers (Do, 2017). To further increase their efficiency, the Vietnamese suppliers have also invested more into lean manufacturing and automation, which has resulted into process upgrading. The companies that have successfully adopted lean manufacturing reported productivity increases between 20 and 52% and a reduction of fault rates from 20 to 8% (Ministry of Industry and Trade, 2020).

However, it is also common that buyers carefully select the types of technology and knowledge they transfer to the suppliers (Goto, 2012). Technology that is transferred tends to be confined to product information and production techniques that are helpful in process and product upgrading, rather than the more knowledge-intensive skills that would lead to functional upgrading. The reason for this is that such knowledge-intensive functions are the core competences of the buyers, enabling them to maintain rents in the value chain to reap a higher proportion of value-added. As found in a survey of Korean garment companies in Vietnam, the Korean garment firms tend to limit the engagement into technological innovation to the Korean engineers while the Vietnamese employees are not involved (Cho, 2017).

Between 2007 and 2010, there was a wave of functional upgrading among the garment suppliers (VITAS, 2014). From CMT suppliers, domestic companies have made serious efforts to produce under FOB contracts, which means that they could decide upon sourcing materials and consequently increase their profit margin. By 2013, these attempts were stalled due to the surge of bank interest rates to over 20% per year. Without access to bank credits, the garment companies could not produce on FOB contracts, which usually require advance payment for materials.

In terms of product upgrading, cotton fibre production proves to be a promising area. Vietnam's fibre industry, consisting of 96 companies, accounts for 2.5% of global production capacity (Vietnam Textile and Apparel Association VITAS, 2017). In Vietnam, the costs to produce fibre are much lower than those of the top fibre-producing countries thanks to the lower wages and cheap electricity tariffs (FPT Securities, 2017). The locally produced cotton fibre could be used for domestic production instead of importing fabric and fibre from other countries, which could give Vietnam an advantage in terms of production time and

costs. Furthermore, the dyeing and textile machinery and technologies are currently old and outdated. According to the Vietnamese Ministry of Industry and Trade, 30% of textile machines in Vietnam are outdated while investment into dyeing is large but not encouraged by local authorities for fear of environmental impacts (FPT Securities, 2017). This results in a disconnection between fibre and garment manufacturing in Vietnam. However, as most domestic companies are small- and medium-sized firms, they lack the large resources needed to invest into updating their infrastructure. As a result, Vietnam is still exporting two-thirds of its fibre while importing 60% of the fibre needed for domestic garment production (FPT Securities, 2017).

Electronics

One of the most critical weaknesses of the electronics industry in Vietnam is its low value-added electronics production, for both export and domestic markets. Most of the enterprises operating in Vietnam just assemble components and parts imported from other countries. While the assembly line is still at the stage of 'screwdriver technology', many other countries in the region like Malaysia already use more advanced technology (such as surface-mount technology) for manufacturing.[4] Therefore, the value-added content of electronic products from Vietnamese production is relatively low. If calculated according to the rate of localisation[5] by the electronics companies, the highest localisation rate is the colour television at 60%, whereas the videocassette is 30%. Process upgrading has recently been observed, especially among the companies that have joined the global supply chains. Big brands such as Canon, Panasonic, LG and Samsung have sent engineers to help Vietnamese suppliers improve their efficiency by focusing on reducing the fault rate, production cost and lead time (Vietnam Electronic Industry Association, 2020).

In the shift from China as their manufacturing base, the electronics brands have moved the production of more sophisticated products to

[4] Screwdriver technology means mostly manual work without low or no automation. Surface-mount technology is a method in which the electrical components are mounted directly onto the surface of a printed circuit board.

[5] Defined as the proportionate value of domestically made materials, parts and labour used in the production process over the total value of a product.

Vietnam. For instance, when it set up the first factory in Vietnam in 2008, Samsung only produced low-cost phones as part of its strategy to compete more effectively with Nokia. However, concerned about the rapidly rising labour costs in China and the frequent trade frictions between China and U.S., the company decided to build Factory 2 and began manufacturing smartphones in 2014 (Cho, 2017). However, this did not result in product upgrading for the domestic industry as the local firms have rarely been engaged in this production.

There has been little progress in functional upgrading as the supporting industry of the electronics industry remains underdeveloped. When Canon made an effort to identify a Vietnamese supplier of bolts for the printers it assembles in Vietnam, all of the 26 Vietnamese enterprises it surveyed failed to meet the quality standards set by Canon for its products. In the end, Canon had to purchase the bolts from Fujitsu Vietnam, another Japanese company operating in Vietnam. In another example, only 15% of the components assembled in the Samsung electronics supply chain in Vietnam are locally supplied (mainly produced by Korean component suppliers operating in Vietnam), while the rest are imported from Korea, U.S. and Japan. One of the main reasons for the industry's stagnation is the shortage of capacity in product design or R&D. Inappropriate training by Vietnamese technology universities and the focus on product assembly are among the major constraints which are impeding the country from moving up the electronics value chain. The technology, equipment and machinery of electronics enterprises are also poor and often one or two decades behind the regional standard.

Reasons for a Lack of Upgrading

The stagnation of the Vietnamese garment and electronics industries and their inability to upgrade economically can be attributed to three reasons. First, the Vietnamese firms have limited access to low-cost credits to perform higher functional tasks in the GVCs (Do, 2017). To implement high value-added tasks, the Vietnamese firms must have enough capital to cover the costs for materials, machinery, labour, transportation and taxes months before they get the payment from their buyers. However, the government's favourable treatment of the SOE and FDI sectors means that the domestic private sector can barely access low-cost credits they need for upgrading. Second, as late-comers in the GVCs, the Vietnamese firms have not been able to set up their own supply

chain connecting from the consumer markets to material production—the section currently dominated by Korean, Taiwanese and Hong Kong firms. Lastly, as discussed earlier, lead firms' supply chain management strategy is to prevent transferring the core technology and functional tasks to the peripheral suppliers in countries like Vietnam.

In other words, the stagnation of economic upgrading in the garment and electronics supply chains results from two complementary factors: on the one hand, the supply chain management strategy of the lead firms in these two industries has denied the local firms the opportunity to acquire advanced technology and receive higher value-added tasks; on the other hand, the government's discriminatory industrial policy has denied the necessary resources for upgrading from the most important engine of the national growth—the domestic private sector.

Social Downgrading?

Under constant pressure from the buyers to keep production costs down, the suppliers, apart from paying the regular wages at the minimum level, have also urged workers to work longer than allowed by the law. Although the law provides for a maximum overtime limit of 30 h per month and 200 h per year, exceeding the legal limits has become the norm rather than an exception in both the garment and electronics sectors. According to Better Work Vietnam[6] (BWV) (2017), among over 400 first-tier member companies (which employ 30% of the total Vietnamese garment industry's labour force), the non-compliance rate for overtime regulations has been consistently over 80% for the past decade. Excessive overtime is also common among electronic workers. According to a 2017 survey of 202 workers in 55 electronics companies by a Vietnamese labour NGO, the Center for Development and Integration (CDI), over 70% of electronics workers consistently worked beyond the legal limits for overtime throughout the entire year. During high-season months, nearly 70% of the surveyed workers had to work more than 45 h/month of overtime and the highest monthly overtime amount recorded in the survey was 150 h/month (or nearly 14 h per day) (CDI, 2017). One of the reasons for the pervasiveness of excessive overtime is the lenient sanction for violations—a fine of up to USD 1,200 /employer.

[6] Better Work is an ILO/IFC-funded project, aimed at improving working conditions in the garment industry.

The workers in garment and electronics supplier firms also have to face constant occupational health and safety risks. Better Work Vietnam reported that the non-compliance rate for handling chemicals and hazardous substances among its member companies was 73% in 2017. While this was an improvement from the non-compliance rate of 97% in 2011, it remains a very high level of non-compliance (BWV, 2011, 2017).

In the phone-making industry, workers are frequently exposed to dangerous chemicals. According to the Center for Development and Integration's 2017 survey, exposure to toxic chemicals is found most frequently in cases of cleaning chemicals (21.3%), circuit production (16.1%) and toxic fumes in workspaces (11.9%). The impacts of such exposure on workers' health are serious. Over 30% workers had nausea while a quarter reported reduction of hearing and eyesight. Among the female workers, nearly half of those surveyed had unusual menstrual cycles while nearly 20% reported serious problems such as excessive bleeding and pain (CDI, 2017).

As figured out by the Vietnam Labour Inspectorate after an inspection campaign of the electronics industry in 2017, violations of occupational health and safety regulations have been primarily driven by supplier firms' need to lower production costs (Vietnam Labour Inspectorate, 2017). While the costs of purchasing machinery and chemicals that meet safety standards may run up to millions of dollars, the highest fine for using tools, machines and substances that fail to meet the national safety standards is only USD 3,000. Consequently, the firms tend to opt for violating the law at the expense of workers' health and safety.

Keeping labour costs low is key to attracting FDI into the manufacturing industries. This has been accomplished by weakening collective bargaining practices and slowing down the rise of the minimum wage. After the economic reforms of the 1990s, the Party-controlled Vietnam General Confederation of Labour (VGCL), which continues to be the only union organisation,[7] has replicated the model of unions

[7] In November 2019, Vietnam ratified Convention 98 on collective bargaining and revised the Labour Code, allowing for the establishment of enterprise-level workers' organisations which are unions independent of the VGCL. The Government also plans to ratify Convention 87 by 2023. However, at the time of writing, the criteria for forming independent unions, registration procedures and the conditions for them to obtain and practice the basic rights such as collective bargaining, remain unclear.

in the SOEs in the private sector. Consequently, 60% of enterprise-level union leadership is dominated by high-ranking managers (Trinh, 2014). These enterprise-level unions often operate as an 'extended arm' of the personnel department of the company and provide the stamp of legitimacy for management's decisions. In the meantime, labour legislation grants the right to collective bargaining to the unions (either the enterprise-level unions or national-level unions[8]). Consequently, the lack of independent worker representation by the union becomes a major obstacle to the practice of workers' right to negotiate with management on employment terms and conditions. Workers are not consulted about the collective agreements, which typically replicate the minimum requirements of the national legislation. Wages of the rank-and-file workers are arbitrarily set by management, usually at the minimum wage level so as to minimise their labour costs. According to a survey by Fair Labor Association, the net wage of an average garment worker between 2015 and 2017 was 25% lower than the GLWC (Global Living Wage Coalition) living wage; as a result, workers have to work excessive overtime to make ends meet (FLA, 2019).

The situation is similar in the electronics industry. According to the Center for Development and Integration's 2017 survey, 93% of the surveyed workers were paid at or slightly higher than the applicable minimum wages for their regular working hours (the remaining 7% were paid under the minimum wage). Their regular salaries covered only 48.6% of the basic living expenses for the workers and their families (CDI, 2017). The low regular wages, therefore, have created an urge for workers to work excessive overtime to cover their living costs. According to this survey, overtime pay accounted for 35–50% of an average worker's total compensation (CDI, 2017).

When collective bargaining under the official unions is not possible, workers can go on strike. The Labour Code of Vietnam grants workers the right to strike but the exercising of such rights are basically impossible as strikes must be approved and organised by the official unions. Still, Vietnamese workers have walked out in over 6,000 wildcat strikes since 1995, mainly to demand higher wages (Do, 2017). The garment and electronics industries are the hardest hit by wildcat strikes, accounting for 40% and 10% of the national incidence respectively (Vietnam General

[8] The upper-level unions include the district-level unions and the industrial-zone unions.

Confederation of Labour, 2017). The government has been concessional to strikers, trying to mediate the conflicts in favour of the workers (Do & van den Broek, 2013). Yet, there has not been significant changes in the law to better promote the right to collective bargaining nor the right to strike for workers.

Conclusions

The above analysis has shown that the stagnation of economic upgrading in the case of Vietnam's garment and electronics industries has been caused by two important factors: on the one hand, the two industries are locked into the lowest value-added section of the GVCs due to the lead firms' supply chain strategy and their purchasing practices; on the other hand, the adverse impact of the buyer-driven GVCs has been exacerbated by the Vietnam government's discriminatory policy against the domestic private sector, which has stifled the key actors for upgrading the whole economy. In turn, as the domestic industries are not able to upgrade economically and still have to compete on cost, the government must sustain the comparative advantage of low labour cost by continuing with the restriction of workers' access to basic labour rights (especially freedom of association and collective bargaining) and being widely lenient on employers' violations of labour standards. This has become a vicious cycle deeply integrated in the industrialisation strategy of Vietnam.

This chapter contributes to the GVC literature by showing that the supply chain management strategy and purchasing practices of the buyer-driven GVCs not only result in increasing cost pressure on suppliers and deteriorating working conditions (Anner, 2015, 2019 ; ILO, 2017; Mezzadri, 2016; Nathan et al., 2016) but also create the leverage for governments of producing countries to prolong their suppressive labour policy. This case study also shows that while the lack of industrial policy does not lead to economic and social upgrading, the implementation of policies that favour the state and foreign investors' interests at the expense of the domestic private sector may seriously damage the economy's ability to upgrade economically and exacerbate the adverse impacts of the GVCs on labour rights.

In 2019, the Vietnamese government made important decisions to release labour suppression. As a commitment to the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP) and EU-Vietnam Free Trade Agreement (EVFTA), Vietnam ratified ILO Convention 98 and

revised the Labour Code to allow for independent unions at the enterprise level. However, there has been skepticism about the real impact of these changes. By comparing the labour politics of Vietnam and Bangladesh, Evans (2020) argues that this move is motivated by the export incentives rather than the internal demand for labour reform and as soon as the export incentives are taken away, labour suppression will be resumed It remains unclear whether the recent changes may uphold labour rights for Vietnamese workers; nonetheless, as long as Vietnam's economy remains locked in the assembly section of the GVCs and the domestic private sector is not given fair support to upgrade economically, the push for the government to sustain labour right suppression still lingers.

References

Amendolagine, V., Presbitero, A. F., Rabellotti, R., Sanfilippo, M., & Seric, A. (2017). *FDI, Global Value Chains, and Local Sourcing in Developing Countries* (IMF Working Paper No. 17/284). International Monetary Fund.

Anner, M. (2015). Worker resistance in global supply chains: Wildcat strikes, international accords, and transnational campaigns. *International Journal of Labour Research, 7*, 17–34.

Anner, M. (2019). Predatory purchasing practices in global supply chains and the employment relations squeeze in the Indian garment export sector. *International Labour Review, 158*(4), 705–727.

Bair, J., & Gereffi, G. (2003). Upgrading, uneven development, and jobs in the North American apparel industry. *Global Networks, 3*(2), 143–169. https://doi.org/10.1111/1471-0374.00054

Balasubramanyam, V. N., Salisu, M., & Sapsford, D. (1996). Foreign direct investment and growth in EP and IS countries. *The Economic Journal, 106*, 92–105.

Barrientos, S., Gereffi, G., & Rossi, A. (2011). Economic and social upgrading in global production networks – Challenges and opportunities. *International Labour Review, 150*(3–4), 319–340.

Berg, A. G., & Ostry, J. D. (2017). Inequality and unsustainable growth: Two sides of the same coin? *IMF Economic Review, 65*, 792–815.

Better Work Vietnam (BWV). (2011). *Garment Industry 2nd Compliance Synthesis Report*. International Labour Organisation. Last Retrieved July 4, 2020, from https://betterwork.org/global/wp-content/uploads/Better-Work-Vietnam-2nd-Compliance-Synthesis-Report.pdf

Better Work Vietnam (BWV). (2017). *Annual Report 2017 – An industry and compliance review*. International Labour Organisation. https://betterwork.org/blog/portfolio/better-work-vietnam-annual-report-2017/

Boushey, H., & Price, C. C. (2014). *How are economic inequality and growth connected? A review of recent research*. Washington Centre for Equitable Growth.

Center for Development and Integration (CDI). (2017). *Survey of Working conditions among female electronic workers in Bac Ninh* (CDI Working Paper, December 2017)

Center for Development and Integration (CDI). (2019). *Baseline survey of electronic industries in Hai Phong and Dong Nai* (CDI Working Paper, January 2019).

Cho, S. J. (2017). *Employment Relations in Korean Companies Operating in Vietnam*. Korean Labour Institute (KLI).

Do, Q. C. (2017). *The missing link in the chain? Trade regime and labour standards in the garment, footwear and electronics supply chains in Vietnam* (FES Working Paper). Last Retrieved july 4, 2020, from http://library.fes.de/pdf-files/bueros/vietnam/13334.pdf

Do, C., & van den Broek, D. (2013). Wildcat strikes: A catalyst for union reform in Vietnam? *Journal of Industrial Relations, 55*(5), 783–799.

Dünhaupt, P., & Herr, H. (2020). Global value chains – A ladder for development? *International Review of Applied Economics, 34*, 1–19. https://doi.org/10.1080/02692171.2020.1815665

Evans, A. (2020). Export incentives, domestic mobilisation and labour reforms. *Review of International Political Economy*. https://doi.org/10.1080/09692290.2020.1788113

Fair Labor Association (FLA). (2019). *Toward Fair Compensation in vietnam: Insights on Reaching a Living Wage* (FLA Working Paper). Last Retrieved May 15, 2020, from https://www.fairlabor.org/sites/default/files/documents/reports/vietnam_wagereport_final.pdf.

FPT Securities. (2017). *Bao cao nganh det may: Thay doi de but pha* [Report on the Textile and Garment Industry: Change for a breakthrough]. (FPT Securities Working Paper, December 2017). Last Retrieved March 12, 2020, from http://www.fpts.com.vn/FileStore2/File/2018/01/11/FPTS-Textiles%20and%20Clothing%20Industry%20Report-Dec.2017.pdf

General Statistics Office. (2020). *Vietnam Enterprise White book 2020*. General Statistics Office. Last Retrieved March 15, 2021, from https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2020/04/sach-trang-doanh-nghiep-viet-nam-nam-2020/

Gereffi, G., & Frederick. S. (2010). *The global apparel value chain, trade, and the crisis: Challenges and opportunities for developing countries* (Policy Research Working Paper 5281). World Bank.

Gereffi, G., & Sturgeon, T. (2013). Global value chains-oriented industrial policy: The role of emerging economies. In D. K. Elms & P. Low (Eds.), *Global value chains in a changing world* (pp. 329–360). WTO Publications.

Goto, K. (2012). *Is the Vietnamese garment industry at a turning point? Upgrading from the export to the domestic market* (Institute of Developing Economies (IDE) Discussion Paper No. 373). Last Retrieved Novmber 8, 2020, from https://www.ide.go.jp/English/Publish/Reports/Dp/373.html

Herr, H. (2018). Underdevelopment and unregulated markets: Why free markets do not lead to catching-up. *European Journal of Economics and Economic Policies: Intervention, 15*, 219–237.

Herr, H. (2019). *Industrial policy for economic and social upgrading in developing countries*. Friedrich Ebert Stiftung. Last Retrieved May 20, 2020, from http://library.fes.de/pdf-files/bueros/singapur/15190.pdf

Hirschman, A. O. (1958). *The strategy of economic development*. Yale University Press.

Humphrey, J., & Schmitz, H. (2002). How does insertion in global value chains affect upgrading in industrial clusters? *Regional Studies, 36*, 1017–1027.

International Labour Organisation (ILO). (2016). *ASEAN in Transformation: How technology is changing jobs and enterprises* (Bureau for Employers' Activities Working Paper No. 10). Last Retrieved May 8, 2020, from https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---act_emp/documents/publication/wcms_579553.pdf.

International Labour Organisation (ILO). (2017). *Purchasing practices and working conditions in global supply chains. INWORK Policy Brief No. 10*. International Labour Organisation. Last Retrieved May 8, 2020, from https://www.ilo.org/travail/info/fs/WCMS_556336/lang--en/index.htm

Kaplinsky, R., & Morris, M. (2001). *A handbook for value chain research*. University of Sussex Institute of Development Studies.

Le, D. B. (2018). *Private sector: productivity and prosperity* (MBI Working Paper). MBI and Economica. Last Retrieved November 11, 2020, from https://thongtinphapluatdansu.edu.vn/2019/01/08/nghien-cuu-kinh-te-tu-nhan-viet-nam-nang-suat-va-thinh-vuong/

Lo, D., & Wu, M. (2014). The state and industrial policy in the Chinese economic development. In J. M. Salazar-Xirinachs, I. Nübler, & R. Kozul-Wright (Eds.), *Transforming economies: Making industrial policy work for growth, jobs and development* (pp. 307–326). International Labour Organisation.

Mezzadri, A. (2016). *Sweatshop regimes in the indian garment industry*. Cambridge University Press.

Milanovic, B. (2012). Global income inequality by the numbers: In history and now. *World Bank Policy Research Working Paper*, 6259. Last Retrieved October 25, 2021, from https://documents1.worldbank.org/curated/en/959251468176687085/pdf/wps6259.pdf

Ministry of Industry and Trade (MOIT). (2020). Application of lean manufacturing in the garment industry. *Dan Tri Newspaper*. Last Retrieved February

21, 2020, from https://moit.gov.vn/web/guest/tin-chi-tiet/-/chi-tiet/doanh-nghiep-nganh-det-may-ap-dung-mo-hinh-san-xuat-tinh-gon-20742-3101.html

Ministry of Planning and Investment (MPI). (2018). *Ky yeu hoi nghi 30 nam FDI Viet Nam*. Ministry of Planning and Investment.

Môc, B. & T´ê, T. (2020). How are the Vietnamese suppliers to Samsung performing? *Genk*. Last Retrieved February 15, 2020, from https://genk.vn/doanh-nghiep-viet-tham-gia-vao-chuoi-cung-ung-cua-samsung-dang-lam-an-ra-sao-20201125074650 58.chn

Morris, M., & Staritz, C. (2019). Industrialization paths and industrial policy for developing countries in global value chains (Chap. 31). In S. Ponte, G. Gereffi, & G. Raj-Reichert (Eds.), *Handbook on global value chains* (pp. 506–520). Edward Elgar Publishing.

Nathan, D., Tewari, M., & Sakar, S. (Eds.). (2016). *Labour in global value chains in Asia*. Cambridge University Press.

Neves, P. C., Óscar, A., & Silva, S. T. (2016). A meta-analytic reassessment of the effects of inequality on growth. *World Development, 78*, 386–400.

Newsome, K., Taylor, P., Bair, J., & Rainnie, A. (2015). Putting labour in its place: The labour process and global value chains. In K. Newsome, P. Taylor, J. Bair, & A. Rainnie (Eds.), *Putting labour in its place: The labour process and global value chains* (pp. 1–29). Palgrave Macmillan.

Pincus, J. (2015). Why doesn't Vietnam grow faster? State fragmentation and the limits of vent for surplus growth. *Journal of Southeast Asian Economies, 32*(1), 26–51.

Prema-chandra, A., & Tien, T. Q. (2012). Foreign direct investment in industrial transition: The experience of Vietnam. *Journal of the Asia Pacific Economy, 17*(3), 446–463. https://doi.org/10.1080/13547860.2012.694699

Rodrik, D. (2004, November). *Industrial Policy for the Twenty-First Century*. Available at SSRN: https://ssrn.com/abstract=617544 or https://doi.org/10.2139/ssrn.617544

Rossi, A. (2013). Does economic upgrading lead to social upgrading in global production networks? Evidence from Morocco. *World Development, 46*, 223–233.

Trinh, K. (2014). Trade union organising free from employers' interference: Evidence from Vietnam. *Southeast Asian Studies, 3*(3), 589–609.

Vietnam Chamber of Commerce and Industry (VCCI). (2015). *Vietnam Enterprise Annual Report*. Ho Chi Minh City. Last Retrieved February 17, 2020, from http://vbis.vn/wp-content/uploads/2016/06/Bao-cao-thuong-nien-DN-VN-2015.pdf

Vietnam Customs Office. (2018). *Thong ke so lieu xuat nhap khau det may Viet Nam nam 2018* [Report on the export and import of textile and garment of

Vietnam in 2018]. Last Retrieved August 18, 2020, from https://www.customs.gov.vn/Lists/ThongKeHaiQuan/Default.aspx

Vietnam Electronic Industry Association (VEIA). (2020). *Review of Electronic Brands' support to the local enterprises*. Online article. Last Retrieved February 15, 2021, from http://www.veia.org.vn/

Vietnam General Confederation of Labour (VGCL). (2017). *Statistics on union membership, collective labour disputes and strikes, 2006–2017*.

Vietnam Labour Inspectorate. (2017). *Report on the inspection campaign of the electronics industry*. Last Retrieved February 15, 2020, from http://thanhtralaodong.gov.vn/chien-dich-thanh-tra/tong-ket-chien-dich-thanh-tra-lao-dong-trong-linh-vuc-dien-tu-44137.html

Vietnam Textile and Apparel Association (VITAS). (2014). *Annual Report on textile-apparel industry development*. Internal report.

Vietnam Textile and Apparel Association (VITAS). (2017). *VITAS Newsletter: Quarter 3*.

Vu, T. T. A. (2016). Does WTO accession help domestic reform? The political economy of SOE reform backsliding in Vietnam. *World Trade Review, 16*(1), 85–109.

Vu, T. T. A. (2017). *The political economy of industrial development in Vietnam—Impact of state-business relationships on industrial performance, 1986–2013*. Oxford University Press. Last Retrieved March 19, 2021, from http://www.wider.unu.edu/publication/political-economy-industrial-development-viet-nam

Vu, T. T A., Le, V. T., & Vo, T. T. (2007). *Provincial extralegal investment incentives in the context of decentralisation in Vietnam: Mutually beneficial or a race to the bottom?* (UNDP Policy Dialogue Paper). Last Retrieved March 5, 2021, from http://www.undp.org/content/dam/vietnam/docs/Publications/9716_071205_provincentives.pdf

World Bank. (2021). *World development indicators*. Last Retrieved February 18, 2021, from https://databank.worldbank.org/source/world-development-indicators

CHAPTER 12

Foxconnisation of Automobile Manufacturing? Production Networks and Regimes of Production in the Electric Vehicle Industry in China

Boy Lüthje

Introduction

The digitalization of the automobile, the rapid emergence of new energy cars and of new mobility systems are driving accelerating restructuring of production models and value chains in the global automotive industry. Continuing structural overcapacity in car production, the frequent breakdown of car traffic and the related ecological crisis in megacities around the globe, as well as the continuing emission cheating scandals surrounding major automakers are driving a broad-ranging process of

B. Lüthje (✉)
Institute for Public Policy, South China University of Technology, Guangzhou, People's Republic of China
e-mail: luethje@ipp.org.cn

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_12

restructuring that puts into question the existing regime of capital accumulation in the global car industry. In addition, the emerging forms of new and shared mobility undermine the model of private ownership as the dominant norm of consumption, on which the growth of the automotive industry had been based since the days of Henry Ford.

China is at the center of this process. During the last decade, the Chinese government has initiated a set of policies to rapidly develop new energy vehicles (NEV) and new mobility systems (Muniz et al., 2019). The goal is to leapfrog industrialized countries in technologies, innovation networks, and value chains of future mobility (Wang & Kimble, 2011). Will the government-driven big leap forward in car technologies and mobility be disruptive to the existing model of post-Fordist mass production in the Chinese automotive industry? This chapter proposes a conceptual framework and basic empirical arguments to understand the structural changes in production models, value chains, and innovation strategies. We want to link this analysis to the context of China's complex socioeconomic rebalancing (Lüthje et al., 2013c) and relate this to prospective changes in production regimes in the automotive sector.

The concepts refer to regulation theory, theories of global production networks and analysis of China's political economy as an emerging variety of capitalism (Ten Brink, 2019; Zheng & Huang, 2018). The restructuring of the industrial and innovative base of car making will be examined as a complex transformation of the *regime of accumulation* and the underlying production networks (Lüthje et al., 2013a, 2013b, 2013c, following Aglietta, 1979). The competitive structure of the Chinese car industry, enshrined in the joint ventures between multinational carmakers and Chinese state-owned enterprises, will be analyzed as a specific mode of regulation, named "refurbished state-capitalism" (McNally, 2013). The traditional industry model is challenged by the new industrial players in new energy, digital car, and internet technologies. Together, this sector represents a different mode of regulation, which can be called "network capitalist" (for systematic theoretical analysis see Lüthje, forthcoming).

Based on ongoing empirical studies, this chapter traces the major contours and fault lines of the emerging shifts in the Chinese car industry. In the first section, we explain the theoretical framework of this analysis related to theories of global production networks and regulation theory. The second section provides an analysis of the mode of regulation that has governed growth and capital accumulation in the Chinese car industry since the 1990s and its contradictions. The third section draws

a taxonomy of disruptive forces emerging from independent carmakers, producers of NEV, digital car technologies and batteries, car suppliers, and electronics contract manufacturers. The fourth section looks at the models of production and works in the emerging sectors and their potential impact on incumbent carmakers. The conclusion outlines major policy challenges.

The neo-Fordist Car Industry Under Stress: Late Revenge of Wintelism?

The current changes in the car industry are not merely technological in nature. They constitute a comprehensive rupture in the production models, innovation strategies, and corporate structures that were established with the Fordist model of mass production since the 1920s and revised under the so-called lean production revolution of the 1980s and 90s. The changes can be compared to the transformations of other mass-production industries in recent decades, in which post-Fordist restructuring had led to a fundamental reversal of production models and value chains, such as in information technology (IT) and electronics manufacturing (Borrus & Zysman, 1997; Lüthje, 2001), textile and garment (Bair, 2002), footwear, and furniture (Gereffi & Korzeniewicz, 1994). As in those older cases, the present changes in the car industry imply deep-ranging shifts in the international division of labor and the shape of global production networks.

The automotive industry has often been portrayed as the paradigmatic example of Fordist mass production and consumption, linked through a wage–labor nexus governed by strong bargaining relationships between employers and trade unions (Aglietta, 1979). In the wake of the economic crisis of the mid-1970s, the auto industry had been at the center of restructuring of production models through lean production and modularization (Womack et al., 1990), which enabled a refurbished model of car consumption with greater variety of models, market differentiation and segmentation, and significantly shorter model cycles. The accumulation regime continued to rely on private car ownership as the primary norm of consumption for private households, however (Kingsley & Urry, 2009). This pushed mass production and thereby capital concentration in the car industry to ever larger dimensions and propelled outsourcing of

production and the growth of large-scale "supply pyramids" with hierarchical division of labor between car manufacturers, multinational first-tier suppliers, and large numbers of mid- and low-end suppliers.

Related to the basic trends of technological change, three sets of disruptive factors can be traced, which are relatively independent from each other, but interrelated (Gao et al., 2016). These are:

- **New energy vehicles:** Electrification of the car promises a solution to the major environmental problem of car-based mobility, i.e., carbon emissions. It, therefore, offers a lifeline of survival for the established growth model of the car industry, but renders much of the know-how and skills of established carmakers obsolete and radically reduces the labor content of car making (by as much as 50 percent according to earlier estimates; Hans Böckler Stiftung [HBS], 2012). It also brings in new players from the field of new energy components, especially car batteries and power management systems.
- **Digital driving and control systems:** This can be seen as the most direct manifestation of information technologies becoming a key factor in restructuring. Digitalization of driving brings in the big players of the IT industry, their models of innovation and market control, and their financial power, including venture capital. This development challenges the traditional innovation cycles of the car industry and implies a potential shift of market control from brand-name manufacturers to providers of key components of digital driving systems and their related partners in big data and artificial intelligence (Gao et al., 2016).
- **Digital mobility:** This is the main driver breaking up the model of private car ownership as a dominant norm of consumption (Tyfield, 2018). It shifts the center of innovation downstream to the networks and applications that enable the shared use of cars, comparable to other industries with platform-based models of innovation, such as mobile telecommunications (Thun & Sturgeon, 2017). In such environments, the hardware and its brand name are becoming a less important element of competition, rather than software, apps, and networks. At the same time, car sharing and other mobility networks de facto become public infrastructures (Srnicek, 2017) that affect the requirements for the development of the hardware product.

These disruptions "from outside" are related to the internal problems of the traditional accumulation regime of the neo-Fordist car industry, accompanied by an expected new push of automation through the digitalization of car production (Pardi et al., 2020). The industry has been plagued by structural overcapacity in recent decades, particularly in the wake of the global financial crisis 2008–09. China and other emerging economies provided the "safety valve" to maintain global growth in the face of severe disruptions in developed country markets, helping to postpone substantial restructuring of the dominant accumulation regime (Lüthje & Tian, 2015). This was backed by tacit coalitions between global carmakers, mainstream political parties, and trade unions to protect the car industry and related jobs. The delayed restructuring of the recent decade resulted in a massive political crisis, propelled by the emission cheating scandals of Volkswagen (VW) and other global carmakers in 2015/16, which some German media called the "Fukushima of the car industry."

In the wake of these developments, conditions can be compared to the traditional IT and electronics industry on the eve of the personal computer and Internet "revolutions" in the late 1980s. The incumbent global champions, vertically integrated computer, chips and telecommunications equipment makers such IBM, Siemens, and Fujitsu, were challenged by newcomers such as Microsoft, Intel, and Cisco. These companies not only pioneered sweepingly disruptive technologies, they also created a whole new model of innovation and industry organization that became known as "Wintelism" (as introduced by Borrus & Zysman, 1997). This model was based on vertical disintegration and specialization, industry-wide modularization of core components under "open-but-owned" standards, and the separation of product innovation from manufacturing. As brand-name control transitioned from final assemblers to component suppliers, the "assembly-oriented model of innovation and market control" (Borrus & Zysman, 1997, p. 5) in traditional mass production industries such as textiles and garments, electronics, and automobiles were fundamentally challenged. Manufacturing was shifted to a new brand of vertically integrated contract manufacturers such as Flextronics and Foxconn that created massive manufacturing sites in Mexico, Eastern Europe, Southeast Asia, and China (Lüthje et al., 2013a).

At the time, almost 20 years ago, the question was raised whether vertical disintegration and contract manufacturing could become a model

for car assembly or components manufacturing as well. But there remained consensus that the dominant model of vertical integration in the car industry, i.e., modular supplier pyramids dominated by final assemblers and their production architectures, would basically stay intact (Jürgens & Sablowski, 2004; Lüthje et al., 2013a).

Seen from this perspective, the current restructuring of the car industry may appear as some kind of late revenge of Wintelism over the Toyota model. IT and Internet giants as well as some NEV carmakers and car suppliers are driving new forms of productive organization that mark a break with the refurbished Fordism of global carmakers. Similar to the "PC revolution," restructuring is driven by massive financialization of innovation that pushes the logic of vertical fragmentation and centralization (Ernst & O'Connor, 1992) into the car industry.[1]

Triple Alliances and Refurbished State Capitalism

Whether and how the forces of vertical disintegration can finally transform the productive structure of the automotive industry has to be assessed in the context of the changing patterns of global restructuring and the historically new role of large emerging economies within the international division of labor. The driving forces are much more complex than just government subsidies or ambitious goals of industrial upgrading (Chen & Midler, 2016). The dynamics of vertical specialization and reintegration underlying the green-digital transformation of the car industry evolves in the context of regimes of accumulation and modes of regulation shaped by the national conditions in the key regions of the global car market, now including China and other emerging economies. The regime of accumulation and the multi-layered politics in which it is embedded in China are

[1] In the computer industry, production was historically organised within vertically integrated corporations such as IBM, Siemens, or Fujitsu. The key components of computers, i.e., semiconductor chips, operating systems, application software, storage systems, motherboards and circuitry, cables and connectors, as well as metal and plastic frames and casings were produced within those companies or by some dedicated suppliers. In the PC industry, every segment of the production chain became an industry segment of its own, dominated by highly specialised producers with monopolistic control over core component technologies, such as Intel and AMD in microprocessors, Microsoft in operating systems and application software, or Seagate in disk drives. Assembly became highly concentrated in the hands of large contract manufacturers with no brand name such as Foxconn or Flextronics (Lüthje et al., 2013a, 2013b, 2013c).

essential factors shaping the global trajectory of the current process of restructuring.

China's automobile industry, now the largest in the world, has seen a double transformation during the past two decades. The 1990s were dominated by the massive restructuring of the major state-owned automobile firms of the Mao period on the one hand, and the emergence of first-generation joint ventures between local state-owned holding companies (such as Shanghai Automotive) and foreign carmakers (such as VW) on the other. The car market was relatively undeveloped during that period (Thun, 2006). Since around 2000, a huge influx of foreign investment introduced a new series of joint ventures and a major modernization of production under various models of lean production. This surge of investment in advanced technologies and manufacturing systems has created a production base comparable with that of industrialized countries, including a growing array of design and development activities (Lüthje & Tian, 2015).

The production networks in China's automotive sector today mirror the globally dominant model of flexible mass production of standardized automobile models in large varieties. It is based on modular, company-specific platforms promoted by the major producers on the side of production, and on private car ownership of large sectors of the population on the side of consumption. The joint ventures mainly have served the Chinese domestic market. The key policy goal was to transfer state-of-the-art technology and manufacturing know-how to Chinese carmakers (Lüthje & Tian, 2015).

Despite this strong domestic-market orientation, the rapid growth of the auto industry in China is not a replay of the success story of the automobile in the West during the golden days of Fordism. Mass car ownership remains restricted to urban middle classes with incomes above the level of most manufacturing and agricultural workers. The growth of the industry cannot rely on rising income levels of large sectors of the working population, since the proportion of consumption of China's GDP remains notoriously low and manufacturing workers typically cannot afford to buy cars. Therefore, the auto industry heavily depends on higher income consumers and on extensive investment in infrastructure, subsidized fuel prices as well as accelerated urbanization. The auto industry thereby reflects the general accumulation model of China's emergent capitalism, which favors fixed-capital investment over the growth of mass incomes and consumption (Hung, 2016).

The production networks of the automotive sector in China are based on the lean production model with relatively slim core factories for car assembly and global–local pyramids of first-tier system suppliers and second- and third-tier parts manufacturers (Zhang, 2015). In China, the automobile industry's supply pyramid is embedded in the highly segmented structure growing out of the sector's trajectory of capitalist transformation. The top layers of production networks, assembly of cars, and some strategic components (engines in particular), are controlled by joint ventures. The middle and lower tiers of the supply pyramid are mostly owned by private local, foreign, and overseas-Chinese investors, usually with little access to high-level government resources. Multinational first-tier car suppliers have expanded rapidly in China, including sizeable research and development operations. However, the overall picture remains dominated by heavy-cost competition and labor-intensive production processes with relatively limited industrial upgrading (Lüthje & Tian, 2015).

Against this background, the accumulation regime of China's automobile industry is split into a capital-intensive high end, dominated by Chinese state-owned enterprises (SOE) and their multinational partners, and a low end in which extensive strategies of accumulation prevail. The automotive industry represents a predominantly *state-capitalist mode of regulation* at the core, formed by the joint ventures of Chinese state-owned carmakers with multinational brands and top-tier global car suppliers from North America, Europe, and East Asia. At the same time, a number of smaller carmakers under private or "hybrid" ownership, such as Geely, Chery, or BYD, have emerged that have been able to challenge the large SOEs in some important markets. These companies have developed extensive production networks at local and regional levels and receive support from interventionist local governments to build supplier networks, infrastructure, and technological resources. This type of regulation can be called *network-capitalist*.

Compared to the relatively coherent state-capitalist core of car making, the ownership structure of China's automotive supply sector remains scattered. Among first-tier suppliers, global firms with foreign direct investment or in joint ventures with Chinese SOE are dominant. At the lower tiers of the supply chain, privately owned and hybrid companies of all sizes can be found along with overseas Chinese enterprises from Taiwan and Hong Kong. They are mostly allied with local governments

that provide cheap land, workers' dormitories, and "flexible interpretations" of laws and regulations. This mode of regulation can be called *market-despotic* (for a systematic discussion see Lüthje,).

This quasi-monopolistic structure was relatively efficient in guiding the massive restructuring of the Chinese car industry in the late 1990s and its great leap forward into state-of-the-art production technologies and networks. State-capitalist regulation has also been critical to support the massive geographic expansion into greenfield sites in central and Western China since the crisis 2008–2009, as well as the globalization of Chinese state-owned carmakers as investors and shareholders in multinational car companies (such as Beijing Automotive in Daimler and Dongfeng in PSA; Lüthje & Tian, 2015).

Given the challenges of economic rebalancing and changes in the global automobile industry, however, serious doubts have been voiced over the efficiency of this framework. The state-capitalist mode of regulation not only curbs competition and encourages oligopolistic pricing behavior, it also limits innovation. The major players put substantial resources into the adaptation of foreign car models to the Chinese market, but show little interest in developing indigenous innovations in car technologies, components, and concepts. This points to systemic contradictions between the overall goals of government policies, versus the profit-making strategies of individual capitals and the interests of the state as a shareholder—an aspect often overlooked in standard economic literature.

Most problematic, however, is the fact that this structure is reproducing the bifurcated regime of accumulation with high profits at the top and massive pressure on suppliers, especially those at the bottom of supply chains. It leads to continuing heterogeneity of supplier networks and impedes the development of a technologically viable component industry (Lüthje & Tian, 2015).

Disruptive Forces: The Challenge of Network Capitalism

The disruptive forces reshaping the global car industry in China manifest themselves within the segmented regulation of the automotive sector and of China's emergent variety of capitalism in general (Lüthje, forthcoming; McNally, 2013). The entry of rapidly growing new players potentially undermines and reshapes the present model of state-capitalist regulation,

since it brings in innovative firms from the "unconsolidated," non-state-capitalist sector of the car industry (independent car and NEV makers as well as component producers), from the IT industry, and from global and Chinese car suppliers. Significantly, the Chinese government relies on such new industrial actors, taking account of the success stories of the country's IT and other industries that followed trajectories different from the joint venture model.

The IT sector provides the key reference for the changes in production networks and for the fundamental shifts in China's innovation system in recent decades. The successful development of Chinese IT brand-name firms, such as Huawei, Lenovo, and ZTE to national and global lead firms was achieved in the absence of or in competition with joint venture strategies. In the telecommunications industry, joint ventures of SOEs with global players such as Ericsson, AT&T, and Siemens were designed in the 1990s to trade technology transfer for market access. The Chinese partner firms reaped substantial profits from making and selling foreign-branded telecom equipment in rapidly growing urban markets, but they failed to develop brand-name products and services for the huge markets in rural areas. This was left to newcomer firms such as Huawei who combined expertise in undeveloped markets with rapid adaptation of leading edge technologies from the evolving Internet equipment industry in Silicon Valley (Pawlicki, 2015).

Since the Chinese government began to expand the NEV sector by imposing production quotas of fully electric vehicles on carmakers (10 percent in 2018, 12 percent in 2020, Muniz et al., 2019), a significant change in investment has taken place, while incumbent carmakers suffer from sluggish sales and mounting overcapacity. In 2018, the Chinese market for passenger cars contracted for the first time in recent history. In the first half of 2019, sales of passenger cars fell by 14 percent (Financial Times, 2019a), caused by slower overall economic growth and the exhaustion of upper middle-class consumers' spending on cars. The massive build-up of capacity on the part of joint ventures, that has dominated the scene since 2008–2009, has come to a halt. In some cases, such as Beijing-Hyundai, plant closures became imminent (Automotive News China, 2019a).

New production capacities are mostly being added by independent carmakers and NEV producers. Geely, for example, has opened three plants in the past two years, bringing production capacity to 1.7 million cars per year. In 2017 alone, 14 NEV start-ups in China were granted

production licenses and most of the companies have started building factories. According to the China Association of Automobile Manufacturers, annual capacity to produce pure and plug-in-hybrid electric cars hit 2 million in 2019, and a large number of NEV start-ups are expected to start production by 2022 (Automotive News China, 2019b).

The emerging landscape of new indigenous players in the Chinese car industry can be grouped by technology clusters, business models, and their relationship to the world market:

Independent car and NEV makers with a background in the auto industry, such as Geely, Cheery, JAC, and BYD. With its diverse product portfolio of small and medium-sized cars as well as buses and utility vehicles, BYD has sold more electric vehicles than any competitor worldwide. Geely has established a highly ambitious strategy to convert its Volvo brand completely to NEV, embarking on joint internal component development and use of a low-cost production system created by Geely (Financial Times, 2017). At the end of 2020, Geely entered an alliance with Foxconn to provide contract manufacturing of cars, eyeing new entrants from top-tier global IT firms into NEV (Taipei Times, 2021). Most of the independent car and NEV makers have their own factories, and are vertically integrated within Chinese-style conglomerates. They run extensive local production networks, designed to leverage cost advantages for local players (Balcet et al., 2014).

Digital car and NEV start-ups, backed by Internet giants, global venture capital, and Chinese business tycoons, such as NextEV/NIO, LeEco/Faraday, and Baoneng. Most of these companies focus on the development of high-end vehicles, similar and in competition to market leader Tesla. Most of these ventures are highly speculative and have received ample publicity. In the light of some spectacular bankruptcies their market and financial success still needs to be tested. Different from Tesla, these companies focus on design and development and use contract manufacturers to assemble cars, especially their electronic components. In the wake of Tesla's success in China after the coronavirus crisis, a new wave of speculative investment into Chinese NEV start-ups has occurred (Automotive News China, 2020).

Integrated new energy (BYD) and battery producers. Here, Chinese companies clearly have the strongest position in the world market (Fraunhofer ISI, 2016). BYD is a battery maker by tradition, originally a supplier of Li-batteries for computers and smartphones to Foxconn and

other large electronics manufacturers. In 2017 the company was classified as the biggest producer of Li-batteries globally, leveraging vertical integration effects from various end markets such as cars, buses, IT, or solar and energy management systems. The second lead firm is CATL, a previously unknown battery maker from Ningde, a rural city in Fujian province, where China's president Xi Jinping once served as local party secretary. The company has massively expanded production with plans to become the world's largest producer by 2020. As part of a major globalization effort, CATL announced the construction of a factory in Erfurt, Germany, with an initial capacity of 14 gigawatt-hours per year to supply BMW, VW, and other major European carmakers with Li-battery cells (Nangui, 2019). In addition, China's major electronics making areas, the Pearl River Delta, in particular, have extensive clusters of small and medium-sized battery makers with production experience from the electronics industry (IPRD, 2018). This lineup is completed by large Chinese manufacturing operations of leading battery makers from Korea and Japan in China. In 2017, eight out of the thirteen major Li-battery manufacturing sites in the world were in China (Sanderson et al., 2017).

Car suppliers play a key role in the transformation of innovation and production networks. The situation in this sector in China mirrors the segmented structure of supplier pyramids under the joint venture model. First-tier transnational suppliers are engaged in the development of digital driving systems, and they are preferred partners for the Chinese big three Internet companies. Bosch has formed a strategic alliance with Ali Baba, Continental with Baidu (Automotive News China, 2017). But there is no Chinese car supplier of significance that could play the role of system integrator and potential global champion in the NEV and digital supply chain.

Electronics contract manufacturers, most of them based in Taiwan, already play a major role in supply chains for car electronics and are moving into NEV and digital car electronics. Electronics manufacturing giant Foxconn has operations in car electronics including some major facilities in the United States and acts as a supplier to Tesla, among others.[2] Given the increasing commodification of NEV and digital car components, large IT contract manufacturers appear as potential mass producers for components of driverless vehicles and NEV. Contract

[2] Foxconn CEO Guo Taiming stated that "Tesla EVs are virtually made in Taiwan" (Lee & Ke, 2018).

manufacturers are also securing positions as investors in start-ups of all kinds; for example, Ali Baba and Foxconn invested $350 million in an NEV start-up named Xiaopeng (Automotive News China, 2018). In the fall of 2020, Foxconn announced a new technology platform for NEV and a network of alliances with Geely and Chinese start-up NEV makers, aiming at the replication of its contract-manufacturing model in the electric car sector (Financial Times, 2020).

Overall, it can be said that the forms of vertical integration, production models, and value chains are in rapid transformation and highly unstable. Obviously, the NEV industry in China is evolving along a modularized structure, composed of a set of subindustries that provide the major components and systems. In this context, new regional centers of production and innovation and new power relations between the central and the local state are emerging. Most of the new players and industry segments are located outside traditional centers of car manufacturing. Core locations include Shenzhen and the Pearl River Delta (with BYD, Tencent, Foxconn, and a huge base of electronics manufacturing), Hangzhou (with Geely and Ali Baba), and Fujian Province (with CATV).

The forms of government-industry relations in those regions are essentially different from the traditional centers of the auto industry with their strong state-capitalist traditions. The new centers are governed by network-capitalist forms of regulation (Lüthje, 2021), with informal, but well-developed relationships between activist local governments and privately owned firms.

Incumbent carmakers—globally and in China—have recently responded with massive investments into NEV. Companies such as VW or Ford are planning to produce electric versions of most car models in the near future, with VW announcing in 2019 that 50 percent of its sales in China will be NEV (Automotive News China, 2019c). VW has created its own global platform and concentrates NEV manufacturing in two dedicated factories in Shanghai and Foshan (Guangdong Province). Traditional carmakers try to use their manufacturing expertise to keep the old model of vertical integration intact. Yet, their production strategies for NEV are driving new forms of modularity. VW, BMW, and other global carmakers source battery cells externally under large-scale contracts with CATL and other East Asian producers and limit their own production activities to the assembly of battery cells into car frames (2019 field interviews). At the same time, carmakers are aggressively pushing cooperation and cost-sharing. In a major alliance with Ford, VW

will license its newly developed platform for electric vehicles to Ford and potentially to other carmakers in the future (Financial Times, 2019b).

The restructuring of production systems and value chains also opens up considerable potentials for flexible specialization. Production of specialty cars, delivery trucks, buses, and public transport systems creates a large array of growth opportunities for NEV. In these markets, as well as in passenger NEV, volumes tend to remain relatively small. Changes in technology as well as government regulations and standards require frequent changes in model lineups and components. To cope with such insecurities major Chinese firms tend to keep their operations highly integrated, but with low degrees of automation. BYD, in particular, pursues a strategy to produce batteries and components for new energy systems of all kinds (including smart phones, urban grids, and solar systems), among which cars are only one downstream product. Under this model, new energy technologies are employed in a large variety of products and systems, economies of scale are mainly leveraged on the side of battery production (IPRD, 2018).

Regimes of Production: Low-Wage Mass Production as New Lead Model?

The changes in value chains have a potentially huge impact on work, employment, and relocations in the automobile industry, which have hardly been researched yet. Early estimates and initial job reductions at global carmakers indicated that substantially fewer workers will be needed for NEV manufacturing and that the traditional mechanical skills of car workers and engineers will be devalued (HBS, 2012). The impact of changing value chains and relocation are not included in most studies, however. As the electronics industry demonstrated, the revolutions in technologies and business models in the 1990s initiated a massive transformation of manufacturing. In its course, most traditional computer and telecommunications production was either closed down or sold to contract manufacturers and relocated to emerging economies (Lüthje et al., 2013a, 2013b, 2013c).

In the automobile industry today, massive state-of-the-art production bases have already been developed in China and other emerging economies. Job losses due to transnational relocation have been less severe than in electronics, since most carmakers duplicated their production networks rather than using China as a location for low-cost export

production. However, the transformation of industry structures is largely played out within the emerging economies. In China, this implies a break in the existing competitive structure and production models—between the incumbent joint ventures with relatively upscale wages and working conditions on the one side, and their competitors from independent carmakers and the IT industry on the other. The latter mainly rely on low-wage manufacturing workforces with high proportions of rural migrant workers.

The sectoral transformation of China's car industry traced in the preceding section also involves a complex restructuring and recombination of the existing regimes of production (Lüthje et al., 2013a, 2013b, 2013c).

In the leading **joint ventures**, the globalized model of state-capitalist regulation is aligned with regimes of production that combine the practices of transnational automakers with the party-based management systems of their Chinese partners, resulting in the characteristic twin structure of Western and East Asian corporate lean management and state-bureaucratic practices on the shop floor (Lüthje & Tian, 2015). Today, the core factories of the joint ventures suffer from increased cost competition and slower market growth. Massive workforce reductions and plant closures are imminent in major centers of car manufacturing in China. Most carmakers have started to incorporate manufacturing of electric or hybrid vehicles into their existing production lines, adding new flexibility requirements for factory organization and workers. Increased pressures have led to workers' dissatisfaction over deterioration of pay, benefits, and employment prospects, especially for temporary workers. In one 2017 case, FAW-VW in Changchun, this caused a major labor conflict with temporary workers over principles of equal pay for equal work (China Labour Bulletin, 2017).

Most **independent carmakers, NEV, and battery producers** rely on vertically integrated production with high flexibility and workforces with wages substantially lower than in the joint ventures. The rule of thumb among industry experts is about 9 US dollars as a standard hourly wage at the top joint ventures compared with 4–4.50 US dollars at independent carmakers such as Geely and BYD (Automotive News China, 2017). The lower wage scale is especially prevalent among companies with a background in the electronics industry such as BYD and most battery makers. Their regimes of production represent a high-performance type of labor relations, which has been adapted from Korean, Taiwanese, and

U.S. models. Wages and employment conditions are fairly decent, but the system is highly incentive-based. Skilled employees can achieve considerable extra income and promotions, but work organization is based on relatively low base wages and salaries, usually less than 50 percent of regular monthly incomes. Production workers, many of them migrants, are forced to work overtime to achieve a living income (Lüthje et al., 2013b). The production systems of these companies are very flexible, but rely on a core of relatively experienced skilled or semi-skilled workers. One of the leading firms of this kind maintains its operations in two large industrial parks in South China, one employing 20,000–30,000 and the other one over 70,000 workers (2017–2018 field research and interview data; IPRD, 2018).

Electronics contract manufacturers in China are notorious for their poor working conditions and low wages. Their very large factories, many of them with 100,000 or more workers, represent a regime of flexible mass production that draws its unique characteristics from China's system of internal labor migration (Lüthje et al., 2013b). It is based on large-scale employment of rural migrant workers in coastal provinces or big-city inland locations with base wages at the local legal minimum wage and massive overtime work, often beyond legal limits. Work is extremely segmented and deskilled, designed to facilitate mass recruitment and lay-offs according to market conditions. Workers are mostly housed in dormitories, often with harsh living conditions. With the increasing role of Electronics Manufacturing Services (EMS) contract manufacturers in NEV and digital car production such working conditions are expected to penetrate supply chains. Trade unionists in developed countries, therefore, speak of the "Foxconnisation of car manufacturing."

Car suppliers have diverse regimes of production, reflecting the segmented structure of the industry and their positions in the supply chain. First-tier multinational car suppliers have high-performance type of production regimes, while those in joint ventures with state-owned Chinese carmakers have state-bureaucratic forms (Lüthje et al., 2013b). The car supply industry in China generally works at wages much lower than in the core joint ventures, including first-tier multinationals such as Bosch or Denso. The lower levels of the car supply sector in China are typically traditional low-wage industries, comparable to the flexible-mass-production regimes in the IT industry or to the "classical" low-wage environment of labor-intensive small and medium enterprises.

A recent study of the car supply sector in South China indicated that the shift to NEV car manufacturing and automation have not yet caused major restructuring among car suppliers at the middle and lower tiers, since most of the car manufacturers in the region still focus on traditional car technologies (Yang et al., 2019). Automation, however, does have potentially heavy impact at the low ends of the supply chain. Recent studies of metal-related manufacturing industries in Guangdong province found that relatively simple forms of automation (mostly with Chinese-branded low-cost robots) lead to massive replacement of manual labor, often affecting the most experienced workers in physically challenging labor processes such as machining of metal or polishing of stainless parts (Huang & Sharif, 2017).

Policy Challenges

This chapter developed a conceptual framework to help understand the "green" and "digital" transformation of the Chinese car industry and its implications for production models and value chains. Current changes are clearly disruptive for the established regime of accumulation and its forms of political-economic regulation. This process is not merely a result of heavy-handed government policies and subsidies to create "national champions" and Chinese global leadership, as the rhetoric of today's "trade wars" suggest. Rather, these transformations reflect deep-ranging structural problems of the post-Fordist regime of accumulation in the global car industry and its revival in China in the wake of the financial and economic crisis 2008–2009. The segmentation of production networks and industrial policies established since the 1990s now shape the conditions and options to address today's complex shifts in technologies and social norms of production and consumption.

Under these conditions, the shift in China's industrial policies to NEV and digital car technologies can be seen as a strategic break with the existing mode of regulation based on the triple alliances of multinational carmakers, Chinese state-owned carmakers, and government. The joint ventures are no longer regarded as potential "national champions" in the automotive sector.

A large array of new players have emerged that command core knowledge in NEV and digital car technologies and their components, but the structure is very much in flux and highly dispersed. Despite rapidly rising production volumes and the impressive scale of some Chinese players,

there are no companies that appear to be potential "system integrators" of far-flung technology chains and production networks. The strongest players in hardware components are based in the field of battery production (CATL and BYD), with differing strategies of vertical integration. At the same time, there is a widespread separation of technological innovation from manufacturing, especially among the NEV start-ups. All this favors vertical disintegration—albeit in an uncoordinated and sometimes chaotic fashion—and uneven regional distribution of various industry segments.

Will this transformation finally lead to a "Wintelist" restructuring of the car industry in China and globally? Two scenarios can be derived from our analysis:

(a) **Refurbishing of the vertically integrated mass-production models of global carmakers**: This strategy is underlying the present drive of traditional carmakers to "electrify" their products and to integrate large-scale manufacturing of NEV into their existing networks of production. This trajectory can build on the enormous capacity of global carmakers in R&D and production, but it may lead to distinctively new forms of modularity under which key components will no longer be developed and produced by the carmakers themselves. Vertically integrated component suppliers such as Panasonic, LG, or CATL in batteries or some tier-one car suppliers and their Chinese Internet-platform partners in digital driving systems can become new system suppliers. Carmakers will remain potential system integrators or flagship firms, but this type of shared control over production networks will be substantially different from the Fordist or Toyotist model of vertical integration.

(b) **Emergence of a vertically disintegrated mass-production model similar to the electronics industry**: Such a model would consist of layers of vertically specialized high-volume production separated between brand-name carmakers, providers of core components, and contract manufacturers. For green and digital cars, China now controls technologies and advanced mass-production capabilities in core hardware components, system software and artificial intelligence, as well as key infrastructure architectures (5G). At the same time, China is the home of large-scale chains of network-based mass manufacturing, especially in electronics with notoriously poor wages and employment conditions for the majority sectors of the workforce. However, the viability of such a "Wintelist" scenario in the automotive industry would critically depend

on the establishment of open interconnection standards for core components (Borrus & Zysman, 1997) and platform-based innovation systems in the various industry segments, as known from the PC and smartphone industries (Thun & Sturgeon, 2017).

Further development of this transformation will depend on the political and social power relations that shape it. The challenge for China's industrial policy is twofold. On the one hand, government policies have to be further emancipated from the innovative pitfalls of the joint venture model and the related strategies of post-Fordist mass manufacturing. On the other hand, a replication of the "Wintel" story under Chinese leadership, as currently pursued in the battery sector, has the potential to create segmented systems of mass production, in which product innovation remains disconnected from innovations in manufacturing processes and low-wage working conditions prevail.

Flexible specialization clearly appears as a strategic alternative. The challenge is to create integrated supply chains with co-development of core technological innovations and rapid transfer into quality manufacturing. Smaller to medium-sized innovative firms with high-quality products, management, and workforces seem to be the appropriate form of organization. Given the continuing insecurity about the future patterns of industry organization, as well as the relatively small production volumes in the NEV industry, the creation of interconnected clusters of specialized suppliers and component and software producers could be a reasonable strategy for combining flexibility with quality, and for overcoming China's notorious weakness in transforming innovations in product architectures into high-value manufacturing (Brandt and Thun, 2010). Such industry networks could leverage the potentials of flexible specialization in new mobility technologies and create opportunities of decentralization of car manufacturing directed to the needs of local markets, mobility systems, and communities. Conditions for such an approach exist at the local level, particularly in the aforementioned high-tech centers and their regional affiliates (Lüthje, 2019).

On the whole, recent changes create huge new challenges for China's automotive industry and its model of socioeconomic development. Downsizing of overcapacity in the traditional car industries has to be carried out simultaneously with the development of new production networks in NEV. But under the segmented structure of the sector and its competing modes of regulation a smooth transition from "old" to "new" seems highly problematic. The upgrading of work and vocational

training remain blind spots in most regional development strategies—even in locations that have seen advances in collective bargaining, workplace representation, and trade union reform (Luo & Yang, 2019). As the leading industrial nations increasingly pursue protectionist policies to "decouple" global value chains, China will have to reassemble the pieces from below.

Acknowledgements Previous versions of this article have been published as *East-West Center Working Paper*, December 2019, and in the *International Journal of Automotive Technology and Management* No. 3, 2021. Field research for this project has been supported by Volkswagen Group China.

References

Aglietta, M. (1979). *A Theory of Capitalist Regulation. The US-Experience*. Verso.

Automotive News China. (2017, May 2). Bosch and Conti forming strategic alliances in China. *Automotive News China*.

Automotive News China. (2018, February 2). Ali Baba and Foxconn invest $350 million in an EV startup. *Automotive News China*.

Automotive News China. (2019a, March 8). Hyundai may suspend output at China plant as slowdown bites. *Automotive News China*.

Automotive News China. (2019b, May 31). China's EV plants expected to run at 80% of capacity in 2019–20. *Automotive News China*.

Automotive News China. (2019c, July 5). Volkswagen: 50% of China sales will be NEV by 2035. *Automotive News China*.

Automotive News China. (2020, September 14). Is the surge in EV stocks out of juice? *Automotive News China*.

Bair, J. (2002). Beyond the Maquila Model? NAFTA and the Mexican Apparel Industry. *Industry and Innovation, 9*(3), 203–225.

Balcet, G., Hua, W., & Xavier, R. (2014, June 22). The post-acquisition of Volvo by Zhejiang Geely: Technological catching up, asset-seeking strategies and impact. Ppt. presentation 22nd International Colloquium of GERPISA, Kyoto.

Borrus, M., & Zysman, J. (1997). *Wintelism and the changing terms of global competition. Prototype of the future?* (BRIE Working Paper 96B). Berkeley Roundtable on the International Economy.

Brandt, L., & Thun, E. (2010*). The fight for the middle: Upgrading, competition, and industrial development in China*. (Department of Economics Working Paper 395). University of Toronto.

Chen, B., & Midler, C. (2016). The electric vehicle landscape in China: Between institutional and market forces. *International Journal of Automotive Technology and Management, 16*(3), 248–273.

China Labour Bulletin. (2017). Hundreds of Volkswagen Workers in Northeast China Demand Equal Pay. https://clb.org.hk/content/hundreds-volkswagen-workers-northeast-china-demand-equal-pay. Accessed 17 Jun 2019.

Ernst, D., & O'Connor, D. (1992). *Competing in the electronics industry: The experience of newly industrializing economies*. OECD.

Financial Times. (2017, October 15). Geely and Volvo jointly develop components. *Financial Times*.

Financial Times. (2019a, July 10). China's car market set for second year of falling sales. *Financial Times*.

Financial Times. (2019b, July 12). Ford and Volkswagen to share costs on electric and self-driving cars. *Financial Times*.

Financial Times. (2020, October 17). Foxconn accelerates electric vehicle drive with new tech platform. *Financial Times*.

Financial Times. (2021, January 8). Foxconn ramps up EVs push via deal with Chinese start-up. *Financial Times*.

Fraunhofer ISI. (2016). *Energiespeicher Monitoring 2016: Deutschland auf dem Weg zum Leitmarkt und Leitanbieter?* (Frauenhofer ISI Research Report). Fraunhofer-Institut für System- und Innovationsforschung ISI.

Gao, P., Kaas, H-W., Mohr, D., & Wee, D. (2016). Automotive revolution – Perspective towards 2030: How the convergence of disruptive technology-driven trends could transform the auto industry. *McKinsey Advanced Industries Research Report*. McKinsey & Company. https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/disruptive-trends-that-will-transform-the-auto-industry/de-de. Accessed 8 Jul 2021.

Gereffi, G., & Korzeniewicz, M. (Eds.). (1994). *Commodity chains and global capitalism*. Praeger.

Hans Böckler Stiftung (HBS) (2012). *Elektromobilität und Beschäftigung. Wirkungen der Elektrifizierung des Antriebsstrangs auf Beschäftigung und Standortumgebung (ELAB)*. Hans Böckler Stiftung.

Hung, H. F. (2016). *The China boom: Why China will not rule the world*. Columbia University Press.

Huang, Y., & Sharif, N. (2017). From 'Labour Dividend' to 'Robot Dividend': Technological Change and Workers' Power in South China. *Agrarian South: Journal of Political Economy, 6*(1), 53–78.

IPRD (Institute for Reform and Development of the Pearl River Delta). (2018). Huizhou shi chanye he chengshi fazhan yanjiu baogao (Industrial and Urban Development in Huizhou City). *IPRD Policy Consulting Report*, Unpublished Manuscript. Sun Yat-sen University.

Jürgens, U., & Sablowski, T. (2004). A new model of industrial governance? Wintelism in the InfoCom Industry. In M. Faust, U. Voskamp, & V. Wittke (Eds.), *European Industrial Restructuring in a Global Economy. Fragmentation and Relocation of Value Chains* (pp. 221–240). Soziologisches Forschungsinstitut Göttingen (SOFI).

Kingsley, D., & Urry, J. (2009). *After the car*. Polity Press.

Lee, A., & Ke, W. (2018, 8 January). Taiwan PC makers to reap new harvest from automotive electronics. *Digitimes*. https://www.digitimes.com/newsshow/company.asp?datePublish=2018/01/08&pages=PD&seq=208&cid=80. Accessed 16 Jul 2021.

Lüthje, B. (2001). *Standort Silicon Valley: Ökonomie und Politik der vernetzten Massenproduktion*. Campus.

Lüthje, B. (2017). How Will China's Industrial Modernization Plan Affect Chinese Workers? East West Center. https://www.eastwestcenter.org/news-center/east-west-wire/how-will-china%E2%80%99s-industrial-modernization-plan-affect-workers. Accessed 8 Jul 2021.

Lüthje, B. (2019). Platform capitalism 'Made in China'? Intelligent manufacturing, taobao villages, and the restructuring of work. *Science, Technology and Society, 24*(2), 199–217.

Lüthje, B. (forthcoming). Regimes of accumulation and modes of regulation in China's Emergent Capitalism. In R. Boyer (Ed.), *Regulation Theory – A New State of the Art*.

Lüthje, B. (2021). Going digital, going green: Changing production networks in the automotive industry in China. *International Journal of Automotive Technology and Management, 21*(1–2), 121–136.

Lüthje, B., Hürtgen, S., Pawlicki, P., & Sproll, M. (2013). *From Silicon Valley to Shenzhen – Global Production and Work in the IT-Industry*. Rowman and Littlefield.

Lüthje, B., Luo, S., & Zhang H. (2013). *Beyond the iron rice bowl: Regimes of production and industrial relations in China*. Campus.

Lüthje, B., McNally, C., & Ten Brink, T. (2013). Rebalancing China's emergent capitalism, state power, economic liberalization and social upgrading. *Journal of Current Chinese Affairs, 42*(4), 3–16.

Lüthje, B., & Tian, M. (2015). China's automotive industry: Structural impediments to socio-economic rebalancing. *International Journal of Automotive Technology and Management, 15*(3), 244–267.

Luo, S., & Yang, T. (2019). Moderated mobilization: A new model of enterprise-level collective bargaining in South China. *The China Quarterly*, 1–22. https://doi.org/10.1017/S0305741019001061

McNally, C. (2013). Refurbishing state capitalism: A policy analysis of efforts to rebalance China's political economy. *Journal of Current Chinese Affairs, 42*(4), 45–71.

Muniz, S. T. G., Belzowski, B. M., & Zhu, J. (2019). The trajectory of China's new energy vehicles policy. *International Journal of Automotive Technology and Management, 19*(3–4), 257–280.

Nangui, B. (2019). Ningde Shidai de quanqiuhua kuozhang, goujian dianchi chanye de da geju (CATL's global expansion, creating the battery industry's big pattern). *Yan Zhi qiche jianwen (Yan Zhi Automobile Insight) Market Report*. WeChat Offical Site. http://mp.weixin.qq.com/s/SJ4RJqUrl. Accessed 28 Aug 2019.

Pardi, T., Krzywdzinski, M., & Lüthje, B. (2020). *Digital manufacturing revolutions as political projects and hypes: Evidences from the auto sector*. (ILO Working Paper 3: The Future of Work in the Automotive Industry). International Labor Organization.

Pawlicki, P. (2015). The development of Chinese telecom equipment companies and China's industrial policies – Adaptability and unintended consequences. Unpublished Research Report. Goethe University Africa's Asian Options (AFRASO) Research Program, p. 41. Frankfurt, Germany.

Piore, M. J., & Sabel, C. F. (1984). *The second industrial divide: Possibilities for prosperity*. Basic Books.

Sanderson, H., Hancock, T., & Lewis, L. (2017, March 5). Electric cars: China's battle for the battery market. *Financial Times*. https://www.ft.com/content/8c94a2f6-fdcd-11e6-8d8e-a5e3738f9ae4. Accessed 7 Jul 2021.

Srnicek, N. (2017). *Platform capitalism*. Polity Press.

Taipei Times. (2021, January 14). Hon Hai to set up vehicle joint venture. *Taipei Times*. https://www.taipeitimes.com/News/biz/archives/2021/01/14/2003750511. Accessed 7 Jul 2021.

Ten Brink, T. (2019). *China's Capitalism. A Paradoxical Route to Prosperity*. Translated by Carla Welch. University of Pennsylvania Press.

Thun, E. (2006). *Changing Lanes in China, direct investment, local government, and auto sector development*. Cambridge University Press.

Thun, E., & Sturgeon, T. J. (2017). *When global technology meets local standards. Reassessing China's telecom policy in the age of platform innovation*. (MIT-IPC Development Working Paper 17–001). MIT Industrial Performance Center.

Tyfield, D. (2018). *Liberalism 2.0 and the rise of China: Global crisis, innovation and urban mobility*. Routledge.

Wang, H., & Kimble, C. (2011). Leapfrogging to electric vehicles: Patterns and scenarios for China's automobile industry. *International Journal of Automotive Technology and Management, 11*(4), 312–325.

Womack, J. P., Jones, D., & Roos, D. (1990). *The machine that changed the world*. Rawson Associates.

Yang, T., Luo, S., & Lüthje, B. (2019). *Machine Replacing Man? Upgrading and Transformation of Car Suppliers in the Pearl-River Delta 2010–2017*. (Friedrich-Ebert-Stiftung Discussion Paper). FES Office China.

Zhang, L. (2015). *Inside China's automobile factories*. Cambridge University Press.
Zheng, Y., & Huang, Y. (2018). Market in state. *The political economy of domination in China*. Cambridge/New York: Cambridge University Press.

CHAPTER 13

Few Opportunities for Smallholders for Upgrading in Agricultural Value Chains

Ismail Doga Karatepe and Christoph Scherrer

Introduction

Agriculture is a sector which still employs almost one-third of all workers worldwide. The allocation of agricultural work is globally uneven. Lower middle income countries host almost half of the people employed in the agricultural sector. In low-income countries, agriculture's share of total

Our contribution builds on the team of the project Global Agricultural Value Chains: Jakir Hossain and Manish Kumar (rice), Mubashir Mehdi, Burhan Ahmad, Thales Penha, Walter Belik, Valdênia Apolinário, Khiddir Iddris, Francis Enu-Kwesi and Angela Akorsu (mango), Dan Hawkins, Bruno Perosa, Santosh Verma, and Do Quynh Chi (coffee). The project has been supported by grants of the Hans Böckler Foundation and the International Center for Development and Decent Work.

I. D. Karatepe · C. Scherrer (✉)
International Centre for Development and Decent Work (ICDD), University of Kassel, Kassel, Germany
e-mail: scherrer@uni-kassel.de

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_13

employment is even higher, on average it is 67.9% (ILO, 2019). Therefore, the sector is of great economic and social importance for the Global South.

The decent work[1] deficit in the Global South is comparatively more pronounced in agriculture. Farm workers and the so-called smallholders[2] generally suffer from insufficiencies in earnings, social protection, political participation, and health and safety precautions (Radon & Scherrer, 2019; Scherrer & Verma, 2018). A commonly proposed solution to the plight of smallholders is their integration into global agricultural value chains (VCs). For example, the Food and Agriculture Organization of the United Nations recently stated: "by participating in global value chains, smallholder farmers can boost their food production and income" (FAO, 2020). Participating in such chains is supposed to provide access to better-paying end markets and lead to the adoption of more efficient farming techniques (Lutz & Olthaar, 2017; World Bank, 2007). The coalition calling for the integration of smallholders to the world market includes not only international organizations such as the FAO and the World Bank, but also powerful corporations both upstream (such as agricultural input industry) and downstream (such as retailers) of the VC (Felsted, 2010; The World Bank, 2018).

Research, however, highlights specific risks for smallholders joining global supply chains such as: high initial investments in order to fulfill phytosanitary and other quality requirements; rejection of produce not complying with these requirements; higher levels of indebtedness because of commercially acquired inputs; and volatility of world market prices. Even in cases of successful participation in global supply chains, the value capture of the smallholders remains at best rather limited, i.e., they receive only a small fraction of the price the final consumer pays (Evers et al., 2014; Willoughby & Gore, 2018). Based on 114 articles on contract

[1] Decent work is a term coined by the International Labor Organization. The ILO's Decent Work Agenda includes almost 200 international labour standards under the following four headings: (1) full employment (including business start-ups); (2) respect for fundamental rights of workers; (3) social protection; (4) social dialogue.

[2] The size of small farms varies a lot among the countries in our case studies: from up to 1 hectare (ha) among rice growers in Bangladesh and India to 20 ha among the Brazilian coffee growers.

farming,[3] Bellemare and Bloem (2018, p. 268) identify the highly heterogeneous and context-dependent effects of contract farming, and conclude that not enough evidence exists for drawing "any broad policy relevant conclusions."

With a team of international researchers, we have set out to probe the social upgrading possibilities for owners and tenants of small farms as well as their workers. The concept of social upgrading is employed as a means of assessing the improvement of the conditions of farm workers and smallholders. For us, social upgrading means reducing decent work deficits, i.e., increased and more stable earnings, some form of social protection, access to political decision-making bodies (or some form of social dialogue), and better health and safety precautions (ILO, 2019).

Our research takes a crop-and-country comparative perspective, which is methodologically based on Ragin (2014, p. 52) and Bryman (2012, p.75). One of the premises of our research is that the characteristics of the crop, the end markets, and governance of the supply chains (including product and process related standards), as well as the national political, economic, and cultural contexts influence the contours of the respective VCs and, concomitantly, the social and economic conditions of smallholders and agricultural workers. Accordingly, we chose crops which are predominantly produced by smallholders in the Global South but are distinguished along the axes of domestic versus international end markets and short versus long shelf lives. For a cash crop mainly destined for exports we chose *coffee*, and for mainly domestically consumed crops we selected the staple food *rice*. While in their processed form coffee and rice can be stored for quite some time, fresh fruits are quickly perishable. Since this is especially true for *mangoes*, we chose them for a product with a short shelf life. The case studies are shown in Table 13.1.

The selection of countries (see Table 13.1) was less driven by conventional criteria; it depended more on the established network of scholars. However, the chosen countries are major producers of one or more of our selected agricultural products; and, in addition, are sufficiently diverse to provide the interesting insights into the influence of a country's economic, political, and social characteristics on the possibilities for social and economic upgrading.

[3] Among the different types of inclusion of smallholders in the global agricultural VC, contract farming is the most integrated. It is an agreement between a grower and a processor regarding the production of an agricultural commodity.

Table 13.1 The matrix of case studies

Products	*Countries*			
Coffee/stimulant	Brazil	India	Colombia	Vietnam
Mango/perishable	Brazil	Pakistan	Ghana	
Rice/staple	Brazil	India Punjab + Bihar	Bangladesh	

Economic upgrading denotes the processes by which coffee, rice, and mango producers move to relatively high-value activities and thus obtain more of the value generated across the VC (Barrientos et al., 2011). Following the global VC and network analysis literature, four distinctive, albeit interrelated, types of economic upgrading can be found: chain, functional, process, and product upgrading.

Chain upgrading happens when smallholders move into new yet related products or when they start to pursue product differentiation. For example, smallholders may have upgraded their VCs by diversifying away from monoculture to polyculture, i.e., the simultaneous cultivation of several crops. Functional upgrading happens when producers take over more lucrative tasks in the VC, e.g., directly marketing their premium quality mangoes to high-end retail stores. Process upgrading refers to increasing the efficiency of crop production by adopting new techniques, increasing inputs, using more machinery, investing in land amelioration, and/or skill training. Product upgrading generally refers to moving to value-added crops, f.i., by moving from non-basmati rice to basmati rice, which is richer in terms of nutrient content and aroma.

Our key findings pertain to the importance of collective action by key stakeholders, including smallholders and a supportive state, for economic and social upgrading. On their own, smallholders face obstacles entering global agricultural VCs and, if they are included, their value capture is marginal. Strong actors (e.g., big retailers) in the chain act collectively. Through their associations and their offshoots or their well-established connection with universities and local, national, or international public bodies, they can successfully pursue their own collective interests.

Growth or mere survival for smallholders under the pressure of strong actors in the VC requires concerted efforts in agricultural research, large-scale investment in infrastructure (irrigation, cooling houses, roads, etc.), and targeted marketing. While strong associations like the Colombian

National Coffee Growers' Federation (FNC) can partly stem these efforts, state support remains crucial by bringing together the various stakeholders, the financing component of the required infrastructure, and providing subsidized inputs. Successful collective action can open access to more profitable export markets and, in principle, to more employment opportunities.

However, as the Brazilian case has shown, effective process upgrading substitutes capital for labor and thus diminishes the demand, especially, for low-skilled workers. Certification of farms comes only with minor benefits for workers, such as better hygiene in the workplace and living quarters, as well as fewer occupational health risks.

Support of the state is especially necessary for the so-called weak interests, i.e., those social groups that are poorly represented in the civil and political society. Where the state does not support these groups, usually because of their political meekness, no social upgrading takes place. This is especially true for smallholders with no or little literacy and, of course, for landless agricultural workers. They generally face more structural constraints than large producers or other powerful actors in pursuing their interest at the state level.

For agricultural workers, social upgrading was noticed only in the case of Brazil, where, during the reign of the Workers' Party (PT), the country's labor laws were more strictly enforced than those of previous governments. The impeachment of Dilma Rousseff of the Labor Party in 2016 and the subsequent conservative government have not only led to less enforcement, but also to a dilution of the legal protection of agricultural workers.

We start our chapter by highlighting some of the problems one faces in trying to measure the impact of VC participation on smallholders. Following this is our theoretical understanding of the link between economic upgrading and social upgrading. We conclude that product and labor markets are not directly related and, therefore, economic upgrading is not enough to secure social upgrading. The justification of our case studies selection follows. It includes hypotheses about selected factors' impacts on smallholders and agricultural workers. The following presentation of the case studies is ordered according to these factors. Special attention is given to the role of the state in promoting social upgrading. The conclusion highlights the importance of collective action for social upgrading.

Problems of Measurement

A key reason for the lack of unambiguous evidence for smallholders' benefits of joining global agricultural VCs, as mentioned by the meta-study of Bellemare and Bloem (2018), is the difficulties in measuring the effects of joining a contractual arrangement compared to not joining. It starts with the observation that participation in such an arrangement is not a random affair, neither for the firm nor for the farm. Firms' selection criteria for smallholders comprise such factors as the macro-ecological suitability of the smallholders' region, transaction costs (transportation costs, contract compliance), and the availability of warehouses and security. The same criteria, for example, accessibility of the farm, may be judged differently by two firms. While one firm might prefer the most accessible areas, the other firm might expect lower procurement prices because remote farms have fewer alternatives to sell their products. On their side of the relationship, smallholders might not accept an offer for a contract because they might be risk-averse (concerns about price volatility, exposure to chemicals, debt-related land foreclosure), might distrust outsiders, or succumb to peer group pressure. The motivations and capabilities of smallholders are especially difficult to observe. In order to attract buyers or certification schemes, farmers might invest also before they join the chain. It is quite likely that the positive contracting experience of one smallholder may not be replicated by another smallholder. Measuring the welfare effect is also challenging. The common indicator, profits, eludes straightforward identification for a few reasons. One cannot rely on market prices for smallholders' inputs and outputs, because they are not operating in perfect markets (Barrett et al., 2012, p. 720). Labor time, a key input factor, is particularly difficult to observe from the outside. Surveys might help, but their validity depends not only on how forthcoming smallholders are with revealing their cost structure and their sales successes but also on their ability to account for the input costs. Furthermore, what might look profitable in the short term might be costly in the longer term, for instance, soil and water depletion through overuse (Swain, 2016).

Another issue is the fallacy of composition. Scaling up the benefits of joining an agricultural VC may face the obstacle of insufficient growth of demand to accommodate all those who have been encouraged by the success of some of their peers to join the chain. The buyers may also entice participation by providing attractive contract conditions to the first movers in the region. Once they have signed up enough participants,

they might offer less attractive terms to latecomers or in the next round (Barrett et al., 2012, pp. 725–726).

These challenges to measuring the impact of shareholders' participation in VCs suggest the limits of universal claims. We have, therefore, chosen a comparative approach that attempts to be sensitive to many potential factors and specific contexts. We expected to discover a few common themes across the cases, without providing definite answers for the question regarding opportunities for social upgrading in agriculture.

Why Economic Upgrading Does Not Automatically Translate into Social Upgrading for Workers

Much of the economic literature proposes that benefits of economic upgrading will trickle down to the workers employed in the economic units that successfully upgraded (e.g., Kapsos & Bourmpoula, 2013; Taglioni & Winkler, 2016). This proposition is based on two assumptions: first, that upgrading leads to more value capture of the value created in the global supply chain; second, that the product and the labor markets are tightly connected. The extent to which economic upgrading leads to more value capture depends not only on the specific mode and degree of upgrading, but also on the responses of competitors and the power resources of the buyers. If many competitors follow the upgrading trajectory of the supplier firm, the key buyers remain in a powerful situation vis-à-vis all the upgraded suppliers. Unless the suppliers gain access to the final consumers or develop unique technological capabilities, they will remain dependent on the buyers. The buyers' control of access to the end markets will provide them with monopsony power to dictate the purchasing prices, and thus capture the main part of the value generated in the chain.

Even less realistic is the assumption of a close connection between product and labor markets. While more value capture potentially allows for higher wages and better working conditions, it is not at all guaranteed that the additional value capture will be equally shared amongst owners, managers, and workers. The reason is that at the level of a firm, success in the product market has little impact on the demand conditions in the labor market. Only at a more aggregate level, i.e., when many firms engage successfully in economic upgrading, might their collective success lead to a substantial increase in the demand for labor and thus to higher wages. Of course, a firm whose upgrading leads to a rapid increase in labor

Table 13.2 Similarities and differences—case studies

	Coffee	*Mango*	*Rice*
Perishability	Low on shelf, fairly high at farm	High	Very low on shelf, low at farm
Mechanization	Dependent on terrain and variety (robusta vs. arabica)	Low	Great variety depending on the terrain and the size of the farm
Nutritional importance	Low	Medium	High
Foreign exchange earnings	High	Low	Low to medium depending on the variety (e.g., basmati vs. non-basmati varieties)
Market destination	Mostly international	Mostly domestic	Mostly domestic

demand might clear the local labor market. Furthermore, upgrading does not necessarily imply a greater demand for labor. Productivity increases may outpace demand. In addition, the labor market may not be at equilibrium, i.e., unemployment may exist. It is, therefore, pertinent to carry out a close examination of the dynamics of the labor market (see, Scherrer on power in this volume).

The Selection of the Case Studies

Our case studies cover smallholders' participation in the coffee, mango, and rice VCs (Table 13.2). We consider the following product differences to be important factors for the likelihood of social and economic upgrading: the length of a product's shelf life; the degree to which its production can be mechanized at the current level of technology; a product's nutritional importance, i.e., its contribution to food security; its significance for a country's foreign exchange earnings; and its market destinations (see Table 13.2).[4] In the following, we hypothesize the role of these factors for smallholders' position in the supply chain.

[4] Insofar as our research covers several countries with different consumption habits, crops, supply and storage characteristics, measuring and comparing price and income elasticities may explain rather little.

The production of an agricultural product with *long-term storage possibilities* is less exposed to the vicissitudes of seasonality, less dependent on storage and cooling technologies, and can be marketed more easily in distant markets. For the governance of the supply chain, the implication is a lower level of integration (Johnson & Berdegue, 2004), because less speed and precision is necessary to connect farm to fork. Theoretically, differences in storage possibilities should impact the power relations among the actors of the supply chain. In the case of a perishable product, the seller cannot wait for better market prices after the harvest. The vulnerability of the smallholder selling perishable products may be heightened in the case of employing wage labor. By threatening to withhold their labor power at harvesting time, workers can potentially enhance their bargaining power. Therefore, we assume that the global supply chain of the perishable mango is more integrated, more difficult for smallholders to enter, and, if smallholders do ultimately become part of the supply chain, they will be in a weak bargaining position. Farm laborers may potentially be in a stronger position, if no other factors prevent them from exercising their labor withholding power. While the shelf life of coffee and rice is long, coffee beans must leave the farm for further processing fairly quickly, because once they lose their freshness, their quality and price are greatly reduced. For this reason, smallholders' position in the coffee supply chain might not be so different from mango-producing smallholders. In contrast, paddy rice ("unmilled rice"), i.e., the sun-dried farmer's rice after it is harvested, can be stored for years. Therefore, rice-producing smallholders, as sellers, are potentially in a stronger bargaining position if they are not dependent on immediate payment and have enough proper storage capacity.

The differences in *mechanization* have ramifications on the capital and labor intensity of agricultural production. While harvesting coffee beans and rice can be done with machines, harvesting by hand is still prevalent and, so far, is the only means for mango production. However, harvesting is not the only area of possible mechanization. For instance, management of weeds or construction of work paths can also be done with machines. Therefore, a comparison of the extent of mechanization must consider the whole range of tasks traditionally done by smallholders and farm laborers. If the use of machinery leads to a substantially higher level of capital intensity and thereby to higher economies of scale, smallholders might be squeezed out of the market.

As a staple good, rice is consumed by half of the world's population every day and consequently, is of great *nutritional* importance. Out of food security concerns, governments are much more likely to intervene in rice markets than in coffee and, even more so, mango markets. Not only production but also the international trade of rice has been largely shaped by government policies. In an electoral democracy, smallholders might obtain more government support because of their own voting power and consumers' preference for stable and sufficient supply of food stuff.

Coffee is a traditional export good and one of the most internationally traded commodities (Gonzalez-Perez & Gutierrez-Viana, 2012). For some countries, coffee was, and for some still is, a major source of *foreign-exchange* revenue. Accordingly, it receives government attention. In contrast to coffee, as a staple crop, the rice produced is mostly consumed at home. According to OECD-FAO estimations, the ratio of total rice export to the world rice output was less than 9% in 2016 (OECD-FAO, 2017). Mango was almost solely consumed at home before the invention of modern cooling techniques and the decreasing costs of airfreight.

If an agricultural product is destined for export, producers may have to adhere to international quality and phytosanitary *standards*, either set by international governmental bodies, non-governmental certification associations, private parties of wholesalers, or retailers.

The countries, selected for case studies of *coffee*, are its key producers. Brazil is by far the world's largest coffee producer and exporter. It produces mostly commoditized coffee and is most advanced in mechanization. Vietnam has become the second-largest producer in a few decades. Much less mechanized than Brazil, Vietnam also supplies mostly commoditized coffee. Colombia is the third largest and a traditional high-quality coffee producer with a large smallholder base. India is ranked seventh; especially in comparison to Brazil and Colombia, coffee plays a much lesser role in Indian agriculture.

For *mango*, we have chosen Brazil and Pakistan. In terms of production, Brazil ranks only seventh, yet it holds the second-largest share of the export market after Mexico. Pakistan ranks fifth, but its share of the export market is much smaller and, concomitantly, its domestic market is much more important. Its export markets also differ from Brazil. While Brazil sells mangoes mainly to continental European retailers, the UK and Middle Eastern countries have traditionally been the biggest consumers for mango produced in Pakistan. These different destinations may have

an impact on the standards prevalent in the mango VC. We have also included Ghana for exploring the challenges that marginal producers face in entering the world markets.

In the case of *rice*, we have chosen India, given that it ranks second to the People's Republic of China in terms of production, and is the top rice-exporting country. Considering the possible influence of the market destination—domestic versus international market—on the features of the rice supply chain, Bangladesh is included in the project. In the case of Bangladesh, the produced rice is consumed domestically, and the net export of rice for Bangladesh is negative for the covered period.

Key Findings from the Case Studies

The case studies have been extensively documented in the volume edited by Karatepe and Scherrer (2021): coffee (Chi et al., 2021), mango (Mehdi et al., 2021), and rice (Hossain et al., 2021). In the following, we will first present their findings concerning working and livelihood conditions, as well as social and economic upgrading. We will then present their findings according to the abovementioned factors that ostensibly influence the possibilities of social upgrading for smallholders and farm laborers.

Working and Livelihood Conditions

The smallholders and farm workers in the *rice* VC of Bangladesh and India suffer from severe decent-work deficits. The farm workers are deprived of basic rights and decent wages. Women receive even lower wages for the same tasks. They also face severe health-related problems from spraying pesticides and spreading fertilizers without safety measures. This is especially true for the informally employed workers, who face higher occupational health risks because of a lack of training and insufficient provision of protective equipment.

In the case of *coffee*, the livelihood conditions of small farmers, in general, are better than that of the workers. Most Brazilian small farms are profitable, even those less than 10 ha. In India, even the much smaller farms seem to survive. In Colombia, many of the smallholders also must work on other farms because they frequently lack cash before the end of the harvesting season. In Vietnam, the smallholders rely mostly on family

labor. The average farm income divided per person active in the household is higher than the rural poverty line in most cases. Differences in the livelihood conditions of the small coffee growers are mainly the result of whether they belong to the majority or minority population and to a growers' association. The indigenous coffee growers, on average, are less educated and poorer. The same is true for the growers from indigenous populations (Scheduled Tribes), and from low-ranking castes (Scheduled Castes and Other Backwards Classes) in India.

The situation for small-scale *mango* producers and farm labor in Pakistan is comparable to the Indian rice farmers. Like in Pakistan, Brazilian small-scale mango producers use mainly family labor to help in the production process. In contrast to Pakistan, the Brazilian large-scale producers resemble enterprises and mango production is their source of income. They comply with the prohibition of child labor stipulated by law and the requirements for global food certification. On the large-scale farms, the women are concentrated in the packing houses, with field workers being mostly men.

Social and Economic Upgrading

In the case of *coffee*, the ramifications of economic upgrading for social upgrading also differed from country to country. In Brazil, economic upgrading brought about more permanent positions and considerably fewer temporary jobs. In Colombia, social upgrading has been limited to the farmers, and has not been extended to the hired laborers, despite their significant numbers and the fact that quite a few of the hired workers are themselves coffee growers, though marginal producers. In Vietnam, social upgrading took the form of rapid expansion of the industry, which provided more employment and higher returns for smallholders in comparison to their previous crop. The indigenous farming population has been left behind. Meanwhile, no social upgrading is noticeable in India.

Most South Asian *rice* growers own very small plots because of uneven land distribution and rapid population growth. The small-scale production hinders mechanization and access to extension services. Cooperatives and common ownership of equipment are seldom present. In comparison to Bangladesh and India's Bihar, Punjab (India) offers its small farmers better conditions. Besides the favorable ecological conditions for Basmati, rice farmers enjoy more state support (see below). However, it comes at a

cost. The higher yields in rice production translate into higher land rent. The yields rely on more inputs in terms of hybrid seeds, fertilizers, pesticides, and machinery, which require a solid capital base or access to loans at low interest rates. Both land rents and capital requirements squeeze out the marginal farmers.

Some of Pakistan's *mango* growers, mainly medium to large, benefit by equipping themselves with the skills and technologies needed to access export markets. They and their down-the-chain partners captured more value. However, the adoption of best practices is limited among the small growers, since they mainly sell their produce to the commission agents/wholesalers in the local market. In Brazil, economic upgrading for the large-scale farmers has been accompanied with some improvements to workers' conditions; however, improvements in decent work conditions are still limited to the formal workers on large-scale farms and lead to fewer jobs (see below).

Size Matters

The studies confirmed the frequently mentioned hurdles smallholders face in linking up to global VCs. While in all the observed crops and countries, some large-scale farmers succeeded in process and product upgrading, there is limited evidence of process or product upgrading at the level of small-scale producers. Process and product upgrading require a certain level of know-how, capital, and social networks for accessing high-end markets. The desired standards for export markets can be attained only by heavily investing in the mango orchards, coffee plantations, rice fields, and post-harvest management. In the case of mangoes, smallholders are also faced with the high costs of cooling equipment for transport. Furthermore, we see that certifications (and other codes and standards) may exclude smallholders from the international markets because obtaining a certificate requires both capital and knowledge. In the absence of coordination and collective action in the form of cooperatives and state support, the small-scale producers are overwhelmingly dependent on the middlemen.

The limitations for upgrading were especially pronounced for the rice growers in Bihar and Bangladesh because their poor bargaining power leaves no surplus for investments. The Colombian and some Vietnamese small-scale coffee growers were able to overcome some hurdles to economic upgrading via strong associations or cooperatives.

On average, farm workers have not benefited from the gains captured by the large-scale farmers. The exception is Brazil, where some improvements in the working conditions for mango farm workers have been accompanied by economic upgrading. However, the improvements have been limited to the formal workers in large estates. This is because the relevant state authorities can only monitor the large farms; they fail to control medium and small-scale production sites where informal labor relations remain prevalent.

Perishability Worsens the Bargaining Power of Smallholders

As a perishable agricultural product, exporting mango to the high-end markets requires coordination involving a series of tasks in the pre- and post-harvest period. Various interwoven tasks—ranging from the practice of using pesticides to harvesting, marketing, certification, and organizing demand—cannot be organized by small-scale producers, because they lack cooperatives and/or are deprived of the capital and investments necessary to fulfill the requirements of the international markets. In the absence of capital or cooperatives, technical assistance is insufficient, especially regarding training related to the risks of the activity (e.g., irregular use of pesticides, lack of protective equipment).

In the case of mango, there is a great asymmetry between smallholders and middlemen, because smallholders can be left with spoiled products if they attempt to bargain hard. Furthermore, they run the risk of not being considered as suppliers for the next harvest. What we observed in the case of Pakistan and Brazil is that smallholders delegate harvest to buyers/middlemen, who eventually squeeze out the revenue from them. Small-scale coffee growers are exposed to perishability-related bargaining losses, as fewer fresh beans mean lower prices. The inverse power argument may not be true. While longer storage possibilities in the case of rice would theoretically allow producers to wait until better prices are available, the small-scale rice growers of India and Bangladesh typically either have depleted all their savings before harvest time or are indebted to their buyers and/or lack storage space.

Yet, perishability can bestow more bargaining power on farm laborers. The higher wages for seasonal workers are not the consequence of collective bargaining, but of labor market bottlenecks during harvest time. For instance, in the case of Brazil, during harvest time, pickers receive up

to USD 18 per day and the informally employed a little bit more. An informal worker can then earn twice the minimum wages per month.

Mechanization Leads to Social Upgrading and Downgrading

For mechanization to result in significant labor productivity increases, scale is of relevance. This strategy is, therefore, largely reserved for farmers with more land or cooperatives. The crop should also allow it. Concerning coffee, the huge Robusta farms on fairly flat terrain allow for a much higher level of mechanization in Brazil than in the hilly terrain dominant in Colombia or the tiny plots in India. The Vietnamese coffee cooperatives have also achieved a higher level of mechanization, while non-member farmers have been unable to afford it.

However, smaller machinery (such as power tillers in India), especially motorization of transport (or the installation of ducts to transport the coffee berries uphill in Colombia), is also increasing the labor productivity of smallholders. Depending on the size of investment in machinery, farmers run the risk of falling into a debt trap, if market prospects do not materialize as anticipated. The risk can be reduced through government action: for example, funding irrigation systems and providing subsidized energy for running these systems, as in the case of Punjab.

Large-scale mechanization leads to a bifurcation of the labor market. Mechanized farms employ fewer permanent workers, who have skills to handle machines. On the coffee farms of Brazil, the mechanization process reduced the demand for temporary workers by about two-thirds and permanent position work increased by about one-third between 2007 and 2016. On the Brazilian coffee plantations, temporary workers are now employed for shorter amounts of time during the year.

Nutritional Importance Does not Always Translate into Sufficient Government Support

As expected, the respective governments are much more involved in rice production than in the VC of mango. The degree of government support for smallholders, however, varies greatly among countries and provinces. The degree of government support depends, inter alia, on two factors: institutional and financial capacity as well as political mobilization. At one pole, we have the Brazilian government during the reign of the Workers'

Party (PT), which provided the cooperative, established by the Landless Rural Workers' Movement in Brazil (MST), Grupo Gestor do Arroz Ecológico, with the land, irrigation, storage capacity, and public procurement needed for its organic rice. The motivation, however, was not related to ensuring food security. It was rather a response to the problems of a large landless agricultural workforce and its mobilization capacity. At the other pole, we find the Bangladeshi government, who guarantees a minimum price for rice through its public procurement system. However, the government procurement centers are not accessible to the small rice growers, but only to the large producers and millers.

Between strong and no support, we find India, though with major differences between the two investigated states: Punjab and Bihar. The state government of Punjab offers more generous support. It provides for the costs of irrigation and an accessible public procurement system for paddy. In Bihar, there is no such governmental support for irrigation, and the public procurement system is rather dysfunctional. The public procurement system even works differently in different regions of Punjab because of its political orientation. In Patiala, Punjab, the state procures all non-Basmati rice varieties from farmers, which is 95% of the total paddy production. Patiala is in the Malwa region of Punjab, where farmers are politically organized, and the origin of most of the leaders of ruling and opposition parties. In order to keep their vote bank intact, public procurement continues to function efficiently in this region.

The limited and inefficient support provided by the governments of Bihar and Bangladesh results in a higher level of poverty among the rice growers of these regions than in Punjab. The more affluent Punjabi farmers face other problems. Their greater market orientation requires higher levels of commercially acquired inputs such as hybrid seeds, fertilizers, pesticides, and machinery. Thus, they run higher risks of over-indebtedness. Furthermore, heavily subsidized irrigation has led to a significant lowering of groundwater levels.

Prospects of Foreign-Exchange Earnings Attract Government Involvement

Foreign-exchange revenues are quite a central issue in some countries of the Global South, due to their trade deficits. Coffee, being one of the most traded goods, attracts the attention of governments'

foreign-exchange earnings. Under the leadership of Brazil and the accommodating position of the USA, coffee-producing states were able to stabilize international coffee markets and thus the prices in the period of the 1960s–1980s (International Coffee Agreement; ICA). After the breakdown of the ICA, the states lost their importance in the coffee trade: purchase and the sales of coffee were privatized in Brazil; the state-supported FNC in Colombia gave up its export monopoly and, also in India, the monopoly of the government-appointed Coffee Board was abolished, and the sector was left to its own. In addition to the international roasters, future traders and retailers in the high end of the global retail market (Europe, USA, and Japan, principally), the liberalization of the coffee market has also opened up opportunities to certain other countries. Vietnam's rise in the international coffee market is not only a result of market forces, but it is also an outcome of deliberate support of its government for coffee growers. The state-organized migration of Kinh (the majority group) to the land development centers, accompanied with credit flow to coffee production, facilitated Vietnam's export success.

Brazil's success in exporting mangoes is based on state-financed irrigation projects, most notably the Petrolina-Juazeiro and Açú-Mossoró regions. In Ghana and Pakistan, mango growers have not received major state support. Their considerably lower volume of exports relies primarily on private initiatives. However, a multi-stakeholder initiative including international development agencies, the Australian Centre for International Agricultural Research, and the University of Agriculture in Faisalabad orchestrated improvements in basically all parts of the mango value chain. The improvements allowed not only the export of mangoes to the European market but also translated in much higher margins for the participating Pakistani growers.

The Limited Impact of End Markets and Certification

In the case of rice, our analysis demonstrates that the end market may matter for smallholders. However, if rice is destined for high-end markets, it is generally other actors (namely, export firms, millers, or middlemen, among others) that capture the gains created along the VC. Producing rice for export or for urban areas does not automatically bring about any social and economic improvement for the farmers. For instance, Punjabi farmers cultivating Basmati earn more than non-Basmati farmers. Yet, there is no income difference whether the Basmati rice is sold domestically

or abroad. The farmers sell paddy in the market to unknown procurers through commission agents. The procurers are generally agents of rice mills, who may sell rice in India or abroad.

In the case of mango, due to the internationally required certification, the small-scale producers have noticeably restricted access to the international market. The market-mediated quality attributes and phytosanitary standards of high-end markets create barriers for small-scale producers' participation. Therefore, better sanitary standards are limited to those able to conform to certification requirements.

Certification's impact on coffee growers is, in the main, beneficial. Certification is a requirement to access more profitable markets but does not guarantee a better price if the quality of the product does not meet expectations. The certified farms, usually the bigger farms, achieve higher yields. In DakLak, the biggest coffee-farming province in Vietnam, the coverage of certified coffee farming remains limited to about a fifth of all farms. The certified farms receive a premium of up to 15%, but not all certified coffee can be sold as such, due to the limited demand for certified coffee.

The benefits of certification are less clear for the coffee workers. In general, workers receive more training and better protection against occupational health risks, not the least by improving hygiene conditions. However, certification is not enforcing compliance with labor laws in practice. In Colombia, half of the workers interviewed in one sample could not identify whether the farm they were working on was certified.

Social Upgrading Requires State Support and Collective Action

Among the factors, we analyzed as shaping social upgrading in agricultural VC, perishability turns out to weaken the bargaining power of the producers and mechanization has ambiguous effects. On the one hand, mechanization requires a more valued skillset and therefore comes with better employment conditions, but, on the other hand, it leads to an increase of precariously employed seasonal workers. As key factors for economic and social upgrading, the case studies identified the role of the state which itself is influenced by the collective action capabilities of smallholders and farm workers. We, therefore, conclude our account of the case studies with a discussion of the role of state and collective action especially for social upgrading.

The Key Role of the State

The limited bearing of private agricultural VC governance on social upgrading calls for attention to public governance. Our case study findings indicate that labor and social protection laws as well as their enforcement impact the social conditions of farm workers.

Brazil and India under the Lula and Modi governments, respectively, can be taken as two distinct examples in this regard. In the case of India, the laws have been (and still largely are) labor-friendly, owing to the progressive elites of the newly independent India. The Plantation Act, 1951 is a case in point. However, current labor law enforcement is far from being effective, especially in rural areas. The relevant public authorities are poorly organized and lack the financial means to cover the vast areas of rural India. The close network between political society and landowning elites prevent any reform.

In Brazil, the institutional arrangement protecting rural workers came three decades later. The post-dictatorship Brazilian Federal Constitution of 1988 granted rural workers the same social rights as urban workers. The efficient enforcement of the law, however, began with the Lula presidency. Improvements in the real wages, collective agreements, frequency of labor inspections, access to health services resulted in better economic and social conditions for the farm workers. Landless Rural Workers' Movement (MST) has contributed to these improvements. From the outset, the movement has striven to provide access to land for the poor in rural Brazil, where the distribution of land is extremely uneven. Going beyond the traditional rural movements seeking land reform, the movement calls for gender and income equality as well as for an ecologically sustainable way of life. Adopting a bottom-up approach, MST has organized many land occupations. Over the course of the 1990s, the state and landlords frequently attempted to prevent MST's actions by violent means. However, MST succeeded in developing counter strategies to overcome the coercive means of the state and enjoyed some degree of public sympathy. The movement could initially mobilize allies both in and outside Brazil. Yet, it found even more scope to pursue its goals during the PT governments.

For all crops studied, Brazilian farm workers appeared to enjoy better economic conditions than those of other countries investigated. Despite the state's efforts in the PT era, coverage of the enforcement of the labor law is restricted. Our findings in the case of mango VCs suggest that only

large farms' legal compliance could be inspected. The labor conditions in the small and medium-scale farms located in remote areas are generally not inspected due to the lack of staff, vehicles, etc. Informal working relations are prevalent in small and medium-scale orchards. Brazilian family farmers frequently prefer to hire labor informally, because they are at risk of losing their status as a family farm, along with the privileges that come with this status (e.g., subsidized loan rates), if they employ more workers permanently. The workers with the formal contract covered by labor law are entitled to a pension, while the informally employed are excluded from these benefits. This loophole is testimony to the overall weak representation of landless workers in the Brazilian state. Overall, the value distribution within the mango chain changed only slightly; workers' share in the value distribution continues to be small.

In sum, the labor laws, the state's institutional enforcement capacity, and its position in the labor market as an employer are all crucial for social upgrading. To what extent a state is supportive of agricultural smallholders and laborers depends on these groups' political might. As a state is a social relation, i.e., a terrain or a battleground, where different strategies compete, agricultural workers and smallholders face more constraints than other groups with command over more power resources. These constraints can be overcome if workers and smallholders can act collectively in a calculative manner in accordance with their interests and identities. This argument leads us to the final part which highlights the importance of collective action.

The Importance of Collective Action

Regardless of the produce and country, our findings suggest that collective actions shape power relations and concomitantly change the respective bargaining power of actors. The conclusion we draw from the case studies is that without collective mobilization, smallholders and farm workers will not achieve social upgrading. Through collective action, smallholders and farm workers can receive more support from the state since they can challenge stronger actors to pursue their interest at the state level.

The coffee VC, with its few multinational big roasters and hundreds of thousands of smallholders, is a showcase for the importance of collective action. In Colombia, the most developed association with the deepest historical roots among growers is the Coffee Growers Federation (FNC).

It has supported its roughly 570,000 members in weathering the challenges of the liberalization of the coffee markets since the late 1980s by pushing for quality and successful marketing, which ensures that Colombian coffee obtains the premium prices in world markets consistently. This allowed the FNC to resume the policy of guaranteed purchase of all the coffee of its members, based on a floor reference price. Furthermore, it offers free technical assistance on a large scale and advice on how to access state subsidies, it also provides some social and investment infrastructure and has launched a higher end retail chain for its own brand. Among the FNC members, 33 coffee-grower cooperatives exist, which provide complementary services to what is offered by the FNC. The case study has highlighted the *delos Andes* Cooperative, which runs processing plants, has its own coffee shops, developed its own brands, and directly exports its coffee, as well as making heavy investments in the futures' market. The less well-organized farm workers of Columbia have not experienced such social upgrading.

In the case of rice, the MST-led cooperative's ability to enlist the support of the Brazilian state in the era of Lula has been a crucial ingredient of its success. The state furnished storage houses and had become a major buyer of its produce. In Pakistan, the multi-stakeholder pilot project of improving all parts of the mango chain translated to higher margins for the growers.

The collective organizations in the studied countries also play a major role in the certification of their members' coffee farms. They support certification by providing advice and technical assistance for bringing its members' production processes in line with the requirements of the various certificates. However, not all small farmers have the necessary means to comply with certification, especially those outside of associations or cooperatives. The demands of some more ambitious certificates, such as the one from the Rainforest Alliance, are too costly for many small growers.

Our findings suggest that most of the smallholders and farm workers lack cooperatives, unions, etc., through which they could otherwise jointly attempt to improve their social conditions. As a result, they lack political voice, and possess little bargaining power vis-à-vis well-organized powerful actors in the VC, such as large producers, input providers, and retailers. In contrast, the owners of capital or land appear to be conscious of the importance of collective action. Through their associations and their offshoots, or their well-established connections with the

universities and local, national or international public bodies, etc., they can successfully mobilize power resources and pursue their own collective interests.

Without collective action, the agricultural VC offers little for smallholders. Grassroots movements such as La Via Campesina[5] have for long been aware of it. Their call for "food sovereignty," i.e., prioritizing local agricultural production, deserves more intellectual and practical support.

References

Barrett, C. B., Bachke, M. E., Bellemare, M. F., Michelson, H. C., Narayanan, S., & Walker, T. F. (2012). Smallholder participation in contract farming: Comparative evidence from five countries. *World Development, 40*(4), 715–730.

Barrientos, S., Gereffi, G., & Rossi, A. (2011). Economic and social upgrading in global production networks: A new paradigm for a changing world. *International Labour Review, 150*(3–4), 319–340.

Bellemare, M. F., & Bloem, J. R. (2018). Does contract farming improve welfare? A review. *World Development, 112*, 259–271. https://doi.org/10.1016/j.worlddev.2018.08.018

Bryman, A. (2012). *Social research methods* (4th rev). Oxford University Press.

Chi, D. Q., Hawkins, D., Benzaquen Perosa, B., Verma, S., Karatepe, I. D., & Scherrer, C. (2021). Economic and social upgrading in coffee VC in comparative perspective. In I. D. Karatepe, & C. Scherrer (Eds.), *The phantom of upgrading in agricultural supply chains: A cross-country, cross-crop comparison of smallholders*. Nomos.

Evers, B., Opondo, M., Barrientos, S., Krishnan, A., & Amoding, F. (2014). *Global and regional supermarkets: Implications for producers and workers in Kenyan and Ugandan horticulture* (Capturing the gains working paper: Vol. 39). Capturing the Gains, Univ. of Manchester.

Food and Agriculture Organization (FAO). (2020). Global trade in food and agricultural products more than doubles in last two decades. http://www.fao.org/news/story/en/item/1309369/icode/. Accessed 30 Sep 2020.

Felsted, A. (2010, October 14). Supermarkets: Schemes to help developing world smallholders. Retrieved October 23, 2021, from https://www.ft.com/content/86a5cb8c-d65a-11df-81f0-00144feabdc0

[5] International farmer organization founded by more than 180 organizations in 81 countries.

Gonzalez-Perez, M.-A., & Gutierrez-Viana, S. (2012). Cooperation in coffee markets: The case of Vietnam and Colombia. *Journal of Agribusiness in Developing and Emerging Economies*, *2*(1), 57–73. https://doi.org/10.1108/20440831211219237

Hossain, J., Kumar, M., & Karatepe, I. D. (2021). Smallholders in the rice VCof Bangladesh and India. In I. D. Karatepe & C. Scherrer (Eds.), *The Phantom of Upgrading in Agricultural Supply Chains: A Cross-Country, Cross-Crop Comparison of Smallholders*. Nomos.

International Labour Office (ILO). (2019). Decent and productive work in agriculture: Decent work in the rural economy policy guidance notes. Retrieved October 23, 2021, from http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_policy/documents/publication/wcms_437173.pdf

Johnson, N. L., & Berdegue, J. A. (2004). *Property rights, collective action and agribusiness* (Focus 11 • Brief 13 of 16).

Kapsos, S., & Bourmpoula, E. (2013). Employment and economic class in the developing world. ILO research paper no. 6. *ILO, Geneva*, *279*, 14.

Karatepe, I. D., & Scherrer, C. (Eds.) (2021). *The Phantom of Upgrading in Agricultural Supply Chains: A Cross-Country, Cross-Crop Comparison of Smallholders. Nomos.*

Lutz, C., & Olthaar, M. (2017). Global value chains and smallholders in Sub-Saharan Africa. *Review of Social Economy, 75*(3), 251–254. https://doi.org/10.1080/00346764.2017.1357321

Mehdi, M., Burhan, A., Thales, P., Walter, B., Apolinário, V., & Karatepe, I. D. (2021). Economic and social upgrading in global agro-food value chain VCs: Mango in Brazil and Pakistan. In I. D. Karatepe, & C. Scherrer (Eds.), *The Phantom of Upgrading in Agricultural Supply Chains: A Cross-Country, Cross-Crop Comparison of Smallholders*. Nomos.

OECD-FAO (2017). OECD-FAO Agricultural Outlook 2017–2026. Retrieved October 23, 2021, from http://stats.oecd.org/viewhtml.aspx?datasetcode=HIGH_AGLINK_2017&lang=en

Radon, K., & Scherrer, C. (Eds.). (2019). *Occupational health and safety issues in agriculture // Occupational safety and health challenges in southern agriculture*. Rainer Hampp Verlag.

Ragin, C. C. (2014). *The comparative method: Moving beyond qualitative and quantitative strategies* (New ed.). University of California Press.

Scherrer, C., & Verma, S. (Eds.). (2018). *Decent work deficits in southern agriculture: Measurements, drivers and strategies. Labor and globalization*. Rainer Hampp Verlag.

Swain, B. B. (2016). Contract farming and Indian agriculture: Can agribusiness help the small farmer? *Indian Journal of Agricultural Economics, 71*(3), 285–297.

Taglioni, D., & Winkler, D. (2016). Making global value chains work for development. Retrieved October 23, 2021, from https://openknowledge.worldbank.org/handle/10986/18421

The World Bank (2018). Agrabusiness and value chains. Retrieved October 23, 2021, from https://www.worldbank.org/en/topic/agribusiness

Willoughby, R., & Gore, T. (2018). Ripe for change: Ending human suffering in supermarket supply chains. Retrieved October 23, 2021, from https://policy-practice.oxfam.org.uk/publications/ripe-for-change-ending-human-suffering-in-supermarket-supply-chains-620418

World Bank. (2007). *World development report: Agriculture for Development*. Oxford University Press; World Bank.

PART III

Strategic Consequences and Solutions from Different Backgrounds

CHAPTER 14

The Governance Challenges of Social Upgrading in Apparel Global Value Chains in the Context of a Sourcing Squeeze and the Covid-19 Pandemic

Mark Anner

Introduction

Freedom of association and living wages are two fundamental components of social upgrading in global value chains. However, in the apparel sector, the power afforded to lead firms due to industry consolidation has resulted in a squeeze on suppliers and on workers that is reflected in terms

This paper draws on (Anner, 2019), "Predatory purchasing practices in global apparel supply chains and the employment relations squeeze in the Indian garment export industry." International Labour Review 158 (4): 705–727. The author thanks the journal for its permission to re-print parts of that article here.

M. Anner (✉)
The Pennsylvania State University, University Park, PA, USA
e-mail: msa10@psu.edu

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_14

of low wages and increased worker rights violations. This squeeze down the supply chain has been exacerbated by the Covid-19 pandemic, with many lead firms abruptly cancelling orders without paying supplier factories for their orders. Millions of workers were adversely affected through lost income, lost jobs, and increased food insecurity. The sourcing squeeze and the Covid-19 crisis thus illustrate decent work governance gaps in global value chains. This chapter argues that these gaps can be addressed via a transformation of the institutional context in which GVCs operate. This involves collective bargaining and other binding agreements and more effective public governance. These arguments are illustrated through the country case study of India.

For the growth of global value chains to contribute to worker well-being, economic upgrading must be associated with social upgrading (Barrientos et al., 2011). In the case of apparel global value chains, there is a general agreement in the literature that most suppliers are now performing more complex tasks and thus have achieved some degree of economic upgrading (Gereffi et al., 2005). Moreover, that upgrading is assumed to have transformed apparel GVC governance structures from captive to relational, which should, in theory, lessen the power imbalance between buyers and suppliers (Gereffi et al., 2005, pp. 91–92). Yet, this chapter argues that many apparel GVCs reflect new forms of captive governance mechanisms, rather than more equalizing relational governance. As a result, many apparel workers still face low wages, long hours of work, and violations of their rights to form unions and bargain. Hence, the questions this chapter seeks to explore are: (1) Why has economic upgrading not contributed to social upgrading? (2) Which decent work governance mechanisms are most conducive to social upgrading?

In answer to the first question, I argue that while apparel suppliers have increased their capabilities, most buyers have consolidated their power to an even greater extent. In addition, global market conditions (notably, supplier overcapacity) have eroded supplier power vis-à-vis lead firms. The result has been an *increased* power imbalance between buyers and suppliers, which has resulted in a squeeze on price and other purchasing practices that in turn contributes to a squeeze on workers (Anner, 2020b).

Evidence for a lack of social upgrading is most apparent in the areas of wages, hours of work, and enabling rights. In all major apparel exporting countries, prevailing wages do not even cover 50% of living wages (WRC, 2013). Many apparel exporting countries chronically violate national laws and international standards on hours of work (Anner, 2018). And the

growth of apparel exports is associated with rising workers' rights violations (Anner, 2020b). All of these trends were greatly exacerbated with the Covid-19 pandemic, when retail outlets in major consumer countries were forced to shutter. Retailers and brands responded by using their considerable GVC leverage to abruptly cancel billions of dollars of orders without paying despite their contractual commitments to their suppliers. In Bangladesh alone more than one million workers were adversely affected, with many being sent home without severance or furlough pay (Anner, 2020a).

Addressing deficiencies in social upgrading can be achieved by examining the institutional context in which these GVCs operate at the micro-level (worker-management relations), the meso-level (national government regulatory regimes), and the macro-level (international rules and practices). At each level we find decent work governance gaps, which have been exacerbated by the private governance structure of buyer-driven global value chains. Addressing these gaps, therefore, requires transforming the institutional contexts in which GVCs operate.

This chapter is organized as follows: The first section reviews the literature on power asymmetries in apparel global supply chains and develops the argument and model. The next section outlines the methods used in this article. The third section of the chapter provides an overview of apparel export production in India and details the author's survey findings. The final section explores governance gaps in the context of power imbalances the constitute buyer-driven global value chains, which were exacerbated by the buyer response to the Covid-19 pandemic.

Power Asymmetries in Apparel Global Value Chains

The literature on buyer-driven global value chains indicates varying degrees of power imbalance between buyers and suppliers (Anner, 2018; Bair, 2009; Gereffi et al., 1994; Selwyn, 2014; Taylor et al., 2013). The greatest power imbalance was assumed to be in buyer-driven global value chains such as apparel, because large brands and retailers were seen to have considerable leverage over the relatively small, numerous, and geographically dispersed suppliers (Gereffi, 1994). However, some subsequent literature re-visited this assumption, arguing that as suppliers took on more tasks (sourcing fabric, cutting patterns, etc.), they increased their leverage vis-à-vis their buyers, thus reducing the power imbalance (Gereffi et al., 2005). In contrast, this chapter argues that, despite the increase in

task coordination by suppliers, power imbalances have exacerbated due to buyer consolidation. The result has been social downgrading rather than social upgrading.

The squeeze at the bottom of global value chains is not simply a reflection of buyer leverage over suppliers. Financialization also plays an important role. Publicly traded companies as well as privately held companies are under constant pressure to produce short-term returns (Appelbaum & Batt, 2014; Weil, 2014). Companies that do not perform well in quarterly reports risk losing crucial investors. Margins can be increased by increasing retail prices and/or by decreasing costs. Since it is difficult to increase retail prices in the highly competitive apparel consumer market, buyers have long sought to maintain or increase their margins by reducing the costs of goods sold. And this is done by squeezing down on the price paid to the suppliers that make these goods (Milberg & Winkler, 2013).

Buyer-driven GVC power imbalance can most clearly be observed in pricing dynamics, that is, what buyers pay suppliers to make their garments (Kaplinsky, 2000). And the greatest impact of the price squeeze at the assembly level of production is a squeeze on wages. But equally important, yet often less studied, are other manifestations of this power asymmetry. This includes a shortening of lead times, fluctuations in order volume, and changes to order specifications once production begins. To adjust to these pressures, it is argued here, suppliers push workers to work faster and longer. The push for increased production output per worker is often linked to verbal abuse and, at times, physical abuse. But financialization and the growth of global value chains are not simply the result of market factors. Governments made decisions to liberalize financial markets (Foroohar, 2017), phase out trade restrictions in the apparel sector (Gereffi & Frederick, 2010), and promote EPZs through development assistance and tax incentives (Anner, 2011). Moreover, the use of technology by industry leaders (notably, the use of big data to determine product demand and to facilitate speed to market), further consolidated the power of lead firms (Abernathy et al., 1999; Bonacich & Appelbaum, 2000; Lichtenstein, 2009).

To summarize, trade regimes, tax policies, development incentives, financialization, and technology have contributed to buyer leverage. Buyers have used this power to squeeze down on suppliers through a squeeze on prices, lead times, and other sourcing elements. Suppliers, most of whom are located in poor, labour surplus economies, in turn

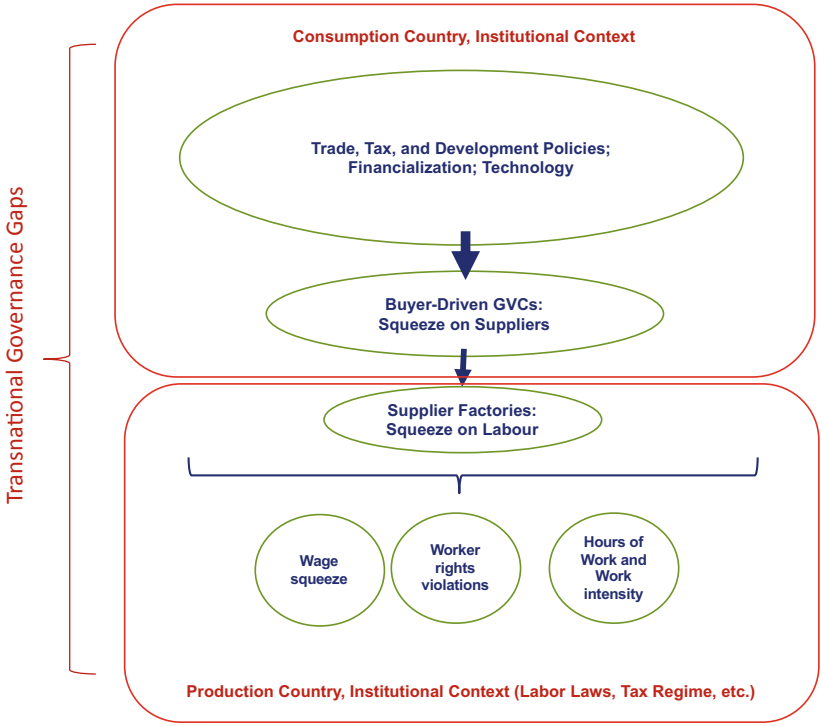


Fig. 14.1 Power Asymmetries and the Challenge of Social Upgrading

have squeezed down on labour. This results in chronically low wages, long hours of work, and union avoidance strategies. These dynamics occur in the context of weak transnational decent work governance institutions (see Fig. 14.1).

Research Methods

This chapter explores the sourcing squeeze argument by analysing trade data and through two original surveys in India. The first survey covers 340 supplier factories and the second survey covers 560 workers. The chapter also relies on interviews with suppliers and with workers in their homes and communities. The price component of purchasing practices is examined by exploring trade data on the price per square metre or price

per kilogram over time of apparel. The Office of Textiles and Apparel (OTEXA) of the International Trade Administration of the U.S. Department of Commerce provides time-series data for apparel imports to the U.S. in USD by square metre.[1] The European Commission provides data on apparel imports in price paid in euro per kilogram, which allow for an examination of the price paid per kilogram of imported apparel from India to the E.U. for all Indian-made apparel and for specific apparel groups.[2] Trade data and two author supplier surveys conducted in 2020 were used to analyse the impact of Covid-19 on suppliers and their workers.

Production and Employment Dynamics in India's Apparel Export Sector

Textile and apparel production outside of developed market economies first grew in East Asia, notably Japan, Korea, Hong Kong, and Taiwan (Gereffi & Wyman, 1990). As these East Asian countries expanded their apparel exports in the 1960s, in India apparel exports accounted for only 0.16% of total exports (Mezzadri, 2016). By the 1990s, apparel accounted for over 12% of India's exports (Mezzadri, 2016). Today, India exports over USD 18 billion per year in apparel and is the fifth largest apparel exporter in the world.[3]

For much of the post-WWII period, the global apparel industry was regulated by the Multi-Fibre Arrangement (MFA), which allotted export quotas to developing countries. By the mid-1980s, India reached the limits of its export allocations in many apparel products (Kumar and Khanna, 1990). When the World Trade Organization began the phase-out of the MFA in the 1990s, the industry in India began to grow. Yet, it grew at a time when buyers were consolidating their power, and the financial sector was increasing its leverage over buyers and demanded larger returns.

As China and Vietnam entered the WTO in 2001 and 2007, respectively, a crisis of overcapacity emerged in the industry. In response, retailers began promoting shorter fashion cycles in order to sell more products (Anguelov, 2016). In these hyper-competitive global markets,

[1] See: http://otexa.trade.gov/.

[2] See: http://ec.europa.eu/eurostat/data/database.

[3] World Trade Organization, clothing statistics.

many buyers went out of business as large merchandizers consolidated their power. The results were growing power asymmetries between buyers and suppliers, and a squeeze on price and lead times and other sourcing practices. These trends, as argued above, greatly exacerbated the squeeze on labour and thus undermined attempts at social upgrading.

The Price Squeeze and Wages in India

International trade data allow for an examination of pricing dynamics over time in India. Taking the value of Indian apparel exports to the United States and European markets and dividing by the volume of exports gives the price per volume per year. Using a USD deflator provides the real monetary value over time.[4] What the data indicate in the case of Indian apparel exports to the United States is a 19.65% decline in nominal value and a 62.81% decline in real dollar value (see Fig. 14.2).

For the European Union, the price paid for India's largest export to the EU, cotton t-shirts, displays a similar pattern as with exports to the United States starting in 2011; there was a significant decline (11.24%) in 2017.[5] In real euro terms, Indian producers were paid almost exactly the same in 2017 as they were paid in 2002. Trade data include the price of all inputs that go into apparel production, including the price of fabric. To control for this factor, the author's survey asked suppliers what they were paid only for the cut-make-trim component of production, that is, what they are paid excluding the price of fabric and other purchased inputs. What the findings indicate is that, when controlling for inflation between 2011 and 2017 there was a 7.14% decline in price. In sum, the trade

[4] Finding the appropriate deflator for an item produced in a global supply chain is a daunting task. Without knowing whether the cotton was grown in the United States or Uzbekistan, and whether the fabric was woven in Turkey or Hong Kong, it is almost impossible to properly control for the real value of the final product. However, when looking at a 24-year time period, not controlling for inflation would present a distorted picture of price dynamics. To address this problem, I use the GDP deflators for the United States and for the European Union. These deflators tend to be more conservative than other options.

[5] This is a lower decline than the decline for products entering the United States. There are several plausible explanations for this difference. For example, the US mega-retailers and mass discount stores might have more scale and thus bargaining power to push down prices further. Further research would be needed to more fully explore this possibility.

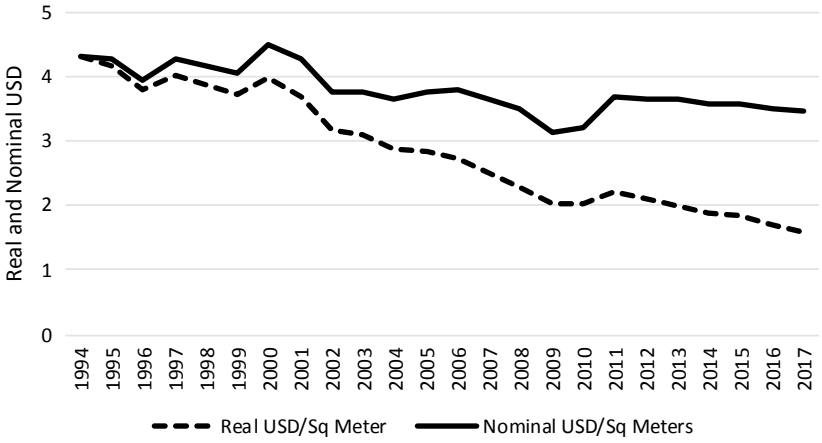


Fig. 14.2 United States Imports of Indian Apparel Real and Nominal USD per Square Metre (*Source* Author's calculations based on OTEXA and World Development Indicators data)

and survey data provide evidence of a price squeeze by buyers on supplier factories in India.

The most apparent impact of a price squeeze on suppliers can be expected to be a wage squeeze on workers. Given regional variations and gendered dynamics of labour, it is also expected that wages vary by region and by gender. The survey data confirm these expectations. On average, workers in the National Capital Region (NCR/Delhi)—without including overtime and bonuses—earned 10,090 rupees per month (USD 144/month) compared to 8547 rupees per month (USD 122/month) earned by workers in Bengaluru. When accounting for overtime and bonuses, workers in the NCR earned 21% more than workers in Bengaluru. And men earned on average 15% more than women in the NCR (see Fig. 14.3).

Workers also were asked about their total take-home wages (total wages including overtime and bonus after all deductions were removed). The survey results indicate a mean male worker take-home pay of USD 162.23 and a mean female workers take-home pay of USD 113.69, a statistically significant difference (see Table 14.1).

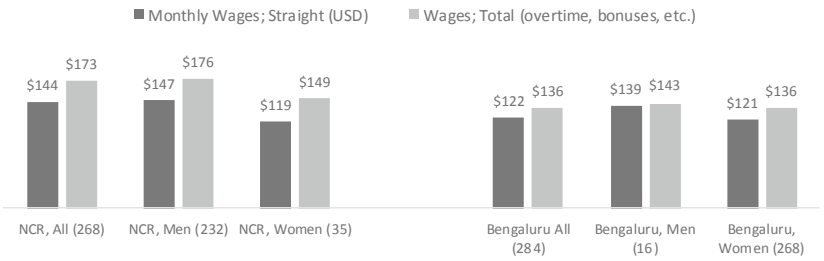


Fig. 14.3 Apparel Worker Monthly Wages (*Source* Author's Survey of Workers)

Table 14.1 Mean male and female take-home pay

	N	*Take-Home Pay*	*Std. Deviation*
Male	248	USD 162.23	35.23
Female	303	USD 113.69	20.58

Source Author's Survey of Workers
$t = 19.177$; p-value < 0.001

To examine the impact of these wage levels on workers' lives, the survey asked workers if their wages covered their living needs. Approximately 80% of workers indicated that their straight wages *never* cover their living expenses, 15% stated they sometimes covered their living expenses, and only 4.72% responded that their straight wages always cover their living expenses. When asked what monthly family budget items they were most likely to cut in order to get by on their wages, 72.5% stated that they buy less nutritious food for themselves and their children. In sum, the worker survey provides considerable evidence that the sourcing squeeze corresponds to a squeeze on wages, to such a point that wages do not cover most workers' basic living needs. This is further evidence of a lack of social upgrading in Indian apparel GVCs.

Hours of Work, Work Intensity, and Contingent Work

As noted above, the price squeeze is only one manifestation of the sourcing squeeze. Buyers can also change order specifications, shorten lead times, and delay payments. What is particularly noticeable about Indian apparel exports is its seasonal volatility. When examining the volume of exports by month to the United States, the data indicate

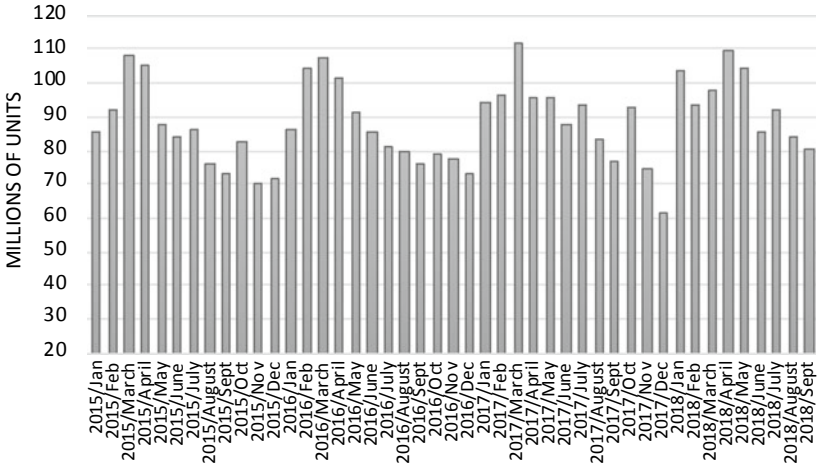


Fig. 14.4 Monthly Apparel exports to the United States from India (Millions of units) (*Source* Author, based on OTEXA data)

significant variation. Each year, March/April appears to be a peak period whereas November/December has the lowest volume. For example, the United States imported 112 million units from India in March 2017 and only 62 million units in December 2017. This represents a 44.64% decline. The next month, January 2018, the United States imported 103 million units of apparel from India, a 66% increase.[6] (See Fig. 14.4.)

In addition to aggregate seasonal volatility, each buyer may vary over volume demands depending on which products are and are not selling. The survey asked suppliers the following question: "After production starts, does your main buyer change order specifications: Never, Sometimes, Often." Eleven percent of suppliers said buyer order specifications were changed often, 69% said specifications were changed sometimes, and only 20% said orders were never changed. The most common change to order specifications was changes to trim elements (38% of changes).

The impact of such changes was illustrated through interviews with suppliers. In one case, a factory owner explained that the buyer instructed her to add a frill element to a blouse. After production started (and she

[6] It is important to note that these peak months correspond to when products are received in the United States and not when they are made in India.

had already purchased all the frill elements for the entire production run), the buyer phoned to say that they had changed their minds and they no longer wanted the frill element and that they would reduce the price paid to her accordingly. Since the supplier was afraid of losing future production orders from this large buyer, she was unable to protest this decision. She explained: "I was furious. I wanted to put all the frill elements in a box and ship them to the buyer and say, 'here, you take them.'" (supplier interview.) But she was unable to speak up given the power imbalance and took on this loss and continued the production cycle. Indeed, the supplier survey indicates that 39% of suppliers accepted orders below costs during the previous year in order to maintain a business relationship and in the hope of getting future orders from a buyer at a higher rate. This finding is consistent with ILO research that found globally 46% of textile and clothing suppliers accepted orders below the cost of production (ILO, 2017).

One important question in the survey was how the suppliers responded to peak orders. They were given three response options, and they could pick all options that applied. Fifty-two% of suppliers said they increased overtime hours; 51% said they increased the use of contingent work; and 58% indicated that they outsourced production to a local subcontractor (see Fig. 14.5).

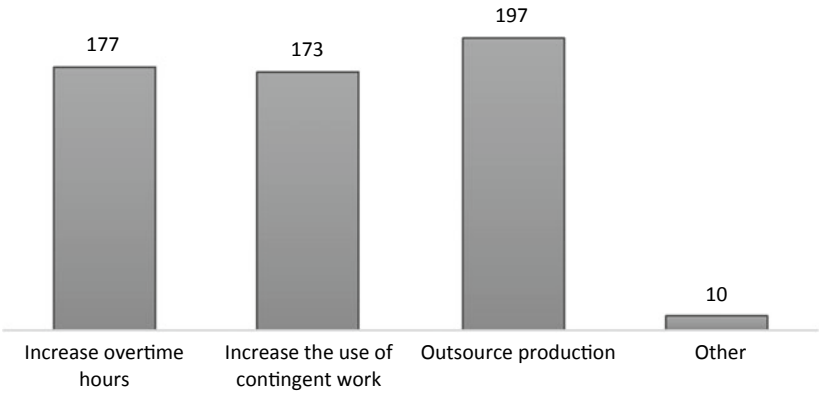


Fig. 14.5 Supplier Factories' Responses to Peak Orders from Buyers (*Source* Author's Survey of Suppliers)

This provides a strong indication that suppliers were indeed responding to buyer purchasing practices by not only increasing working hours of their core workforce but by also using non-standard work arrangements and outsourcing to meet buyer order demands. Suppliers were not asked what share of outsourced production was to authorize facilities and what share of outsourcing was to informal production units that were not registered by the state and authorized by buyers, because suppliers cannot be expected to answer honestly a question that asks if they are violating the law. But it seems fair to conclude, especially given what is indicated in the literature, that at least some of this production goes to unregistered factories.

Worker Survey and Conditions of Labour

As noted above, when supplier factories were asked how they responded to peak orders, their first response was that they increased overtime. This can be expected given that is easier to have employees work longer hours than to hire new workers. New hires require training and benefits. When asking workers about overtime, 37.03% responded that overtime was always voluntary, 34.02% said it was sometimes obligatory, and 28.95% said it was always obligatory (see Fig. 14.6). It should be noted that any form of forced work is a violation of international labour standards and thus is an indication of a decent work deficit.

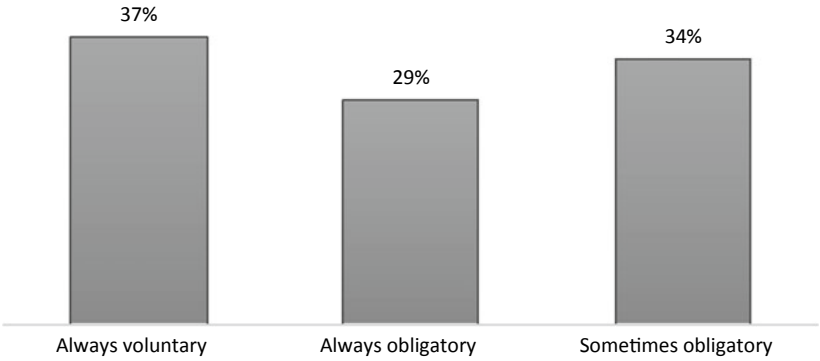


Fig. 14.6 Worker responses to the question: are overtime hours voluntary or obligatory? (*Source* Author's survey of factory workers)

According to Indian labour law, overtime should be paid at a rate of 200% of the straight wage rate. Nonetheless, 32% of workers indicated that they were paid their regular straight wage rate when doing overtime, and 4% of respondents indicated they were not paid anything for overtime.[7] In these cases, most often workers who did not meet a production target during their regular shift were instructed to stay after hours and work off the clock to meet their target. This suggests significant gaps in the national labour relations regime, a topic we will return to later in this chapter.

A significant concern for workers was the question of work intensity. Eighty-one% of workers indicated that they have production targets. Moreover, the survey findings indicate that production targets have increased over time. In 2012, 15% of workers reported having production quotas of 60 or more operations per hour. In 2017, just over half of workers reported having production quotas of 60 or more operations per hour. And while in 2012 less than one% of workers reported having production quotas of 100 or more per hour, by 2017, some 20% of workers indicated that they had production quotas of 100 or more per hour.

These quotas are most often aggressively imposed on workers. Some 64% of workers said they had been yelled at by a supervisor most often for not meeting a production target. Many said they were called "dogs, donkeys, and owls."[8] Others said that they were told to "work faster or go home." One worker noted in an interview that, when she could not meet a production target, a supervisor yelled, "Why did you come here dressed so pretty when you don't work? You should be out on a street corner." (Worker interview, Bengaluru, July 2018.) The survey data indicate an increase in production quotas from a mean of 44.08 per hour in 2012 to 75.11 per hour in 2017 (See Table 14.2).

To summarize, the worker survey and worker interviews provide substantial evidence that as the sourcing squeeze by buyers on suppliers increased, conditions of work decreased: apparel worker wages did not

[7] My survey question on straight wages and overtime rates focused on workers in registered factories. By law, factories are not allowed to hire contingent (informal) workers. However, the findings suggest that many factories treat these 'formal' sector workers as if the law did not fully apply to them. The survey did not include informal business operations, such as unregistered workshops or garment work done in homes.

[8] 'Owl' in some regions of India is understood a stupid.

Table 14.2 Worker Production Quotas (tasks/hour), 2012 and 2017

	N	*Tasks/Hour*	*Std. Deviation*
2012	427	44.08	20.42
2017	427	75.11	40.93

Source Author's Survey of Workers
$t = 28.49$; p-value < 0.001

cover living needs, the pace of work intensified, and work became more precarious. What is also noticeable from the findings is the remarkable absence of trade unions in the workplace. Fewer than two% of workers indicated there was a union where they work.

The Sourcing Squeeze and the Covid-19 Pandemic

If there were any doubts over who holds more power in apparel GVCs—buyers or suppliers—the Covid-19 pandemic put these doubts to rest: buyers exhibited their inordinate power. In March 2020, as the pandemic forced governments in major consumer countries to lockdown, demands for apparel dropped dramatically. Retailers and brands responded by abruptly cancelling production orders that had placed with supplier factories, most often without paying (Anner, 2020a). When so doing, they often referenced *force majeure* clauses in their production contracts, although the legality of such clauses has been called into question (ECCHR et al., 2020).

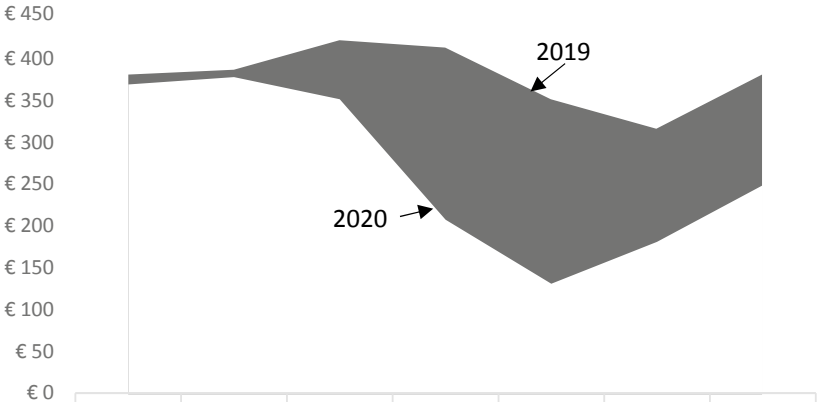
The abrupt cancellations also violated the spirit of many corporate social responsibility and multi-stakeholder initiatives principle of "responsible exit," whereby buyers should slowly transition out of supplier relationships. This raises the question, if these abrupt contract cancellations violated laws and social governance programmes, why did buyers proceed with the cancellations? The answer once again can be found in the power asymmetry that characterizes apparel GVCs. In this case, buyers assumed that suppliers would not pursue legal actions against them or attempt to leverage CSR or MSI mechanisms out of a fear of losing future orders.

It should be noted that in some cases production was disrupted in supplier countries due to lockdowns in those countries. In case of India, the lockdown began on 24 March 2020 and lasted for almost two months. However, if the country lockdown was the only cause of the

cancelled orders, we would expect a dramatic uptick in exports following the end of the lockdown to compensate for the period when production was disrupted. That did not happen. Moreover, most often brands and retailers issued global statements to suppliers on order cancellations regardless of their lockdown status.

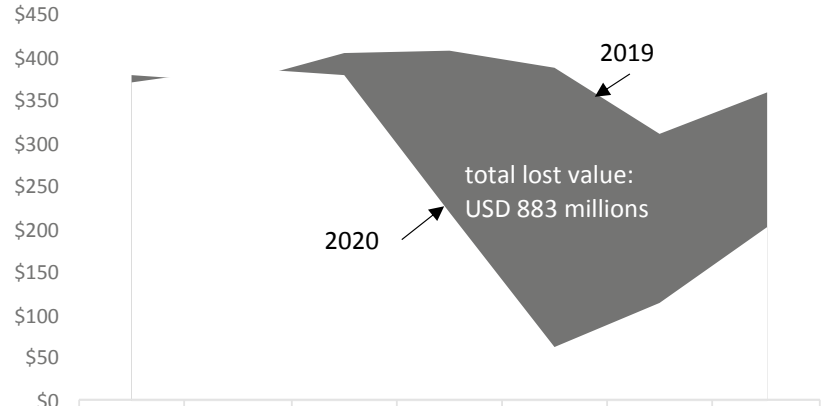
What the data on Indian exports show is the dramatic loss of value. In the case of apparel exports to the EU, India lost USD 922 million between January and June 2020 relative to what it exported during that same period in 2019. In the case of apparel exports to the United States, it lost USD 883 million during that same period (see Figs. 14.7 and 14.8). This amounts to ten% of its apparel exports in previous years. These figures only cover the first six months of 2020 and do not include other major garment importing countries such as Japan, China, Canada, and Australia.

The impact of this devastating squeeze by lead firms on their suppliers was most harshly felt by workers at the bottom of global value chains. Data on workers in Bangladesh indicated that more than one million were adversely affected, with many being sent home without severance or furlough pay (Anner, 2020a). Similar accounts emerged of workers



	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.
2019	€ 379	€ 385	€ 421	€ 411	€ 351	€ 315	€ 380
2020	€ 366	€ 377	€ 348	€ 208	€ 130	€ 179	€ 246

Fig. 14.7 India, Garment Exports to the EU, millions of Euros, 2019 and 2020 (*Source* Author, based on Eurostat data)



	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.
2019	$381	$372	$405	$408	$387	$311	$360
2020	$370	$390	$381	$220	$63	$113	$204

Fig. 14.8 India, Garment Exports to the US, millions of dollars, 2019 and 2020 (*Source* Author, based on OTEXA data)

in India, and income insecurity turned to food insecurity. A representative on an Indian apparel supplier association, Dr. Selvaraju, explained: "They did this by cancelling all orders placed before the crisis—some of which were already ready to be shipped. This meant that factories, which fronted the costs for fabric and labour, were often left without the money to pay their workers" (Cited in Belagere, 2020). One garment worker reflected, "we are just helpless garment workers with no protection from anyone" (Belagere, 2020). The Covid pandemic thus further illustrates apparel GVC power imbalances and dramatic governance gaps that curtail attempts at social upgrading.

Addressing the Decent Work Governance Gaps

In general, a supplier is understood to have achieved "economic upgrading" when it moves to higher value activities. In the case of apparel, Gereffi et al. (2005) find that production has increasingly moved from low-value-added assembly production to "full package" production that involves more complex forms of coordination, capabilities, and knowledge exchange. Moving from solely assembly operations to fabric sourcing,

finishing, packaging, logistics, and transportation are considered part of "functional upgrading" (Barrientos et al., 2011). The author's field research in Central America, Vietnam, Bangladesh, and India confirms this observation. Most factories in fact had no choice. Lead firms will not provide orders unless suppliers have the capability to source fabric and other inputs, cut the fabric, and sew, package, and ship the final product.

The challenge is ensuring that economic upgrading contributes to social upgrading, where social upgrading is understood as enhancing working conditions and improving workers' rights, most notably the right to form a union, bargain collectively, and strike, which are all part of "decent work" as defined by the International Labour Organization (Barrientos et al., 2011). Economic upgrading does not necessarily lead to social upgrading (Gereffi & Lee, 2016). The case study above on the apparel sector in India makes this abundantly clear. Rather than decent work, workers face low wages, long hours of work, excessive production targets, and verbal abuse. Indeed, the data indicate that these decent work deficits have been increasing over a period of time. This is because, while suppliers are achieving functional upgrading, the power imbalance between suppliers and buyers has been increasing as buyers consolidate their power to an even greater degree than suppliers. This allows buyers to continue to squeeze down on prices and other sourcing dynamics such as lead times and payment schedules.

Gereffi and Lee (2016) suggest six possible mechanisms to improve labour conditions and workers' rights: markets, corporate social responsibility (CSR) programmes, multi-stakeholder initiatives (MSIs), labour-centric mechanisms, cluster (supplier)-driven mechanisms, and public governance. The analysis and empirical findings presented in this chapter suggest that social downgrading occurs as a result of power asymmetries. It thus follows that the most effective mechanisms are ones that shift the power imbalance in favour of labour. Market mechanisms in the case of low-skill garment workers in labour surplus economies are not likely to alter the power imbalance. Indeed, markets in this case undermine decent work. Corporate Social Responsibility (CSR) programmes and Multi-Stakeholder Initiatives (MSIs) have been shown to be largely ineffective because they are voluntary (Anner, 2012; Bartley, 2018; Locke, 2013). Cluster/supplier-driven solutions are possible only if suppliers can overcome their collective action problem and speak with one voice to demand better contract terms from buyers. However, in hyper-competitive global markets, such coordination among suppliers is unlikely. Moreover, if such

coordination were to exist, it does not mean suppliers will share the gains with workers. That requires additional leverage on the part of workers.

This leaves two possible mechanisms: labour-centric mechanisms and public governance. A labour-centric mechanism entails strong unions and collective bargaining, which have been shown to distribute value to workers, especially when bargaining is more encompassing and centralized (Hayter & Visser, 2018). Thus, strong trade unions and sustained collective bargaining are a fundamental mechanism for improving working conditions and thus social upgrading. Additional labour-centric mechanisms include a range of worker-employer co-governance social responsibility programmes, such as the Fair Food Program and the Bangladesh Accord (Blasi & Bair, 2019). As Blasi and Bair explain, "What is critical to this approach is that a determination of whether a supplier is compliant with labour standards and therefore eligible to receive lead firm orders is not left to the discretion of lead firms but is instead *determined by an entity which representatives of unions and/or labour NGOs help oversee*" (Blasi & Bair, 2019, p. 15, emphasis added). In addition to worker representation and labour-employer co-governance, these programmes involve legally binding, cost-sharing commitments, be they on building safety as in the Bangladesh Accord or living wages with the Fair Food Program.

The second major force that has the power to ensure the gains of economic activity are more equitably shared is the state (Seidman, 2007), what Gereffi and Lee (2016) refer to as the "public governance" mechanism. States can enact minimum wage legislation, require that firms pay adequate benefits, and ensure respect for trade union rights. States can also tax economic activity and use the tax income for social protection programmes that contribute to social upgrading. The challenge for the state in the context of hyper global competition is to enact strong labour laws and social protections while also struggling to attract foreign direct investors away from other countries that might have weaker laws and protections in place.

India is a good case in point. Some of India's stronger labour laws that go back to the period of import substitution industrialization and Congress Party rule. This includes the requirement that firms employing 100 or more workers secure government permission before laying off workers. And historically there has been a relatively low threshold for union formation (seven employees or 10% of workers). However, since 2014 with the election of the Bhartiya Janata Party (BJP), there has

been a push towards market-oriented reforms and labour market flexibility (Badigannavar & Ghosh, 2020). For example, the BJP government exempted employers in export zones from state inspection, allowing them "to self-inspect, report and certify their compliance with labour laws" (Badigannavar & Ghosh, 2020, p. 455).

More recently, the Indian government used the context of the Covid pandemic to further liberalize the labour market. In September 2020, Parliament passed central labour acts on industrial relations, social security, and occupational safety and health. The industrial relations code (which, at this writing, still need to enter into effect) now allows firms with workers up to 300 (rather than the current threshold of 100) to resort to closure and dismissals without prior government permission. The reforms also allow fixed-term contracts for all jobs. In such cases, the 300-employee rule for government permission does not apply. In addition, unions will be recognized by management for collective bargaining only if they have 75% or more of the workforce as members (Saini, 2020). Finally, the requirement of mandatory 14-day notice for strikes now applies to all units, not just public utility firms.

The goal of the changes from the government and the employers' point of view is to make India more competitive in order to regain economic growth (Saini, 2020). However, this approach creates an incentive for neighbouring countries to enact similar labour reforms. The result will be that apparel exporting countries remain at the same level of competitiveness with each other, but workers are left in a more precarious position. Thus, public governance in the Indian case has not contributed to social upgrading but rather has undermined it. This is not to say that public governance does not hold strong potential. It does. Indeed, one lesson of the Indian case is that elections matter. If the population voted in one government that enacted such reforms (the BJP in 2014), it can also elect a government that might pursue labour-friendly reforms in the future.

Another level of public governance is at the national level of countries where GVC lead firms are headquartered. Here there is a growing push towards mandatory due diligence laws that require firms to disclose information on labour, environmental, and human rights impacts of their operations in GVCs (Fransen & LeBaron, 2019). These laws are inspired by and modelled on the UN Guiding Principles for Business and Human

Rights, which require firms to respect and remedy human rights violations in their supply chains.[9] Since 2009, more than one dozen countries have enacted national legislation that mandate companies disclose labour rights violations in their global value chains (Fransen & LeBaron, 2019). Consequences for non-compliance vary greatly, from large fines to "soft" law public shaming approaches.

Conclusions

This chapter has argued that apparel global value chains are characterized by growing power imbalances between lead firms and suppliers and suppliers and their workers. In its simplest form, the model suggests that buyers use purchasing practices to squeeze suppliers on price, and suppliers squeeze workers on wages and benefits. Yet, this chapter also illustrates how many other aspects of purchasing practices adversely affect working conditions and forms of employment. One way that suppliers respond to price pressure is to increase work intensity. Yet, this approach has its limits. Eventually, workers are unable to keep up and fall behind on production demands. This often results in verbal abuse by line managers. The second most significant aspect of the squeeze on suppliers involves order volatility. Dramatic seasonal changes in order volume, last minute changes to order specifications, and demands for greater speed to market during peak seasons push suppliers to implement the most flexible workforce allocation schemes possible.

It is notable that deteriorating conditions of labour are taking place as apparel suppliers have shifted from simple assembly operations to "full package" production in which they source and cut fabric, assemble the garments, and package and ship the final product. The India case indicates that such economic upgrading has not contributed to social upgrading. Moreover, buyer responses to the Covid-19 pandemic further illustrate the power imbalance and its deleterious impact on suppliers and their workers. Buyers abruptly cancelled orders without paying, and suppliers responded by laying off workers, often without providing severance pay. This is not to say that it would have been better for suppliers not to upgrade to full package production. For many suppliers, if they had remained only doing assembly (CMT) operations, they would not have

[9] See: https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf.

received orders from buyers and would have gone out of business years ago. Suppliers did not demand that buyers allow them to do full package production so that they could capture more of the gains of GVC production. Rather, buyers required that suppliers do full package production so that the buyers could push the risks of sourcing fabrics and other inputs onto suppliers. The cost of this risk became apparent during the Covid crisis when suppliers were stuck not only with the expenses associated with assembly costs, but also with the costs of inputs such as fabric.

As Gereffi and Lee (2016) indicate, to achieve social upgrading, additional social and public governance mechanisms are necessary. That is, there is a need for an institutional context that is conducive to social upgrading. Gereffi and Lee (2016) outline six possible governance mechanisms. This chapter argues that, of these, two mechanisms hold the most promise: labour-centric mechanisms and public governance. Labour-centric mechanisms include trade union organizing and collective bargaining. They also include binding, cost-sharing agreements in which trade unions and other worker representatives share in co-governance programmes designed to address decent work deficits. Public governance mechanisms (e.g. state institutions, policies, and practices) also are able to shift power imbalances in global value chains so that the benefits of growth are more equitably distributed.

The challenge is that in an economic context in which many poor, developing countries compete with each other to attract foreign direct investment in the same export product (in this case, garments) there is a collective action problem. This can be seen in the case of India, where it has attempted to regain regional competitiveness in the context of the Covid pandemic through labour law reforms that weaken collective bargaining and increase labour market flexibility. Mandatory due diligence laws in the home countries where lead firms are headquartered provide additional leverage, but to date many of these laws have limited scope and moderate consequences for violators. Ultimately, sustained social upgrading will require greater synergies between labour-centric mechanisms and strong public governance.

References

Abernathy, F. H., Dunlop, J. T., Hammond, J. H., & Weil, D. (1999). *A stitch in time: Lean retailing and the transformation of manufacturing: Lessons from the apparel and textile industries*. Oxford University Press.

Anguelov, N. (2016). *The dirty side of the garment industry: Fast fashion and its negative impact on environment and society*. CRC Press.

Anner, M. (2011). The impact of international outsourcing on unionization and wages: Evidence from the apparel export sector in Central America. *Industrial & Labor Relations Review, 64*(2), 305–322.

Anner, M. (2012). Corporate social responsibility and freedom of association rights: The precarious quest for legitimacy and control in global supply chains. *Politics & Society, 40*(4), 604–639.

Anner, M. (2018). CSR participation committees, wildcat strikes and the sourcing squeeze in global supply chains. *British Journal of Industrial Relations, 56*(1), 75–98.

Anner, M. (2019). Predatory purchasing practices in global apparel supply chains and the employment relations squeeze in the Indian garment export industry. *International Labour Review, 158*(4), 705–727.

Anner, M. (2020a). *Abandoned? The impact of Covid-19 on workers and businesses at the bottom of global garment supply chains*. Center for Global Workers' Rights.

Anner, M. (2020b). Squeezing workers' rights in global supply chains: Purchasing practices in the Bangladesh garment export sector in comparative perspective. *Review of International Political Economy, 27*(2), 320–347.

Appelbaum, E., & Batt, R. (2014). *Private equity at work: When wall street manages main street*. Russell Sage Foundation.

Badigannavar, V., & Ghosh, D. (2020). India. In C. Frege & J. Kelly (Eds.), *Comparative employment relations in the global economy* (2nd ed., pp. 450–469). Routledge.

Bair, J. (2009). Global commodity chains: Genealogy and review. In J. Bair (Ed.), *Frontiers of Commodity Chain Research* (pp. 1–34). Stanford University Press.

Barrientos, S., Gereffi, G., & Rossi, A. (2011). Economic and social upgrading in global production networks: A new paradigm for a changing world. *International Labour Review, 150*(3–4), 319–340.

Bartley, T. (2018). *Rules without rights: Land, labor, and private authority in the global economy*. Oxford University Press.

Belagere, C. (2020). *For them, hunger a bigger worry than Covid*. In The New Indian Express.

Blasi, J., & Bair, J. (2019). *An Analysis of multiparty bargaining models for global supply chains. Conditions of work and Employment Series No. 105*. International Labour Office.

Bonacich, E., & Appelbaum, R. P. (2000). *Behind the label: Inequality in the Los Angeles apparel industry*. University of California Press.

ECCHR, ILAW, & WRC. (2020). Farce *majeure: How global apparel brands are using the COVID-19 pandemic to stiff suppliers and abandon workers*. European Center for Constitutional and Human Rights. European Center for

Constitutional and Human Rights, International Lawyers Assisting Workers, Worker Rights Consortium.

Foroohar, R. (2017). *Makers and takers: How wall street destroyed main street*. Crown Press.

Fransen, L., & LeBaron, G. (2019). Big audit firms as regulatory intermediariesin transnational labor governance. *Regulation & Governance, 13*, 260–279.

Gereffi, G. (1994). The organization of buyer-driven global commodity chains: How U.S. retailers shape overseas production networks. In Gereffi, G. & Korzeniewicz, M. (Eds.) *Commodity chains and global capitalism* (pp. 95–122). Praeger.

Gereffi, G., & Frederick, S. (2010). *The Global Apparel Value Chain: Trade and the Crisis* (Policy Research Working Paper 5281). The World Bank Development Research Group.

Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy, 12*(1), 78–104.

Gereffi, G., Korzeniewicz, M., & Korzeniewicz, R. (1994). Introduction: Global commodity chains. In Gereffi, G., & Korzeniewicz, M. (Eds.), *Commodity chains and global capitalism* (pp. 1–14). Westport: Praeger. pp. 1–14.

Gereffi, G., & Lee, J. (2016). Economic and social upgrading in global value chains and industrial clusters: Why governance matters. *Journal of Business Ethics, 133*, 25–38.

Gereffi, G., & Wyman, D. L. (1990). *Manufacturing miracles: Paths of industrialization in Latin America and East Asia*. Princeton University Press.

Hayter, S., & Visser, J. (2018). The application and extension of collective agreements: Enhancing the inclusiveness of labour protection. In S. Hayter & J. Visser (Eds.), *Collective agreements: Extending labour protection* (pp. 1–31). International Labour Organization.

ILO. (2017). *Purchasing practices and working conditions in global supply chains* (INWORK Issue Brief No. 10). International Labour Office.

Kaplinsky, R. (2000). Globalisation and unequalisation: What can be learned from value chain analysis? *Journal of Development Studies, 37*(2), 117–146.

Kumar, R., & Khanna, S.R.(1990). India, the Multi-Fibre Arrangement and the Uruguay Round. In Hamilton, C.B. (Ed.), *The Uruguay round: textiles trade and the developing countries, eliminating the multi-fibre arrangement in the 1990s* (pp. 182–212). The World Bank.

Lichtenstein, N. (2009). *The retail revolution: How Wal-mart created a brave new world of business*. Metropolitan Books.

Locke, R. (2013). *The promise and limits of private power: Promoting labor standards in a global economy*. Cambridge University Press.

Mezzadri, A. (2016). *Sweatshop Regimes in the Indian Garment Industry*. Cambridge University Press.

Milberg, W., & Winkler, D. (2013). *Outsourcing economics: Global value chains in development*. New York City.
Saini, M. (2020). *What do India's new labor codes mean?* In Sourcing Journal.
Seidman, G. W. (2007). *Beyond The Boycott: Labor rights, human rights, and transnational activism*. Russell Sage Foundation.
Selwyn, B. (2014). Commodity chains, creative destruction and global inequality: A class analysis. journal of economic geography, advance Access (June), 1–22.
Taylor, P., Newsome, K., & Rainnie, A. (2013). putting labour in its place': global value chains and labour process analysis. *Competition and Change, 17*(1), 1–5.
Weil, D. (2014). *The fissured workplace: Why work became so bad for so many and what can be done to improve it*. Harvard University Press.
WRC. (2013). Global wage trends for apparel workers, 2001–2011. Worker Rights Consortium.

CHAPTER 15

Social Upgrading in the Bangladeshi Garment Sector Since Rana Plaza: Why Some Governance Matters More Than Others

Nora Lohmeyer, Elke Schüßler, and Naila Kabeer

Introduction

Workers in global garment supply chains suffer from frequent labor rights violations, including low wages, excessive overtime, abusive behavior by superiors, as well as health and safety risks. Trade unions and NGOs have long been concerned about a downward spiral in labor standards within

N. Lohmeyer (✉)
Radboud University, Nijmegen, The Netherlands
e-mail: nora.lohmeyer@ru.nl

E. Schüßler
Johannes Kepler University Linz, Linz, Austria

N. Kabeer
London School of Economics and Political Science (LSE), London, UK

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_15

global production. These conditions have come to global attention due to several deadly factory accidents, with the Rana Plaza factory collapse in 2013 alone leading to the death of more than 1,000 people.

Given these issues, inquiring into strategies to improve working conditions in global supply chains remains a theoretical and societal imperative. In this vein, scholars and practitioners alike have shown interest in social upgrading initiatives in global supply chains. While upgrading more generally refers to the move to higher value-added activities in production, social upgrading refers to a repositioning of workers with regard to their working conditions as well as process and outcome rights (Barrientos et al., 2011). Social upgrading might involve improvements in measurable standards (e.g., type of employment or wages) as well as enabling rights (e.g., freedom of association, collective bargaining) and is intricately linked to the decent work agenda of the International Labour Organization (ILO).

Particular attention has been paid to the various pathways through which social upgrading can be achieved. While earlier research viewed social upgrading mainly as a consequence of economic upgrading, more recently alternative pathways have been conceptualized (see especially Gereffi & Lee, 2016). In this paper, we shed light on recent developments of different pathways to understand the potentials and limitations for meaningful social upgrading in the Bangladeshi garment sector. In particular, we ask whether the underlying governance arrangements have changed sufficiently and reflect on how they would need to change further.

Building on data from a large comparative research project as well as other recent empirical research, we shed light on the achievements that have been made with regard to different pathways and their effects on workers after the Rana Plaza factory collapse. We show that improvements can be observed regarding outcome standards (e.g., working hours and building safety) but are still lacking in other areas, including important process rights. Our chapter will take a closer look at these changes, using the framework of pathways to social upgrading introduced by Gereffi and Lee (2016), and specify where further improvements are needed to support upgrading in the Bangladeshi garment industry.

Our results add to extant literature on social upgrading by empirically investigating recently conceptualized paths to social upgrading, shedding light on the role played by different actors and private, public, and societal initiatives. Taking both the vertical and horizontal relationships between

those actors as well as the interplay of different initiatives into account allows for a more holistic view on social upgrading as a basis for better understanding the governance conditions for social upgrading (Gereffi & Lee, 2016). In our case, looking at the overall governance arrangement allows us to identify a hierarchy between different paths. Such hierarchy helps to better understand the relative importance of different paths as well as their interdependence in either supporting or hindering each other's further development. Our analysis, therefore, makes the case for taking the mutual dependencies of different paths into account when analyzing and designing governance mechanisms for social upgrading.

In the following, we will begin by positioning our study in extant literature on social upgrading in global supply chains with a particular focus on the garment industry and then provide insights into our data and methodology. We will present our findings by focusing on the six pathways to upgrading outlined by Gereffi and Lee (2016). The chapter ends with a discussion of our findings as well as the formulation of policy recommendations.

Different Trajectories to Social Upgrading

When it comes to the question of how social upgrading can be brought about, different trajectories have been discussed. Early upgrading literature assumed a close link between economic and social upgrading, with the latter seen as an almost automatic consequence of the former (Knorringa & Pegler, 2007; Puppim de Oliveira, 2008). It has, however, been shown that the relationship may be complicated by factors such as the type of employment (e.g., informal vs. formal work) or gender (e.g., male vs. female workers), highlighting the importance of additional factors influencing social upgrading and, thus, the need for a more fine-grained understanding of different trajectories leading towards social upgrading (see Barrientos et al., 2011; but also Anner, 2020).

In this light, Gereffi and Lee (2016) have highlighted several alternative trajectories towards social upgrading. The *market-driven path* relies on market mechanisms, i.e., consumers and buyers rewarding suppliers with better working conditions, thereby potentially incentivizing investments in working conditions by suppliers. The *corporate social responsibility (CSR)-driven path* relies on the compliance regime of Western lead firms, i.e., mostly lead firms imposing codes of conduct on their suppliers. The *multi-stakeholder path* relies on the collaborative efforts of a diverse

set of actors, jointly working towards the improvement of working conditions, with the main strength (especially compared to the CSR-driven path) being the collective nature of these multi-stakeholder initiatives. The *labor-centered path* relies on the important role that labor activists and unions can have in promoting social upgrading [see also Lakhani et al. (2013) who focus on the qualification of workers as a relevant factor for their working conditions]. The *cluster-centered path* is initiated by cluster firms in production clusters to improve working conditions within the cluster, i.e., highlighting that leading suppliers can be standard makers as well, with the key mechanism of this path being cluster-based collective actions towards the improvement of labor conditions. Lastly, the *public governance path* highlights that—despite the increasing importance of social and private modes of governance—public regulations remain important for social upgrading, e.g., through effective implementation of labor laws that cover all suppliers under their jurisdiction [as compared to only a few that form part of agreements or multi-stakeholder initiatives (MSIs)].

Gereffi and Lee (2016) hereby assume that the strength of each path depends on governance arrangements, which are marked by local (horizontal) and global (vertical) public, private, and social arrangements. For instance, economic upgrading is most likely to occur where power asymmetries between lead firms and suppliers are low (Gereffi et al., 2005). The garment industry has been described as an example of 'captive governance,' with large power asymmetries existing between powerful lead firms—usually Western multinational corporations (MNCs)—and suppliers (Gereffi et al., 2005). The captivity of suppliers in these relationships results from the combination of their limited capabilities and low barriers of market entry on the one hand, and high dependence on lead firms organizing complementary activities and providing detailed product specifications on the other. Such private governance arrangements are embedded in social (e.g., civil society) and public (local, regional, national, and transnational regulation) governance systems.

In a (mostly literature-based) comparative study of economic and social upgrading in four industries (automobile, garment, electronics, and IT) and six countries (Bangladesh, Brazil, China, India, South Africa, and Vietnam) Dünhaupt et al. (2020) describe the Bangladeshi garment industry as experiencing low economic and social upgrading, with the latter including little increases in real wages, little union power and only minor improvements of working conditions, mostly regarding fire and

building safety. The authors suggest that upgrading in Bangladesh may be related to agreements such as the Bangladesh Accord on Fire and Building Safety (hereafter Accord). Building on these ideas, and our own empirical data on Bangladeshi garment workers collected in the aftermath of the Rana Plaza disaster, our aim in this chapter is to look in more detail at social upgrading outcomes in this industry in light of different initiatives and pathways.

We find this conceptualization of different pathways a fruitful theoretical lens as it allows us to take different private, public, and societal actors involved in upgrading initiatives as well as their interactions into account. On the one hand, this allows us to compare different initiatives and evaluate their potentials and shortcomings. On the other hand, this allows us to shift the focus from looking at isolated initiatives and subgroups of actors towards a more integrated view that sees them as a part of an institutional infrastructure (Waddock, 2008) or texture of transnational regulation (Pries & Seeliger, 2013) as well as embedded in broader politico-economic conditions. This helps in understanding the interplay between different upgrading initiatives as well as the conditions for their effectiveness.

Methodology and Data

Our data stem from a large comparative research project seeking to understand the responses of lead firms, suppliers, and policymakers to the Rana Plaza disaster in Bangladesh in 2013 as well as resulting changes in working conditions for garment workers in Bangladesh's garment export factories (www.garmentgov.de). As part of the project, our research team collected interviews with 79 lead firms in four countries (Australia, Germany, Sweden, and UK), a survey of 152 factory managers, a survey of 1,500 garment workers employed in over 200 Bangladeshi garment factories (and additional follow-up interviews), and 70 interviews with stakeholders (non-governmental organizations, unions, industry experts, investors, and government representatives). Parts of the findings have been presented in the final project report of the Garment Supply Chain Governance Project[1] as well as in project-related publications (see, e.g.,

[1] See https://www.wiwiss.fu-berlin.de/forschung/Garments/Medien/04-09-Changes-in-the-Governance-final.pdf.

Frenkel et al., 2017; Kabeer et al., 2019, 2020; Oka et al., 2020; Rahman & Rahman, 2020; Schuessler et al., 2019a, 2019b, 2020).

Social Upgrading in the Bangladeshi Garment Industry—An Unlikely Case?

In the following, we are going to discuss the different social upgrading trajectories for the case of the Bangladeshi garment sector based on our own and others' research. We argue that—mainly as a result of the CSR-driven and multi-stakeholder paths—improvements with regard to relevant outcome standards can be observed in garment factories. However, given the specific conditions of this country and sector, most other paths towards social upgrading remain weak, with more systemic changes (e.g., regarding process rights) unlikely to occur.

Economic and Social Upgrading in Bangladesh: Status Quo

When it comes to economic upgrading in the Bangladeshi garment sector, Moazzem and Sehrin (2016) argue that the sector has made significant strides in terms of process and product upgrading, less so, however, in functional upgrading. That is, while investments have been made in technology and productive capacity (process upgrading) and the composition and complexity of products has changed as well (product upgrading), few changes have occurred when it comes to overtaking new functions from buyers, such as research and development, design, or marketing (functional upgrading). The authors furthermore caution against hopes for further upgrading, given 'that the factors that have thus far contributed to product and process upgrading [i.e., investments in technology, machinery, and human resource development, preferential market access, and policy support by the Government, the authors] may not be adequate for further upgrading in the value chain.' (Moazzem & Sehrin, 2016, p. 90) The authors highlight that, in particular, investments in ensuring physical and social compliance, i.e., worker safety and security in the workplace and better living and working standards, would be necessary (Moazzem & Sehrin, 2016). The original idea of social upgrading based on these advancements in economic upgrading thus seems unlikely in Bangladesh, given that the government seeks to achieve its ambitious sector growth goals with a strategy of gaining competitive advantage through low wages.

At the same time, involvement in the garment sector has brought many benefits especially for women. Studies have shown that the sector offers women from poorer households greater regularity of wages, more social benefits, and a higher level of rights (e.g., paid leave, maternity leave, and medical care). Women working in the garment sector also exhibit a greater willingness to take collective action in defense of themselves than women working in other sectors (Kabeer & Mahmud, 2004; Mahmud & Kabeer, 2003). It has also been associated with reduced levels of domestic violence, increased female education, and postponement of age of marriage and childbearing (Heath & Mobarak, 2015; Salway et al., 2005).

The Rana Plaza factory collapse in 2013 has shifted the world's attention to the situation of garment workers in Bangladesh. Since then, a multitude of public and private governance initiatives, both local and global, have been developed to make factories in Bangladesh safer. While the multitude of initiatives being implemented after Rana Plaza makes it difficult to tease out the causal impact of particular initiatives, our large-scale worker survey showed some relevant improvements (see Kabeer et al., 2019, 2020). Most importantly, we see relevant improvements with regard to *outcome standards*, including bonuses and overtime pay, social benefits and job security as well as health and safety issues. While workers received an average basic salary of 7,200 takas per month, this wage is 53% of the 'living wage' estimated by the Global Living Wage Coalition (13,620 Takas) and just 20% of the 36,385 takas estimated by the Asia Floor Wage (see Schuessler et al., 2019b).

However, we see less improvements in terms of *process rights*. The latter include workers' knowledge about worker rights to representation and participation in decision-making that affects their work including general treatment by management. On the question of knowledge, many more workers (71%) knew about company codes of conduct than about national labor laws (40%). At the same time, responses to questions about trade unions revealed widespread lack of knowledge among workers about their presence and functions with very few (5%) workers reporting a union in their factory. There was much more positive evidence on the existence and roles of worker participation committees (WPCs) (see discussion below). On questions of dignity and respect in the workplace, a high percentage of workers (over 73%) reported having experienced abuse and mistreatment at their current factory. This included mainly verbal abuse, but also some reports of physical abuse. Reported abuses were mainly linked to failure to

meet production quotas, with most (80%) workers identifying supervisors as the main perpetrators. However, many workers (57%) reported some improvement in supervisor behavior since Rana Plaza.

These results show clear limits to the extent of social upgrading that has been achieved, particularly regarding process rights. The current Covid-19 crisis provides further evidence for the limited structural improvements achieved in global garment supply chains to date. Below we examine the role of different social upgrading paths in leading to these outcomes in recent years (2013–2020) and reflect on whether the underlying governance arrangements have changed sufficiently as well as how they would need to change further.

Market-Driven Path

This pathway depends on the demand for garments produced with high social standards being strong enough to force cluster firms to improve labor conditions (Gereffi & Lee, 2016). In the garment industry, this pressure has always been low, an exception being the intense campaigns against child labor in sports supply chains in the late 1990s and early 2000s. These triggered the first wave of corporate codes of conduct being developed by lead firms, thus, pushing them to pay closer attention to labor standards in their supply chains (Fichter & Sydow, 2002). Yet, since then evidence has mounted that shows the ineffectiveness of codes (e.g., Barrientos & Smith, 2007; Locke, 2013; Locke et al., 2009). While codes have indeed led to stronger compliance measures on the side of the lead firms, compliant suppliers have rarely been systematically rewarded (e.g., Lund-Thomsen & Lindgreen, 2014), thus, not activating the market-driven pathway based on clear incentives for cluster firms to improve labor standards. Conversely, a focus on cost competitiveness and low wages accompanied by a pronounced integration of women—as the more 'docile' workers—into the garment labor force marks many cluster strategies in the Global South (Munir et al., 2018). End consumers, with the exception of a niche market for fair trade garments, have fully embraced the fast fashion business model, marked by a double pressure on prices and lead times (e.g., Taplin, 2014).

Since Rana Plaza, little has changed about this market dynamic. Based on an analysis of institutional and regulatory responses to Rana Plaza in Germany, Lohmeyer, and Schuessler (2018) conclude that dominance is given to production-oriented measures, i.e., attempts to regulate labor

standards at the point of production by auditing and monitoring supplier factories. Yet, such measures do not provide clear economic incentives for social upgrading. Instead, lead firms' purchasing practices are tied to a double or triple squeeze on prices, lead times, and fluctuating orders that negatively affect working conditions (e.g., Anner, 2019, 2020). Rana Plaza did, however, intensify attention to compliance (see also next section). Especially firms with low prior baseline standards were pushed by media and stakeholder pressure resulting from the Rana Plaza factory collapse to strengthen their supply chain and sourcing policies (Schuessler et al., 2019a). Yet, continued pressure on purchasing prices and additional cost incurred by remediation and compliance activities may limit suppliers' capacity to upgrade, as our data suggests. Our factory manager survey showed that a third (33%) of factories earned between 0 and 2% annual profit; 38% between 2 and less than 5%; while only 24% of factories reported a profit of 5% or more. These factories now have to invest in improvements, e.g., in building structure, but only 12% of lead firms in our sample paid higher purchasing prices for garments to support factory improvements and only 25% directly paid for factory initiatives regarding workplace or building safety. Lead firms consider themselves as stuck in a hypercompetitive market, and lead firms' profit margins reach beyond 5% only in the case of the largest and most profitable players.[2] Thus, without more systemic changes in business models, the market-driven path is unlikely to intensify social upgrading for garment workers.

CSR-Driven Path

The CSR-driven path relies on Western lead firms' implementation of CSR policies and practices (Gereffi & Lee, 2016). In global garment supply chains, Western lead firms have for a long time mostly relied on codes of conducts and related auditing and monitoring approaches to social compliance. As argued above, although attention to compliance has intensified since Rana Plaza due to a fear of reputational damage, CSR policies and practices remain decoupled from purchasing practices, thereby keeping in place many of the practices that lie at the roots of substandard working conditions in garment factories (Amengual et al., 2020). Some firms have recognized these limitations, not least because

[2] See, e.g., http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/margin.html.

they became evident in the collapse of the Rana Plaza factory itself—a factory that only few days before it collapsed had been audited. As research from our project shows, some lead firms try to go beyond compliance by engaging in capacity building or even advocacy (Oka et al., 2020)—on their own or together with other stakeholders (see next section). The capacity-building approach implies a shift from 'policing' suppliers towards building more commitment-based relations based on information sharing and problem-solving between buyers and suppliers. The advocacy approach goes one step further, including firms engaging in brand advocacy and pressuring governments to take regulatory action—mostly in producer, but more recently also in buyer countries (e.g., LeBaron & Rühmkorf, 2019; Oka, 2017). For instance, in recent years, groups of brands have engaged in writing letters, talks with government officials, or boycotts in response to governments' handling of striking workers (e.g., Oka, 2017 for the case of Cambodia; Oka et al., 2020, pp. 1318–1319, for the case of Bangladesh).

Our research also suggests, however, that there are limits in terms of the variety of initiatives that lead firms can engage in. For instance, German lead firms, in particular, reported that they feel stretched between their engagement in the Accord, the German Textile Partnership, and other initiatives, indicating a need to shift resources between initiatives rather than continuously expanding their portfolios. Furthermore, lead firms indicated a discrepancy between expectations on what they should do and what they perceived they can do given competitive pressures in the retail sector:

> It's important to check what we can and cannot realize. NGOs can say 'But you have to do this and that'. But then I say: 'You need to get to know the market. We want to do a lot, but I cannot hire 20 people just for travelling around and checking what's happening in tier 2 factories.' (Procurement Manager, German Lead Firm, Interview 20 April 2016) (cited in Schuessler et al., 2019b, p. 29).

This quote indicates how the CSR path is tightly linked to the market path. While advocacy and capacity building show lead firm's awareness regarding the limitations of unilateral code-based approaches to improving labor standards and that at least some front-runner firms experiment with going 'beyond compliance,' both are limited in contributing to social upgrading for garment workers.

Multi-Stakeholder Path

This path relies on the force of multiple stakeholders on different levels and from different societal spheres cooperating to set, implement, and monitor standards for better working conditions in factories (Gereffi & Lee, 2016; see also Dünhaupt et al., 2020). While some MSIs, such as the Fair Wear Foundation, still work on the basis of codes of conduct, others are geared towards more active advocacy interventions in production countries. Oka (2017), for instance, describes the UK's Ethical Trade Initiative's intervention in Cambodia to express concerns regarding the violent crackdown of minimum wage strikes through military police, in which five garment workers were killed, more than 30 workers wounded and 23 detained for months without trial, and to request the release of detained worker activists. Egels-Zandén and Lindholm (2015) paint a rather bleak picture on code-based MSIs, arguing that they only marginally improve worker rights on a very general level.

Since Rana Plaza, several new MSIs were founded. In 2014, Better Work—a MSI that includes unions, buyers, manufacturers, and governments into the development of measures for labor standard improvements—has been rolled out in Bangladesh. In Bangladesh and other countries, Better Work provides worker education and trainings, e.g., on communicating and conflict resolution at work and home. With findings on working condition-outcomes of the Better Work Bangladesh program being somewhat inconclusive, Pike and English (2020) nevertheless see relevant effects on the empowerment of women workers participating in the Better Work program, mainly 'through an increase in effective communication, and through a decrease in household level impacts of financial instability and precarity' (p. 31). The authors highlight that without accordant changes at the broader societal level—e.g., in gender norms and gendered division of labor—results from work-related improvement programs will necessarily remain limited.

Probably the most discussed MSI governance model that has been formed in response to Rana Plaza is the Bangladesh Accord. The Accord was funded by over 200 lead firms together with IndustriALL and UNI Global Union. With its large-scale inspection program, the Accord aimed to improve the safety and health of garment workers in Bangladesh, with a particular focus on building safety. Factory owners covered by the Accord are accountable to improve safety through an inspection and remediation

process whose results are publicly available. The Accord was accompanied by a second initiative driven by a smaller group of mainly US-based firms, the Alliance for Worker Safety, which did not include unions (Donaghey & Reinecke, 2018). While the Alliance had less accountability measures than the Accord as it was not legally binding and did not foresee any sanctions in case of non-compliance, both initiatives benefit from their collective enforcement.

Views on the Accord differ. Some have criticized the Accord for its lack of inclusion of local actors (Zajak, 2017), especially women labor leaders (Alamgir & Banerjee, 2019), or have argued that the Accord is too limited in scope, covering only a small part of the country's garment factories (Labowitz & Baumann-Pauly, 2015). Also, it has been argued that the Accord leaves power relations between buyers and suppliers unchanged (Scheper, 2017). However, the Accord has been hailed by many as an institutional innovation (Anner et al., 2013; Bair et al., 2020; Reinecke & Donaghey, 2015), with observers pointing to the importance of its legally binding character (Anner et al., 2013) and collective as well as union-inclusive character (Ashwin et al., 2020a, 2020b). Due to its legally binding and collective character, the Accord was able to overcome many of the problems associated with lead firms' prior approach of unilateral compliance monitoring, such as the lack of expertise and effective sanctioning (Donaghey & Reinecke, 2018).

Created as a five-year initiative initially, views differed on how to proceed with the Accord. While government officials and industry representatives were in favor of ending the Accord (Bair et al., 2020, p. 987), with the latter favoring the creation of a 'brand-led multi-stakeholder forum,' labor representatives were divided, with some remaining skeptical towards the Accord, others being in favor of its extension (Alamgir & Banerjee, 2019, p. 291). However, the Accord was further extended through 2018 and, in January 2020, it was agreed upon that the Accord will transition into a new institution—the Ready-Made Garment (RMG) Sustainability Council—which will provide domestic employers and the government with a strengthened role.

In line with others' observations, our analysis also suggests that there has been a tendency for power asymmetry between lead firms and suppliers to increase after Rana Plaza. While engagement in the Accord fostered longer-term relations and mutual understanding between buyers and suppliers as well as trust and continuity of orders, it intensified the 'sourcing squeeze' (Anner, 2018, 2020) exerted by lead firms

on suppliers. In contrast, the collective power of suppliers was weakened by their representative organizations, the BGMEA and Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA) being formally excluded from Accord and Alliance decision-making, although they were consulted from time to time. Yet, due to the collective (and in the case of the Accord union-inclusive) nature of these initiatives, the multi-stakeholder path bears some promise for changing existing governance arrangements in global garment supply chains and for social upgrading—especially if extended to other issues beyond building safety.

Cluster-Driven Path

This path relies on suppliers themselves engaging in initiatives to improve working conditions, thus, acting as standard setters rather than standard takers (Gereffi & Lee, 2016). This pathway, therefore, might involve labor standard-oriented action by individual suppliers as well as by local business or employer associations but is also related to questions of suppliers taking 'ownership' of other actors' initiatives (e.g., buyers' compliance or capacity building initiatives). The effectiveness of these paths then relies on the pressure exerted by buyers, the capacity and willingness of suppliers as well as governance arrangements at the local cluster level. As discussed above, much of the growth of the Bangladeshi garment sector is based on a low-cost strategy, pushed by both the government and industry associations. However, we can observe some changes that have promoted a 'climate of compliance' among factories and, more recently, seem to have promoted the seeding ground for a number of cluster-driven initiatives to appear.

Research from our project shows that in the aftermath of Rana Plaza (Rahman & Rahman, 2020; Schuessler et al., 2019b), relationships between buyers and suppliers changed towards what we call 'asymmetric cooperation.' That means that buyer–supplier relationships tend to be longer-term and cooperative, reflecting buyers' desire to reduce switching costs and ensure compliance with basic building safety and labor standards, resulting in continuity of orders. But at the same time, suppliers' profit margins have declined and the power of buyers over suppliers has tended to increase, for instance, through buyer collaboration in the Accord. In terms of social upgrading, the longer-term and cooperative relations might create a time-horizon and the stability for suppliers to

engage in social upgrading themselves or take ownership of their buyers' initiatives.

Part of this climate of compliance are several more recent initiatives that engage in promoting knowledge around compliance-related issues among both factory managers and workers. For instance, in May 2015, the Bangladesh Employers' Federation (BEF) and the ILO signed an agreement to deliver trainings on occupational safety and health to mid-level and line supervisors in 400 factories, enabling them to train 750,000–800,000 workers. In a similar vein, in December 2019, BGMEA has signed a memorandum of understanding (MoU) with Unilever Bangladesh to engage in promoting sustainable development goals (SDGs), especially around SDG 3 (Ensure good health and promote well-being for all at all ages); SDG 6 (Ensure availability and sustainable management of water and sanitation for all); SDG 12 (Ensure sustainable consumption and production patterns); and SDG 17 (Strengthen the means of implementation and revitalize the global partnership for sustainable development). In addition, Unilever Bangladesh will make its products available at discounted prices to garment workers and has signed independent MoUs with garment factories to improve the livelihoods of their workers through different initiatives.

Other initiatives seek to strengthen the compliance-related discourse and exchange on the cluster level. One initiative featuring prominently in industry-related discussions in the media is, for instance, the Bangladesh Apparel Exchange (BAE), founded by entrepreneur, Mostafiz Uddin, managing director of Denim Expert Limited, which has received global media attention for being the first Bangladeshi business to join initiatives such as the Sustainable Apparel Coalition or the Zero Discharge of Hazardous Chemicals (ZDHC) Foundation. The BAE organization engages in learning and networking events for Bangladeshi factory owners and managers, addressing issues around economic (e.g., offering trainings on innovation and technology) and social upgrading (e.g., offering workshops to promote industry sustainability and capacity building). BAE organizes several high-profile multi-stakeholder industry events (Bangladesh Denim Expo and Sustainable Apparel Forum) and collaborated with BGMEA and other partner organizations on annual events like the Dhaka Apparel Summit.

In sum, while cluster actors have caught up with regard to fostering a discourse on compliance and have started to engage in capacity building,

more systemic social upgrading is limited by suppliers' continued dependency on Western lead firms.

Labor-Centered Path

While workers are usually seen as the least powerful actors in global supply chains, their situation still differs between countries and sectors (e.g., Anner, 2015). In the Bangladeshi garment sector, the situation of labor unions and workers has been described as comparatively weak. Anner (2015) refers to the labor control regime as one of 'market despotism,' with the strong interrelationship between the state and employers hampering the formation of unions and reinforcing the oppression of unions where they exist. This regime contributes to an only limited implementation of labor law, marked not least by exceptionally low and highly fragmented unionization, weak industry unions, and high thresholds to form factory unions. For example, a 30% (since recently 20%) threshold for union formation at the factory level as well as continued intimidation of workers when they try to register to a union places a high burden on workers to formally organize. Absence of strong unions implies that collective wage bargaining is non-existent, while the national minimum wage is still far below the living wage level and raises are often absorbed by rising rents (Kabeer et al., 2020). Despite these difficulties, the number of unions has been increasing since 2013 (e.g., Labowitz & Baumann-Pauly, 2015). Anner (2018) reports an increase in union presence in RMG factories from less than 100 prior to Rana Plaza to 440 in early 2018. Hossain et al. (2018) observe a similar increase but report the existence of over 500 unions. However, several conditions remain in place that limit further organizing and the influence of existing unions. Our own research shows that workers have limited knowledge about unions and often lack a clear worker identity (Mahmud & Kabeer, 2006) making worker organization a difficult matter. Furthermore, Connell (2020) reports that even where attempts to build factory unions are made, there is still a high rejection rate for applications and for unjustified reasons with limited scope for appeal (see also Alamgir & Banerjee, 2019, p. 287). It remains to be seen whether initiatives such as a public online database for union registration or the recently adopted standard operating procedures (SOPs) against unfair labor practice and anti-trade union discrimination launched by Bangladesh's Department of Labor (DoL) with the support of the ILO will help in providing guidance and improving transparency of the

union registration process. Recent research suggests that this is not the case (Bair et al., 2020, p. 983). Furthermore, reports of yellow unions (i.e., unions installed or tightly controlled by management) as well as suppression of worker activists and violent crackdowns continue to mount in the post-Rana Plaza era as well (e.g., Ashraf & Prentice, 2019; Siddiqi, 2017). For instance, Ashraf and Prentice (2019) report how in 2016 and 2017, when worker unrest in the industrial district of Ashulia peaked over minimum wage requests, poor working conditions, and the death of one overworked worker, factory owners suspended more than 1,000 workers and the government arrested labor organizers and detained workers, displaying 'authoritarian tactics of labor suppression' (p. 94).

Apart from the above-mentioned initiatives seeking to improve the situation of unions in the garment sector, our own work as well as the work of others also shows the importance of looking at more than the traditional ways of organizing. Quayyum (2019), for instance, shows that women workers in the Bangladeshi RMG sector are gradually building 'an infrastructure of working-class dissent' by engaging in other than the formal ways of mobilizing and organizing. That is, they make use of institutions such as intergenerational households of women garment workers, workers' centers, or developmental NGOs, often to get legal support, use daycare facilities or partake in learning and education. Quayyum (2019) argues that by offering relevant services to women garment workers, these institutions play a critical role in the formation of networks, systems of support, as well as platforms for the exchange of common working-class experiences, ultimately becoming 'potential sites of open discussions of activist knowledge and strategy' (p. 847). These informal—strongly relationship-based—ways of organizing are crucial for the female garment workers, as the Bangladeshi trade union movement remains largely male-dominated. Quayyum (2019) concludes that while the effectiveness of these infrastructures remains to be seen, recognizing the importance of these less formal ways of organizing is crucial for understanding the developing infrastructure of dissent in the Bangladeshi garment sector.

In a similar vein, our own research on the transnational worker network ExChains (Lohmeyer et al., 2018) highlights the importance of facilitating interactive processes among workers along the supply chain as well as less formal relationships between workers and local unions as a relevant supplement to higher level organizing. Such bottom-up approaches, which allow for the realization of shared experiences and the realization

of short-term improvements, allow for the emergence of worker identities and relationships of solidarity where these do not exist. They thereby build the seeding ground for more formal organizing processes both on the local and transnational level as well as the promotion of longer term goals. However, given the small-scale nature of initiatives such as ExChains as well as the sheer number of garment workers in Bangladesh, results remain necessarily limited in scope.

Our worker survey found very little evidence of trade union membership within the factories but focus group discussions suggested that a number of unions operated outside the factories and provided dismissed workers with support. Independent leftist unions appear to have been far more active in promoting workers' rights in the garment sector than mainstream registered unions. The massive protests by thousands of RMG workers in 2006 were led by two independent leftist unions who had been involved in the incidents that precipitated the initial strikes and were able to rapidly mobilize militant mass action on a scale never previously seen in the Bangladesh RMG industry. The government responded to these protests by setting up a minimum wage board to oversee the setting of minimum wages. Since then, minimum wages have been increased a number of times, but each raise was preceded by a period of agitation.

By contrast, most factories reported WPCs. These had been set up by the 2006 Labor Law to provide a platform for social dialogue. It stipulated that WPCs should be set up in any factory which had more than 50 workers with at least as many workers' representatives as employers' representatives. Workers' representatives were to be nominated by trade unions within the factory. Since most factories did not have unions, in practice, they appear to have been nominated by employers (see also Bair et al., 2020). A 2014 amendment of the labor law made an open election of workers' representatives to WPCs mandatory. Our WPC-related focus group discussions with workers suggested that most committees were generally approached about more routine complaints, such as fresh soap in the toilets, replacing water filters, or reprimanding abusive supervisors. There were some examples of WPCs taking on more significant issues such as salary raises and unfair dismissals. Our survey found that workers in most factories, particularly those associated with MSIs, reported election to WPCs. These factories were also more likely to report effective WPCs. In fact, we found that factories that reported effective WPCs, according to various criteria, were also more likely to report improvements on a range of conditions since Rana Plaza: health and safety,

behavior by managers and supervisors, job security and timeliness of payments, and sexual harassment. This may reflect more enlightened management and/or more engaged buyers. These were a minority of factories, however. A more common story was that WPC members were not given any time or incentives to perform their duties and hence made very little difference. Anner (2018) furthermore reports that workers participating in safety committees often face repression or have been fired (p. 13). Thus, the labor-driven path, to date, still seems limited in its potential to bring about social upgrading.

Public Governance Path

The public governance path relies on public regulations, most importantly national labor law, including actors such as government ministries, supreme courts, as well as labor inspectors on national and local levels (Gereffi & Lee, 2016). In Bangladesh, economic development strongly depends on the garment sector, which accounts for around 80% of the country's export revenue. This means that the garment sector is high on the Bangladeshi government's agenda and a number of initiatives were started in recent years with the aim to improve wages and working conditions for garment workers.

In the aftermath of the Rana Plaza factory collapse, a few developments have taken place. Most importantly, since 2013, the government increased the minimum wage in the garment sector and made several amendments to the Labor Act, including the one for the Export Processing Zones (EPZ Labor Act). While these are promising developments, the initiatives largely lack ambition. Even after several raises of the minimum wage and although the monthly income for garment workers at the entry-level lies above the gross national income per month (Ahmed & Nathan, 2016, p. 8), Bangladeshi garment workers still remain among the lowest paid garment workers worldwide (Barrett & Baumann-Pauly, 2019, p. 9). Within Bangladesh, however, garment workers tend to earn more than the average per capita income for the country (Ahmed & Nathan, 2016, p. 8). Furthermore, while the threshold for the formation of factory-level unions was lowered from 30% to a still fairly high 20%, the prohibition of trade unions in EPZs was kept in place. Rather than strengthening unionization, under the new labor code (as well as the new EPZ Labor Act) WPCs are required in every factory with more than 50 employees and allowed in EPZ factories.

A similar conclusion can be drawn for another public governance response to the Rana Plaza factory collapse, the Compact for Continuous Improvements in Labour Rights and Factory Safety in the Ready-Made Garment and Knitwear Industry in Bangladesh (Compact, for short). The Compact was founded by the Bangladeshi government, representatives of the European Union and the ILO, in July 2013. The goal of the Compact was to improve labor standard enforcement, building on extending inspection and remediation efforts as well as reforms of the labor code. Part of the efforts under the Compact was the governments inspection program (known as the 'National Initiative'), which involved, among others, investments in the Department of Inspection for Factories and Establishment (DIFE), including increasing the number of labor inspectors as well as providing trainings to them. Relatedly, DIFE together with the ILO has launched an electronic Labor Inspection Management Application (LIMA) to improve the collection, storage, and analysis of labor inspection data to enhance industry transparency, provide information on occupational health and safety, and streamline factory safety processes. Despite all these efforts, however, Bair et al. (2020) conclude their comparison of the Compact and the Accord that not only has the Compact been less effective in reaching its goals compared to the Accord but it also has undermined the efforts of the Accord to improve worker health and safety, e.g., with labor law provisions for the election of WPCs in the Compact negatively affecting the Accords' institution of safety committees.

This lack of ambition can be explained by several factors. First, the Bangladeshi government continues to build the growth of the sector on a low-cost strategy. This strategy depends on a cheap and flexible workforce and, therefore, hinders efforts to systematically working towards social upgrading. Second, the close-knit industry-state nexus, where members of parliament are also owners of garment factories, has allowed the industry elite to influence legislative processes, further hindering labor-centered improvements (Alamgir & Banerjee, 2019). Third, with garment production striving rather than vanishing after Rana Plaza and trade-related threats from Western governments remaining unrealized, international leverage seems to be deteriorating (Bair et al., 2020). With these conditions remaining in place, it is unlikely that the Bangladeshi government engages in more systematic efforts to socially upgrade garment workers.

Western governments, in turn, can create stricter regulations for lead firms to ensure better labor standards and guarantee human rights in

their global supply chains. Steps in this direction have already been taken with, for instance, the UK and Australian Modern Slavery Act, the French Loi de Vigilance (Evans, 2018), or the German Supply Chain Due Diligence Act. Furthermore, through sustainable public procurement initiatives, Western governments might increase the market for fairly produced garments, thus strengthening the first driver we discussed (i.e., the market-driven path).

Discussion: Towards a Hierarchy of Paths

Our analysis of the six different social upgrading paths outlined by Gereffi and Lee (2016) reveals a rather patchy picture (see Table 15.1). Pushed by the global attention to the Rana Plaza factory collapse in 2013, some form of activity can be observed for most of the six paths: from changes in labor law and legal minimum wages (public governance path), via an increasing 'climate of compliance' among suppliers (cluster-driven path), to an intensification of both formal and informal organizing (labor-centered path). Involved in these paths are all the actors described as important by Gereffi and Lee (2016), either in unison or in various collaborative constellations: lead firms, suppliers, consumers, workers, labor unions, industrial and employer associations, governments, as well as international and non-governmental organizations.

Yet, while several paths are activated, the extent to which this is the case differs (see Table 15.1). Most developments seem to have occurred within the CSR-driven and especially the multi-stakeholder path. The CSR-driven path has pushed lead firms to not only strengthen their compliance initiatives but—at least for some firms—to experiment with going 'beyond compliance' and engage in capacity building and advocacy. The multi-stakeholder path has brought about a shift towards more collective and union-inclusive initiatives, marking an important advancement as compared to prior unilateral, firm-driven initiatives and bringing about relevant improvements in terms of outcome standards. Other paths, however, seem particularly weak. The market-driven path seems especially limited by the confluence of competitive pressures on both lead firms and suppliers and the lack of incentives for suppliers and consumer pressure on lead firms to invest in labor standard-focused improvements. The public governance path seems to be similarly weak, with little pressure from Western governments and a lack of capacity and willingness on the side of the Bangladeshi government to protect worker rights. Also

Table 15.1 Paths to social upgrading in the Bangladeshi garment industry

	Key actors	*Key developments*	*Current role*	*Importance for governance arrangement*
Market-driven path	Buyers, consumers, suppliers	High competition for both global buyers and suppliers, trend of fast fashion	Very weak, if not counterproductive	Very important
CSR-driven path	Global buyers	Compliance, capacity building and advocacy	Strong	Important
Multi-stakeholder path	Global buyers, IndustriALL	Accord, Alliance	Strong	Important
Labor-centered path	Workers, labor unions	Increase in number of labor unions, informal organizing	Weak	Very important
Cluster-driven path	Suppliers, BAE, BEF, Unilever Bangladesh, ILO	Climate of compliance, MoU, trainings, networking	Weak	Important
Public governance path	Bangladeshi government, DIFE, ILO	Labor law, Compact, National Initiative	Weak	Very important

the cluster-driven and labor-centered paths remain weak. Taken together, our findings suggest a hierarchy of paths to social upgrading in the Bangladeshi garment industry.

Identifying this hierarchy is not only relevant in terms of comparing levels of activity across paths and thereby determining which of the paths need further activation. Such hierarchy is also relevant because the different paths depend on each other and thereby facilitate or limit each other's further development. The cluster-driven path, for instance, depends both on the market-driven and the public governance path. Without these latter paths providing the necessary incentives

(market) and pressure (public governance), the cluster-driven path is unlikely to develop further momentum. For instance, without suppliers' profit margins rising, their leeway to improve labor standards beyond minimum compliance levels remains limited. Likewise, without public regulation leveling the playing field, low labor standards will remain a cost-saving strategy. Similar holds for other paths: the CSR-driven and multi-stakeholder paths, for instance, are unlikely to pass a certain threshold and deliver sustainable effects without a strong push from either market or policy (or labor, which itself depends on the former two to become stronger). For instance, the achievements made by the Accord might be unstable as they are neither anchored in effective process rights nor government support and lead firm purchasing practices remain unchanged. Our analysis therefore suggests that not only are the market-driven and public governance paths the least active, they also do matter the most as they take an important enabling role in the overall governance arrangement. Without the market-driven and the public governance paths becoming more activated it is unlikely that more systemic and sustainable forms of social upgrading will occur in the Bangladeshi garment sector. To conclude with and add to Gereffi and Lee (2016): not just 'governance matters' but some governance matters more than others.

Following our analysis, it seems important to activate the weaker pathways, with particular focus on those paths that take an enabling role for other paths' development. For the public governance path, further action needs to be taken by regulators in both Bangladesh and buying countries to make labor standards a 'pre-competitive issue' (i.e., to take them out of competition). For the market-driven path, firm-level changes in factories and lead firms to improve productivity and to systematically promote social upgrading need to be complemented by industry and societal-level changes in business models and production and consumption behaviors. At the same time, mechanisms need to be introduced which facilitate worker's voice.

However, our analysis further suggests that more than activating single paths, it is important to work towards 'complementary and synergistic governance' (Gereffi & Lee, 2016, p. 35), acknowledging the mutual influence between different paths. With regard to the interplay of different paths, it is important to acknowledge that both positive as well as negative spill-over effects might occur. For instance, our research provides evidence that especially those lead firms that already had some experiences in working together with other lead firms as well as global union

federations (e.g., in the realm of the Accord or as part of global framework agreements) have developed the trust to tackle complex problems such as living wages in a collective and union-inclusive manner (Ashwin et al., 2020b). This suggests positive spill-over effects across initiatives, with experiences in past initiatives allowing for the creation of new initiatives. In other cases, however, negative spill-over effects can be observed as well. Bair et al. (2020) reveal how public governance (labor law) interferes with private governance (the Accord), with labor law provisions for the election of WPCs negatively affecting the Accords' institution of safety committees. Our analysis, therefore, shows that in taking further efforts to improve workers' lives, mutual dependencies and unintended consequences of different paths to social upgrading are important to consider.

Acknowledgements We gratefully acknowledge funding from the Volkswagen Foundation via the Europe and Global Challenges Program in cooperation with the Riksbankens Jubileumsfond and the Wellcome Trust. Grant no. 90807. We thank Adiba Afros for her valuable assistance.

References

Ahmed, N., & Nathan, D. (2016). *Improving wages and working conditions in the Bangladeshi garment sector: the role of horizontal and vertical relations, Capturing the Gains – Economic and social upgrading in global production networks* (Working Paper Nr. 40).

Alamgir, F., & Banerjee, S. B. (2019). Contested compliance regimes in global production networks: Insights from the Bangladesh garment industry. *Human Relations, 72*(2), 272–297.

Amengual, M., Distelhorst, G., & Tobin, D. (2020). Global purchasing as labor regulation: The missing middle. *ILR Review, 73*(4), 817–840.

Anner, M. (2015). Labor control regimes and worker resistance in global supply chains. *Labor History, 56*(3), 292–307.

Anner, M. (2018). CSR participation committees, wildcat strikes and the sourcing squeeze in global supply chains. *British Journal of Industrial Relations, 56*(1), 75–98.

Anner, M. (2019). Predatory purchasing practices in global apparel supply chains and the employment relations squeeze in the Indian garment export industry. *International Labour Review, 158*(4), 705–727.

Anner, M. (2020). Squeezing workers' rights in global supply chains: Purchasing practices in the Bangladesh garment export sector in comparative perspective. *Review of International Political Economy, 27*(2), 320–347.

Anner, M., Bair, J., & Blasi, J. (2013). Toward joint liability in global supply chains: Addressing the root causes of labor violations in international subcontracting networks. *Comp. Lab. L. & Pol'y J., 35*, 1–43.

Ashraf, H., & Prentice, R. (2019). Beyond factory safety: Labor unions, militant protest, and the accelerated ambitions of Bangladesh's export garment industry. *Dialectical Anthropology, 43*(1), 93–107.

Ashwin, S., Kabeer, N., & Schuessler, E. (2020a). Contested understandings in the global garment industry after Rana Plaza. *Development and Change, 51*(5), 1296–1305.

Ashwin, S., Oka, C., Schuessler, E., Alexander, R., & Lohmeyer, N. (2020b). Spillover effects across transnational industrial relations agreements: The potential and limits of collective action in global supply chains. *ILR Review, 73*(4), 995–1020.

Bair, J., Anner, M., & Blasi, J. (2020). The Political Economy of Private and Public Regulation in Post-Rana Plaza Bangladesh. *ILR Review, 73*(4), 969–994.

Barrett, P. M., & Baumann-Pauly, D. (2019). *Made in Ethiopia: Challenges in the Garment Industry's New Frontier*. NYU Stern Center for Business and Human Rights.

Barrientos, S., Gereffi, G., & Rossi, A. (2011). Economic and social upgrading in global production networks: A new paradigm for a changing world. *International Labour Review, 150*(3–4), 319–340.

Barrientos, S., & Smith, S. (2007). Do workers benefit from ethical trade? Assessing codes of labour practice in global production systems. *Third World Quarterly, 28*(4), 713–729.

Connell, T. (2020). *Bangladesh Garment Workers: New blocks to form unions*. Retrieved from AFL-CIO Solidarity Center: https://www.solidaritycenter.org/bangladesh-garment-workers-new-blocks-to-form-unions/ (Last Retrieved 10 October 2020).

Donaghey, J., & Reinecke, J. (2018). When industrial democracy meets corporate social responsibility—A comparison of the Bangladesh accord and alliance as responses to the Rana Plaza disaster. *British Journal of Industrial Relations, 56*(1), 14–42.

Dünhaupt, P., Herr, H., Mehl, F., & Teipen, C. (2020). *Opportunities for development through integration in global value chains?* Hochschule für Wirtschaft und Recht Berlin, Institute for International Political Economy Berlin. (Working Paper, No. 140/2020).

Egels-Zandén, N., & Lindholm, H. (2015). Do codes of conduct improve worker rights in supply chains? A study of fair wear foundation. *Journal of Cleaner Production, 107*, 31–40.

Evans, A. (2018). The politics of pro-worker reforms. *Socio-Economic Review*, 1475–1461, https://doi.org/10.1093/soceco/mwy042

Fichter, M., & Sydow, J. (2002). Using networks towards global labor standards? Organizing social responsibility in global production chains. *Industrielle Beziehungen/The German Journal of Industrial Relations, 9*(4), 357–380.

Frenkel, S.J., Rahman, K.M., & Rahman, S. (2017). *Between lead firms and institutional ensembles: Labour and safety practices in Bangladeshi Garment Export Factories* (Garment Supply Chain Governance Discussion Paper Series No. 03/2017).

Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy, 12*(1), 78–104.

Gereffi, G., & Lee, J. (2016). Economic and social upgrading in global value chains and industrial clusters: Why governance matters. *Journal of Business Ethics, 133*(1), 25–38.

Heath, R., & Mobarak, A. M. (2015). Manufacturing growth and the lives of Bangladeshi women. *Journal of Development Economics, 115*, 1–15.

Hossain, J., Ahmed, M., & Sharif, J. H. (2018). *Linking trade and decent work in global supply chains in Bangladesh*, Friedrich-Ebert-Foundation.

Kabeer, N., Huq, L., & Sulaiman, M. (2019). *Multi-stakeholder Initiatives in Bangladesh after Rana Plaza: Global Norms and Workers. Perspectives'*. (Garment Supply Chain Governance Discussion Paper Series).

Kabeer, N., Huq, L., & Sulaiman, M. (2020). Paradigm shift or business as usual? Workers' perspectives on multi–stakeholder initiatives in Bangladesh after Rana Plaza. *Development and Change, 51*(5), 1360–1398.

Kabeer, N., & Mahmud, S. (2004). Globalization, gender and poverty: Bangladeshi women workers in export and local markets. *Journal of International Development, 16*(1), 93–109.

Knorringa, P., & Pegler, L. (2007). Integrating labour issues in global value chains analysis: Exploring implications for labour research and unions. In V. Schmidt (Ed.), *Trade union responses to globalisation: A review by the global unions research network* (pp. 35–51). International Labour Organization.

Labowitz, S., & Baumann-Pauly, D. (2015). *Beyond the tip of the iceberg: Bangladesh's forgotten apparel workers*. NYU Stern Center for Business and Human Rights.

Lakhani, T., Kuruvilla, S., & Avgar, A. (2013). From the firm to the network: Global value chains and employment relations theory. *British Journal of Industrial Relations, 51*(3), 440–472.

LeBaron, G., & Rühmkorf, A. (2019). The domestic politics of corporate accountability legislation: Struggles over the 2015 UK Modern Slavery Act. *Socio-Economic Review, 17*(3), 709–743.

Locke, R. M. (2013). *The promise and limits of private power: Promoting labor standards in a global economy*. Cambridge University Press.

Locke, R., Amengual, M., & Mangla, A. (2009). Virtue out of necessity? Compliance, commitment, and the improvement of labor conditions in global supply chains. *Politics & Society, 37*(3), 319–351.

Lohmeyer, N., & Schuessler, E. (2018). *Rana Plaza as a threat to the fast fashion model? An analysis of institutional responses to the disaster in Germany. Eco-friendly and fair: Fast fashion and consumer behaviour* (pp. 3–14). Greenleaf Publishing.

Lohmeyer, N., Helfen, M., & Schussler, E. (2018). Can solidarity by organized 'from below' in global supply chains? The case of ExChains. *Industrielle Beziehungen, 4*, 472–496.

Lund-Thomsen, P., & Lindgreen, A. (2014). Corporate social responsibility in global value chains: Where are we now and where are we going? *Journal of Business Ethics, 123*(1), 11–22.

Mahmud, S., & Kabeer, N. (2003). Compliance versus accountability: Struggles for dignity and daily bread in the Bangladesh garment industry. *The Bangladesh Development Studies*, 29(3/4), 21–46.

Mahmud, S., & Kabeer, N. (2006). Compliance versus accountability: Struggles for dignity and daily bread in the Bangladesh garment industry. In P. Newell & J. Wheeler (Eds.), *Rights, resources and the politics of accountability* (pp. 223–244). Zed Press.

Moazzem, K. G., & Sehrin, F. (2016). Economic upgrading in Bangladesh's apparel value chain during the post-MFA period: An exploratory analysis. *South Asia Economic Journal, 17*(1), 73–93.

Munir, K., Ayaz, M., Levy, D. L., & Willmott, H. (2018). The role of intermediaries in governance of global production networks: Restructuring work relations in Pakistan's apparel industry. *Human Relations, 71*(4), 560–583.

Oka, C. (2017). Brands as labour rights advocates? Potential and limits of brand advocacy in global supply chains. *Business Ethics: A European Review, 27*(2), 95–107.

Oka, C., Egels-Zandén, N., & Alexander, R. (2020). Buyer engagement and labour conditions in global supply chains: The Bangladesh accord and beyond. *Development and Change, 51*(5), 1306–1330.

Pike, K., & English, B. (2020). *Better work beyond the workplace: A comparative study of gender dynamics in Bangladesh, Cambodia, Kenya, Lesotho, and Vietnam* (Better Work Discussion Paper No. 35). International Labour Office.

Pries, L., & Seeliger, M. (2013). Work and employment relations in a globalized world: The emerging texture of transnational labour regulation. *Global Labour Journal, 4*(1), 26–47.

Puppim de Oliveira, J. A. (Ed.). (2008). *Upgrading clusters and small enterprises in developing countries: Environmental, labor, innovation and social issues*. Ashgate.

Quayyum, N. (2019). Women workers in Bangladesh's ready-made garment industry: Building an infrastructure of dissent. *Journal of Labor and Society, 22*(4), 835–852.

Rahman, S., & Rahman, K. M. (2020). Multi-actor co-responsibility initiatives after Rana Plaza: Managements' views on Accord and Alliance. *Development and Change, 51*(5), 1331–1359.

Reinecke, J., & Donaghey, J. (2015). After Rana Plaza: Building coalitional power for labour rights between unions and (consumption-based) social movement organizations. *Organization, 22*(5), 720–740.

Salway, S., Jesmin, S., & Rahman, S. (2005). Women's employment in urban Bangladesh: A challenge to gender identity? *Development and Change, 36*(2), 317–349.

Scheper, C. (2017). Labour networks under supply chain capitalism: The politics of the Bangladesh Accord. *Development and Change, 48*(5), 1069–1088.

Schuessler, E., Frenkel, S. J., & Wright, C. F. (2019). Governance of labor standards in Australian and German garment supply chains: The impact of Rana Plaza. *ILR Review, 72*(3), 552–579.

Schuessler, E., Frenkel, S., Ashwin, S., Kabeer, N., Egels-Zandén, N., Alexander, R., Huq, L., Oka, C., Lohmeyer, N., Rahman, S., & Rahman, K.M. (2019b). Garment Supply Chains since Rana Plaza: Governance and Worker Outcomes. Garment Supply Chain Governance Project Final Report.

Siddiqi, D. (2017). Before Rana Plaza: Toward a history of labour organizing in Bangladesh's garment industry. In A. Vickers & V. Crinis (Eds.), *Labor in the clothing industry in the Asia Pacific* (pp. 60–79). Routledge.

Taplin, I. M. (2014). Who is to blame?: A re-examination of fast fashion after the 2013 factory disaster in Bangladesh. *Critical Perspectives on International Business, 10*(1–2), 72–83.

Waddock, S. (2008). Building a new institutional infrastructure for corporate responsibility. *Academy of Management Perspectives, 22*(3), 87–108.

Zajak, S. (2017). International allies, institutional layering and power in the making of labour in Bangladesh. *Development and Change, 48*(5), 1007–1030.

CHAPTER 16

China's Leverage of Industrial Policy to Absorb Global Value Chains in Emerging Industries

Anna Holzmann and Max J. Zenglein

This chapter elaborates on the leverage of industrial policy in the People's Republic of China (PRC or simply China) to boost economic development in special consideration of global value chains (GVCs) and emerging industries. Industrial policy is an essential component of China's state capitalist economic system, and it is one of the main drivers for both China's economic growth and industrial transformation that kick-started in the 1980s. China's leadership has shown that it is capable of effectively employing means of industrial policy, ranging from artificially created demand to subsidies, to quickly develop and foster newly emerging industries. Drawing on the experience of China's solar panel industry, this chapter explores the patterns of Beijing's use of tech-focused industrial policy to spur economic upgrading with the example of an emerging

A. Holzmann · M. J. Zenglein (✉)
Mercator Institute for China Studies (MERICS), Berlin, Germany
e-mail: max.zenglein@merics.de

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_16

industry that is of critical importance to the European economy: new energy vehicle (NEV) batteries.

China's approach to industrial policy, however, is not rigid but responsive to demand. Over the past three decades, the PRC has become technologically more advanced to an extent where it is now on track to becoming the largest economy in the world. Given the growing size and importance of its economy, China is now in a better position than ever to leverage the scale of its domestic market to achieve strategic goals. China's leadership capitalizes on the attractiveness of the Chinese market to access foreign technologies that are needed for the upgrade of its economy. The current situation of rapid technological change that brings about many newly emerging sectors provides the Chinese Communist Party (CCP)-led government with an opportunity to absorb GVCs from the very beginning and establish China as a lead market by means of industrial policy application.

The Leverage of Industrial Policy as an Enabler for China's Economic Development

Industrial policy has been an essential component of China's economic system since the foundation of the PRC in 1949. In response to phases of successful and failed economic development over the past decades, the CCP-led Chinese government made significant adaptations to its industrial policy approach. Under the leadership of Mao Zedong (1893–1976), China's economic development was dominated by central planning reminiscent of the command economy of the Soviet Union. Industrial policies set out to strengthen China's industrial base with an emphasis on capital-intensive, heavy industries. During what Naughton (2007) calls China's "Big Push," the advance of industries such as steel, machinery, and chemicals were key elements of China's socialist era (1949–1978).

The emphasis on heavy industries such as steel, in particular, can be ascribed to their strategic value for achieving CCP goals. For example, steel had crucial implications upstream (e.g., for coal, iron ore, and equipment) as well as downstream (e.g., as input factor for the construction industry) of the value chain (Naughton, 2007). The achievement of national self-sufficiency—i.e., the state of commanding a national economy that is sufficiently strong to meet the domestic demand in key sectors with minimal dependence on foreign input—in all of these areas

was considered an indicator of China's industrial strength. The capital-intensive nature of strategically important heavy industries set the stage for the institutional embeddedness of state-owned enterprises (SOEs) in China's economic system, making them a key element of China's command economy. The macro efficiencies SOEs provided in terms of support for economic growth (both on the production and consumption side), however, condoned inefficiencies with regard to capital utilization and profitability (Qi & Kotz, 2020).

The industrial policy push for heavy industries left its mark on the Chinese economy. The share of China's secondary sector (industry, construction, and mining by Chinese definition) expanded from only 17.6% in 1952 to 39.1% in 1960, while the share of the primary sector (agriculture) plummeted from 50.5% to 23.2% (Fig. 16.1). The establishment of China's industrial foundation in heavy industries and manufacturing bases for electricity-generating equipment as well as automobiles falls within this period of time (Naughton, 2007). However, this industrial strategy also resulted in the inefficient allocation of input factors and contributed to the colossal disaster of the "Great Leap Forward" between 1958 and 1961, and the ensuing massive famine in China (see, e.g., Kung & Lin, 2003). The leadership's objective of advancing the industrialization of the Chinese economy by means of central planning thus came at a high price.

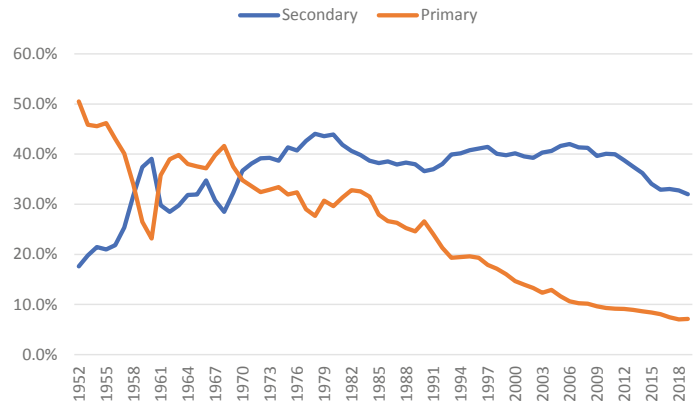


Fig. 16.1 China's gross domestic product (GDP) share by sector, 1952–2019 (*Source* National Bureau of Statistics)

Only with the start of the opening-up and reform process under Deng Xiaoping in 1978 did the transition from central planning to a more decentralized industrial policy set in China. The central government accepted the accompanying loss of control to a certain extent in order to allow for the leeway required for reform initiatives at a regional level (Heilmann, 2004). According to Heilmann (2004), China's reforms over the past decades serve as evidence for the favorable conditions of decentralized institutional experimentation—and set the stage for the marketization of China's economic system. As part of this process, China's institutional arrangements experienced considerable disruptions (Breslin, 2003). The reforms and regional experimentation initiated by Deng Xiaoping accelerated in the 1990s, resulting in a declining role of SOEs. The changing policy environment was a necessary pre-condition for the overhaul of China's SOEs, putting pressure on them to become more profitable and productive. As a result, SOEs dominance in the Chinese economy retreated and the dismantling of the "iron rice bowl"—China's paternalistic labor relations—began (Zenglein, 2018). The experimental elements of the reform process, however, also led to a slow and gradual adaptation of the underlying industrial policies. Endorsing experiments in a confined area allowed the CCP to spur economic growth while retaining overall control and political power. Any reforms efforts, then and now, are constrained by the political system under CCP leadership (Chen & Zenglein, 2019).

By means of incremental change to China's economic system, the emphasis on heavy industries and central planning during the "Big Push" was thus reversed.[1] Within 25 years, the share of SOEs in China's industrial production dropped from 80% to only 15% in 2000 (Perkins & Rawski, 2008). The revision of China's development model entailed an adjustment of industrial policies akin to those employed in the East Asian "Tiger" economies that triggered a period of rapid development and growth in South Korea, Taiwan, Hong Kong, and Singapore (which, in turn, emulated Japan's post-World War II development) in the 1960s and 1970s. China's embrace of elements of the East Asian development model coincided with a greater emphasis on light industries (e.g., textiles and consumer goods) and an increasingly export-oriented development of the Chinese economy (Boltho & Weber, 2009).

[1] Naughton's (2007) "Big Push" referring to China's industrialization focusing on heavy industry must not be confused with the "Great Leap Forward" under Mao Zedong.

There is an extensive debate to what extent China did indeed follow the East Asian development model, and what roles both the government and market forces played in this (see, e.g., Boltho, 1985; Rodrik, 1995). Irrespective of the question of success, however, in one way or another state intervention shaped the development of East Asian economies (Boltho & Weber, 2009). In China, the CCP had notably sought to strike a balance between economic reform and the Marxist-Leninist ideology at its core. This is reflected in China's adhering to the "one center, two basic points"-principle (i.e., the Party remaining at the center, while pursuing reform and opening-up) with a view "to improve the socialist basic economic system, mechanism and institutions by continuously pushing forward the reform of the socialist market economic system" (Huang, 2018, p. 57).

After a decade-long period of rapid economic growth that resulted from a partial retreat of the state, the Chinese government has been faced with new challenges to continue the economic development and modernization of its economy. Again, this required adaptations to its industrial policy approach. At the "Third Plenum of the Central Committee of the CCP" in 2013, the Chinese leadership declared SOEs once more an integral pillar of the nation's economic system. Under Xi Jinping, economic reforms have been more prominently rooted in Marxist political economics (Huang, 2018). The corresponding theoretical framework emphasizes the role of SOEs and strong political support (Lin, 2017). The state and a more centralized industrial policy have thus made a comeback, and the CCP is seeking to expand its control over China's economic development. With the help of "[s]tate-driven industrial policy combined with stronger integration of private sectors," the Chinese leadership strives "to improve capital allocation, the innovation landscape, and technological autonomy, all of which are necessary to transform the nation into a global high-tech nation by 2049" (Chen & Zenglein, 2019, p. 7).

The renewed focus on upgrading China's domestic market comes with a strong emphasis on improving technological self-sufficiency and an expectation that both SOEs and private companies deliver on national strategic goals. This concept, however, is not new. It has been an integral part of China's industrial policies since the Mao era, and became particularly prominent during the fall-out between the PRC and the Soviet Union—which used to be a major tech supplier for China up until then (Thomas, 2019). More recently, the Chinese leadership pushed for

greater self-sufficiency in core technologies as part of major policy initiatives such as "Made in China 2025" (MIC25) and its complementary technology roadmap (Zenglein & Holzmann, 2019). Self-sufficiency, in this context, is both a means to an end for the Chinese government and a necessary precondition for pursuing its goal of global tech leadership. In the wake of this, ensuring stable supply chains and controlling large parts of value chains has become of crucial importance to Chinese policymakers. Globally competitive production and stable supply chains preventing disruptions (i.e., securing access to essential technology such as semiconductors and machinery) are listed as one of the "Six Ensures" that was proclaimed by the Chinese government as focus areas of economic policymaking in April 2020 (People's Daily, 2020). In May, the Chinese leadership also started to promote its "dual circulation" strategy (DCS)—China's new development pattern that focuses on the upgrading of the domestic market in terms of both supply and demand (inner circulation) while handling its integration into the global market (external circulation) in a way that is conducive to China's tech capabilities. Confronted with new challenges, the CCP is reasserting its control over China's economic development by reinforcing centralized guidance of the CCP, the role of SOEs, and the urge for greater self-sufficiency at the domestic level. This shows how entrenched these institutions have been throughout China's economic development and reform efforts over the past decades.

Foreign Investment and Shifting GVCs as Catalysts for Economic Upgrading

Compared to Japan and South Korea, for instance, China embraced a comparatively open external policy during the initial reform process that started in the late 1970s under Deng Xiaoping. As China opened up to foreign investments through its Special Economic Zones (SEZs), entrepreneurs and companies from Taiwan and Hong Kong served both as pioneer investors and catalysts for the country's economic development (see, e.g., Heilmann, 2004; Naughton, 2007).

Spurred by their initial success in the 1970s and 1980s, Taiwan and Hong Kong started to move up GVCs during the 1980s and 1990s while relocating more labor-intensive manufacturing abroad. This coincided with China's economic reform efforts, setting the necessary preconditions for greater inclusion in the international division of labor within East Asia during the 1990s and after China's accession to the World

Trade Organization (WTO) in 2001. Manufacturing and assembly activities at the lower end of GVCs began to move into China to exploit the favorable conditions of abundant labor, cheap production costs, and virtually unrestrained access to global inputs. The division of labor principle was the same as the one that resulted in shifting GVCs from advanced economies in Japan, Europe, and the United States to Asia in the 1960s and 1970s. Both exports and foreign direct investment (FDI) as a share of China's GDP picked up considerably in the 1990s (Fig. 16.2). China's development model under Deng hence can be characterized by three key elements: marketization, decentralization, and the embrace of globalization (Zhu, 2019). This set the stage for China to become the world's factory.

China's industrial policies at that time set the pre-conditions that enabled the embrace of marketization, private ownership, and foreign investment. The state was mainly a facilitator and regulator, guiding firms' activities within GVCs—which stands in contrast with the earlier "Big Push" period under the planned economy, during which the government also acted as a producer and buyer (Horner & Alford, 2019). In this capacity, the government created tax incentives, established SEZs (i.e., larger cities or regions in which economic laws and regulations different from national law) as well as zones for export processing (i.e., smaller free trade zone within development zones with relaxed customs regulations aimed at exports), and reduced restrictions on foreign investment as well as pricing mechanisms. It is disputed, however, to what extent the

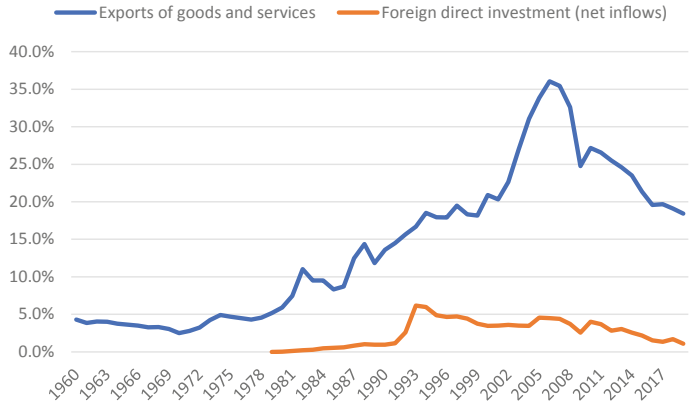


Fig. 16.2 China's exports and FDI as a share of GDP, 1960–2019 (*Source* World Bank)

CCP remained in control of privatization efforts and the resulting changes of China's economic system at that time. Heilmann (2004) argues that the rather high degree of regional laissez-faire policies was the result of bureaucratic confusion and an underestimation of the dynamics that had been unleashed. Most notably, light industry sectors that kick-started China's period of rapid economic growth in the 1980s can be attributed to foreign investors and the decreased relevance of centralized economic planning (Branstetter & Lardy, 2006). Although China's reforms led to the permission of private companies, governmental support for them was only limited (Boltho & Weber, 2009).

Economic upgrading in the context of international trade pertains to how companies or countries move from low value to high-value activities. Lema et al. (2019) point out that the learning experience for firms within GVCs can vary substantially, and deeper integration is no guarantee for economic and technological development. The integration of East Asian economies into GVCs, however, had largely positive impacts on economic development. Kaplinsky and Morris (2016) argue that Asian economies successfully followed a vertically specialized GVC path, according to which companies enter a value chain by assembling foreign design. Local firms then gradually improve their competitiveness via different types of upgrading: process upgrading, product upgrading, functional upgrading, and, finally, innovation (Gereffi, 2019). This process is usually accompanied by an increase in knowledge intensity and disembodied activities; it is often enhanced by state support, e.g., in terms of strengthening the national innovation and education system—a vital element of the East Asian development model that can also be observed in China's upgrading trajectory.

The development of the electronics industry is a strong point in case. As part of GVCs, foreign companies cooperated with domestic suppliers in China. They continuously expanded the scope of production in the local information and communications technology (ICT) sector, establishing China as the globally dominant cluster in the field. By means of foreign investment and original equipment manufacturing, China became the global manufacturing powerhouse for ICT by the end of the 1990s. These dynamics coincided with stronger efforts by the Chinese government to boost indigenous innovation and encourage foreign companies to not only focus on manufacturing but also engage in research and development (R&D) activities in China (Gereffi, 2019). Increased presence of "foreign R&D institutions act[ed] as professional training centers

and contribute[d] to the prosperity of the local talent market" (Zhu et al., 2019, p. 266). This set the stage and provided the knowledge pool for Chinese entrepreneurship in the ICT sector. The rise of Chinese smartphone companies as original brand manufacturers with growing domestic and international market shares over the past decade underlines the successful move up the GVCs using foreign knowledge as a catalyst. However, Zhu et al. (2019) point out that knowledge transfer through state-directed joint ventures between foreign companies and SOEs only resulted in limited knowledge spillover.

However, the process of moving up GVCs was gradual and slow. In the past decades, China's strategy for participating in economic globalization was to use its comparative advantage of low-cost original equipment manufacturing to cut into GVCs of developing countries (Liu, 2020). Even in the relatively successful electronics industry, the upwards trajectory took more than three decades. But China's economic upgrade has now reached a level of enabling conditions and technological capabilities that allow for an acceleration of China's upward movement along GVCs with the help of industrial policy support.

Developing China's Blueprint for Dominating Emerging Industries: The Solar Industry

In the following, the major events of China's integration in the global solar value chain are outlined—paying special attention to the role of industrial policies. The solar value chain is thereby understood in a broader sense, covering the production of capital equipment, polysilicon, ingot, wafers, cells, modules, and system components (Zhang & Gallagher, 2016). The developments in the solar industry serve as an example of China's vertically integrated upgrading trajectory in a sector whose core technology originated from abroad but eventually gets dominated by the Chinese.

China's Integration into the Global Solar Industry

At first, the United States, Japan, and European countries—above all Germany, Spain, and Italy—pioneered the global solar technology and industry development. Market formation, feed-in-tariffs, and deployment policies of Western governments led to a surging demand for solar modules in the late 1990s. This called Chinese companies to the

scene (Malcomson, 2020; Zhang & Gallagher, 2016). Leveraging China's comparative advantages in lower-cost input factors and upscaling capabilities, they ramped up local production of solar modules, however, mainly for markets abroad. Following an export-driven model, Chinese manufacturers set out to dominate the global solar module industry in the mid-2000s. Manufacturing forms the backbone of China's solar industry, but since 2005 Chinese companies have started to vertically integrate themselves into the global solar value chain—both upstream (e.g., into polysilicon and tech research) and downstream (e.g., into system integration and project development)—and thereby managed to increase supply security (Ball et al., 2017; Zhang & Gallagher, 2016).

Similar to the electronics sector, China's solar industry launched out of the entrepreneurial spirit of Chinese and foreign companies; external demand was also a major catalyst. Chinese solar firms entered the GVC at the bottom of the solar smile curve—i.e., the manufacturing segment, where barriers for tech transfer were notably low (Zhang & Gallagher, 2016). They acquired most materials and turnkey assembly lines from abroad and sought to gain access to foreign markets and particularly interesting solar technologies through foreign investment (Ball et al., 2017; Tan et al., 2013; Zhang & Gallagher, 2016). Both "push" policies from China, such as the "go global"-strategy, and "pull" policies from host countries encouraged such activities (Tan et al., 2013). Additionally, inbound investments occurred. Quitzow (2015, p. 138) argues that "German equipment suppliers played a central role in transferring state-of-the-art equipment and related know-how [to China]." However, Chinese companies got into solar module manufacturing not only through tech transfer. They also recruited talent from overseas and engaged in R&D cooperation to supplement China's innovation system with knowledge from abroad (Zhang & Gallagher, 2016).

The Chinese government also saw great merit in the development of a strong solar industry. After an initial period of relatively cautious policy intervention (Zhi et al., 2014), governmental involvement stepped up. China's solar industry benefited greatly from ministerial support programs that aimed for the development of domestic tech capabilities (Hayashi, 2020). There are two major reasons for such awakened state interest. First, the government sought to boost solar as part of its support for renewable energies, hoping to reduce China's dependence on energy imports and "dirty" coal as major power source (China Power Team, 2020). Second, it wanted to create jobs, increase tax revenues,

and contribute to GDP growth (Zhang & Gallagher, 2016). The interests of Chinese firms and Beijing in a rapid expansion of China's solar strength thus overlapped—with remarkable results. Between 2012 and 2016, China added more installed solar capacity than Germany over the course of two decades (Ball et al., 2017) and is now the largest photovoltaics (PV) market worldwide (IEA, 2020b).

State support for China's solar industry was initially low but came to play a crucial role in building up China's solar strength. It expanded from the local to the central level, where major initiatives such as the "Golden Sun Demonstration Program" and the "PV Roof Top Subsidy Program" were introduced (Zhang & Gallagher, 2016). The Chinese government granted subsidies for production and created incentives, such as feed-in tariffs, to artificially boost demand (Fialka & ClimateWire, 2016; Malcomson, 2020). Supply-side policies came with greater support for deployment and thus demand (Quitzow, 2015). In the end, virtually all levels of government offered subsidies—ranging from tax reductions or exemptions, input subsidies for cheaper electricity and equipment purchases, and cash investments (such as grants for product development and bank loan guarantees), to more indirect forms of financial assistance, e.g., in form of social welfare contributions (Ball et al., 2017). Backed by state support that "balanced the implementation of technology-push and demand-pull" (Hayashi, 2020, p. 14), China's solar manufacturers could thus buy foreign equipment, expand their production capabilities, and diversify in the solar value chain (Zhang & Gallagher, 2016). The government also used big policy banks—especially the China Development Bank (CDB)—to fund China's renewable energy and solar expansion. These banks also provided Chinese manufacturers with a liquidity lifeline during the Global Financial Crisis of 2007/2008, putting them ahead of producers in other countries who were not endowed with similar nest eggs (Ball et al., 2017).

State-backed liquidity greatly contributed not only to the expansion of China's solar industry but also to the production of overcapacities (Hayashi, 2020). In 2012, China's solar panel manufacturing capacity could meet about 150%—i.e., one and a half times—of global demand (European Commission, 2013). This "home-made" driver for excess capacity was aggravated by foreign tariffs on Chinese solar panel imports imposed by the US and Europe in 2012/2013. Chinese exports declined, and production surpluses accumulated in China. This resulted in global

price wars that favored Chinese manufacturers. Due to their vertical integration into several segments of the solar value chain, they could operate more profitably and thus further beat down costs for solar modules (Zhang & Gallagher, 2016), which dropped by up to 80% between 2007 and 2017 (Ball et al., 2017). This first stimulated growth, since lower prices triggered higher demand. Eventually, however, it led to a consolidation of solar manufacturers around the globe (Ball et al., 2017)—a consolidation that only the strongest manufacturers in China survived and thrived on thanks to state support.

In recent years, however, the Chinese government has started to revise its support system to battle overcapacities and increase efficiency. Many domestic solar companies operated uneconomically and were too reliant on state support. Solar policy adaptions, however, only came at a time when Chinese companies had already established global dominance. The quality of Chinese solar products might not match that of competitors from abroad (Zhang & Gallagher, 2016), but in more traditional high-tech fields, such as solar, the Chinese leadership seems to be content with having "sufficiently capable (as opposed to state-of-the-art) domestic expertise" (Zenglein & Holzmann, 2019, p. 23). In light of China's global leadership ambitions, the production of overcapacities that eventually obliterates foreign competition may thus be considered acceptable—not to say a deliberate means by the Chinese government to reach its goals. After all, insufficient profits erode the capabilities and incentives of foreign companies, which cannot resort to equally strong state support, to further be active in the field. In the end, solar technology "made in China" could come to dominate the globe.

China's Blueprint for Dominating Emerging Industries

The development and success of China's solar industry can be ascribed to different factors. Ball et al. (2017) describe the maturation of China's solar industry in three stages: the bulk manufacturing of solar equipment, increase domestic demand for solar equipment on the domestic market, and reforms in China's support system with a view to higher efficiency. Zhang and Gallagher (2016) identify four factors that drove China's rapid emergence in the global solar value chain: global market formation policies, international mobilization of talent, the flexibility of China's manufacturing industry, and belated policy interventions from the Chinese government.

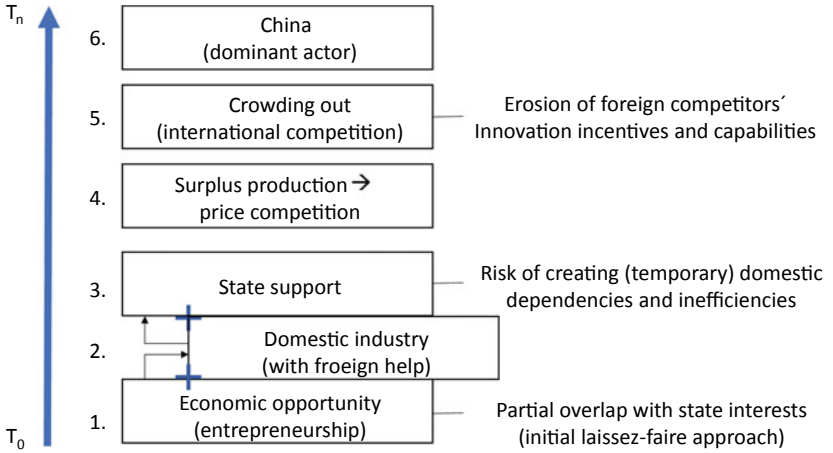


Fig. 16.3 China's blueprint for fostering newly emerging industries from domestic niche markets to global leaders (*Source* Authors)

Paying special attention to industrial policies and notions of economic upgrading in GVCs, we propose a five-stage model to describe the development of China's solar industry (Fig. 16.3). We argue that this model represents a blueprint for the development of emerging industries in China from niche markets into global leaders. Contrary to Zhang and Gallagher (2016), we suggest that the case of China's solar industry is not unique. Similar patterns of government-supported developments in newly emerging industries can be expected and are already taking shape, for instance, in the NEV battery industry.

A Major Opportunity for China's Global Dominance: The NEV Battery Industry

The Chinese leadership seeks to position China as an increasingly self-sufficient technology leader to further assert the country's status as a globally competitive superpower. Both technological frontiers and the Chinese economy have developed a lot over the past decades. In the course of rapid economic upgrading, the Chinese government has leveraged industrial policies to forge ahead not only but especially in emerging industries and future technologies. Zenglein and Holzmann (2019) argue

that in these areas, in particular, China strives to leapfrog competition from abroad. Profiting from the magnitude of its domestic market, China seizes the opportunity of yet often undetermined technological leadership to position itself in the global vanguard early on with the help of industrial policies—ranging from financial support to artificially created demand. China thus seeks to establish relevant GVCs within its borders, making full use of the fast-moving and, at first, largely unrestricted domestic market environment for the development of emerging technologies. "Foreign companies then have little choice but to be locally present if they want to benefit from these dynamics" and not be left behind (Zenglein & Holzmann, 2019, p. 23).

In this section, we apply the blueprint derived from the development of China's solar industry—an important new technology and sector at that time—(Fig. 16.3) to the newly emerging industry of NEV batteries. In this context, NEVs refer to any kind of battery-powered electric vehicle (BPEV). It must be noted, however, that the developments in both the Chinese and the global NEV battery industry are highly dynamic. Even though China has not (yet) established itself as *the* dominant actor across all fields of the NEV battery supply chain, a pattern remarkably akin to the developments in the solar industry can be observed.

1. Economic opportunities (entrepreneurship):
Global sales for NEVs have risen significantly since 2010. In 2019, about 50% of these happened in China, which—with the help of industrial policies—had already become the world's biggest NEV market in 2015. The global demand for both NEVs and batteries is expected to increase over the next ten years (IEA, 2020a). Having created an "ambition loop" within which government policies for NEV development and business ambitions positively reinforce each other (Steer, 2018), the incentives for companies to engage in NEV battery production to reap profits of a promising emerging industry are large.

Whereas Chinese companies initially got into the solar business because of high demand from abroad, they entered the NEV battery industry due to strong demand on the domestic market. From the beginning onwards, they could bank on a huge domestic market for NEVs that was nurtured by state subsidies and other support programs over the past decade (Zhao et al., 2015). With NEV market shares in Europe on the rise (Gersdorf et al., 2020), foreign demand can be expected to further stimulate China's EV battery companies.

2. Domestic industry (with foreign help):
The technologies to produce NEV batteries did not originate in China. Japanese and South Korean companies have long spearheaded the development of NEV battery technologies (Tanaka et al., 2018), and they are still topping international patent rankings (Goso, 2020). To help domestic battery manufacturers getting started, the Chinese government took steps to accelerate the introduction of foreign technologies into China. In 2009, for instance, it released regulations that tied market access for foreign car manufacturers to the condition of transferring technological know-how—including, but not limited to, on batteries—to China (Heller, 2017). Later, the government also issued a guiding catalog that encourages foreign investment into China's NEV and related industries, including battery manufacturing (MOFCOM, 2012). Attracted by China's market potential and state incentives, foreign companies, too, set up shops on Chinese ground (Wu, 2013). They invested in or expanded their capacities in China; some foreign brands were even acquired by Chinese firms (Ou et al., 2017).

3. State support:
Although the Chinese government welcomed foreign input for the development of China's NEV battery industry, it has also sought to ensure that Chinese companies had more pull on the domestic market than foreign competitors. NEV subsidy arrangements that require the use of batteries produced by "white-listed," i.e., approved, manufacturers were used to favor domestic battery producers (Kennedy, 2018). Demand for Chinese NEV batteries was thus artificially boosted (Holzmann, 2018), and market access for foreign companies impeded (Retzer et al., 2018).

Deviating from state involvement in the solar industry, the Chinese government started to intervene in the domestic NEV battery industry early on. This can be ascribed to the fact that developments in the Chinese battery sector have been closely tied to the domestic NEV market, which is strong and mature yet heavily state-driven. The government started to give great attention to the domestic NEV industry in the early 2000s (Du et al., 2017). The sector features in top-level policy plans such as MIC25, which triggered the release of technology roadmaps in relevant fields, such as traction batteries (Hao et al., 2017). State support in terms of subsidies for NEVs (using China-made batteries) is now being phased out. However, this once again comes only at a time when Chinese battery

manufacturers are already holding a quasi-monopoly in China (Huang, 2019).

4. Surplus production and price competition:
To expand their foothold, Chinese NEV battery companies capitalize on the size of the domestic market and the upscaling capabilities of China's manufacturing base. Küpper et al. (2018) project that by 2021, more than 60% of the installed production capacity in China will lie idle. With over-capacities accumulating, the pressure put on battery prices is increasing around the world. Chinese firms seek to build up capacity along the entire battery supply chain. This results in considerable price-setting power (Xie, 2020). Even though Chinese battery companies might not lead in terms of cutting-edge technology, they may outdo competitors with lower prices (Kim, 2020).

5. Crowding out (international competition), and 6. China (dominant actor):
With the domestic market for NEVs and thus for batteries having reached maturity (in terms of sufficiently meeting both demand and supply) prior to other countries, China can be considered an early mover in the global NEV battery industry. China's battery industry has already entered a phase of consolidation, having brought about a few globally competitive battery behemoths such as CATL and BYD (Kim, 2019) that strongly profited from state support (Tanaka et al., 2018). China established itself as global platform for NEV battery developments, to an extent which other regions, such as Europe, did not even get to develop their own battery industries and supply chains (Krukowska & Starn, 2019).

However, NEV core technologies, including advanced traction battery materials, are not yet mastered in China (Du et al., 2017). The country's battery production focuses on lower market segments (Preen, 2017), and the quality of Chinese battery technologies has not yet reached—let alone surpassed—that of Japanese of Korean competitors (Vincent, 2020).

Nevertheless, Chinese battery firms have already started to expand from mere manufacturing into other areas of the NEV battery value chain by means of vertical integration. As Crabtree (2019, p. 424) points out, "[b]atteries and their supply chains are the new oil," meaning whoever leads them "will have outsized influence on geoeconomics and world development." And China is clearly heading in this direction. According to a Bloomberg NEF (2020) study, China recently overtook Japan and

Korea in dominating the global lithium-ion battery supply chain. Innovative R&D, too, is on the uptake in China. CATL recently announced that it is developing a new type of NEV battery without any nickel or cobalt (Reuters, 2020). Until battery innovations such as the solid-state technology become widely marketable, however, "the battery war is being fought on the production line" (Tanaka et al., 2018). Drawing on their home field advantage, Chinese battery companies are thus well-positioned to win the tech competition after all.

Discussion and Concluding Remarks

Notwithstanding the advances in economic upgrading since major reforms in the late 1970s, China's development is still facing many challenges. According to the World Bank, China's GDP per capita was USD10,000 in 2019. This is still substantially lower than that of other advanced economies in Asia. China is also still dominating low-value manufacturing, e.g., of textiles and consumer goods, and has yet to overcome the middle-income trap. China's economy is in the midst of transitioning from a position where it leverages its demographic dividend (with a surplus of lower skilled workforce) toward one where it capitalizes on a knowledge dividend as the main source of future growth and social upgrading. This requires substantial progress in innovation and technological know-how. China's economic upgrade is bound to continue impacting GVCs, altering the international division of labor for decades to come.

To successfully upgrade China's economy, Beijing has adapted its policy approach to the logic of GVCs and the need for innovative breakthroughs. In December 2016, the central government released, for the first time, guidelines that called for the support of companies in their efforts to integrate themselves into GVCs while improving their innovation capabilities (MOFCOM, 2016). At the same time, the Chinese government has constantly sought to strengthen the national innovation system with a view to enable Chinese companies to expand both their domestic and international foothold. The MIC25 strategy, for instance, strives to support Chinese multinationals in their spearheading China's rise toward the upper end of value chains with the explicit goal of establishing a complete and independent industry chain for aviation (State Council, 2015). The policy document is indicative of China's approach

to establishing complete industrial chains within Chinese borders by gradually shifting GVCs.

China's ambitions for a stronger position in GVCs and greater self-sufficiency without, however, scaling back on the PRC's quest for global (tech) dominance have gained urgency against the background of worsening relations with the United States. The unfolding dynamics of economic and technological decoupling need to be seen in the confrontational context of a rising power (China) challenging the current hegemon (United States) as explained by power transition theory; tensions may also arise from the perceived contradiction of a socialist China seeking integration into a liberal or capitalist global model (Coco, 2020). Reminiscent of the Sino-Soviet split, China's access to crucial technology of a comparatively advanced economy as a catalyst for domestic development may once again be disrupted. As a matter of fact, countries around the globe have become more aware of the risks inherent to economic interdependence. They started to frame trade relations as security issues that call for the protection of domestic strategic industries (Montanaro & Violi, 2020). For the Chinese government, in particular, economic independence– including command over complete and independent value chains—became a matter of national security (Gewirtz, 2020). With technology-driven competition, systemic conflict, and security concerns all on the rise, the current politization of economic activities jeopardizes not only the outlook of benign international cooperation but also China's future upgrading trajectory.

How effective the gravitational pull of the Chinese economy will turn out in continuously drawing foreign companies and their most valuable assets into China—and thus the sphere of CCP and state control—is decisive for China's further development. This will determine the success of China's blueprint for dominance in emerging industries, and thus the development of future technologies not only in China but also abroad. If successful, the shifts in GVCs accelerate China's establishment as the global lead market in emerging industries, which eventually risks eroding the incentives and profitability bases of foreign companies to further innovate. The examples for the solar and NEV battery industry illustrate how quickly China's strength in industrial policy support on a growing domestic market can result in changes—even the absorption—of GVCs. Chinese tech solutions might end up dominating the global market after

all. It is, however, yet to be seen whether—and if so, to what extent—China's blueprint will have to be adapted again (and again) in reaction to an increasingly averse geopolitical environment.

References

Ball, J., Reicher, D., Sun, X., & Pollock, C. (2017). The new solar system: China's evolving solar industry and its implications for competitive solar power in the United States and the world. Stanford Steyer-Taylor Center for Energy Policy and Finance. Retrieved February 2, 2021, from https://law.stanford.edu/wp-content/uploads/2017/03/2017-03-20-Stanford-China-Report.pdf

Bloomberg NEF. (2020). China dominates the Lithium-ion battery supply chain, but Europe is on the rise. Retrieved November 10, 2021, from https://about.bnef.com/blog/china-dominates-the-lithium-ion-battery-supply-chain-but-europe-is-on-the-rise/

Boltho, A. (1985). Was Japan's industrial policy successful? *Cambridge Journal of Economics, 9*(2), 187–201. https://doi.org/10.1093/oxfordjournals.cje.a035576

Boltho, A., & Weber, M. (2009). Did China follow the East Asian development model? *The European Journal of Comparative Economics, 6*(2), 267–286. https://doi.org/10.1017/CBO9781139962858.009

Branstetter, L., & Lardy, N. (2006). China's embrace of globalization. *NBER Working Paper Series*, 1–71. https://doi.org/10.3386/w12373

Breslin, S. (2003). Reforming China's embedded socialist compromise: China and the WTO. *Global Change, Peace & Security, 15*(3), 213–229. https://doi.org/10.1080/0951274032000124947

Chen, G., & Zenglein, M. J. (2019). The global faces of China's incomplete reforms: A perspective from China's new intellectual property regime. *Journal of Chinese Economic and Business Studies, 17*(4), 425–443. https://doi.org/10.1080/14765284.2020.1712886

China Power Team. (2020). How is China's energy footprint changing? China Power Project. Retrieved January 3, 2021, from https://chinapower.csis.org/energy-footprint/

Coco, O. (2020). Contemporary China and the "harmonious" world order in the age of globalization. *The Chinese Journal of Global Governance, 6*(1), 1–19. https://doi.org/10.1163/23525207-12340044

Crabtree, G. (2019). The coming electric vehicle transformation. *Science, 366*(6464), 422–424. https://doi.org/10.1126/science.aax0704

Du, J., Ouyang, M., & Chen, J. (2017). Prospects for Chinese electric vehicle technologies in 2016–2020: Ambition and rationality. *Energy, 120*, 584–596. https://doi.org/10.1016/j.energy.2016.11.114

European Commission. (2013). Memo: EU imposes provisional anti-dumping duties on Chinese solar panels. Retrieved February 10, 2021, from https://ec.europa.eu/commission/presscorner/detail/en/MEMO_13_497

Fialka, J. C. & ClimateWire. (2016). Why China is dominating the solar industry. Scientific American. Retrieved December 10, 2020, from https://www.scientificamerican.com/article/why-china-is-dominating-the-solar-industry/

Gereffi, G. (2019). Economic upgrading in global value chains. In S. Ponte, G. Gereffi, & G. Raj-Reichert (Eds.), *Handbook on global value chains* (pp. 240–254). Edward Elgar Publishing.

Gersdorf, T., Hertzke, P., Schaufuss, P., & Schenk, S. (2020). McKinsey electric vehicle index: Europe cushions a global plunge in EV sales. McKinsey. Retrieved January 4, 2021, from https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/mckinsey-electric-vehicle-index-europe-cushions-a-global-plunge-in-ev-sales

Gewirtz, J. (2020). The Chinese reassessment of interdependence. China Leadership Monitor. Retrieved January 4, 2021, from https://www.prcleader.org/gewirtz

Goso, S. (2020). Japan leads battery tech race with a third of global patent filings. Nikkei Asia. Retrieved January 6, 2021, from https://asia.nikkei.com/Business/Technology/Japan-leads-battery-tech-race-with-a-third-of-global-patent-filings

Hao, H., Cheng, X., Liu, Z., & Zhao, F. (2017). China's traction battery technology roadmap: Targets, impacts and concerns. *Energy Policy, 108*, 355–358. https://doi.org/10.1016/j.enpol.2017.06.011

Hayashi, D. (2020). Harnessing innovation policy for industrial de-carbonization: Capabilities and manufacturing in the wind and solar power sectors of China and India. *Energy Research & Social Science, 70*(101644), 1–16. https://doi.org/10.1016/j.erss.2020.101644

Heilmann, S. (2004). *Das politische System der Volksrepublik China* (Vol. 2). VS Verlag für Sozialwissenschaften.

Heller, M. (2017). Chinese government support for new energy vehicles as a trade battleground. The National Bureau of Asian Research (NBR). Retrieved January 8, 2021, from https://www.nbr.org/publication/chinese-government-support-for-new-energy-vehicles-as-a-trade-battleground/

Holzmann, A. (2018). China's battery industry is powering up for global competition. Mercator Institute for China Studies (MERICS). Retrieved January 9, 2021, from https://merics.org/en/analysis/chinas-battery-industry-powering-global-competition

Horner, R., & Alford, M. (2019). The roles of the state in global value chains. In S. Ponte, G. Gereffi, & G. Raj-Reichert (Eds.), *Handbook on global value chains* (pp. 555–569). Edward Elgar Publishing.

Huang, E. (2019). China ends policy steering EV makers to local battery firms. Quartz. Retrieved February 4, 2021, from https://qz.com/1651944/china-ends-policy-steering-ev-makers-to-local-battery-firms/

Huang, T. (2018). Economic theory innovation and China's development practice. *China Political Economy, 1*(1), 55–66. https://doi.org/10.1108/cpe-09-2018-004

IEA. (2020a). Global EV Outlook 2020. International Energy Agency (IEA). Retrieved February 5, 2021, Report to be downloaded at https://www.iea.org/reports/global-ev-outlook-2020#the-global-electric-vehicle-fleet-expanded-significantly-over-the-last-decade-underpinned-by-supportive-policies-and-technology-advances

IEA. (2020b). Solar PV. International Energy Agency. Retrieved February 5, 2021, from https://www.iea.org/reports/solar-pv

Kaplinsky, R., & Morris, M. (2016). Thinning and thickening: Productive sector policies in the era of global value chains. *The European Journal of Development Research, 28*(4), 625–645. https://doi.org/10.1057/ejdr.2015.29

Kennedy, S. (2018). China's risky drive into new-energy vehicles. Center for Strategic & International Studies (CSIS). Retrieved February 5, 2021, from https://csis-website-prod.s3.amazonaws.com/s3fs-pub-lic/publication/181127_Kennedy_NEV_WEB_v3.pdf?wJboZdPX5rhUfie1yaPEnws-2uKUQJcc

Kim, J.-H. (2019). As battery battle continues, threats escalate further. Korea JoongAng Daily. Retrieved January 7, 2021, from https://koreajoongangdaily.joins.com/2019/05/03/industry/As-battery-battle-continues-threats-escalate-further/3062644.html

Kim, B.-W. (2020). [Tech Read] China looms over Korea (3): Quality vs. price? Battle of batteries. The Korea Herald. Retrieved January 7, 2021, from http://www.koreaherald.com/view.php?ud=20200525000557

Krukowska, E., & Starn, J. (2019). Europe thinks like China in building its own battery industry. Bloomberg. Retrieved January 7, 2021, from https://www.bloomberg.com/news/articles/2019-07-03/europe-thinks-like-china-in-building-its-own-battery-industry

Kung, J.K.-S., & Lin, J. Y. (2003). The causes of China's Great Leap famine, 1959–1961. *Economic Development and Cultural Change, 52*(1), 51–73. https://doi.org/10.1086/380584

Küpper, D., Kuhlmann, K., Wolf, S., Pieper, C., Xu, G., & Ahmad, J. (2018). The future of battery production for electric vehicles. Boston Consulting Group (BCG). Retrieved January 4, 2021, from https://www.bcg.com/publications/2018/future-battery-production-electric-vehicles

Lema, R., Pietrobelli, C., & Rabellotti, R. (2019). Innovation in global value chains. In S. Ponte, G. Gereffi, & G. Raj-Reichert (Eds.), *Handbook on Global Value Chains* (pp. 370–384). Edward Elgar Publishing.

Lin, J. Y. (2017). Industrial policies for avoiding the middle-income trap: A new structural economics perspective. *Journal of Chinese Economic and Business Studies, 15*(1), 5–18. https://doi.org/10.1080/14765284.2017.1287539

Liu, Z. (2020). Xin fazhan geju shi kaifang de guonei guoji shuang xunhuan [The new development pattern is an open domestic and international dual circulation]. Yangtze Industrial Economic Think Tank (IDEI). Retrieved January 8, 2021, from http://www.yangtze-idei.cn/index.php?m=content&c=index&a=show&catid=13&id=2470

Malcomson, S. (2020). How China became the world's leader in green energy. Foreign Affairs. Retrieved January 18, 2021, from https://www.foreignaffairs.com/articles/china/2020-02-28/how-china-became-worlds-leader-green-energy

Ministry of Commerce of the People's Republic of China (MOFCOM) 中华人民共和国商务部. (2012). Fujian: Waishang touzi chanye zhidao mulu (2011 nian xiuding) [Attachment: Catalogue of Industries for Guiding Foreign Investment (2011 Revision)]. Ministry of Commerce of the People's Republic of China (MOFCOM). Retrieved December 18, 2020, from http://www.mofcom.gov.cn/article/bh/201204/20120408086699.shtml

Ministry of Commerce of the People's Republic of China (MOFCOM) 中华人名共和国商务部. (2016). Shangwubu deng 7 bumen lianhe xiafa《Guanyu jiaqiang guoji hezuo tigao woguo chanye quanqiu jiazhilian diwei de zhidao yijian》[7 departments including the Ministry of Commerce jointly issued the "Guiding Opinions on Strengthening International Cooperation to Improve the Status of My Country's Industries in Global Value Chains]. Ministry of Commerce of the People's Republic of China (MOFCOM). Retrieved December 18, 2020, from http://www.mofcom.gov.cn/article/b/fwzl/201612/20161202061465.shtml

Montanaro, F., & Violi, F. (2020). The remains of the day: The international economic order in the era of disintegration. *Journal of International Economic Law, 23*(2), 299–322. https://doi.org/10.1093/jiel/jgaa018

Naughton, B. J. (2007). *The Chinese economy: Transitions and growth*. The MIT Press.

Ou, S., Lin, Z., Wu, Z., Zheng, J., Lyu, R., Przesmitzki, S., & He, X. (2017). A Study of China's explosive growth in the plug-in electric vehicle market. Oak Ridge National Laboratory. Retrieved January 8, 2021, from https://info.ornl.gov/sites/publications/files/Pub72210.pdf

People's Daily. (2020). Zhonggong zhongyang zhengzhiju zhaokai huiyi zhonggong zhongyang zongshuji Xijinping zhuchi huiyi [The Politburo of the CCP Central Committee convened a meeting, presided over by General Secretary of the CCP Central Committee Xi Jinping]. People's Daily Online. Retrieved January 15, 2021, from http://cpc.people.com.cn/n1/2020/0418/c64094-31678616.html

Perkins, D. H., & Rawski, T. G. (2008). Forecasting China´s economic growth to 2025. In T. G. Rawski & L. Brandt (Eds.), *China's Great Economic Transformation* (pp. 829–886). Cambridge University Press.

Preen, M. (2017). The electric vehicle battery industry in China. China Briefing. Retrieved January 9, 2021, from https://www.china-briefing.com/news/electric-vehicle-battery-industry-china/

Qi, H., & Kotz, D. M. (2020). The impact of state-owned enterprises on China's economic growth. *Review of Radical Political Economics, 52*(1), 96–114. https://doi.org/10.1177/0486613419857249

Quitzow, R. (2015). Dynamics of a policy-driven market: The co-evolution of technological innovation systems for solar photovoltaics in China and Germany. *Environmental Innovation and Societal Transitions, 17*, 126–148. https://doi.org/10.1016/j.eist.2014.12.002

Retzer, S., Huber, M., & Wagner, M. (2018). The e-mobility race and China's determination to win: Measures by the Chinese government to accelerate e-mobility development. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. Retrieved February 2, 2021, from http://www.sustainabletransport.org/wp-content/uploads/2018/09/The-E-Mobility-Race-and-Chinas-Determination-to-Win-%E2%80%93-Measures-by-the-Chinese-government-to-accelerate-e-mobility-development.pdf

Reuters. (2020). China's CATL is developing new EV battery with no nickel, cobalt, exec says. Retrieved January 5, 2021, from https://uk.reuters.com/article/us-catl-batteries/chinas-catl-is-developing-new-ev-battery-with-no-nickel-cobalt-exec-says-idUSKCN25B0BA

Rodrik, D. (1995). Getting interventions right: How South Korea and Taiwan grew rich. *Economic Policy, 10*(20), 53–107. https://doi.org/10.2307/1344538

State Council 国务院. (2015). Guowuyuan guanzu yinfa "Zhongguo zhizao 2025" de tongzhi [State Council notice on publishing "Made in China 2025"]. State Council. Retrieved January 7, 2021, from http://www.gov.cn/zhengce/content/2015-05/19/content_9784.htm

Steer, A. (2018). How China raised the stakes for electric vehicles. World Resources Institute (WRI). Retrieved January 19, 2021, from https://www.wri.org/blog/2018/12/how-china-raised-stakes-electric-vehicles

Tan, X., Zhao, Y., Polycarp, C., & Bai, J. (2013). China's overseas investments in the wind and solar industries: Trends and drivers (Working Paper). World Resources Institute (WRI). Retrieved January 6, 2021, from http://pdf.wri.org/chinas_overseas_investments_in_wind_and_solar_trends_and_drivers.pdf

Tanaka, A., Kawakami, T., & Omoto, Y. (2018). Battery wars: Japan and South Korea battle China for future of EVs. Nikkei Asia. Retrieved January 10, 2021, from https://asia.nikkei.com/Spotlight/The-Big-Story/Battery-wars-Japan-and-South-Korea-battle-China-for-future-of-EVs

Thomas, N. (2019). Mao redux: The enduring relevance of self-reliance in China. MacroPolo. Retrieved December 17, 2021, from https://macropolo.org/analysis/china-self-reliance-xi-jin-ping-mao/

Vincent, D. (2020). The uncertain future for China's electric car makers. BBC News. Retrieved February 4, 2021, from https://www.bbc.com/news/business-51711019

Wu, H. (2013). Waizi qiye jinru Zhongguo xin nengyuan qiche shichang celüe yanjiu [Research on the Strategy of Foreign-Invested Enterprises Entering China's New Energy Vehicle Market]. Dianchiwang. Retrieved February 7, 2021, from http://www.itdcw.com/archives/news/041U3412013.html

Xie, J. (2020). How China dominates global battery supply chain. Voice of America. Retrieved January 4, 2021, from https://www.voanews.com/silicon-valley-technology/how-china-dominates-global-battery-supply-chain

Zenglein, M. J. (2018). *Institutional framework and dysfunctionality of the transitional Chinese wage bargaining regime*. Rainer Hampp Verlag.

Zenglein, M. J., & Holzmann, A. (2019). Evolving Made in China 2025: China's industrial policy in the quest for global tech leadership (MPOC No. 8). Mercator Institute for China Studies (MERICS). Retrieved December 18, 2020, from https://merics.org/sites/default/files/2020-04/MPOC_8_MadeinChina_2025_final_3.pdf

Zhang, F., & Gallagher, K. S. (2016). Innovation and technology transfer through global value chains: Evidence from China's PV industry. *Energy Policy, 94*, 191–203. https://doi.org/10.1016/j.enpol.2016.04.014

Zhao, X., Doering, O. C., & Tyner, W. E. (2015). The economic competitiveness and emissions of battery electric vehicles in China. *Applied Energy, 156*, 666–675. https://doi.org/10.1016/j.apenergy.2015.07.063

Zhi, Q., Sun, H., Li, Y., Xu, Y., & Su, J. (2014). China's solar photovoltaic policy: An analysis based on policy instruments. *Applied Energy, 129*, 308–319. https://doi.org/10.1016/j.apenergy.2014.05.014

Zhu, S. (2019). New economic geographies of manufacturing in China. In M. Tewari & D. Nathan (Eds.), *Development with global value chains: Upgrading and innovation in Asia* (pp. 86–106). Cambridge University Press.

Zhu, H., Xu, F., & He, Q. (2019). Moving from OEM to OBM? Upgrading of the Chinese mobile phone industry. In D. Nathan, M. Tewari, & S. Sakar (Eds.), *Development with global value chains: Upgrading and innovation in Asia* (pp. 247–278). Cambridge University Press.

CHAPTER 17

New Business and Human Rights Laws—Support for Social Upgrading?

Stefanie Lorenzen

Introduction

A governance gap regarding the responsibility of lead firms for working conditions in supplier firms characterizes global value chains (GVCs). While international "hard law" treaties exist for human rights and labour standards, these instruments only address national governments, but not private entities and their operations in supply chains. A process for a UN Treaty on business and human rights is pending, pursuing the trail of "hard law" to fill this governance gap on an international level (UNHRC, 2020). A long-standing approach to creating accountability for lead firms has been private standard setting through corporate social responsibility (CSR). While CSR has taken manifold forms, both its voluntary nature and the attempt to solve the structural human rights deficits in GVCs on a micro/business level have prevented CSR from having much impact on the improvement of workers' rights or the human rights

S. Lorenzen (✉)
HWR Berlin (Berlin School of Economics and Law), Berlin, Germany
e-mail: stefanie.lorenzen@hwr-berlin.de

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_17

of involved communities (Anner, 2012; Bartley, 2018; Locke, 2013; Mezzadri, 2014). Against this backdrop, regional and national mandatory laws in the field of business and human rights are increasingly being passed to fill the liability gap and establish responsibility of lead firms for human rights of workers and communities, as well as increasingly for environmental goods in their geographically and organisationally dispersed production.

Transnational Business and Human Rights Laws—A Classification

International "soft law" standards, such as the UN Guiding Principles on Business and Human Rights (UNGPs) and the OECD Guidelines for Multinational Enterprises, both adopted in 2011, as well as the ILO Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy, adopted in 2017, deliver the overarching framework for these legislative activities. The UNGPs define three pillars to address human rights issues in transnational business: the state duty to protect human rights, the corporate duty to respect them and the duty of both to guarantee access to remedy for harmed parties. The corporate duty's core concept of human rights due diligence causes some harmonization among them. Yet, the larger picture is that of a plurality of concepts.

Transnational business and human rights legislation can be categorized in different ways. The most common perspectives are by material scope, i.e., the problem area they want to affect, or their regulatory technique (Bueno, 2019). In terms of the material scope some of the laws focus on a specific human right, e.g., child labour or modern slavery, or a sectoral issue often involving human rights violations, like conflict minerals (Salminen & Rajavuori, 2019; Grabosch, 2020b). The first law with a broad horizontal material scope is the French Duty of Vigilance Law, adopted in 2017.[1] In a number of other countries steps towards such legislation have been taken, but the first to follow was Germany, which after a long political debate passed the Supply Chain Due Diligence Act on 11 June 2021.[2] Common ground is that they principally cover all

[1] France, La loi n°2017–399 relative au devoir de vigilance des sociétés mères et entreprises donneuses d'ordre.

[2] Germany, Lieferkettensorgfaltspflichtengesetz, 11 June 2021, BT Drs. 19/28649.

'internationally recognized human rights' and some environmental issues. In the same vein, the EU Justice Commissioner has announced mandatory human rights and environmental due diligence legislation in 2021 for the whole single market.[3]

The main determinator of regulatory technique among these transnational business and human rights laws is whether they are disclosure laws, which set out what, and how, covered companies are obliged to report on their human rights practices or whether they are mandatory due diligence laws requiring specific conduct, namely a human rights due diligence process (Bueno, 2019; Salminen & Rajavuori, 2019; EU Commission, 2020a, 225 seqq.). Reporting provisions are designed to increase transparency around human rights issues in supply chains, so that consumers, trade unions, investors and NGOs can pressure businesses to take more robust/concrete action. Mandatory human rights due diligence laws (mHRDD) do not rely solely on stakeholder pressure, but directly oblige covered enterprises to take more substantive action. Along the lines of the UNGPs, they require that negative human rights impacts are assessed, prevented or mitigated, and that the results of this are evaluated and reported. An approach that may be considered a third regulatory technique is that the law itself does not set out statutory due diligence, but incentivizes it through stringent sanctions, for instance, a trade ban on goods if the importer does not prove that they were produced without the use of modern slavery.

The mandatory transnational business and human rights' laws differ in design concerning their corporate coverage, the content of their statutory duty, their supervision and enforcement mechanisms, as well as the repercussions for breaching the legal duty. Additionally, due diligence laws may cater to access to remedy for harmed rightsholders. While the German law, for instance, envisages significant administrative penalties, the French Duty of Vigilance law opens up civil liability claims to injured parties. An

[3] European Union, In a legislative initiative procedure the Committee on Legal Affairs of the European Parliament on 11 February 2021 brought forward a Report with recommendations to the Commission on corporate due diligence and corporate accountability (2020/2129(INL)), with a motion for a proposed Directive; https://www.europarl.europa.eu/doceo/document/A-9-2021-0018_EN.html. On 10 March 2021 the plenary of the European Parliament adopted the proposed Directive on Corporate Due Diligence and Corporate Accountability; https://www.europarl.europa.eu/doceo/document/TA-9-2021-0073_EN.html. At the time this chapter was written, the EU Commission's reaction and further legislative process was pending.

Italian Legislative Decree of 2001, originally not meant for human rights, has been extended to provide for criminal liability of legal entities for infringing specific human rights like modern slavery and environmental crimes.[4]

Assumptions About the Effectiveness of Business and Human Rights Legislation

The new due diligence legislation for more accountability in GVCs works under the implicit, and hardly discussed, assumption that the laws will influence companies' behaviour and practices, which in turn will determine suppliers' behaviour and practices, which will ultimately positively impact workers' and communities' rights, as well as the environment (Nelson et al., 2020, 8 seq.). This is hardly self-fulfilling given the extensive research pointing out that the situation of suppliers and workers is influenced by context specific circumstances, e.g., weak rule of law, corruption, deficits in national regulation and its implementation, such as labour inspection (Anner, 2019; Nelson et al., 2020, p. 26). Adding to this, further root causes of decent work deficits have led to power asymmetries in GVCs to the detriment of suppliers and workers (Armbruster-Sandoval, 2005; Hale & Wills, 2005). They include international trade rules, short termism and shareholder orientation of strategic decisions in multinational enterprises, technological progress, weak industrial policies in producing countries and tax policies. Suppliers in turn frequently have to cope with a very competitive surrounding and bear cost risks for their lower tier suppliers and workers. That their economic gains are not necessarily passed on to workers even holds true for the consolidation of larger "full-package" suppliers, who have partly developed due to buyers' demands to upgrade functionally and coordinate some tiers of the value chain themselves (Anner, 2019). Workers, especially in labour surplus markets, have little leverage to oppose this. The result being low wages, overtime, health and safety deficits and threats to enabling collective rights such as the freedom of association and collective bargaining (Anner, 2019; Nelson et al., 2020).

[4] Decreto Legislativo 8 giugno 2001, n. 231, Disciplina della responsabilità amministrativa delle persone giuridiche, della società e delle associazioni anche prive di personalità giuridica, a norma dell'articolo 11 della legge 29 settembre 2000, n. 300.

Research on the design of single business and human rights' laws exists (Field et al., 2019; Lutz-Bachmann et al., 2021; Mantouvalou, 2018; Savourey, 2020), some literature has compared designs (EU Commission, 2020a; Salminen & Rajavuori, 2019; Grabosch, 2020b), and some literature links outlining designs of laws with presenting case studies on their implementation (Partzsch, 2020; Schilling-Vacaflor, 2020). There is, however, little research on how exogenous facts or the systemic set-up of GVCs and business and human rights' laws are linked (Nelson et al., 2020). Some authors conclude that mHRDD may have little effect, because the legislation does not take power relations in GVCs into account (Nelson et al., 2020). Others attribute this to a gap of "bottom-up" self-organization and collective action by workers and trade unions (Kumar, 2018). Notwithstanding the role of collective action and of the governments of producing states, this chapter argues that human rights and environmental due diligence laws have the potential to support levelling some of the power imbalances in GVCs, depending on central elements of their design and implementation.

The chapter is organized as follows: Three relevant examples of laws are outlined and analyzed. From this, some general findings will be formulated regarding central elements of effective design and implementation with a potential to change company and supplier behaviour and affect workers' rights positively.

Potential to Change Company and Supplier Practices—Examples of Business and Human Rights Laws

The three examples of business and human rights laws chosen reflect varying regulatory approaches and address different topics. The Modern Slavery Act (2015) of the United Kingdom (UK Modern Slavery Act/UK MSA) is a prominent example of reporting legislation. It is issue-specific and aims at eliminating slavery, forced labour and human trafficking from GVCs. The French Law on the Corporate Duty of Vigilance, 2017 (French Duty of Vigilance Law) enacted on 27 March 2017 is the first law generally making human rights and environmental due diligence mandatory for companies without addressing a certain sector, issue or specific right. The German Supply Chain Due Diligence Act (German Due Diligence Act) of June 2021 is the most novel piece of legislation

continuing this pattern. Yet, the regulatory technique chosen is quite different, especially the envisaged enforcement mechanisms.

In order to compare the design of the laws, the central elements of business and human rights legislation are referenced: the personal scope, which outlines who the addressee required to act is; the material scope, which describes the object due diligence is to protect, or the problem the law wants to solve; the statutory duty, which details the mandatory obligation; the reach of this duty along the GVC; enforcement mechanisms such as supervision and sanctions for breach of duty; and finally, possible liability for damages to harmed parties.

The UK Modern Slavery Act—Outline

The UK Modern Slavery Act 2015 entered into force for the accounting year, which ended after 31 March 2016. It mainly clarifies and consolidates the criminal offences of slavery, servitude, forced or compulsory labour and human trafficking. Additionally, in its material scope, it provides for a reporting duty for companies on this matter concerning their supply chain.

The personal scope covers commercial organizations with annual net sales of at least GBP36 million "carrying on business", supplying goods or services in any part of the UK. The law therefore also applies to foreign companies with, for instance, an office branch in the UK. In its impact assessment prior to passing the act, the UK government estimated that this covers approximately 9,000 companies (UK Government, 2015, p. 2).

The statutory duty entails that a company must annually issue a slavery and human trafficking statement on the steps it has taken to ensure that slavery and human trafficking is not taking place in any of its supply chains, and in any part of its own business. Distinguishing the reporting obligation from a standard of conduct, i.e., a due diligence obligation, a company may also state that it has taken no such steps.[5] The act suggests that the statement 'may include' information about six areas[6]: (1) the company's structure, its business and its supply chains; (2) its policies in relation to slavery and human trafficking; (3) its due diligence

[5] Section 54 (4), UK Modern Slavery Act (2015).

[6] Section 54 (5), UK Modern Slavery Act (2015).

processes; (4) risk assessment and measures taken; (5) the effectiveness of its steps, measured against performance indicators; (6) staff training. While the act does not set out any further requirements for the quality of reporting, the government issued a guidance to facilitate and support company reporting (UK Home Secretary, 2017). The statement must pass through the company board and be signed by a director.[7] Also, it must be published on the company's website, as the official guidance suggests within 6 months (UK Home Secretary, 2017, para 7.4.), or, lacking a website, on request within 30 days.[8]

The UK MSA is not enforced by regular supervision of an administrative authority. Neither does it establish extraterritorial liability (LeBaron & Rühmkorf, 2017, p. 20). The repercussion envisaged if a company does not report is that the government may bring civil proceedings in court for an injunction to issue the statement. Refusing publication after a court order can entail an order for contempt of court, which is punishable by unlimited fines (Neely, 2020, p. 312).[9] However, the courts do not examine whether the company statement is materially accurate or transparently written in clear language (Grabosch, 2020a, p. 26).

The UK Modern Slavery Act—Assessment and Experience

Since its adoption, the act's effect on corporate policies has been investigated; however, its effect on suppliers and workers has not. The effectiveness of the law has received some positive assessment in 'nudging' businesses to look into modern slavery issues (BHRRC, 2021, p. 3), as well as the coverage of foreign companies for competition reasons. Yet, the UK government's proclaimed objective to spark a race to the top through transparency—with investors basing their lending decisions, and consumers basing their purchasing decisions, on the quality of measures a company discloses to prevent modern slavery (UK Home Secretary, 2017, para 2.5; Neely, 2020, p. 297)—has not materialized. Its contribution to changing company policies and practices is judged as weak and criticized on various grounds (Field et al., 2019; Mantouvalou, 2018).

[7] Section 54(6), UK Modern Slavery Act (2015).

[8] Section 54 (7), (8), UK Modern Slavery Act (2015).

[9] Section 54 (11), UK Modern Slavery Act (2015).

Unlike the Australian Modern Slavery Act 2018 (Australian MSA) the UK MSA does not cover publicly owned entities under the personal scope, thereby omitting transparency rules on public procurement activities, and disregarding policy coherence (Finland MoEAE, 2020, p. 33; Grabosch, 2020a, p. 41).

Another major criticism pertains to the principal provisions of the UK MSA, the reporting duty. While the Australian MSA prescribes that the company statement must include the company name, the company structure, its business model and supply chains, as well as elements of due diligence, the content of disclosure under the UK MSA is discretionary and the quality of information on average remains quite generic (BHRRC, 2018, 2021). Companies generally disclose little detailed information; most companies fail to really explain their business model, the location of their subsidiaries and operations, or the structure/composition of their supply chain. While many companies conduct some form of risk assessment, the approaches and quality of how this is used for further elements of human rights due diligence vary strongly. The narrow material scope does not incentivize companies to look into other labour abuses which may indicate or lead to modern slavery (BHRRC, 2021). Only a small minority of approximately 15% report engaging with local workers, trade unions or NGOs (BHRRC, 2021). Although the majority of companies maintain that they monitor their suppliers, the results of this are not transparent (BHRRC, 2018, p. 16). Practically none of the companies exposed any critical exploitation of 'hidden workforce' in their supply chains; few publicly committed to changing this or to using their leverage among their smaller to-medium size suppliers. The weakest spot in disclosure under the UK MSA is reporting on the effectiveness of the company's practices (BHRRC, 2021, p. 7). Some rely on quantitative KPIs already used under CSR as the number of workers trained or the number of suppliers audited. However, qualitative evaluation of the prevention or mitigation of slavery risks are lacking as are details on remediation of actual adverse impacts.

It is not surprising that the above findings come from an NGO report. Since supervision is completely delegated to investors, consumers and other stakeholders such as academia and civil society, the lack of mandatory reporting requirements puts the main objective of the act, market transparency, at stake. Supervision depends to a great extent on the volatile resource situation of civil society organizations. A common structure for the reports, a choice of possible reporting formats, a public

online registry and an annual report on compliance with the law highlighting best-practice examples by the competent ministry as foreseen by the Australian MSA[10] are not provided for and hinder stakeholder supervisory work all the more.

Although company boards are involved in approving and signing the modern slavery statement, the compliance rate has only reached 60% after 6 years (BHRRC, 2021, p. 2). This is attributed to the legal sanctioning mechanism under the UK MSA, which is not stringent. To date, no court injunction for failing to publish a modern slavery statement has been served (BHRRC, 2021). The principal consequence builds on companies' interest to avoid reputational risks. Whereas the Australian MSA underlines this with the possibility of "shaming" perpetrators by publishing the disclosure violation naming the company,[11] the legal framework of the UK MSA creates a reporting dilemma, incentivizing nontransparent, generic reporting. If a company reports details which prove to be inaccurate or protected as business secrets it could face civil litigation from competitors, other stakeholders or shareholders. Directors potentially risk personal liability for negligence or breach of duty (Grabosch, 2020a, p. 24; Neely, 2020, p. 312).

In comparison, the anti-forced labour framework in the USA relies on much more clear-cut legal consequences and establishes some remedy for harmed workers. The California Transparency in Supply Chains Act 2010, a reporting statute which served as a blueprint for the UK MSA, is complemented by the US Trade Facilitation and Trade Enforcement Act of 2015.[12] Based on the US Tariff Act of 1930 it prohibits the importation of products into the USA mined, produced or manufactured using forced labour, including child labour.[13] The act itself does not provide for due diligence obligations. Yet, it incentivizes these. If allegations reasonably indicate that goods were produced with forced labour, the competent US Customs and Border Protection may detain them. The burden of proof is on the importer. Companies can furnish proof by undertaking

[10] Sec. 23 Australian MSA.

[11] Sec. 16 Australian MSA.

[12] Pub. L. No. 114–125 Trade Facilitation and Trade Enforcement Act of 2015 (United States Public Laws 2015–2016 Edition).

[13] 19 U.S.C § 1307.

supply chain due diligence.[14] In addition, importers may be sanctioned through criminal prosecution (Bell, 2016, p. 583).[15]

The detention orders are mainly directed at specific products and firms, but also at commodities from specific countries such as tobacco from Malawi, cotton from Turkmenistan or gold from all artisanal mines in the Democratic Republic of Congo. The effect is quite harsh, since it is de facto a trade ban with all its negative side effects, possibly causing loss of employment. Also, the decision-making process within the customs authority is not very transparent and seems to be policy-driven to a certain extent—a majority of detentions since 2016 concerned Chinese goods. The provisions therefore cannot replace well-constructed social chapters in trade agreements or a coherent trade policy. Still, NGOs, whose intensive information and advocacy work delivered evidence for these cases, judge the import bans as a contribution to improved working conditions on the ground (Roggensack & Syam, 2020, p. 4; BHRRC, 2021).

The effect of the import ban is magnified by the US Trafficking Victims Protection Act of 2000 and its Reauthorization in 2017 (TVPA), which provides for a mandatory restitution claim for economic loss, i.e., the minimum wage during the slave labour working time,[16] also against someone who knew or should have known about the violations and financially benefitted from them.[17] Due diligence cannot protect against this claim (Grabosch, 2020b, p. 9).

Against this backdrop, the recommendation of an independent evaluation of the UK MSA to introduce more robust provisions (Field et al., 2019) can only be commended.

*The French Duty of Vigilance Law (***Loi De Vigilance***)—Outline*

The French Duty of Vigilance Law was drafted in the aftermath of the Rana Plaza Building collapse and aims at preventing social and environmental catastrophes following from the organization of GVCs (Bright et al., 2020, p. 31). Stated objectives of the law are also to grant remedy

[14] https://www.cbp.gov/sites/default/files/assets/documents/2017-Jan/170103_Forced Labor Importer Due Diligence Fact Sheet.pdf.

[15] 18 USC § 1761–§ 1762.

[16] 18 USC § 1593.

[17] 18 USC § 1595.

to victims and to stop "cascading subcontracting" (Bright, 2020; Sherpa, 2018, p. 33). The due diligence obligation is integrated into the French Commercial Code.

The personal scope of the Duty of Vigilance law is not linked to a certain turnover. The law covers companies registered or incorporated in France which either employ more than 5000 employees for two consecutive financial years or have French-registered subsidiaries that do. Alternatively, it also covers companies which employ more than 10,000 employees worldwide, counting their own as well as the workforce of their subsidiaries in France or abroad. It is presumed that this applies to between 150 and 300 companies (Brabant & Savourey 2017a, p. 2; Duthilleul & Jouvenel, 2020, p. 17; Savourey, 2020, p. 20).

The material scope concerns three objects of the statutory duty: human rights and fundamental freedoms, health and safety of persons and the environment. The due diligence or vigilance obligation regarding these issues is three-fold and hinges on the "vigilance plan", the "cornerstone" of the law (Brabant & Savourey, 2017b). In-scope, companies need to (1) establish a vigilance plan, (2) implement it effectively[18] and (3) publish it as part of the company's annual report.[19] The vigilance plan must outline reasonable vigilance measures to identify risks and prevent severe impacts on human rights and fundamental freedoms, health and safety of persons and the environment.[20] This is the general vigilance duty. In addition the law details five requirements which are not sufficient, but necessary, to discharge it: (1) risk mapping in order to identify, analyze and prioritize risks; (2) relating to the mapped risks: regular evaluation of activities of controlled enterprises, subcontractors or suppliers with whom there is an established commercial relationship; (3) appropriate actions to mitigate risks or prevent severe impacts; (4) an alert mechanism to collect risk-related grievances and observations; (5) a system for monitoring the implementation of the vigilance measures and evaluating their effectiveness. The law explicitly calls for stakeholder involvement. It does not make it mandatory but states that the vigilance plan "is meant to be drawn up in association with" stakeholders of the company, and where appropriate as part of sectoral or regional multistakeholder initiatives. The alert and

[18] French Commercial Code, Art. L. 225–102-4, para. 2.

[19] French Commercial Code, Art. L. 225–102-4, para. 5.

[20] French Commercial Code, Art. L. 225–102-4, para. 3.

grievance mechanism is to be established together with the representative trade union of the covered company.

Owing to its broad material scope, the French Duty of Vigilance law limits the reach of the vigilance down the supply chain. The character of the legal relationship and its intensity determine the extent of the duty. Next to risks resulting directly or indirectly from its own business operations, an in-scope company needs to scrutinize results of the activities of exclusively controlled enterprises as well as subcontractors and suppliers with whom an established commercial relationship exists.[21]

The enforcement rules of the Duty of Vigilance Law, like those of the UK MSA, do not cater to supervision by a competent public authority, which checks the existence and implementation of vigilance plans on a regular basis. The enforcement is left to market mechanisms and judicial enforcement. It is two-pronged. If anyone believes an in-scope company not to have established, implemented or published a vigilance plan according to the prerequisites of the law, they may give formal notice to such company to comply within a period of three months. In case of non- or only partial compliance, any interested party may seek an injunction with the competent French court, which may order the company to fulfil its obligations under pain of periodic penalty payments (Savourey, 2020, p. 72). The wording of the Duty of Vigilance law does not define what an interested party is. In the light of the UNGP and of lacking administrative monitoring the term should be construed broadly. Some authors see interested parties as "stakeholders whose rights and obligations are affected by the execution or the failure to comply with the duty of vigilance, for example local communities, employees, consumers, trade unions, associations or NGOs" (Beau de Loménie & Cossart, 2017, p. 94; Savourey, 2020, p. 91).

In addition, the vigilance obligation is sanctioned by civil liability rewarding damages to affected parties if the damage could have been avoided with proper vigilance. The ambit of liability is the same as the reach of the due diligence obligation, as is not further restricted, for instance, to direct subsidiaries. Finally, the courts have discretion to publish a civil liability decision. The civil liability provision is the first of its kind in mandatory due diligence legislation. It follows the rules of the

[21] French Commercial Code, Art. L. 225–102-4, para. 3.

French law of tort,[22] requiring fault/negligence concerning the duty of care, damage and causality between the two (Bueno & Bright, 2020). The Duty of Vigilance law does not alter the burden of proof. The full onus of proof therefore lies on the claimant, the harmed party.

The French Duty of Vigilance Law (Loi de vigilance)—Assessment and Experience

The Duty of Vigilance law was passed 4 years ago. There is some assessment of its design and its contribution to altering company policies from the evaluation of the first vigilance plans, as well as the first actions for injunction. A few case studies have looked into effects on workers and communities, not much is known about the effect on suppliers.

The law seems to have increased awareness among companies about accountability for human rights and environment and sparked some internal reorganization to manage due diligence (Duthilleul & Jouvenel, 2020; Ernst & Young, 2018; Savourey, 2020, p. 90).

The delimitation of the personal scope of around 150 to 300 companies seems quite narrow (Savourey, 2020, p. 91), but the duty of vigilance will be cascaded down to companies in the GVCs of the covered companies, the exact number depending on how the courts will interpret the reach of the statutory duty in terms of controlled companies and suppliers. Still, large foreign companies on the French market fall outside the ambit, if they don't have a French-registered subsidiary (Savourey, 2020, p. 91), hindering broader coverage and a level playing-field for French firms.

The vigilance duty is shaped largely along the lines of the UNGPs and similar to the widespread private compliance standard ISO 26000, an advantage for companies and their suppliers, who are therefore used to risk management cycles (Bright et al., 2020, p. 32). Although the French law delimits the reach of the duty down the supply chain, the perimeter is still considered broad, since exclusively controlled companies include directly and indirectly controlled subsidiaries and subcontractors and suppliers with whom an established commercial relationship exists, is construed to encompass business relationships of a certain duration,

[22] French Civil Code, Art. 1240–1241.

stability and regularity (Brabant et al., 2017, p. 4; Cossart et al., 2017, p. 320; Nasse, 2019, p. 793 seq.; Schiller, 2017, p. 21).

Yet, the evaluation of the first vigilance plans shows a mixed picture of how the duty of vigilance is transposed into company practices. Before the law was passed, around 30% of in-scope companies mapped human rights and environmental risks, whereas 70% have done so since. Most reports have established a replicable method for assessing risks (Entreprises pour les droits de l'Homme, 2018). It seems, however, that many companies analyzed risks to the company rather than risks to rights holders, and that the methods for risk mapping are still underdeveloped since neither the law nor a supervisory body gives guidance on this. Therefore, companies tend to transpose their CSR reporting categories to the vigilance plan, instead of prioritizing the most salient risks (Amis de la Terre et al., 2019).

When it comes to actions to addressing risks, companies refer more to standards than actual measures taken to mitigate risks and prevent violations. Partially, the measures do not match the mapped risks (Entreprises pour les droits de l'Homme, 2018; Amis de la Terre et al., 2019).

The law's explicit notion of involving stakeholders in the design of vigilance plans, and specifically the consultation of trade unions for the alert and complaint mechanism is seen as strengthening an important aspect of the UNGP (Savourey, 2020, p. 91). In practice, however, trade unions were not mentioned in the first vigilance reports (Amis de la Terre et al., 2019), and since the law does not detail obligations on grievance mechanism, they are hardly put into effect (Nelson et al., 2020).

Processes to monitor the effectiveness of the measures have rarely been installed or backed by adequate indicators (Ernst & Young, 2018; Amis de la Terre et al., 2019).

This raises the question whether the enforcement mechanism is fit to improve these limited effects over time. The law has led to the first formal notices and lawsuits but has not induced a flood of court cases. To date, there are four court actions pending, contesting proper prioritization of risks in the vigilance plan: two lawsuits involve Total S.A. oil and gas company concerning rights of displaced local communities arising from oil projects in Uganda and climate-related impacts from green-house gas emissions in France.[23] The lawsuit against energy enterprise EDF alleges ignoring the right of free, prior and informed consent of indigenous

[23] Formal notices to Total S.A. of 19 and 25 June 2019, resp. 23 October 2019 and 14 January 2020 filing of court action.

communities regarding a wind park project in Mexico[24] (EU Commission, 2020a, p. 170). The newest case is directed at the supermarket group Casino concerning deforestation and land grabbing of second tier beef suppliers in the Brazilian Amazon region. This is the only case that also covers a civil claim for damages of rights holders.[25] In addition, three formal notices have been delivered concerning freedom of association, various workers' rights and environmental and sanitary risks.[26]

The cases demonstrate that the broad formula of stakeholders with standing allows French and local NGOs and trade unions to pool their knowledge and resources for summary action, and pinpoint salient risks which companies may have found too difficult to address. The court cases also question whether the figure of the vigilance plan contributes positively to the design of the law. Substantively, arguments seem to focus much on the wording of the vigilance plan itself, as the manifestation of the duty of vigilance, whereas attention is diverted from the assessment of the actual measures taken. This leaves doubts as to whether private enforcement can replace regular supervision by a public/independent body. Developing best practices by case law is a much lengthier process than through regular administrative control. Impact may stay sporadic as it is left to the data collection and coordination skills of NGOs as well as their volatile financial resources (Savourey, 2020, p. 91 seq.; Sherpa, 2018).

Particularly, the civil liability action, which was the result of political compromise, has been called a missed opportunity for access to remedy of affected parties due to the burden of proof (Brabant & Savourey, 2017b; Marx et al., 2019, p. 15; Schilling-Vacaflor, 2020). A case study in Bolivia observed the difficulties and even detrimental effects a local community experienced trying to make use of the French law vis-à-vis a Total subsidiary active in gas extraction. Prior consultation with indigenous communities had taken place. The local company's involvement, however, increased tensions among ethnic groups, caused some to split up and weakened their movement. Allegedly, some ethnic leaders were bribed, some regions were cut off from water. Without support from

[24] Formal notices to EDF 26 Sept. 2019.

[25] Formal notice to Casino in September 2020, resp. March 2021 filing of court action.

[26] Formal notice to Teleperformance 18 July 2019; formal notice to XPO Logistics Europe 1 Oct. 2019; formal notice to Suez July 2020.

local universities and foreign development NGOs, the Bolivian indigenous groups would have been hardly able to collect enough evidence to win a tort case under the French law, as power asymmetries in the value chain also imply knowledge asymmetries (Schilling-Vacaflor, 2020, p. 12). Without further disclosure provisions it will be very difficult for plaintiffs to substantiate all elements of a tort claim, starting with the fact that a supplier is actually part of the defendant's value chain.

Notwithstanding this ambiguous picture of the first effects of the Duty of Vigilance law, some inspiration comes from the civil court in Nanterre in the second case against Total regarding its contribution to climate change. The court highlights that the duty of vigilance fundamentally changes the ambit of factors to be considered in a company's business strategy. It points out that a vigilance plan is not just a formal report to present at the shareholder meeting (Chatelain, 2021), and reminds management that strategic choices "can no longer be made according to a strict economic logic but by integrating elements previously conceived as exogenous: (…), it must integrate into its strategic orientations the risks of human rights and environmental violations, and, in fact, in view of the nature of its activity, proceed to substantial abandonment or reorientation" (Court order N° RG 20/00915 of 11 Feb. 2021 of the civil court of Nanterre, reported by Chatelain, 2021). This meaningful interpretation of the law with paradigmatic change to management strategies is lately supported by the plans of the Commission of the EU to link directors' duties to long-term sustainability objectives.[27]

The German Supply Chain Due Diligence Act—Outline

The German Supply Chain Due Diligence Act 2021 was passed on 11 June 2021 and will enter into effect on 1 January 2023. It was drawn up after the German Government evaluated that only approximately 17% of German-based companies with more than 500 employees voluntarily undergo human rights due diligence. A German National Action Plan on Business and Human Rights, adopted in December 2016, had set out that legislative measures should be considered if less than 50% of the said companies met the threshold.

[27] EY Study July 2020, EP Resolution December 2020, Consultation Summary 18 May 2021.

In its first year the personal scope of the law applies to companies with more than 3,000 employees, which are headquartered, or have a main place of business or a registered office in Germany. This covers an estimated 600 companies. As of 2024 the act will apply to companies with more than 1,000 employees, covering approximately 2,900 companies (Supply Chain Act Initiative, 2021, p. 4). In the parliamentary process this was extended to (foreign) companies with a domestic branch office meeting the threshold, thus increasing coverage noticeably.

The statutory duty is a due diligence standard based on the UNGPs; its object is not restricted to a specific topic or right, but covers human rights from a comprehensive list, which, however, omits some relevant standards such as the recently ratified ILO Convention 169 on the rights of indigenous people. In addition, due diligence needs to address three specific environmental risks concerning mercury emissions, persistent organic pollutants and hazardous waste, as set out in the relevant conventions, which Germany ratified. Apart from that, environmental damage is considered if it translates into a human rights risk, e.g., life, health, land use. The content of the human rights and environmental due diligence obligations mirrors the common steps set out by the UNGP: risk assessment, addressing risks with preventative or mitigation measures, evaluating the effectiveness of the due diligence process and communication, including grievance mechanisms for which companies need to install adequate risk management.[28] Concerning the reach of these duties down the supply chain, the Due Diligence Act creates a characteristic framework of its own, which contrasts the UNGP. It demands that companies apply all steps of the due diligence obligation in their own business perimeter and with their direct contractual suppliers. The definition of the "own business perimeter" was broadened in the parliamentary process to go beyond the German-based legal entities to include (foreign) subsidiaries, over which the parent company has "decisive influence".[29] Covering only direct suppliers restricts full, proactive due diligence to tier 1 suppliers. Only if a company attains "substantiated knowledge" of a possible human rights or environmental violation with indirect suppliers as of tier 2, must it carry out a risk analysis as a first step and address these risks.[30]

[28] §§ 3, 4 German Supply Chain Due Diligence Act 2021.

[29] § 2 (7) German Supply Chain Due Diligence Act.

[30] § 9 German Supply Chain Due Diligence Act.

The Due Diligence Act provides for regular administrative supervision.[31] It is based on reporting duties.[32] Companies need to internally document their due diligence processes and measures on an ongoing basis, and publish an annual report on their website. The competent public body, the Federal Office of Economic Affairs and Export Control, controls compliance based on regular review and specific inspections when claims of non-compliance are put forward. Breach of the statutory due diligence requirements sets off a number of sanctioning mechanisms. The monitoring authority can issue significant administrative fines. These may reach a maximum of EUR 800,000 or of 2% of a company's total annual turnover for large firms.[33] If a company is fined more than EUR 175,000 it should be excluded from public procurement orders for up to three years.[34] The act explicitly excludes that a breach of due diligence constitutes a new civil cause of action. Civil liability for damages based on other provisions remains untouched. Further, injured parties can ask German trade unions or NGOs active in this field to raise civil proceedings on their behalf, novel to German law, which fundamentally restricts collective forms of court action.[35]

The German Supply Chain Due Diligence Act—Assessment

The immediate resonance to the design of the law—which was just passed when this chapter was written—is ambiguous. Some elements have the potential to induce change in corporate behaviour. For instance, it is the first legislative text explicitly requiring companies to develop and implement purchasing practices which prevent human rights risks.[36] The administrative sanctions are robust (fines, exclusion from public procurement) and the act spells out specific environmental due diligence obligations for the first time.

[31] § 14 seqq. German Supply Chain Due Diligence Act.

[32] § 10 German Supply Chain Due Diligence Act.

[33] § 24 (2), (3) German Supply Chain Due Diligence Act.

[34] § 22 (2) German Supply Chain Due Diligence Act.

[35] § 11 German Supply Chain Due Diligence Act.

[36] § 6 (3) no. 2 German Supply Chain Due Diligence Act.

Some elements, however, make it debatable whether the German act is conducive to improving workers' and communities' human rights situations, or whether it will remain a process-oriented project with limited effect. Civil society organizations have criticized that it only applies to large firms (Supply Chain Initiative, 2021, p. 5), even though the threshold is reduced after a year, which may induce further reductions when the law is evaluated.

Recurring to "decisive influence", the German law adds to the list of similar formulas restricting the reach of due diligence in a company group depending on control or influence. While it picks up the language of the suggested text for an EU Directive on Corporate Due Diligence and Corporate Accountability adopted by the European Parliament,[37] other laws draw on "legal or factual control" (2nd Revised Draft UN Treaty), exclusive control (French Duty of Vigilance law), or "economic control" (Swiss Initiative) (Bueno & Bright, 2020). Whereas the named legal texts use control to delimit the liability mechanism, the German law uses it to narrow down the ambit of appropriate actions. Concerning due diligence for suppliers, the German draft constricts full due diligence to immediate, first tier suppliers, which, depending on the sector, may just be a domestic import corporation. This harshly contradicts the UNGPs and has been criticized in an open letter to the Ministers responsible for the draft by *John Ruggie,* the "spiritual father" of the UNGPs (Shift, 2021). A main merit of the UNGPs is to transcend the limitations of defining responsibility along the lines of territoriality, legal entities or tiers, but rather to take a (human rights) risk-based approach (Shift, 2021, p. 3). Since it is well-known that the most severe human rights risks happen further up the supply chain in extraction or manufacturing, the German provisions should be construed to mean that in-scope companies assessing human rights and environmental risks in their own business or with their tier 1 suppliers, can attain "substantiated knowledge" of possible risks further up the transnational supply chain through this risk assessment, and therefore need to conduct proactive due diligence for the indirect suppliers in the GVC as well. If this were not the case, much of the preventive goals of the UNGP would be lost. Assessing risks with indirect suppliers only after complaints have been taken to the company usually means that the risk has or is about to materialize, making prevention obsolete and asking for

[37] European Parliament of 10 March 2021 (2020/2129(INL)).

mitigation or remediation according to whether the company has caused, contributed to or is only linked to the harm (Shift, 2021, p. 3). Unfortunately, the provisions of the law leave room to be interpreted more narrowly. In that case the act would incentivize companies to not look into potential risks in order to avoid "substantiated knowledge". This, in turn, would contradict the transparency efforts through documentation and publishing.

Enforcement by the regulatory body has the potential to induce both a change to company and supplier practices by guiding and pushing for a transition from CSR auditing to more collaborative due diligence. The success of this will, among other things, depend on whether the regulatory agency is adequately resourced and can function independently of the Ministry of Economics under whose auspices it works.

The German law does not spell out access to remedy clearly. It does not explicitly mention remediation as part of the statutory obligation but considers it positively to reduce an administrative fine. Rights holders can initiate action of the competent public authority vis-à-vis companies if they evidence infringements, which will, however, not lead to their compensation or remediation. In this light, civil claims for damages become all the more important. Although the act does not create a new civil cause of action, the general possibility to claim damages for negligence remains unaltered. As trade unions and NGOs can file claims on behalf of harmed parties, the act helps reduce the cost of proceedings and secures anonymity for such lawsuits. However, much will depend on whether the act's domestic due diligence standard will apply according to conflict of laws rules, and whether the jurisprudence of the German courts alleviates the onus of proof on the harmed parties over time.

Central Elements of Effective Design of Business and Human Rights Laws

The major prerequisites in consumer countries for the transposition of altered company practices to improved supplier behaviour to social upgrading of working conditions are the governments' political wills to ratify and enforce effective transnational business and human rights' legislation, to create enough space for civil society organizations and consumers to put pressure on lead firms and to act in a politically coherent manner in order to magnify the effect of the respective laws. The analysis

of business and human rights laws leads to some conclusions concerning central elements of their design and implementation.

Corporate Coverage

Adequate corporate coverage is crucial to effective business and human rights laws. Under voluntary CSR-frameworks coverage is clustered, with mainly large, often European and Australian companies in brand dependent or sensitive sectors getting involved in human rights due diligence (Nelson et al., 2020, p. 17). Mandatory laws should broaden this scope to mainstream due diligence in company policy and practice and aim to level the playing field for companies over time. The thresholds of numbers of employees or financial indicators used to define the personal scope (Nelson et al., 2020, p. 7; Salminen & Rajavuori, 2019, p. 621) should be relaxed (Grabosch, 2020b, p. 7). The German act integrates an incremental solution. Other characteristics may exclude a majority of relevant companies, as does the EU Conflict Mineral Regulation, which requires importers to the EU to scrutinize their upstream GVC, thus relieving much of the European manufacturing industry from checking the origins of their raw materials or processed parts (Partzsch, 2020).

The risk-centred approach of the UNGPs does not differentiate coverage according to size but respects the challenges for smaller enterprises when it comes to the appropriateness of measures to take. Therefore, SMEs, high-risk sector companies and foreign companies active on the domestic market should be in-scope. Over time, technical innovations such as verification by blockchain, developments in certification, as well as the possibility to pool best practices in business initiatives, are likely to proliferate governance systems and improve the capacity to monitor GVCs among companies of different sizes or sectors (Salminen & Rajavuori, 2019, p. 622).

Effective design of transnational business and human rights laws should respect that the coverage of personal and material scope, the duty and its reach along the supply chain are interdependent. For instance, the material scope and the outline of the statutory duty are inversely correlated. If many topics are covered, companies can hardly address them all with in-depth due diligence processes and measures, especially if they reach down the whole supply chain. The French Duty of Vigilance Law and the German law reduce the statutory obligation by its reach, but also through appropriateness, thereby allowing prioritization and action adequate to

the size and leverage of a company (Lutz-Bachmann et al., 2021). Again, the UK MSA delivers an example of a hardly effective correlation, tying a narrow human rights-specific scope to a lightweight reporting duty with discretionary content (Salminen & Rajavuori, 2019, p. 624).

Reach of Due Diligence Down the Supply Chain

In the previously analyzed business and human rights laws, among others, the ambit of the statutory duty—specifically the robustness of repercussions for its breach—correlates with the reach of the duty down the GVC. The risk-centred approach of the UNGPs should guide the design on reach of due diligence to include the activities of all entities in the GVC, national and international, subsidiaries and suppliers, so that precarious and informal work at the fringes of the supply chain is also included. This theoretical construction is not banal for companies to handle. Owing to constitutional arguments over legal certainty and reasonableness, certain limitations seem feasible. Like the French law, which broadly includes activities of direct and indirect subsidiaries as well as a wide array of suppliers and sub-contractors, they should mirror the logic of the risk-centred approach. Notions of control or tier are debated for the ambit of civil liability claims but prove too narrow for the due diligence obligation (Lorenzen, 2020, p. 246).

Statutory Duties

Reporting

Reporting duties with discretionary content show little potential for corporate responsibility. They may even lower existing practices under private CSR standards (LeBaron & Rühmkorf, 2017; Partzsch, 2020). Mandatory content should be detailed to shed light onto the supply chain and the business model. This is especially important in due diligence legislation with private enforcement, for which information is a pre-condition. Public authority supervision, as in the German law, makes it easier to cater to the privacy interests of companies. Internally documented business information may then be retrieved by the supervising authority, but not all details have to be reported publicly.[38]

[38] §§ 14, 17 German Supply Chain Due Diligence Act.

Some authors indicate that prescriptive sanctions as in the French Duty of Vigilance Law with its civil liability incentivize companies to report only the legal minimum (Nelson et al., 2020, p. 15). Another body of literature argues that if companies do not see a commercial advantage over competitors by communicating better due diligence mechanisms, as the analysis of the UK MSA suggests, it is more effective to rely on "failure to prevent" style law, which sanctions compliance with heavy fines as for instance the UK Bribery Act (LeBaron & Rühmkorf, 2017; Neely, 2020, p. 312). In this case, the risk of robust sanctions or liability could augment pressure to undertake due diligence, and increase compensation, independent of whether they are part of the supply chain law itself or stem from competition or consumer law, or the law of torts or complementary provisions as in the US modern slavery legislation.

Elements of Human Rights Due Diligence

The design of the statutory duty obligation should support the transition from CSR to HRDD, i.e., to an individualized impact-oriented involvement with suppliers addressing main human rights problems.

Laws and their guidance should outline what is expected from prioritization in risk assessment so that "salience" does not lead to unduly excluding risks central to workers, or specific "difficult" human rights risks. For the time being, companies react to negative reports and focus on tier 1 relationships and the main, high-priority issues (Nelson et al., 2020). In doing so, not all potential human rights abuses count the same. While child labour is considered a zero-tolerance issue with direct subsidiaries or suppliers, it gets less attention in tiers further up-stream in the GVC. The question of living wages is often disregarded (Nelson et al., 2020, p. 17).

Companies rarely report concrete examples of measures they have undertaken. Evaluation of their own due diligence remains weak and indicators come from voluntary CSR policies, such as the number of audits (Shift, 2019). To support impact, laws should make companies draw up gap analyses concerning their prioritized risks, set time-bound targets for their measures and require them to monitor and report on whether these activities promote the desired results (Nelson et al., 2020, p. 25). Such benchmarking would show whether companies are willing to adapt purchasing practices and facilitate supervision of preventative measures. Equally, or even more so, mitigation, i.e., remediation of adverse impacts,

is a blind spot in human rights due diligence. Companies should therefore be obliged to remediate and document its cases and their funding. A further incentive to remediate could come from reducing sanctions, e.g., fines for breach of due diligence, if a company compensates the harm, as set out in the German law.[39]

Stakeholder involvement is hardly formalized in business and human rights laws. Here, a certain degree of detail in the wording of the provisions seems decisive. The French Duty of Vigilance Law, for instance, does not specify how employees should be able to complain, and companies do little in this field (Nelson et al., 2020). Where companies cooperate with workers and affected communities, improvement is more likely (Anner, 2019; Schilling-Vacaflor, 2020). Trade unions and other third-party involvement, especially in producing countries, should more clearly be provided for in the design of laws on all levels of due diligence (Lorenzen, 2021, p. 67 seq.). The German law usefully adds involving workers' representatives in consumer countries through information rights on GVC due diligence to the economic committee of the works council of the in-scope company.[40]

Supervision

Experience with the UK MSA and the scarce litigation under the French Duty of Vigilance law shows that private enforcement should be complemented by public authority supervision.

Most enterprises are used to putting their codes of conduct and voluntary CSR into effect through an auditing and certification regime and rely on implementing HRDD the same way (Schilling-Vacaflor, 2020, p. 5 seq.; Nelson et al., 2020, p. 19). Auditing has, however, been strongly criticized for protecting business interests, disregarding deficits to workers' rights or community rights, burdening suppliers with the certification cost (Schilling-Vacaflor, 2020, p. 5 seq.) and showing little effect (BHRRC, 2021, p. 7).

Therefore, a central task of supervision is to help and control companies on their way to proactive human rights/environmental due diligence.

[39] § 24 (4) no. 7 German Supply Chain Due Diligence Act.

[40] § 106 (3) no. 5b Works Constitution Act.

This requires scrutiny at all levels. Supervision must ensure appropriate prioritization of risks, checking that companies really review their purchasing practices, that they install meaningful monitoring and ensure stakeholder involvement and that mitigation is not overlooked. A sanctions regime should back supervision.

Enforcement of mHRDD legislation must keep power asymmetries in GVCs in mind. Suppliers, as the generally weaker party, are already in a squeeze of buyers' demands for higher standards but constant prices, in order to keep their contracts. If purchasing practices are not adjusted, and the additional costs of HRDD processes are pushed onto suppliers, this may induce suppliers to cover-up human rights violations even more stringently, increase the cut-and-run tendencies of lead firms and cause market concentration with larger suppliers pushing smaller competitors into insolvency (Anner, 2019; Nelson et al., 2020, p. 20 seq.). More collaboration with suppliers, such as cost sharing, capacity building and monitoring suppliers seems crucial for positive impacts beyond CSR (EU Commission, 2020a, p. 525; Nelson et al., 2020, p. 19; Shift, 2021). If this form of implementation is not guided and enforced, trade-offs between safeguarding human rights and employment seem likely, with smaller suppliers and vulnerable groups of workers at a disadvantage (Nelson et al., 2020, p. 25). Supervision should therefore also cover whether companies place the cost burden of complying with HRDD on their suppliers without appropriate compensation measures.

Supervision with such a central portfolio is not a given fact. Civil society alone cannot fulfil such a demanding function satisfactorily. Supervision should therefore be orchestrated by a public authority, well-resourced and independent to a high degree from common preferences of home industries and their business models, with a governance structure that separates guidance and control functions.

Liability for Damages—Access to Justice for Harmed Rights Holders

Civil liability in the design of business and human rights laws has three main functions: providing for a well-described cause of action, which fosters legal certainty (Bueno & Bright, 2020); raising compliance by deterring (LeBaron & Rühmkorf, 2017); and finally, increasing access to remediation for harmed parties which a public enforcement regime does not offer. In order for workers and communities to profit from such provisions, the burden of proof should not be solely on the claimant.

Conclusion

Well-crafted design and dedicated implementation of business and human rights laws can contribute to change in company and supplier behaviour and working conditions in GVCs. This requires the political will of governments in consumer countries to ratify and effectively implement laws and embed them in coherent policy measures. Further, attention should be dedicated to the role of producing countries and their governments' political will and space for action to support social upgrading through human rights due diligence.

References

Amis de la Terre et al. (2019). ActionAid France-Peuples Solidaires, Amis de la Terre France, Amnesty International France, CCFD-Terre Solidaire, Collectif Ethique sur l'Etiquette et Sherpa, Loi sur le devoir de vigilance des sociétés mères et entreprises donneuses d'ordre - Année 1: les entreprises doivent mieux faire, March 2019 (in French). Retrived March 23, 2021, from https://www.asso-sherpa.org/wp-content/uploads/2019/02/2019-etude-interasso_devoir_de_vigilance-ilovepdf-compressed-3.pdf

Anner, M. (2012). Corporate social responsibility and freedom of association rights: The precarious quest for legitimacy and control in global supply chains. *Politics & Society, 40*(4), 604–639.

Anner, M. (2019). Predatory purchasing practices in global apparel supply chains and the employment relations squeeze in the Indian garment export industry. *International Labour Review, 158*(4), 705–727.

Armbruster-Sandoval, R. (2005). Workers of the world unite? The contemporary anti-sweatshop movement and the struggle for social justice in the Americas. *Work and Occupations, 32*(4), 464–485.

Bartley, T. (2018). *Rules without rights: Land, labor, and private authority in the global economy*. Oxford: Oxford University Press.

Beau de Loménie T., & Cossart, S. (2017, December 14). Parties prenantes et devoir de vigilance, 2017 *Revue Internationale de la Compliance et de l'Ethique des Affaires*—Supplement à la Semaine No. 50 du Jeudi, 1–6.

Bell, S. L. (2016). The US prohibition on imports made with forced labour: The new law is a 'Force' to be reckoned with. *Global Trade and Customs Law, 11*(11–12), 580–583.

Brabant, S., Michon, C., & Savourey, E. (2017). The Vigilance Plan – Cornerstone of the Corporate Duty of Vigilance, Revue Internationale de la Compliance et de l'Éthique des Affaires – Supplement à la Semaine No. 50 du Jeudi 14 Dec. 2017, p. 1–15.

Brabant, S., & Savourey, E. (2017a). Scope of the Law on the Corporate Duty of Vigilance, Revue Internationale de la Compliance et de l'Éthique des Affaires – Supplement à la Semaine No. 50 du Jeudi 14 Dec. 2017, p. 1–8.

Brabant, S., & Savourey, E. (2017b). France's Corporate Duty of Vigilance Law – A Closer Look at the Penalties Faced by Companies, Revue Internationale de la Compliance et de l'Éthique des Affaires – Supplement à la Semaine No. 50 du Jeudi 14 Dec. 2017, p. 1–5.

Bright, C. (2020). Creating a Legislative Level Playing Field in Business and Human Rights at the European Level: is the French Duty of Vigilance Law the Way Forward?, EUI Working Paper MWP 2020/01. Retrived March 23, 2021, from https://cadmus.eui.eu/bitstream/handle/1814/65957/MWP_2020_01.pdf?sequence=1&isAllowed=y

Bright, C., Lica D., Marx, A., & van Calster, G. (2020). *Options for mandatory human rights due diligence in Belgium*. Leuven Centre for Global Governance Studies.

Bueno, N. (2019). Multinational enterprises and labour rights: Concepts and implementation. In J. R. Bellace & B. ter Haar (Eds.), *Research handbook on labour, business and human rights law* (pp. 421–438). Edward Elgar.

Bueno, N., & Bright, C. (2020). Implementing human rights due diligence through corporate civil liability. *International & Comparative Law Quarterly, 69*(4), 789–818.

Business & Human Rights Resource Centre (2018). FTSE 100 & the UK Modern Slavery Act: From Disclosure to Action.

Business & Human Rights Resource Centre, Modern Slavery Registry (2021). Modern Slavery Act: Five Years of Reporting – Conclusions from Monitoring Corporate Disclosure.

Chatelain, L. (2021). First court decision in the climate litigation against Total: a promising interpretation of the French Duty of Vigilance Law. Retrived March 23, 2021, from https://www.business-humanrights.org/en/blog/first-court-decision-in-the-climate-litigation-against-total-a-promising-interpretation-of-the-french-duty-of-vigilance-law/

Cossart, S., Chaplier, J., & Beau de Lomenie, T. (2017). The French law on duty of care: A historic step towards making globalization work for all. *BHRJ, 2*, 317.

Duthilleul, A., & de Jouvenel, M. (2020). Evaluation de la mise en oeuvre de la loi n° 2017–399 du 27 mars 2017 relative au devoir de vigilance des sociétés mères et des entreprises donneuses d'ordre, January 2020. Retrived March 23, 2021, from https://www.economie.gouv.fr/cge/devoir-vigilances-entreprises

Entreprises pour les droits de l'Homme & BL Evolution (2018). The application of the Law of the Corporate Duty of Vigilance, Analysis if the first published

plans, 1st edition, 25 April 2018, available at https://www.e-dh.org/userfiles/Edh_2018_Etude_EN_V4.pdf

Ernst & Young (2018). Loi sur le devoir de vigilance: analyse des premiers plans de vigilance, Sept. 2018, available at https://www.ey.com/Publication/vwLUAssets/ey-analyse-des-premiers-plans-de-vigilance-du-sbf-120/$File/ey-analyse-des-premiers-plans-de-vigilance-du-sbf-120.pdf. Retrived March 23, 2021.

EU Commission. (2020a). Study on due diligence requirements through the supply chain, Final Report.

EU Commission. (2020b) Study on due diligence requirements through the supply chain, Part III: Country Reports

Field, F., Miller, M., & Butler-Sloss, B. (2019): Independent Review of the Modern Slavery Act 2015: Final Report.

Finland Ministry of Economic Affairs and Employment (2020). Ernst & Young Oy: Sakari Helminen, S., Alenius, J., Walta, V., Donner, S., Judicial Analysis on the Corporate Social Responsibility Act.

Grabosch, R. (2020a). Companies and Human Rights, Friedrich-Ebert-Stiftung Study April 2020.

Grabosch, R. (2020b). Internationale Sorgfaltspflichtengesetze – Lessons Learned für die deutsche Debatte, Friedrich-Ebert-Stiftung Analyse, October 2020.

Hale, A., & Wills, J. (Eds.). (2005). *Threads of labor*. Blackwell Publishing Ltd.

Kumar, A. (2018). A race from the bottom? Lessons from a workers' struggle at a Bangalore warehouse. *Competition & Change, 23*(4), 346–377.

LeBaron, G., & Rühmkorf, A. (2017). Steering CSR through home state regulation: A comparison of the impact of the UK Bribery Act and Modern Slavery Act on Global Supply Chain Governance. *Global Policy, 8*(3), 15–28.

Locke, R. (2013). *The promise and limits of private power promoting labour standards in a global economy*. Cambridge University Press.

Lorenzen, S. (2020). Resiliente Wertschöpfungsketten per Gesetz? *Arbeit Und Recht, 68*(6), 244–249.

Lorenzen, S. (2021). Lieferkettengesetz – wie wird es wirksam? *WSI-Mitteilungen, 74*(1), 66–70.

Lutz-Bachmann, S., Vorbeck, K., & Wengenroth, L. (2021). Menschenrechte und Umweltschutz in Lieferketten – der Regierungsentwurf eines Sorgfaltspflichtengesetzes. *Betriebs-Berater, 2021*, 906–914.

Marx, A., Bright, C., & Wouters, J. (2019). Access to Legal Remedies for Victims of Corporate Human Rights Abuses in Third Countries, Study requested by the DROI Committee, European Parliament (February 2019). Retrived March 23, 2021, from http://www.europarl.europa.eu/RegData/etudes/STUD/2019/603475/EXPO_STU(2019)603475_EN.pdf.

Mantouvalou, V. (2018). The UK Modern Slavery Act 2015 three years on. *The Modern Law Review, 2018*, 1017–1045.

Mezzadri, A. (2014). Backshoring, local sweatshop regimes and CSR in India. *Competition & Change, 18*(4), 327–344.

Nasse, L. (2019). Devoir de Vigilance – Die neue Sorgfaltspflicht zur Menschenrechtsverantwortung für Großunternehmen in Frankreich. *ZEuP, 2019*, 774–802.

Neely, S. (2020). United Kingdom Country Report. In EU Commission (2020b) *Study on due diligence requirement through the supply chain. Part III: Country Reports*; pp. 296 – 321.

Nelson, V., Martin-Ortega, O., & Flint, M. (2020). *Making Human Rights Due Diligence Work: An Analysis of Impact and Legal Options. University of Greenwich Report Commissioned by the Fair Trade Advocacy Office and Brot für die Welt*, UK.

Partzsch, L. (2020). Alternatives to Multilateralism: New Forms of Social and Environmental Governance, MIT Press. Retrived March 23, 2021, from https://direct.mit.edu/books/book/4871/Alternatives-to-MultilateralismNew-Forms-of-Social

Roggensack, M., & Syam, A. (2020). Withhold Release Orders, in Three Acts: Heralding A New Enforcement Era. Retrived March 23, 2021, from https://media.business-humanrights.org/media/documents/files/documents/Final_Blog_Post_Tariff_Act_March_2020_002_0.pdf

Salminen, J., & Rajavuori, M. (2019). Transnational sustainability laws and the regulation of global value chains: Comparison and a framework for analysis. *Maastricht Journal of European and Comparative Law, 26*(5), 602–627.

Savourey, E. (2020). French country report. In EU Commission (2020b): *Study on due diligence requirement through the supply chain. Part III: Country Reports*; pp. 56–95.

Sherpa. (2018). Vigilance Plans Reference Guidance.

Shift. (2019). Human Rights Reporting in France: Two Years In: Has the Duty of Vigilance Law led to more meaningful disclosure? December, 2019.

Shift. (2021). John Ruggie, Open letter to Peter Altmeier, Hubertus Heil, Gerd Müller. Retrieved March 9, 2021, from https://www.business-humanrights.org/en/latest-news/john-ruggie-writes-to-german-ministers-welcoming-draft-due-diligence-law-while-raising-need-to-ensure-ungp-alignment/

Schiller, S. (2017). Exégèse de la loi relative au devoir de vigilance des sociétés mères et *entreprises donneuses d'ordre: JCP E 2017, 1193, § 5.*

Schilling-Vacaflor, A. (2020). Putting the French Duty of Vigilance Law in Context: Towards corporate accountability for human rights violations in the global South? *Human Rights Review, 2020*, 1–19.

Supply Chain Act Initiative. (2021). Statement on the Draft Bill for a Supply Chain Act, March 2021. Retrived March 23, 2021, from https://lieferketten

gesetz.de/wp-content/uploads/2021/03/Initiative-Lieferkettengesetz_Statement-on-the-Draft-Supply-Chain-Act.pdf

UK Government. (2015). Impact Assessment Modern Slavery – Transparency in Supply Chains. Retrived March 23, 2021, from https://www.legislation.gov.uk/uksi/2015/1833/impacts.

UK Home Secretary. (2017). Transparency in Supply Chains etc. – A practical guide (update October 4, 2017). Retrived March 23, 2021, from https://www.gov.uk/government/publications/transparency-in-supply-chains-a-practical-guide

United Nations Human Rights Council (2020). Sixth session of the open-ended intergovernmental working group on transnational corporations and other business enterprises with respect to human rights, 26–30 Oct. 2020 on the Second Revised Draft of a Legally Binding Instrument. Retrived March 23, 2021, from https://www.ohchr.org/EN/HRBodies/HRC/WGTransCorp/Session6/Pages/Session6.aspx

CHAPTER 18

Lessons of the Indonesian Freedom of Association Protocol

Reingard Zimmer

When the downward spiral of social standards as a negative outcome of globalization for workers and trade unions in the 1990s became more visible, global union federations (GUFs) started to negotiate global agreements with transnational companies or corporate groups, based on the International Labour Organization's (ILO) core conventions. Today, more than 170 of these international framework agreements (IFAs) to secure social standards have been negotiated (own list), some dedicated to specific topics. These agreements developed over time and now often contain specific provisions on implementation and monitoring, sometimes including complaint and dispute resolution mechanisms, and therefore, are useful instruments for upgrading in global value chains (for the concept of economic and social upgrading in global value chains, see the introduction of this book). This article analyzes the development and

R. Zimmer (✉)
HWR Berlin (Berlin School of Economics and Law), Berlin, Germany
e-mail: reingard.zimmer@hwr-berlin.de

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_18

implementation of a special agreement which was negotiated in Indonesia, the Protocol on Freedom of Association, and compares it to other IFAs.

Steps Towards Transnational Collective Bargaining: International Framework Agreements

First steps towards transnational collective bargaining were already being initiated by the International Transport Workers' Federation (ITF) after World War II, long before the discussion about globalization started. As a reaction to the ship owners' policy of flagging out vessels to low wage countries,[1] where standards are low and inspections tend to be negligent,[2] the ITF developed a flag of convenience (FOC) campaign and started to conclude collective agreements, "which set the wages and working conditions for crews on FOC vessels irrespective of nationality" (ITF Seafarers, 2021; for further information: Lillie, 2004, p. 47; Zimmer, 2020, pp. 178–179).

Facing the lowering of working conditions worldwide as an outcome of the specific globalization taking place, especially from the 1980s on (Altvater & Mahnkopf, 2002, p. 12; Chossudovsky, 2002, p. 23. For an early analysis, see: Fröbel et al., 1979, pp. 21, 75, 115.), most of the other GUFs began to develop their own policies and conclude IFAs with transnational companies to ensure adequate working conditions. The United Food, Farm and Hotel Workers Worldwide (IUF/IUL) started with the conclusion of a first global agreement in 1988 with the French food company BSN/Danone, followed by seven other IFAs with Danone on other topics in the following years. In 1995, the other GUFs started to conclude their own agreements (cf. Sobczak, 2012, p. 139; Telljohann et al., 2009). IFAs mostly aim to guaranty social standards. Nevertheless, there are agreements which only deal with one specific topic, such as the IFA on the protection of occupational safety and health between UNI global union and the French telecommunication company Orange (of 2014), the Bangladesh Accord on occupational safety and health (of 2013/2018) or the Indonesian Freedom of Association Protocol (of 2011), to name just some well-known examples.

[1] The applicable law is determined by the flag of the vessel.

[2] These are countries in the global south, like Liberia, Panama, etc.

IFAs establish a frame with minimum standards, which have to be regarded in bargaining processes at the national, regional or company level. The process of negotiating an IFA takes about two years and marks the starting point of a long-term relationship between the respective GUF and the transnational company (Drouin, 2015, p. 222; Thomas, 2011, pp. 269–274; Zimmer, 2020, pp. 178–182). IFAs are mostly concluded with one company, sometimes with a group, and apply to all company (group) locations worldwide, as well as its subsidiaries and suppliers. So far, subcontractors are mostly excluded from the scope of application. However, discussions about the necessity to take responsibility for the whole value chain have already started. IFAs developed over time as a result of the GUFs' efforts and discussions with their member unions. Early agreements included little more than the ILO core labour standards, but then the GUFs developed guidelines for the negotiations and for the content of IFAs and the experience grew over time. Now the agreements contain more specific provisions to protect workers' rights, which go beyond the ILO core conventions, including detailed rules on implementation and monitoring (more in depth: Zimmer, 2020, pp. 178–181). The majority are in the metal and electronics industry (including the automobile sector and suppliers), concluded by IndustriALL. About 87 percent of IFAs are concluded with European transnational companies (Telljohann et al., 2009, p. 22, 83; Daugareilh, 2006, p. 116; Zimmer, 2008, p. 160).

The scope of application of the global agreements contains the countries where subsidiaries (and optionally suppliers as well) are based. Whereas some agreements like the Bangladesh Accord or the Indonesian FoA-Protocol were concluded only for one country. The question thus arises, whether such specific agreements may also be characterized as IFAs. IFAs differ enormously, nevertheless, the following characteristics have been elaborated: a GUF is involved in the conclusion and negotiation of the agreement; the agreement contains rights which are based upon ILO-standards; a mechanism to monitor the implementation has been established; and in more recent agreements, the scope includes suppliers[3] (Drouin, 2015, p. 218–222; Zimmer, 2020, pp. 178–183).

Let´s discuss the question with regard to the Indonesian FoA-Protocol. The Indonesian protocol was signed between Indonesian trade unions

[3] Whereas subcontractors are only exceptionally bound, e.g. in the IFA with Inditex.

and international sportswear companies, but not by a GUF. International actors were therefore involved on the employers' side and the respective GUF International Textile Garment Leather Workers' Federation (ITGLWF) and the International Trade Union Confederation (ITUC) were at least supporting the process of negotiation at an early stage, as representatives from the signing Indonesian trade unions (and other actors involved) stated.[4] The first criterion might therefore be met, although in a limited form. There's no specific reference to ILO Conventions (like Conventions 87, 98 or 135) in the text, nevertheless reference to international law is made in the preamble. The content of the FoA-Protocol therefore derives from international standards, as also stated by the signing parties in interviews.[5] The last criterion is obviously also fulfilled, specific procedures for implementation are established in the agreement and in the standard operating procedures (SOPs), as will be elaborated further on. It remains that the scope of application is limited to one country and not to all premises of the brands which signed the agreement, though this can be seen as a negligible criterion. Agreements like the FoA-Protocol, therefore, can be characterized as specific IFAs, although some differences to the average IFA may be found.

As already mentioned, IFAs generally are concluded by the respective global union federation, whereby a look into praxis shows that often trade unions from the country where the headquarter of the company is based are strongly involved or even lead the negotiations, the same counts for EWCs (Zimmer, 2013a, 2013b, p. 318). Nevertheless, "normally", the GUFs are the leading force in the process. Trade unions from the global south, which represent the workers in the production countries, are seldom included in negotiations, which restrains the implementation of the final agreement. For example, while eight Bangladeshi

[4] In interviews concluded in November 2018 (with Sharif Arifin (LIPS) on 2 November; Mimmy Kowel (coordinator decent work working group) on 7 November; Emilia Yanti (GBSBI) on 9th Nov; Parto Sumarto (KASBI) on 13 November; Chris Wangkay (formerly OXFAM Australia) on 14 November; Elly Silaban (KSBSI/Garteks) on 21 November; Lilis Usman (former SPN, now KSPN) on 23 November; Frank Tan (FSPTSK Reformasi) on 28 November and Indrasani Tjangdraningsih (AKATIGA) on 15 December 2018).

[5] In interviews concluded in November 2018 (with Emilia Yanti (GBSBI) on 9 November; Parto Sumarto (KASBI) on 13 November; Elly Silaban (KSBSI/Garteks) on 21 November; Lilis Usman (former SPN, now KSPN) on 23 November; Frank Tan (FSPTSK Reformasi) on 28 November; and Harry Nurmansyah on 13 No. 2018 (adidas Indonesia)).

trade unions (including the Bangladesh Textile und Garments Workers League; Bangladesh Independent Garments Workers Union Federation; etc.) co-signed the Bangladesh Accord, due to their rather weak position in Bangladesh (Rubya, 2015, pp. 684–701) they did not play a major role in the process of negotiations. The negotiation of an IFA is therefore described as a top-down approach (Fichter et al., 2012, p. 7). This might be the reason that trade unions in the global south sometimes don't acknowledge the IFA as "their" agreement and sometimes make little use of it. The leading force of the FoA-Protocol were national (Indonesian) trade union (con)federations; therefore, the Indonesian Protocol has a bottom-up approach. On the one hand, it is evident that global unions have a clear understanding of transnational affairs, and by mandate, have to bear the interests of all their member organisations in mind, not just those of a particular region. They also have more resources and are often better trained than trade union officials in the Global South (Ter Haar & Keune, 2014, pp. 5–12). On the other hand, the less actors directly affected are involved in negotiations, the more difficult the implementation of the agreement becomes (Zimmer, 2020, pp. 178–190). However, GUFs are aware of previous campaigns' limitations and try to strengthen the involvement of trade unions from the global south. In October 2019 for example, a meeting in the textile and garment sector between the GUF IndustriALL and over 80 trade union leaders from the global south (from Turkey, Bangladesh, Cambodia, India, Indonesia, Mauritius and Morocco, among others) was realized in Cesme (Turkey), to discuss how IFAs could be used to more effectively strengthen union organizing and facilitate the conclusion of collective bargaining agreements and social dialogue. The meeting was joined by global fashion brands, which already signed an IFA in the sector (Asos, Esprit, H&M, Inditex and Tchibo). The participants also discussed how IFAs could be used to promote the topics of the new ILO Convention No. 190 on Violence and Harassment in the garment sector.[6] This example demonstrates how new topics for IFAs might be developed. In addition, based upon evaluations, new projects arise. An example is "Action, Collaboration, Transformation" (ACT), an initiative to promote living wages in the garment industry which was initiated by IndustriALL with 21 transnational companies. In

[6] See: https://www.business-humanrights.org/de/neuste-meldungen/trade-union-leaders-brands-discuss-how-to-promote-ilo-convention-on-gender-based-violence-with-global-framework-agreements/ (19.1.2021).

comparison to IFAs, this project goes a step further. It promotes the idea that living wages "should be reached through collective bargaining between employers and workers and their representatives, at industry level" (ACT, 2020). This is based upon the idea that promoting collective bargaining at the industry level is considered an opportunity to overcome the risk of companies' social dumping (Holdcroft, 2015, pp. 95–101). Another example is the Bangladesh Accord, which contains specific regulations concerning factory monitoring concerning building safety and occupational safety and health and, what is more, a dispute resolution mechanism with a binding outcome (for further details, see: Zimmer, 2016). Specific provisions on implementation are also appointed in the Indonesian Protocol on Freedom of Association, which supports Indonesian trade unions in organizing textile, garment and footwear workers, and secures the signing trade unions' access to factories to organize campaigns, as detailed below.

The Indonesian Freedom of Association Protocol

The Indonesian Protocol on Freedom of Association is an agreement to protect freedom of association and trade union rights in Indonesia's textile, garment and footwear industry and was signed in June 2011. It was concluded between the five Indonesian trade unions SPN (National Labour Union), KASBI (Indonesian Trade Union Congress), Garteks SBSI (Garment, Textile, Shoe und Leather Union), GSBI (Indonesian Workers' Association), FSPTSK (Association of the Textile, Garment and Leather Trade Unions), 35 local suppliers[7] and the transnational sportswear brand companies adidas (Germany), Asics Corp (Japan), New Balance (US), Nike Inc (US), the Pentland Group PLC (Great Britain), and Puma SE (Germany). In the beginning of 2017, three further companies (Haglöfs, Kjus and SuitSupply), members of the multi-stakeholder organization Fair Wear Foundation, joined the agreement (Fair Wear, 2020). In addition, in December 2012, SOPs were adopted which contain provisions on monitoring through a national supervisory committee. The agreement and the SOPs' content are presented and analyzed in the following, as well as factors that enabled the agreement's conclusion and its implementation in practice.

[7] All first-tier suppliers are included.

Freedom of association is formally guaranteed in Indonesia in Article 28 E No. 3 of the constitution: *"Every person shall have the right to the freedom to associate, to assemble and to express opinions"*, supplemented by the Presidential Decree No. 83 of 1998, and Article 104 para. 1 Law No. 13 of 2003 on Manpower (Muthmainah, 2021, pp. 25 f.). As statutory provisions, the norms have to be interpreted and applied to concrete circumstances in practice. Although freedom of association and trade union rights are formally guaranteed in Indonesia, the rights are constantly violated in practice (ITUC, 2019, p. 10, 2020, p. 12). Therefore, the specification and implementation of the fundamental rights in practice through the social partners by other means is of vital importance.

Content of the Freedom of Association Protocol: Protection of Trade Union Rights

The signing parties are obliged to respect freedom of association at factory sites (Article 2 para. 1, p. 1 of the Freedom of Association Protocol). Upon signing the agreement, brands and suppliers guarantee not to violate trade union rights in Indonesia. Based on Article 4 Paragraph 3, employers guarantee not to interfere in any way with the organizational activities of the trade unions party to the agreement. This provision goes beyond neutrality clauses, which can be found in some IFAs. It entails that the signing trade unions have the right to enter production sites and become registered company trade unions for that factory, and further means that the company cannot prevent any organizing campaigns. This applies to all trade union signatories of the agreement and ensures plurality of trade unions, as well as non-discrimination against specific trade unions (Article 4 para. 2).

Furthermore, provisions to support trade unions' work within companies are part of the protocol. For instance, trade union representatives have to be released from their work duties to carry out organizational activities, while the company must respect all rights to which the workers normally are entitled (Article 4 para. 4, as further specified in Article 5 ff.). Entitlements for paid leave are relative to the factory's size (Article 4 para. 6). In addition, companies have to provide facilities for trade union meetings (Article 5 para. 1(a)), and union representatives "may make use of communication facilities such as telephones, fax and internet within the company as long as such facilities are available," (Article 5 para. 1(a)). Moreover, trade unions are allowed to place their flag at a prominent

place in the factory (Article 5 para. 1 (d)), and have the right to display a union signboard on the premises. In addition, several provisions prohibit discrimination, punishing workers because of their trade union affiliation or related work, and hindering the work of trade unions on the factory premises. These rather specific provisions to facilitate trade union work inside factories are not to be detected in other IFAs, although they are common rights of workers' representatives in industrialized countries.

Scope of Application

According to Article 2 Paragraph 1, page 2, the Protocol only covers first-tier suppliers, which are transnational brands' main supply firms. These are suppliers, that "produce finished goods for the Brands" (i), "have a direct legal manufacturing contract with the Brands" (ii), and "have workplace auditing conducted by the Brand's compliance team" (iii) or "have a system whereby all auditing of Codes of Conduct or supplier company workplace standards are conducted by a third party auditor" (iv). In the "initial phase," subcontractors are outside the scope of application, and rather have to be "informed and encouraged" to adhere to the agreement's provisions. Such noncommittal wording is used in numerous IFAs as a compromise, if no binding solution could be negotiated. This "initial phase" has lasted for 10 years now, with no end in sight. Nevertheless, around 300,000 workers are covered as first-tier suppliers' production sites make up a large portion of the overall process (Ferenschild, 2018, p. 3).

Factors that Promote Strong Trade Union Rights in the Formation Phase

As the Indonesian protocol contains strong trade union rights and details how to realize them, a central question is, how was such a strong agreement achieved?

Public Awareness Due to Intensive Campaigning Around a Mega Sports Event

The Indonesian Freedom of Association Protocol was reached after an intense period of negotiations that started in 2009. As opposed to Bangladesh, there was no catastrophe with numerous dead workers in Indonesia. Nevertheless, in 2008, a coalition of global and European

trade union confederations and civil society actors launched a powerful international campaign for the Beijing Olympics, addressing labour rights violations in sporting goods' global value chains in Southeast Asia. Adidas, Nike, Puma and other brands were called on to take responsibility for labour rights violations along their value chains. A report entitled *Clearing the hurdles* identified central obstacles to overcome: low wages, precarious short-term contract employment, violations of freedom of association and factory closures due to industry restructuring without compensation pay (Maquila Solidarity Network, 2008, p. 47). In June 2008, the Play Fair Alliance and Indonesian trade unions met with the main transnational sportswear companies for a three-day conference in Hong Kong. At this conference, the German company adidas suggested starting a dialogue on working conditions at the national level in Indonesia and tried to get support from other brands (Ferenschild, 2018, p. 3.).

Why the Topic of Freedom of Association?

Negotiations finally settled on the topic of violations of freedom of association, as extreme "union busting" was a widespread occurrence in Indonesia at the time.[8] In addition, some interviewees[9] explained that the sportswear brands were more open to the topic of freedom of association than to negotiate wage increases, the termination of precarious short-term contracts, or of unpaid leave due to factory closures—all issues that bear a higher cost on companies.[10] An adidas representative described his company's motivation, "As there were lots of disputes about trade union rights in Indonesia, an agreement giving concrete guidance (supplementing statutory provisions), was considered as helpful." He frankly admitted that "shareholder interests" were also an important motivation for joining the initiative. If company-level disputes could be prevented, this would be ideal risk-prevention,[11] an argument of the employer side

[8] Interview with Sharif Arifin (LIPS) and Iwan Kusmawan (SPN), 2 November 2018.

[9] Interviews conducted with representatives of all signing Indonesian trade unions, adidas, a supplier and NGO representatives were between November 2018 and January 2019.

[10] Interviews with Emilia Yanti (GBSBI) on 9 November 2018, and Parto Sumarto (KASBI) on 13 November 2018.

[11] Interview with Harry Nurmansyah (adidas office in Jakarta) 13 of November 2018.

which, in general, can been detected as the central motivation for the conclusion of IFAs (Zimmer, 2008, p. 189).

The (Indonesian) unions considered freedom of association a starting point and acted on the assumption that negotiations over the other three issues (as mentioned above) would follow. The workers' side has been advocating for a second and third protocol regarding "wages" and "job security," drafts have already been written.[12] Due to employers' reluctance, the conclusion of further agreements is not in sight, this is even less likely now bearing in mind the corona pandemic.

Strong Support from Different Actors

International and national civil society actors, such as NGOs and trade unions, as well as Indonesian trade unions, were involved in and supported the Indonesian negotiation process, which begun in 2009. These included: Oxfam Australia, Jakarta Legal Aid Institute, Sedane Labour Resource Centre (LIPS), Trade Union Rights Centre (TURC) and the NGO AKATIGA (Pusat Analisis Sosial). British trade unions invited an Indonesian representative for the Play Fair Campaign, and a representative of the GUF ITGWLF was also involved. Oxfam Australia financed the position of a coordinator who facilitated the negotiation process, which the Clean Clothes Campaign took over in 2018. All actors mentioned, that the adidas representative played an essential role and took the employer-side lead whenever negotiations stalled.

A Neutral Facilitator as a Central Factor for Success

A coordinator supported the negotiation process by facilitating meetings, actively motivating actors, and coordinating behind the scenes. Everyone interviewed—those representing trade unions, as well as employers—saw the coordinator's neutral role an essential element in the process'

[12] Interview with Franky Tan (FSPTSK Reformasi) on 28 November 2018, and Emilia Yanti (GBSBI) on 9 November 2018.

success.[13] Nevertheless, the coordinator did not have procedural competences. A stronger coordinator position could have influenced the actors in case of an impasse. It could be beneficial to install someone with broader competences, such as double voting rights, to be even more effective. While the current solution seems to have been more or less effective for this negotiation process, according to the interviewees, it has proven rather ineffective in conflict resolution (in the National Committee).

Low Involvement of Global Union Federations

While global unions were hardly involved in the negotiation process (and still are not; in the beginning, a representative from the former International Textile Garment and Leatherworkers' Federation (ITGWLF, now part of IndustriALL) was shortly involved, as was a British trade union representative), labour rights NGOs played a major role. It seems that Indonesian trade unions wanted to run their own affairs and considered strengthening trade union rights in their country an Indonesian concern.[14] Therefore, they did not maintain contact with ITGLWF (now IndustriALL), the textile and garment sector GUF. The Indonesian trade unions' focus was on brands fulfilling their promises.[15] Furthermore, not all Indonesian trade unions are members of the respective GUF, for example, only SPN and KSBSI are affiliated with IndustriALL. Most of the Indonesian trade union leaders involved did not seem aware that in the struggle against transnational companies, when the workers' side is stronger the more international actors involved put pressure on the companies. Concerning trade union rights, international NGOs are not strong enough actors on their own.

[13] In interviews with: Sharif Arifin (LIPS) on 2 November 2018; Mimmy Kowel (coordinator of decent work working group) on 7 November 2018; Emilia Yanti (GBSBI) on 9 November 2018; Parto Sumarto (KASBI) on 13 November 2018; Chris Wangkay (formerly OXFAM Australia) on 14 November 2018; Elly Silaban (KSBSI/Garteks) on 21 November 2018; Lilis Usman (former SPN, now KSPN) on 23 November 2018; Franky Tan (FSPTSK Reformasi) on 28 November 2018 and Indrasani Tjangdraningsih (AKATIGA) on 15 December 2018.

[14] Interview with Iwan Kusmawan (SPN) on 2 November 2018; Emilia Yanti (GBSBI) on 9 November 2018; Franky Tan (FSPTSK Reformasi) on 28 November 2018.

[15] Interview with Sharif Arifin (LIPS) on 2 November 2018; Mimmy Kowel on 7 November 2018.

Implementing the Freedom of Association Protocol

Effective implementation of the protocol's comprehensive provisions remain a concern. Therefore, in the following, I turn to the implementation measures laid forth in the protocol and SOPs and analyze the provisions' functionality in practice to identify problems and positive aspects.

The Indonesian protocol contains wide-ranging implementation mechanisms. The signing parties committed to supervise the implementation of the agreed provisions (Article 3 para. 7). Even though adidas integrated information about the Freedom of Association Protocol into its local management training and internal audit procedures, it has never offered specific training on freedom of association. Harry Nurmansyah from adidas Indonesia said in an interview in November 2018 that the topic seems to be a rather small part of adidas' programs. The interviewed trade union representatives described supplier firms' local management as poorly informed about and trained in the protocol. Capacity building and training trade unionists at the local factory level seems to vary tremendously between organizations, which also indicates that local trade union activists might not all be well informed about the protocol's content.

Supervision and dispute settlement committees were formed (as agreed in Article 7), both on the national level and in most factories. Factory committees are made up of local management and trade union representatives but seem to operate rather as monitoring bodies than dispute settlement committees, as no (binding) outcome is foreseen in cases of conflict. A National Committee—formed of signing parties' representatives—meet upon request to take key decisions. The national monitoring committee may make recommendations that have to be followed, nevertheless, no such recommendations have ever been agreed upon. Under certain conditions, NGOs may be granted observer status in the committee (Article 3.4 SOP). While the SOPs contain specific provisions pertaining to their operationalization, the interviewed trade union representatives did not describe the committees as being effective. All interviewees saw a neutral coordinator to facilitate the national committee's meetings as a positive element, although this chair has no procedural power. So far, the National Committee has not been able to take a decision in cases of conflict. Nevertheless, the trade unions described direct contact with the brands through the national committee as positive.

Although violations of trade union rights in factories bound by the protocol are still reported, all interviewed trade unionists described the Freedom of Association Protocol as a "door-opener" to unionise new factories. As not all of the Indonesian union federations seem to be engaged in organizing campaigns, and some reported not having any problems with the management at all, it cannot be evaluated exactly how effective the agreement is in this respect. Nevertheless, all interviewed trade unionists stated that in case of a problem, they would call the sourcing brand representative, which in many past cases would have solved the problem. The protocol (and national committee's work) enabled this direct line of communication.

The protocol acknowledges trade union plurality and assures that specific trade unions will not be discriminated against (Article 4 para. 2). Therefore, especially the more radical (and participation-oriented) trade unions use the document to enter factory premises where the biggest and rather moderate trade union confederation (SPN) already has a presence. In this respect, trade union representatives see the Freedom of Association Protocol as a useful instrument. Nevertheless, trade union rights in the Indonesian textile, garment and footwear sector are still violated, as some interviewees explained.[16] The interviewees' statements remain rather vague about the extent to which the protocol enables participating trade unions to enter completely new (so far unorganised) factories. However, according to the interviewed trade unionists, in quite a number of factories, management provides a room for trade union affairs, as foreseen in the agreement, and organisers may be excused from their work duties.[17]

In addition, the agreement mandates that collective bargaining agreements (CBAs) be concluded within six months of a union's formation at the factory level (Article 6 para. 1) and requires that companies have an open attitude towards CBA negotiations (Article 6 para. 1 (a)). As no specific CBAs were concluded, the protocol does not seem to facilitate collective bargaining processes. Either trade unions conclude CBAs as discussed and defined in their organizations, or they do not engage in collective bargaining and accept the statutory minimum wage.

[16] Interview with Sharif Arifin (LIPS) and Emilia Yanti (GBSBI) November 2018.

[17] Interview with Iwan Kusmawan (SPN) et. al. November 2018.

Conclusions

The Indonesian Protocol on Freedom of Association is an example of a bottom-up process with local (national) trade unions as the driving force in the negotiations process—a central factor for an international framework agreements' successful implementation. Local actors' "ownership," commitment and will to make use of the agreement are greatly important to its success (Stevis & Fichter, 2012, p. 667; Zimmer, 2020, pp. 178–196). As Indonesian trade unions negotiated the protocol, its contrast to most other IFAs (concluded by a global union federation) is evident. Nevertheless, supplier firms' involvement in the negotiation process could have been intensified. The companies' suppliers "had to" sign the protocol, but do not seem to have been involved in discussions about its content or implementation. In practice, supplier firms' local management is the central employer-side actor in practice. Involving them more in the negotiation of the protocol's content would have been helpful for implementation, as it was partly the case in the ACT initiative process.

Implementation measures do not seem to be particularly efficient. The main benefit for Indonesian textile, garment and leather unions seems to be their contact with the brands, which the agreement enables. Interviews with Emilia Yanti (GBSBI), Parto Sumarto (KASBI) et. al. in November 2018 showed that the parties unanimously described the positive aspect of starting a social dialogue at the national level, which did not exist in Indonesia before. In addition, Indonesian trade union confederations' capacity building process seems to have started with the signing of the agreement, as the actors were more aware of their rights.[18] Still, implementation measures could be intensified with more trainings, but that would depend on foreign financial support. In particular, Indonesian trade unions receive at least partial access to factory premises, which is essential for further trade union work, and more than what is achieved elsewhere.

The following aspects warrant improvement: intensified training of local management and workers' representatives would support the agreed provisions' implementation.[19] The national committee's work could be tremendously enhanced by a chair with more competences than in

[18] Interview with Amalia F. Alam on 7 Nov. 2018.

[19] The parties of the Protocol would have to agree upon the trainers, who could for example be experts from trade unions or trade-union-related research institutes, from

the current solution, a chair who could influence actors in case of an impasse. It would be even more effective to introduce a real and binding conflict-resolution mechanism, similar to what has been appointed in the Bangladesh Accord. This would not have to be the costly regulations of the United Nations Commission on International Trade Law (UNCITRAL) for international commercial arbitration, as chosen for the Bangladesh Accord (Zimmer, 2020, pp. 178–199 or Zimmer, 2016, p. 5). Other solutions such as an online tribunal with internationally recognised labour law experts would be possible and less costly. In addition, more strongly involving the competent global union federation IndustriALL would significantly support the struggle of Indonesian trade unions. Overall, the Indonesian Freedom of Association Protocol strengthens the signing trade unions, and therefore certainly is an example for actors in other countries, despite the elaborated weaknesses.

References

ACT. (2020). What is ACT? https://actonlivingwages.com/fact-sheet/. Accessed 10 Sep 2020.

Altvater, E., & Mahnkopf, B. (2002). *Globalisierung der Unsicherheit. Arbeit im Schatten, Schmutziges Geld und informelle Politik*. Westfälisches Dampfboot.

Chossudovsky, M. (2002). *Global Brutal. Der entfesselte Welthandel, die Armut, der Krieg*. Zweitausendeins Publisher.

Däubler, W. (1997). *Der Kampf um einen weltweiten Tarifvertrag*. Nomos.

Daugareilh, I. (2006). Les accords cadres internationaux: une réponse européenne à la mondialisation de l'économie. In M. Descolognes & B. Saincy (Eds.), *Les nouveaux enjeux de la négociation sociale interntionale* (pp. 116–129). La Découverte.

Drouin, R. C. (2015). Freedom of association in international framework agreements. In A. Blackett & A. Trebilcock (Eds.), *Research handbook on transnational labour law* (pp. 217–229). Edward Elgar.

Fair Wear. (2020). FWF Members Sign Indonesian FoA Protocol. https://www.fairwear.org/news/fwf-members-sign-indonesian-foa-protocol. Accessed 03 Sep 2020.

Ferenschild, S. (2018). Fact Sheet: Nur Papiertiger? Indonesien und Kollektivverhandlungen. Südwind-Publication online: https://www.suedwind-ins

international trade union confederations or organizations like the ILO, or other experts trained in the field of trade union rights.

titut.de/alle-verfuegbaren-publikationen/fact-sheet-mindestloehne-in-indonesien_von-existenzsicherung-keine-spur-kopie.html. Accessed 6 Feb 2019.
Fichter, M., Sydow, J., Helfen, M., Arruda, L., Agtas, Ö., Gartenberg, I., McCallum, J., Sayim, K., & Stevis, D. (2012). Globalising Labour Relations - On Track with Framework Agreements? Friedrich-Ebert-Foundation. http://library.fes.de/pdf-files/iez/09422-20121129.pdf. Accessed 20 Jan 2021.
Fröbel, F., Heinrichs, J., & Kreye, O. (1979). *Die Neue internationale Arbeitsteilung*. Rowohlt Publisher.
Holdcroft, J. (2015). Transforming supply chain industrial relations. *International Labour Review (ILR), 7*(1–2), 95–104.
International Trade Union Confederation. (2019). 2019 ITUC Global Rights Index. The world's worst countries for workers. https://www.ituc-csi.org/IMG/pdf/2019-06-ituc-global-rights-index-2019-report-en-2.pdf. Accessed 4 Feb 2020.
International Trade Union Confederation. (2020). 2020 ITUC Global Rights Index. The world's worst countries for workers. https://www.ituc-csi.org/IMG/pdf/ituc_globalrightsindex_2020_de.pdf. Accessed 29 Jan 2021.
ITF Seafarers. (2021). About the FOC Campaign. https://www.itfseafarers.org/en/focs/about-the-foc-campaign. Accessed 10 Jan 2021.
Lillie, N. (2004). Global collective bargaining on flag of convenience shipping. *British Journal of Industrial Relations (BJIR), 42*(1), 47–67.
Maquila Solidarity Network. (2008). Clearing the Hurdles: Steps to improving wages and working conditions in the Global Sportswear Industry. http://playfair2008.org/docs/Clearing_the_Hurdles.pdf. Accessed 5Jan 2021.
Muthmainah, M. (2021). Vereinigungsfreiheit und Gewerkschaftsrechten in Indonesien. In: Zimmer, R. (2021), Das indonesische Freedom of Association Protocol. Ein Vorbild für andere internationale Rahmenabkommen zum Schutz von Gewerkschaftsrechten? Working Paper 221, Hans-Böckler Forschungsförderung, 23–32.
Rubya, T. (2015). The ready-made garment industry: An analysis of Bangladesh's Labor Law Provisions after the Savar Tragedy. *Brooklyn Journal of International Law (BJIL), 40*(2), 685–718.
Sobczak, A. (2012). Ensuring the effective implementation of transnational company agreements. *European Journal of Industrial Relations (EJIR), 18*(2), 139–151.
Stevis, D., & Fichter, M. (2012). International Frameworks Agreements in the United States: Escaping, Projecting, or Globalizing Social Dialogues? *Comparative Labor Law & Policy Journal (CLLPJ)*, *33*(4), 667–690.
Telljohann, V., da Costa, I., Müller, T., Rehfeld, U., & Zimmer, R. (2009). *International Framework Agreements: a stepping stone towards the internationalization of industrial relations?* European Foundation for the improvement of the working and living condition (Eurofound).

Ter Haar, B., & Keune, M. (2014). One step forward or more Window-Dressing? A legal analysis of recent CSR initiatives in the Garment Industry in Bangladesh. *The International Journal of Comparative Labour Law and Industrial Relations (IJCLLIR), 30*(1), 5–26.

Thomas, M. (2011). Global industrial relations? Framework agreements and the regulation of international labor standards. *Labor Studies Journal (LSJ), 36*(2), 269–287.

Zimmer, R. (2008). *Soziale Mindeststandards und ihre Durchsetzungsmechanismen. Sicherung sozialer Mindeststandards durch Verhaltenskodizes?* Nomos Publisher.

Zimmer, R. (2013a). European Works Councils as participants in Euro-wide collective agreements – Analysis from a German perspective. *European Labour Law Journal (ELLJ), 4*(4), 312–327.

Zimmer, R. (2013b). Entwicklungsperspektiven transnationaler Kollektivverhandlungen in Europa – Schaffung eines rechtlichen Rahmens für transnationale Kollektivverträge in der Europäischen Union. *Europäische Zeitschrift für Arbeitsrecht (EuZA)*, 247–259.

Zimmer, R. (2015). EU-Dienstleistungsfreiheit auch für (billig) ausgeflaggte Schiffe. Anmerkung zur EuGH-Entscheidung vom 8.7.2014. C-83/13 (Fonnship), *Arbeit und Recht (AuR)*, 103–105.

Zimmer, R. (2016). Corporate Responsibility in the "Bangladesh Accord". Which regulations are transferable to other supply chains? FES-Publication. https://library.fes.de/pdf-files/id-moe/13072.pdf. Accessed 10 Jan 2020.

Zimmer, R. (2020). International framework agreements: New developments through better implementation on the basis of an analysis of the Bangladesh Accord and the Indonesian Freedom of Association Protocol. *International Organizations Law Review (IOLR), 17*, 178–205.

CHAPTER 19

From Corporate Social Responsibility Towards Working Solution: A Comment By The Former Executive Director of 'Action, Collaboration, Transformation' (ACT)

Frank Hoffer

Hazardous working conditions, poverty wages and environmental degradation are the dark side of free markets that allow business to externalise social and environmental costs of production at the expense of workers, society and the planet. Workers pay with their health and lives for the underinvestment in safe and healthy workplaces, while communities suffer from polluted air, soil and water. Least developed countries see no choice but to compete for foreign direct investment or domestic subcontracting for export with low taxes, weak labour rights and poor environmental standards. Regulatory, tariff and tax arbitrage is an integrated part of global brands and retailers' global business strategies.

F. Hoffer (✉)
Global Labour University Online Academy, Berlin, Germany

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_19

This chapter will look at the systemic deficiencies of individual corporate social responsibility and voluntary multi-stakeholder initiatives, and the limited success of global framework agreements between trade unions and transnational companies. The ACT (Action, Collaboration, Transformation) initiative between fashion brands, the global union federation IndustriALL to achieve living wages, and the specific conditions of the Bangladesh Accord as the only binding global agreement will be discussed as more advanced attempts to address the systemic deficiencies in the global garment industry. The concluding part will focus on the potential of combining state regulation and negotiated solutions as a way forward.

Shortcomings of Corporate Social Responsibility Approaches

Corporate Social Responsibility (CSR) initiatives are corporate defence lines to defy the growing criticism of their business models. These voluntary commitments are used to forestall binding regulation that would limit entrepreneurial freedom. However, the systemic deficiencies of global supply chains, including the externalisation of social and environmental production costs, persist despite decades of CSR efforts by individual companies.

In 2001, for example, multinationals promised to eradicate child labour in the cocoa industry by 2005. But in 2005, 2007 and 2010 they had to admit that they are nowhere near to reach that goal: 'After missing the 2010 deadline, the industry established a less ambitious goal—to get a 70% reduction in child labor—and to do so by 2020' (Whoriskey & Siegel, 2019). According to a recent report, well-known multinationals are failing to eliminate even forced labour in their Chinese supply chains (Xiuzhong Xu et al., 2020). For decades the global garment industry has been operating on poverty wages. Production is constantly relocated to countries with low wages and a living wage remains a distant dream (The Circle, 2017) despite repeated sustainability commitments and glamorous company sustainability reports.

The reason for these disappointing outcomes is by and large structural. Even well-intended companies see their scope for improvements limited by market forces. Sometimes they lack economic leverage to change the behaviour of their suppliers, sometimes overall political conditions in production countries do not allow for full respect of workers' rights at company level, but most often competitive prices and the stock

market imperatives of profitability or more precise of profit maximisation (Halliday, 2019) set the limit.

While some authors and business consultants are not getting tired of making the business case for CSR, corporate behaviour, recent research and common sense indicate otherwise (Bhandari & Javakhadze, 2017). If CSR was also the best strategy for profit maximisation, it could calmly be left to the market. The socially responsible companies would outcompete the irresponsible ones and after a while the market would solely be populated by socially responsible companies. In reality CSR targets lose out, particularly in times of crisis, against the overarching management prerogative of improving the rate of return achieved with other strategies (Doane, 2005). Committed CSR managers of companies often see themselves as the 'NGO within the company'. They are not in a decision-making position, but still need to negotiate and 'campaign' internally to defend and advance social and environmental sustainability against the dominant Key Performance Indicators (KPIs) of turnover, profitability and market share. Certainly, the CSR industry has its fair share of 'Greenwashers' (European Commission, 2021), but it would be unfair to dismiss all CSR staff as cynics deliberately misleading the public about the supposed sustainability of their companies. Many CSR workers are hardworking and genuinely committed to improving things. However, measured by success, rarely have so many people worked so hard to achieve so little.

Of course, elements of CSR are compatible with profit maximisation and certain CSR measures are even profit-enhancing. The litmus test is, however, whether companies are voluntarily willing to accept a reduction in profitability in order to achieve what is socially or environmentally desirable. Actually, a main purpose of organising production in supply chains has been to shift risks and responsibilities down the chain and to create the maximum of leverage, freedom, flexibility and cost efficiency for themselves. The rise of CSR has ironically been a consequence of companies unburdening themselves from responsibility through outsourcing and subcontracting. The Covid-19 crisis brutally demonstrated the economic benefits these irresponsible supply chain systems provide for global brands and retailers. For them the current production model entails virtually no fixed costs. 'Force majeure' clauses in their contracts allowed them to cancel orders overnight. Idle factories and desperate workers are at best indirectly their problem. Yes, some companies behaved better than others,

but for all of them a system that shifts economic risks to suppliers and their workers is very advantageous to cope with the market turmoil.

'Everybody wants it, but hardly anyone does it' sums up the dilemma between CSR aspirations and business reality. In a recent survey the German government found that only 13–17% of German companies with more than 500 employees fulfil their human rights due diligence (Auswärtiges Amt, 2020). All other things equal, going it alone in spending on social or environmental desirables that are not at the same time cost-saving or productivity-enhancing is a competitive disadvantage. Furthermore, companies willing to pay a human rights premium might face considerable practical challenges to make this work. The volume of their orders might be too small to give them any leverage with the producer. Brands might order through an agent and have no direct business relationship with the factory that employs the worker. Only a certain percentage of the workforce in a given factory might work for a specific customer. Factory owners do not want to operate two pay schemes at the same workplace. Employers will be reluctant to pay higher wages, if they are not sure that they will be able to maintain the higher wages with future contracts from other clients. Suppliers might be under pressure from their peers not to pay more than the standard wage rate to avoid higher wage demands from other workers.

Of course, criticising companies for not accepting lower profit margins for the common good is morally understandable, but in societies dominated by rational choice and individual utility maximisation it is missing the point. Instead of traditions or religious values, the market has become god and bankruptcy replaced hell. Ethics seems to be more talk than reality. According to the Ethics a Compliance Initiative (2021), in 2020 twice as many employees in the US were working in companies with a strong ethical culture than 20 years earlier. However, baptising a company as an ethical business is one thing, changing the practice is another. The same survey reveals that in 2020 twice as many workers than in 2017 reported that they felt pressure at work to compromise the ethical standards, 8 out of 10 employees reported misconduct and 80% experienced retaliation after reporting misconduct. Higher ethical compliance standards seem to correlate with increased pressure and retaliation not to comply.

Trying to solve the systemic problems of a competitive race to the bottom by campaigning against individual companies and asking them to put values before profit, might, therefore, be barking up the wrong

tree. Accusing individual companies of human rights violations has been an efficient way to highlight and 'visualise' the problems of exploitative supply chains but expecting individual companies to change their business model against the logic of the market looks more like wishful thinking than a realistic solution. It looks as promising as asking for fair play in a game without rules, instead of insisting on fair rules of the game.

Recognising the limits of company-based CSR, business itself has come up with a myriad of joint initiatives to facilitate voluntary pre-competitive collaboration in order to generate a level playing field that allows ethical standards to prevail in a competitive environment. These include Ethical Trade Initiative, Fair Wear Foundation, Better Cotton Initiative, Amfori, Fair Labour Association, Textile Partnership and Fashion for Good to name just a few. Business-friendly foundations like Laudes which is fully funded by the Brenninkmeijer family, the owner of C&A, even give core funding to more campaign-oriented initiatives with radical names like 'Fashion Revolution' (Fashion Revolution, 2021).

All these initiatives want to square the circle by trying to achieve coordinated action without ultimately limiting the business freedom of participating companies. However, so far, the attempts to try the impossible has resulted in lowest common denominator solutions like guidelines, recommendations or commitments to due diligence processes. A multitude of good intentions, long-term visions, vaguely defined goals and overrated changes are creating about sustainability achievements (Kassatly, 2020). Ambitious targets are easily set as accountability is weak and—except for the possible reputational damage—missing voluntary commitments has no consequences. Committing to measurable real improvements like annual increases in real wages, reduction of excessive overtime, health insurance coverage, etc. is as a rule absent. Cost implications are a crucial limiting factor for CSR commitments. Whenever the business costs exceed the expected economic benefits, ethical objectives face an uphill battle. The simple bottom line is: what matters is the bottom line.

Beyond Unilateral Corporate Social Responsibility

There is widespread frustration among many actors including legislators about the failures of CSR and the many empty or half-empty sustainability promises (Uddin, 2021). However, looking beyond the unilateral CSR codes of conduct of individual companies or voluntary multi-stakeholder commitments there are a few examples where companies signed binding

or at least semi-binding agreements. The most effective is the Bangladesh Accord (Morse, 2021). The most widespread are framework agreements with Global Union Federations. The most ambitious is ACT, an agreement between 20 global brands and the Global Trade Union federation IndustriALL to achieve living wages through national sectoral collective bargaining that is supported by international purchasing practices.

The Bangladesh Accord

The Bangladesh Accord was the immediate outcome of the Rana Plaza disaster. With more than a thousand dead bodies at their doorsteps, brands were ready to agree to a ground-breaking agreement. Before the Rana Plaza tragedy only two companies, Phillips-Van Heusen (PVH) and Tchibo, could be convinced to sign the Bangladesh accord and they only signed under the condition that it comes into effect only after other major brands would have signed it as well (IndustriALL, 2012). With their backs to the wall and fearing legislative measures, brands were for the first time willing to use their coordinated purchasing power to change the way the industry is operating. They signed a legally enforceable agreement on 'Fire and Building Safety' with two Global Union Federations, IndustriALL and UNI-Global Union, as signatories and the most vigilant NGOs like Clean Clothes Campaign and Workers Rights Consortium as witnesses (Accord, 2020). The binding character of the agreement ensured that they could be taken to court in case of non-compliance. The possibility of using hard law to enforce the soft law agreement actually resulted in measurable behavioural changes (Leitheiser, 2017). However, despite its undisputed success and its ground-breaking role in ensuring real improvements on the ground (Matthews, 2021), in 2021 major parts of the business community are in favour of watering down the key features of independent monitoring and individual accountability of brands.

The Bangladesh Garment Manufacturers and Exporters Association (BGMEA) and the Bangladesh government opposed the Accord all along, branding it as a neo-colonial intervention. In 2019, a compromise solution was found—future inspections would be carried out by a newly formed Ready-Made Garment Sustainability Council (RSC) with representation from brands, trade unions and manufacturers. The NGO community has voiced concerns that by giving the BGMEA considerable influence, the new RSC body might be less effective than the old Accord in inspecting factories and pushing through required changes. Even less

sceptical voices agree that success crucially depends on brands, trade unions and NGOs succeeding in negotiating a new binding international agreement after the Transition Accord expires in May 2021. Without a binding agreement ensuring accountability of brand signatories for their supply chain, the RSC will degenerate into a toothless CSR exercise.

However, regaining unlimited business freedom and avoiding any costly responsibility for their supply chains is apparently rated higher by many businesses than collective efforts to protect the lives of garment workers. Despite the undisputed fact that its binding character is what made the Bangladesh Accord an outstanding success, it is this binding character that many brands are opposing the most in the current negotiations. On 12th of May 2021 IndustriALL and UNI Global Union, the trade union signatories of the Accord, decided to withdraw from the RSC as 'the global unions cannot accept replacing the extremely effective Accord model with an alternative proposal from brands derived from the failed approaches of the decades prior to the Rana Plaza industrial homicide' (UNI Global Union, 2021). The Bangladesh Accord shows that even successful agreements can never be taken for granted. At the time of writing this chapter, it was still open whether a meaningful continuation of the Accord agreement can be achieved. Brands and IndustriALL could only agree to extend the Transition Accord for three months to continue negotiations (IndustriALL, 2021). By threatening to walk away from the most effective agreement to protect workers, brands are confirming that without public pressure or binding regulation cost saving tends to take priority over saving workers' lives.

Global Framework Agreements

If the Accord has been the most effective international standard so far, born out of the 'favourable conditions' of a terrible catastrophe, trade unions have tried on a daily basis to improve the commitment and accountability of multinationals through global framework agreements (GFAs) (Eurofund, 2019a). In tedious negotiations around 150 GFAs have been signed covering a number of large, mainly European, multinational companies. Though these agreements are not legally binding they create greater accountability than unilateral codes of conduct as they have been negotiated with the trade unions and have a monitoring and dispute resolution mechanism involving trade unions. GFAs help to solve in particular freedom of association issues at subsidiaries or suppliers of

these companies. It is difficult to assess the overall impact of GFAs (Stevis, 2011) on improving working conditions, but the reluctance of companies to sign them is an indication that they are at least seen by management as agreements creating obligations they prefer not to have.

As a rule, these agreements have been concluded with companies from countries with a social dialogue tradition and where trade unions have a strong power base. They are largely derived from the institutional power trade unions still have in a number of countries, rather than as an outcome of the global organising or campaigning efforts of trade unions. As a rule, these agreements form the basis of a dialogue between trade unions and companies. They are a tool to deal with specific grievances and conflicts. They are a step towards cross-border collective bargaining. They require companies to respect the core International Labour Organization (ILO) conventions and institutionalise consultation mechanisms. However, they fall well short of securing the Decent Work minimum.

Compliance with ILO core labour standards is compatible with a fully deregulated labour market as long as no children are employed, forced labour is absent, all workers are treated equally and they are allowed to try to improve their lot through collective action. Neither core labour standards nor GFAs are directly improving wages or working conditions for workers in supply chains. Despite their apparent limitations in terms of the obligations on companies, the proliferation of GFAs remains slow, as there is no regulatory pressure or incentive for companies to conclude a GFA. This is remarkably different to the situation in Europe. The European directive on European Works Council—so far, the only supranational regulations that directly support the establishment of employee representation with companies at supranational level—resulted in the creation of more than 900 European works council (Eurofund, 2019b) and a myriad of agreements between workers' representatives and companies. However, as the jurisdiction of the EU is of course limited to its 27 Member States, the European works councils only cover workers, company headquarters and subsidiaries located within the EU. The difference between the growth of agreements on European and global levels is another indication that more rapid progress is achieved if state regulation limits the freedom of companies to ignore the rights and interests of their direct employees and those employed in their supply chain.

Action, Collaboration, Transformation

ACT, the most ambitious global joint initiative of trade unions and business, is intended to move beyond core labour standards and to achieve living wages in the garment industry through industry-wide collective bargaining supported by brand purchasing practices. ACT is suggesting that suppliers and trade unions should negotiate higher wages for the garment industry at national level. Brands would incorporate these higher wage costs into their purchasing prices from suppliers. All other factors remaining equal, higher wages would then result in higher purchasing prices for consumers. Successfully implemented, the approach would radically alter the global garment industry.

Setting wages for workers at national level guarantees a level playing field for all suppliers in a country. A collective agreement would empower workers and their trade unions and increase the probability that wage levels will not only be set, but also enforced. Furthermore, institutionalising sectoral collective bargaining would provide the framework to negotiate and regulate a wider range of wages, working time and working conditions. Finally, functioning industrial relations would also be a major contribution to strengthening democracy in societies with weak democratic institutions.

However, the ambitious concept of coordinated and negotiated solutions launched seven years ago is facing severe challenges. ACT has run in a number of difficulties in recent years and the Covid-19 crisis has certainly not made things easier, as several brands cancelled orders and some refused to honour prior commitments. The reality that ACT members only represent between 25 and 40% of the market share in most countries, and that national wage-setting does not solve the issue of international competition, are key challenges for ACT. ACT and its member brands argue that an industry-wide agreement creates a level playing field for suppliers, but if this agreement is only incentivised through brand purchasing practices, then it will not achieve its goals as it is only the member brands that are willing to support higher wages through their purchasing practices. Those not producing for ACT brands thus have a competitive disadvantage and will likely lose out. The suppliers also do not see ACT or collective bargaining agreements supported by ACT brands as a level playing field. Another major challenge is the practice of brands to source from the most competitive location. Therefore suppliers, and

governments for that matter, fear that an increase of the wage level will lead to the relocation of production.

Therefore, ACT has been trying hard to convince other European, Japanese and US brands to join the initiative. It slowly increased its membership over the years, but has not succeeded in convincing Nike, Adidas, Puma, Uniqlo, Aldi, M&S and the like to join, let alone aggressive anti-union companies like Walmart and Amazon or any of the fast-growing Chinese retailers. ACT member brands have the choice to either take the lead in changing the wage-setting practices of the garment industry or postpone progress until those unwilling to join ACT reconsider their decision. To make progress ACT brands would have to start with a multi-employer agreement instead of a binding industry-wide agreement. Currently only suppliers who deliver for ACT brands can be incentivised to join a collective bargaining agreement. For that, ACT brands would have to source only from suppliers covered by a collective bargaining agreement, to incorporate higher wages in their purchasing and keep orders stable or increase them despite rising wages. Extension to more brands and ultimately the entire sector would depend to a large extent on the mobilising power of IndustriALL and its civil society allies to pressure other brands to make the same commitments. Non-ACT suppliers can only be expected to join any collective bargaining agreement when their big buyers are also committed to incorporating the higher costs in their purchasing prices or when workers refuse to work for lower wages than in the neighbouring factories bound by a collective bargaining agreement.

Furthermore, suppliers and governments in garment producing countries fear that higher national wage levels will result in relocation of production to countries with lower wages. Given the trends of the last two hundred years, this fear is justified. In order to address these concerns, ACT started parallel consultations in several key garment producing countries such as Cambodia, Myanmar and Bangladesh with the aim of lifting wages in these competing markets simultaneously. During their consultations with Cambodian representatives, ACT brands even offered to maintain or increase their sourcing from Cambodia in the four years following the agreement if they were the first country to sign an industry-wide collective bargaining agreement. However, despite initial progress, the Cambodian employers suspended the negotiations for two reasons. First, the EU had started the process to withdraw the Everything but Arms (EBA) trade preferences following Cambodia's regress concerning

human and labour rights. Second, suppliers disagreed with the ACT idea that wages should increase for all workers in the sector while ACT could only guarantee a volume and price commitment for 40% of the market.

Measuring success in a complex process is difficult. Judging by wages the results so far are not encouraging as no wage increases have been achieved, whereas judging by intermediate steps indicates that ACT has successfully initiated consultation processes in several countries. The ACT brands committed publicly to an agreed set of purchasing practices. In Myanmar—before the coup in February 2021—ACT was successful in initiating meaningful negotiations between ACT brand suppliers and the trade unions. This led to the adoption of a freedom of association guideline and a dispute resolution mechanism between ACT brand suppliers and trade unions (ACT, 2021) as a first step towards collective bargaining on wages and working conditions. ACT brands agreed to require their suppliers to follow the guideline and to accept the decisions of the dispute resolution mechanism.

So far, ACT has been successful in non-monetary issues of strengthening freedom of association and creating dialogue platforms. However, who pays for higher wages remains the elephant in the room. In all countries ACT met considerable reservation from employers and employer organisations for several reasons. Firstly, most of them are not particularly trade union-friendly and have little interest in empowering trade unions. Signing a collective bargaining agreement or legally binding agreement with unions is something most suppliers have spent decades avoiding. Wage increases or no wage increases, collective bargaining agreements at industry level would also hand trade unions institutional power they currently do not have. Secondly, they are not convinced that all ACT brands will meet the commitment of incorporating higher wages in their purchasing practices and that they will not move to cheaper production locations. Most importantly they are sceptical that other brands can be brought on board or that IndustriALL has the strength to push other brands to join and to hold all brands accountable to their promises.

It is an open question how ACT plans to overcome the challenges outlined above. Will brands be willing to take a leadership role by piloting a multi-employer agreement? Can IndustriALL increase the pressure to convince brands to move forward in these directions? Is ACT able to convince more brands to join? ACT not moving forward would be a major setback in attempting to achieve real progress in the garment

industry. However, a continuation of the status quo seems to be unlikely to generate the necessary momentum required for a breakthrough.

Supportive Regulation

The failures of voluntary CSR to address the systemic negative features of global supply chains, the crisis of the Bangladesh Accord, the limited impact of GFAs and the challenges ACT is facing, show that without supportive national and supranational regulations fundamental improvements are unlikely to happen. Those companies that are genuinely willing to invest in sustainable businesses, engage in collective bargaining with their workers, and maintain a genuine dialogue with civil society organisations can only benefit from government rules that give priority to the common good over profit maximisation relying on externalisation of social and environmental costs.

Both the US and the EU as the two largest consumer markets have the leverage to set rules and regulations that can shape the industry. At European level, two instruments come into mind to increase company obligations or to provide incentives to raise standards. The first is the upcoming EU law on due diligence and second is a more strategic use of the EU trade preferences.

Legally Enforceable Due Diligence

A due diligence law will increase the pressure on companies to identify, prevent, mitigate and account for their impacts on human rights. Access for workers in producing countries to judicial remedy in Europe would provide additional impetus for companies to get serious about these responsibilities. The binding character of a law and the threat of costly and damaging court cases will surely lead to a different risk analysis by company boards. The willingness to give higher priority to and invest more resources in proper due diligence will grow. Well-structured due diligence legislation should support and encourage companies to engage in joint initiatives that deliver on structural changes to improve working conditions and wages. However, only initiatives with agreed and binding mechanisms to deliver and measure improvements on wages, working times or health hazards should qualify. Any initiative that does have trade unions represented in their decision-making structure and in all monitoring and accountability processes would disqualify itself. Proper

due diligence processes and procedures are important but should not serve as a substitute for what ultimately counts—better outcomes. By its very nature, a due diligence law demands that companies put the right measures and instruments in place to pursue human rights due diligence effectively. This creates the risk of focussing on processes while remaining imprecise on measurable real changes. Many companies will probably give priority to protect themselves against any legal claims and liabilities instead of investing in costly improvements on the ground. Proving that due diligence requirements that were met might be easier and more cost efficient than genuinely trying to change things. An army of company lawyers will draft watertight contracts with suppliers and subcontractors to provide proof that companies have done their due diligence and can reject any liability claims.

Preferencing Wages

Using the EU special trade preferences offers an easier and more straightforward way of achieving change than a due diligence law. Currently the EU trade preferences play a (perhaps unintentionally) negative role concerning living wages. They are instrumental in depressing wages and directing production to the countries with the lowest wages.

The EU EBA (Everything bit Arms) trade preferences give least developed countries free access to the European market. The EBA exempts countries such as Bangladesh, Myanmar, Ethiopia and Cambodia from the 12% EU import tariff on ready-made garments and footwear, which is the equivalent to 60–80% of the wage costs. The EBA intensifies the wage pressure in garment producing countries that do not enjoy the same trade preferences, as the EU is further subsidising imports from countries that already have the lowest wages. Unsurprisingly, the export share to the EU of garment-exporting countries without EBA or Generalised Scheme of Preferences (GSP) subsidies has declined due to their cost disadvantages, including Thailand (Nidhiprabha, 2017), Malaysia, Indonesia, Vietnam, and more recently, China (ILO, 2018). India, with wages as low as Bangladesh, has stagnating exports to Europe while those from Bangladesh and Pakistan have been rising rapidly. In particular, the rise of Bangladesh to the second largest ready-made garment exporter of the world cannot be explained without its tariff-free access to the European market. However, while millions of jobs were created in least developed countries, companies continue to pay poverty wages. The

abundance of cheap labour in these countries means that wages are stuck at the poverty level if left to supply and demand. Because of the fierce competition among least developed countries, the EU subsidies did not result in higher wages for workers in poor countries but largely in higher profits for multinationals and lower consumer prices for fast fashion.

The EU could turn the current race to the bottom into a race to the top by linking the trade preferences to positive wage developments. Currently competing low-wage EBA and GSP+ countries like Bangladesh, Myanmar, Pakistan, Sri Lanka and Cambodia are large ready-made garment exporters to the EU. Garment exports should only remain eligible for the EU EBA as long as they ensure 5% annual real wage growth in the garment sector of the producing country. For the next 10 years, every year in which they fail to achieve these targets, the trade preference is reduced by one percentage point. Countries can ensure the required wage increase through a rise in sectoral minimum wages or preferably through a legally extended sectoral collective bargaining agreement.

Through this mechanism, the EU gives the least developed countries a choice to ensure either higher wages for their workers or accept reduced trade preferences for exports into the EU. In other words, they can choose to give more money to their workers or pay more tariffs to the EU. The countries would not have to fear being undercut by other countries refusing an expansionary wage policy as those countries would face higher EU import tariffs.

Initiatives like ACT could move ahead and support the race to the top through a simple double growth commitment. For the next ten years, they would only increase their sourcing from the five countries with the lowest wages among garment exporting countries and an export volume above 1 billion US dollars, if these countries ensured a real wage growth of at least 5%. Countries not raising their wages would not only face reduced trade preferences but would also know that any low-wage strategy would eliminate the opportunity to grow with the ACT member brands. IndustriALL and NGOs could put pressure on other countries to follow the ACT brands as there would be a simple and powerful mechanism to bring wages up systematically.

The combination of trade policies and purchasing practices would provide a powerful incentive for countries to raise wages. It would also give trade unions a strong argument in negotiations with employers, as the wage rise would become a precondition to maintain and increase

business opportunities. Consumers would be assured that the wages of the workers producing fashion will grow regularly and substantially. A greater share of the added value of garment production would stay in the countries. This will not only strengthen the internal market, improve the living conditions of the workers, but with all likelihood the investment of garment workers in the education and health outcomes of their children would increase and 'upgrade' tomorrow's workforce.

References

Accord. (2020). How the Accord works. https://bangladesh.wpengine.com/wp-content/uploads/2020/10/How-the-Accord-works-flowchart.pdf

ACT. (2021). *Myanmar work*. https://actonlivingwages.com/where-we-work/myanmar/

Auswärtiges Amt. (2020, October 13). *Monitoring zum Nationalen Aktionsplan Wirtschaft und Menschenrechte*. https://www.auswaertiges-amt.de/de/aussenpolitik/themen/aussenwirtschaft/wirtschaft-und-menschenrechte/monitoring-nap/2124010

Bhandari, A., & Javakhadze, D. (2017). Corporate social responsibility and capital allocation efficiency. *Journal of Corporate Finance, 43*, 354–377.

Doane, D. (2005, Fall). The Myth of CSR. *Stanford Social Innovation Review*. https://ssir.org/articles/entry/the_myth_of_csr

Ethics & Compliance Initiative. (2021). *Global business ethics survey*. https://www.ethics.org/global-business-ethics-survey/

Eurofund. (2019a). *International framework agreement*. https://www.eurofound.europa.eu/observatories/eurwork/industrial-relations-dictionary/international-framework-agreement

Eurofund. (2019b). *European works councils*. https://www.eurofound.europa.eu/observatories/eurwork/industrial-relations-dictionary/european-works-councils

European Commission. (2021). *Screening of websites for 'greenwashing': Half of green claims lack evidence*. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_269

Fashion Revolution. (2021). *How we are funded*. https://www.fashionrevolution.org/about/

Halliday, S. (2019, May 19). Asos 13% sales rise disappoints, challenges in UK, US, France and Germany. *Fashion Network*. https://ww.fashionnetwork.com/news/Asos-13-sales-rise-disappoints-challenges-in-uk-us-france-and-germany,1078717.html

ILO (International Labor Organization). (2018). *From obligation to opportunity*. https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---ifp_seed/documents/publication/wcms_628430.pdf

IndustriALL. (2012). *Tchibo joins agreement on garment factory safety in Bangladesh*. http://www.industriall-union.org/tchibo-joins-agreement-on-garment-factory-safety-in-bangladesh

IndustriALL. (2021). *3-month extension to Bangladesh Transition Accord achieved*. http://www.industriall-union.org/3-month-extension-to-bangladesh-transition-accord-achieved

Kassatly, V. B. (2020). *Sustainable cotton: Myths versus reality*. https://apparelinsider.com/wp-content/uploads/2020/02/organic-cotton-cover.pdf

Leitheiser, E. (2017). A sheep in wolf's clothing? How the illusion of hard law makes business more responsible. In G. Atinc (Ed.), *Proceedings of the seventy-seven annual meeting of the academy of management*. Academy of Management. Academy of Management Proceedings.https://doi.org/10.5465/AMBPP.2017.253.

Matthews, B. (2021, February 9). It's time to learn lessons of Bangladesh Accord. *Apparel Insider*. https://apparelinsider.com/8326-2/

Morse, A. (2021). *The Bangladesh Accord is set to expire on May 31: Here's why that would be catastrophic*. https://remake.world/stories/news/the-bangladesh-accord-is-set-to-expire-on-may-31-heres-why-that-would-be-catastrophic/

Nidhiprabha, B. (2017). The rise and fall of Thailand's export-oriented industries. *Asian Economic Papers, 16*(3), 128–150.

Stevis, D. (2011). The impacts of international framework agreements: Lessons from the daimler case. In K. Papadakis (Ed.), *Shaping global industrial relations* (pp. 116–142). ILO and Palgrave.

The Circle. (2017). *Fashion focus: The fundamental right to a living wage*. https://www.thecircle.ngo/wp-content/uploads/2015/11/Fashion-Focus-The-Fundamental-Right-to-a-Living-Wage-1.pdf

Uddin, M. (2021, June 1). Why we need an industry charter on buying practices. *The Daily Star*. https://www.thedailystar.net/opinion/rmg-notes/news/why-we-need-industry-charter-buying-practices-2083673

UNI Global Union. (2021). Global unions to withdraw from unenforceable garment factory safety scheme in Bangladesh. https://www.uniglobalunion.org/news/global-unions-withdraw-unenforceable-garment-factory-safety-scheme-bangladesh

Whoriskey, P., & Siegel, R. (2019, June 5). Cocoa's child labourers. *Washington Post*. https://www.washingtonpost.com/graphics/2019/business/hershey-nestle-mars-chocolate-child-labor-west-africa

Xiuzhong Xu, V., Cave, D., Leibold, J., Munro, K., & Ruser, N. (2020). *Uyghurs for sale*. Australian Strategic Policy Institute. https://www.aspi.org.au/report/uyghurs-sale

PART IV

Conclusions and Outlook

CHAPTER 20

Comparing National and Industry-Specific Trajectories of Economic and Social Upgrading as Well as Various Strategic Solutions

Petra Dünhaupt, Hansjörg Herr, Fabian Mehl, and Christina Teipen

This book has aimed to shed more light on hitherto polarized viewpoints, bring together theoretical perspectives from different disciplines

P. Dünhaupt · H. Herr · F. Mehl · C. Teipen (✉)
HWR Berlin (Berlin School of Economics and Law), Berlin, Germany
e-mail: christina.teipen@hwr-berlin.de

P. Dünhaupt
e-mail: petra.duenhaupt@hwr-berlin.de

H. Herr
e-mail: hansjoerg.herr@hwr-berlin.de

F. Mehl
e-mail: fabian.mehl@hwr-berlin.de

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_20

and analyse the conditions for economic as well as social upgrading in various countries and sectors. In this chapter we summarise the main results of this book. Our focus is an analysis of global value chains (GVCs) between the Global North and the Global South.[1] Here, the main motivation of the lead companies for outsourcing and offshoring, apart from an increase in flexibility and access to new markets is, above all, the reduction of costs.

One of the aims of this chapter is to develop a classification of economic and social upgrading trajectories according to our theoretical approach, which was introduced in the first chapter of this book, and to present our empirical results according to this framework. A second aim, based on this classification and theoretical debate, is to provide tentative policy recommendations for economic and social upgrading in GVCs.

The empirical results and comparisons are primarily based on studies in five sectors (apparel, automobiles, electronics, IT services and agriculture) and six countries (Bangladesh, Brazil, China, India, South Africa and Vietnam, in the case of the agricultural sector, additional countries are considered).[2]

Economic interaction via GVCs can assume different patterns, which we will illustrate by means of our case studies. The lead firms in particular industries or industry segments (typically headquartered in the Global North) organise the production process during which the good (or service) and its intermediate inputs cross one or several borders and which involves multiple supply firms.

In order to analyse the possibilities and challenges for economic and social upgrading in different industries and countries, a correspondingly open and complex theoretical research strategy is needed. Our arguments

[1] Global North and Global South are not to be understood in a geographical sense but refer to the unequal and hierarchical economic relations between different world regions (see Chapter 1). Since core and peripheral economic regions are subject to dynamic change, it has to be noted that some countries, especially China, are still generally classified as part of the Global South, even though they are in the process of rapidly catching up economically. Additionally, China, as the home country of some sectoral lead firms, is outsourcing and offshoring production tasks to low-wage countries in the Global South.

[2] The case studies were conducted between 2017 and 2020 within the scope of a research project titled 'Global Value Chains—Economic and Social Upgrading', funded by the Hans-Böckler Foundation (Project No. 2017-233-1). The research project was carried out by the editors of this book at HWR Berlin (Berlin School of Economics and Law) in cooperation with a team of international project partners.

are at least twofold in this respect: We firstly suggest supplementing the analysis of value chain governance modes with economic approaches on power relations and rent-seeking possibilities in different market forms. Secondly—since the expectations of mainstream economists regarding economic and social upgrading opportunities for countries in the Global South through involvement in GVCs have not materialized—we take the concerns of institutionalists seriously, who underline that upgrading also depends on a country's capacity to shape the national competitive and labour market situation through a series of political measures such as labour regulation, industrial policy and others. Therefore, in our interdisciplinary view, GVC approaches should be further integrated into other debates about power resources of labour, industrial relations and industrial policy.

The chapter is structured as follows: In the first section a comprehensive classification of GVCs according to our theoretical understanding is developed (see also Chapter 1). In the second section, drawing on insights from different national sector studies, we will present and discuss the outcomes of these sectoral analyses. On this basis, in the last section we will draw conclusions for policies that are needed in order to realise comprehensive and inclusive economic and social upgrading.

Analysing Global Value Chains—Governance, Rent-Seeking and Economic and Social Upgrading

In the following, we will briefly summarise the theoretical considerations that underpin our analytical framework and which have already been introduced in Chapter 1 of this book. The classification of GVCs we developed is presented in Table 20.1. We thereby only consider the interactions between the lead firms and their first-tier suppliers in a GVC. Of course, several more tiers can exist and firms along the whole GVC can be in a different situation.

Global Value Chain Governance

Here, the typology by Gereffi et al. (2005) (see also the chapter by Teipen & Mehl in this book) proved to be very useful because it emphasises relations between firms, including power imbalances between lead firms and suppliers, which go beyond the interactions of agents in anonymous markets. The authors identify specific forms of value

Table 20.1 Classification of governance modes, rent-seeking constellations and economic and social upgrading outcomes of the empirical cases analysed

Sector	Country	Predominant governance modes	System of industrial relations	Rent-seeking of lead firms		Types of Economic upgrading of suppliers	Social upgrading in supplier firms	
				Bargaining power of trade unions in supplier firms[b]	Rent-seeking position of lead firms in sell and supply markets		Real wages[c]	Collective voice
Automotive	South Africa	Relational FDI[a]	Democratic corporatism	Strong	One-sided with a tendency towards double-sided	Product Process	Good	Existing
	India	Relational FDI Own champions	Market despotism	Weak		Product Process Limited functional Relatively weak national champions	Poor	Existing
	China	Relational FDI (in many cases joint ventures) Own champions	Unitarist state corporatism	None		Product Process Functional Inter-sectoral National champions	Good	Not existing
	Brazil	Relational FDI	Democratic corporatism	Strong		Product Process	Good	Existing

Agriculture	Bangladesh Brazil Columbia Ghana India Pakistan Vietnam	Captive	Country-specific	Weak	Double-sided	Product Process (in Brazil, Columbia, Vietnam)	Poor (except Brazil: moderate)	Existing in Ghana, India, Columbia Existing, but hindered, in Bangladesh, Pakistan Not existing in Vietnam
Apparel	Bangladesh	Captive	Market despotism	Weak	Double-sided	Product Process	Poor	Existing but hindered
	China	Captive	State corporatist unitarism	None		Product Process	Moderate	Not existing
	Vietnam	Captive	State corporatist unitarism	None		Product Process	Poor to moderate	Not existing
	India	Captive	Market despotism	Weak		Product Process (Very limited)	Poor	Existing

(continued)

Table 20.1 (continued)

Electronics	Vietnam	FDI	State corporatist unitarism	None	Double-sided	Product Process	Poor to moderate	Not existing
	Brazil	Modular FDI	Democratic corporatism	Strong	Double-sided to one-sided	Product Process	Good	Existing
	China	Modular	State corporatist unitarism	None	Double-sided to one-sided	Product Process Functional Inter-sectoral National champions ons	Moderate	Not existing
IT services	India	Modular Relational Captive	Market despotism	Weak	Double-sided to one-sided	Product Process Functional National champions	Good (strongly spread inter-nally)	Existing
	China	Modular Relational Captive	State corporatist unitarism	None	Double-sided to one-sided	Product Process Functional Inter-sectoral National champions	Good (strongly spread internally)	Not existing

[a] In the classification by Gereffi et al. (2005) integration into GVCs via FDI is called 'hierarchical'

[b] 'None' means that no free association of trade unions with bargaining functions is possible.

[c] 'Poor' means no or low increases, also in relation to the rest of the economy. 'Good' means high level or high increases, also in relation to the rest of the economy. 'Moderate' is in the middle, compared to the other cases.

chain governance between firms, which are essentially determined by the complexity of transaction, the ability to codify transactions and supplier competence. Gereffi et al. (2005) distinguish between market interactions, modular governance, relational governance, captive governance and vertical integration (the latter also including foreign direct investment (FDI)).

Market relationships implicitly assume that many buyers and suppliers interact via pure market coordination and that the power asymmetry between customers and suppliers of goods and services is low. Firms' management and strategy are not directly influenced by other firms.

Captive governance structures often exist between lead companies (in countries of the Global North) and suppliers (in countries of the Global South). Tasks fulfilled by suppliers are relatively simple and entry barriers for suppliers with low capabilities are comparably low; tasks can thus be carried out by many supply firms in many countries. However, because of detailed product specifications, intensive coordination between the lead firm and suppliers is needed. Usually, the lead firm directly specifies the task the supplier has to take over, including a detailed description of the required production process as well as the intermediate goods which have to be used. For example, multinational apparel brands or retailers often oblige suppliers to use specific designs and intermediate products or raw materials when producing a shirt or dress. This means that a few lead firms have a large choice of suppliers worldwide, who in turn are in fierce competition with each other. Obviously, the lead firms in such a constellation will push down the price of products offered by numerous suppliers in such a way that the latter will make only a very small profit. In addition, if labour market regulations or ecological standards in the countries of the suppliers are weak, it is easy to imagine the precarious conditions under which employees in such companies often work. For lead firms, outsourcing to legally independent subcontractors has advantages in addition to low costs as the lead firm can pass the risk of production fluctuations on to its suppliers.

In relational governance, given the relatively high capabilities of suppliers and the need for intensive information exchange, the spectrum of possible cases is subdivided. In the first case, large, and typically global, suppliers with superior technological know-how interact with lead firms. An example is the automotive industry, where the major brands select powerful suppliers such as Bosch for electronic equipment or Michelin for tyres. In the second case, a relational governance constellation can

also exist in which suppliers are more dependent on the lead firm and have relatively less power because they are specialised in subcontracting to the automotive industry. This is likely to be the case if the tasks taken over by suppliers are more complex (as in captive GVCs) but technologically still relatively undemanding, and the capital required for production is comparatively low. In this scenario, more suppliers are available on the market than in the first case. A typical empirical example of this is the relationship between suppliers of relatively simple components and final manufacturers in the automobile market, but which involve very high-quality standards and interaction requirements.

With modular governance, which implies that the supplier is able to deliver a complete product without the know-how or support of the lead firm, different constellations are also conceivable. In the electronics industry, for example, the relationship between a few relatively powerful contract manufacturers (such as Foxconn) and a small number of buyers (such as Apple) can exist. Another case of modular governance occurs, for example, if brand companies in the apparel sector increasingly buy their goods completely finished and packaged and even leave some of the design to the suppliers themselves. Examples of such modular suppliers include multinational producers in Hong Kong and China, importers with logistics and design functions, or large intermediaries such as Li & Fung (Abdulsamad et al., 2015).

In the governance modes presented so far, suppliers are legally independent firms. But lead firms in the Global North can also decide to establish subsidiaries in the Global South via various forms of foreign direct investment (FDI), i.e. green field investments, joint ventures and mergers and acquisitions. The motivation for this type of governance could be a lack of capable suppliers or the fear that tacit knowledge could spread to competitors. Good examples of this include Samsung's FDI in the Brazilian and Vietnamese electronics sectors or joint ventures in the automotive sector in China. It is obvious that in the case of FDI the lead firm completely dominates the subsidiary. Our classification of governance forms according to Gereffi et al. (2005) can be taken from Table 20.1 as mentioned.

Rent-Seeking

Gereffi et al. (2005) concentrated their analysis on the interaction between firms and the organisation of GVCs. Power relationships play an

important role in their framework, but it does not focus on the question how value creation in a GVC is distributed among the different firms and stakeholders, namely workers, managers and owners of firms (for detailed literature see Chapter 1 of this book).

Rent-seeking, meaning higher than normal profits or 'extra profits', has two broad dimensions. The first is related to how companies in GVCs are embedded in markets on their supply and selling sides (Milberg & Winkler, 2013). The second refers to how rents are distributed within companies. This depends mainly on the strength of trade unions. In the following, we start explaining the first dimension.

Lead firms in GVCs on their supply side are often in a monopsony or oligopsony position. Suppliers in monopsonies are in a constellation of hyper competition among each other. Not much fantasy is needed to imagine that in such a constellation prices for suppliers are pushed to a minimum and the profits of these suppliers are low or even minimal. The pressure to keep wages or other costs low in such supply firms is high. We can speak here of 'value grabbing' by lead firms from their suppliers. Typical examples of this market constellation are interactions between big retailers and suppliers in the apparel or agricultural sectors. However, lead firms can also be confronted with strong suppliers. An example here is the interrelation between first-tier suppliers and lead firms in the automotive industry. In such a constellation, the rent-seeking capacity of the lead firm is limited.

In the case of vertical integration, companies directly and completely dominate the production of suppliers. An example is Samsung's FDI in countries like Vietnam or Brazil to produce parts or assemble mobile phones or other electronic products. Vertical integration is comparable to a monopsony constellation because the lead firm can transfer profits from its subsidiary, at its discretion, to the Global North.

Lead companies can have a strong market position on the sales side. This allows rent-seeking which is typical for monopolies or oligopolies. Oligopolies can be strong, but they can also approach a situation of monopolistic competition. For the first case, Apple is an example. For the second case, 'no-name' apparel or simple electronic products are an example.

In cases where a lead firm has a monopsony or oligopsony position on the selling side, and a monopsony or oligopsony position on the supply side, we speak of a *double-sided rent-seeking position*. Since such companies have a power advantage on the purchasing and sales side, this constellation

contains a true rent-seeking paradise with high and above-average profit rates. This could be the case, for example, with brand companies in the apparel industry such as Nike or Adidas.

When lead firms are in a monopoly or oligopoly position in the market they sell their products but are exposed to strong suppliers on the supply side, a *one-sided rent-seeking position* exists, which in the case of a monopoly or a strong oligopoly in a big market can also lead to extensive rent-seeking.

However, lead firms with a strong position vis-à-vis its own suppliers also can be exposed to tough competition in their selling markets. This is the case for oligopolies with relatively many firms and difficulties establishing tacit cartels, for example, by means of price leadership of one firm. Retail chains in the clothing industry such as H&M or Primark can be mentioned as an example here.

It should be noted that if a lead firm is under tough competition on the selling side, for example, in cases of monopolistic competition, even if such a firm has a monopsony position vis-à-vis its suppliers, rent-seeking is not possible. We consider such a constellation in GVCs to be an exception.

In Chapter 1 of this book we argued that double-sided rent-seeking is typically related to captive governance and vertical integration via FDI. One-sided rent-seeking is most likely linked to relational and modular governance. The atypical case of no rent-seeking can happen in all governance modes. In Table 20.1, we classify our empirical cases according to double-sided and one-sided rent-seeking positions. We did not find a case of no rent-seeking.

There is a correlation between rent-seeking and the strength of unions. Strong trade unions with potent bargaining power can increase wages in successfully rent-seeking firms and extract some of the extra-profits of firms. The economic mechanism behind this possibility is that firms in monopoly or oligopoly positions have the power to increase prices, but they will hesitate to roll the higher costs caused by higher wages over to consumers as this would reduce the demand for the product they sell. In very competitive markets (pure or monopolistic competition), wage increases in single firms are very limited as higher costs cannot be rolled over and no extra-profits can be earned. Firms affected by such wage increases will likely go bankrupt or leave the market. The sharing of extra profits among firms, or rather between owners of firms and workers, was very common in the Global North in the decades after World War II,

but after the 1990s and the establishment of shareholder-value corporate governance, this became the exception. Nonetheless, such systems of corporate governance still exist in some countries in specific industries, even in the Global South. With respect to our case studies, this is true for the automotive industries in South Africa and Brazil. The role of trade unions and their ability to bite into firms' rents is also classified in Table 20.1.

Looking at rent-seeking it becomes clear that the owners and managers of lead firms benefit from successful rent-seeking in GVCs. Workers in lead firms, if they are able to get part of the rents, are also benefitting. And last but not least, consumers benefit, primarily in the Global North. This is the case because a significant part of the production in GVCs, which takes place in the Global South, is consumed in the Global North—and low prices for intermediate products result in low prices for the final product. In this context, it is clear that the normal profit maximising reaction of a monopoly or an oligopolistic firm to falling costs is that prices are reduced to a certain extent to increase demand for the product being sold. Exceptions exist for so-called status goods. The prices for such products are not lowered when production costs fall.

Economic Upgrading

Economic upgrading can be achieved by increasing the labour productivity of firms, sectors or whole countries. For countries in the Global South, catching up to the living standards in the Global North is only possible when less developed countries increase productivity faster than developed countries. This implies that countries in the Global South would need to develop their innovative power and take over higher value creating functions in the international division of labour. Also, for GVCs, this implies that firms in the Global South must take over new and more value-adding functions and/or move to new, promising sectors.

Humphrey and Schmitz (2002) developed a useful classification of economic upgrading in GVCs. They distinguish between product, process, functional and inter-sectoral upgrading. We will demonstrate that for the catching up of firms in GVCs, product and process upgrading is not sufficient. Functional and inter-sectoral upgrading with a takeover of higher value-added functions is needed. However, functional upgrading related only to limited low value-added functions is not sufficient for catching up since it also implies a higher risk potential, particularly in

times of crisis. This implies that firms, for example, in the apparel, electronic or automotive sectors, must be able to take over tasks such as design, branding, marketing or research and not only participate in the fabrication process.

In GVCs, in cases of subcontracting as well as FDI, product and process upgrading are likely, but functional upgrading and inter-sectoral upgrading are not. Regarding power asymmetries in GVCs, higher value-adding activities and the management of GVCs are kept in the hands of companies from the Global North. It is simply against the interest of lead firms to support other firms in their pursuit to take over the functions which belong to the lead firm's key competences and yield the highest profits. The consequence is that the market mechanism does support certain productivity increases, but does not result in the convergence of productivity levels. Also, downgrading in GVCs cannot be excluded. Lead firms do not need to give first-tier suppliers more demanding functions in GVCs and instead, prefer to let them concentrate on simple tasks. This can even be in the profit maximising interest of the supplier firm. FDI, for example, can crowd out promising domestic firms which had already occupied higher value-adding functions or tried to do so (Akyüz, 2017, part III).

Economic upgrading, in the sense of reducing productivity gaps between countries in the Global South and leading industrial countries like the US or Europe, remains the exception. During the last two decades, (almost) only China has experienced substantial catching up and started to develop lead firms which, via FDI and subcontracting to other countries, stepped into the footsteps of multinational companies from the Global North. This understanding of economic upgrading also stresses the need for countries to have firms that act independently from foreign multinational companies, and—at least for bigger countries—their own national champions in different sectors (Amsden, 2009).

In Table 20.1 we follow the classification of Humphrey and Schmitz to evaluate economic upgrading in the sectors and countries we analysed.

Social Upgrading

Several chapters of this book have analysed real wage development and working conditions at different stages of production in GVCs, as well as potential strategies to achieve decent working conditions along supply chains. Their starting point was the observation that economic upgrading

within a firm or sector does not necessarily translate into higher wages or better working conditions for employees. As mentioned in Chapter 1, the concept of social upgrading broadly refers to the improvement of the situation of workers and encompasses measurable standards as well as enabling rights (Barrientos et al., 2011). Conceptually, it draws on the International Labour Organization's (ILO) 'Decent Work Agenda' and its key dimensions (cf. ILO, 2016). The cost pressure exerted by lead companies can lead to very low profit margins for local producers and huge pressure to cut costs, which is reflected in low wages and poor working conditions for the employees. Regarding the different dimensions of social upgrading, for the purpose of this chapter, we primarily focused on three sets of indicators: the development of real wages, working conditions (formal/informal employment relationship, overtime, occupational safety and health, etc.) and trade union rights such as freedom of association and collective bargaining.[3]

Economic and social upgrading trajectories in GVCs are a relational and dynamic concept, which can compare 'up-'or 'downgrading' trajectories over time (Rossi, 2019). The allocation of tasks in the production of goods and services and their global allocation in GVCs has undoubtedly favoured industrialisation and job creation in sectors which are integrated into GVCs throughout the Global South. But job creation alone is no guarantee for economic and social upgrading. Also, economic upgrading in GVCs does not automatically lead to social upgrading. A further important point is that even successful economic and social upgrading in GVCs is not a guarantee for the development of a national economy as a whole. If the industry segments that are integrated into GVCs in a country in the Global South are small and their links with the domestic economy limited, the integration into GVCs cannot be more than a silver lining on the horizon. As shown by Dünhaupt and Herr (see Chapter 3 in this book), this method of integration into GVCs does not lead to positive economic and social developments at the national level.

Following our argument, two criteria for social upgrading are used in Table 20.1. First, real wage development, which is relatively easy to

[3] In Table 20.1, we have omitted the description of the working conditions in order to not overburden the clarity. The results on this complex sub-dimension of social upgrading are therefore only taken up in the text (subsection 3). For a detailed overview of the indicators used by the ILO for the Decent Work dimensions see ILO (2013).

measure, and second, collective voice of workers (freedom of association and collective bargaining).

Here, it must be noted that the conditions for freedom of association and collective bargaining as enabling rights are significantly shaped by the institutional context of a country or sector.[4] Of particular importance are national systems of industrial relations, of which we identified three broad types among our case studies. First, 'market despotism', in which independent trade unions exist and labour and trade union rights are officially recognised, but where the state and weak, fragmented unions fail to enforce them. Workers are thus 'disciplined' by 'despotic' market forces and the oversupply of cheap labour in the country. We consider India and Bangladesh to fall into this category. Second, 'state corporatist unitarism', in which authoritarian governments heavily intervene in the regulation of employment and industrial relations. There are no officially recognised, independent trade unions; official union representatives act as a second pillar of management and wildcat strikes and protests are among the few options left for workers to voice their grievances and demands independently of state party control. Among our cases, China and Vietnam are examples of this type. Third, in 'democratic corporatism', independent and comparably strong trade unions have historically enjoyed some influence in certain sectors, national institutions and government policies. This does not preclude the fact that significant sectoral differences may exist, a huge part of the population may be informally employed, or that unions could find themselves in a period of eroding bargaining power. Here, we can classify Brazil and South Africa as this type.

Besides industrial relations and the *institutional power* of unions on the level of the nation state, industry-specific power asymmetries arising from different governance modes also influence the bargaining power of workers in different segments of GVCs. For the purpose of our analysis, we draw on the power resources approach (Schmalz et al., 2018; Silver, 2003; Wright, 2000; see also the chapter by Teipen and Mehl in this book) to distinguish between *structural power*, which results from the strategic position of workers in the production process and *associational power*, which refers to the ability of workers to collectively assert their interests in the sphere of production.

[4] For the explanation of the following dimensions of our analytical framework, see also Chapter 4 by Teipen & Mehl in this book, as well as Teipen and Mehl (2021), Nölke et al. (2020), Hayter (2018), Gereffi and Lee (2016), Anner (2015).

As both captive and modular governance imply correspondingly precarious working conditions in the area of low-skilled, low-wage labour, we assume that the structural and associational power of workers as well as the prospects for social upgrading will be relatively low in these constellations when compared with relational governance (see the chapter by Teipen & Mehl in this book).

Empirical Results and Interpretation of Case Studies

In the following, we will present and discuss the empirical cases along the countries and the classifications we have introduced (see Table 20.1). The results of this chapter are based on an extensive literature review as well as quantitative and qualitative research studies on the national sectors, of which several are featured in this volume (see the chapters by Noronha and D'Cruz, Jha and Kumar, Mashilo, dos Santos et al., Do, Karatepe and Scherrer). Between 2017 and 2020, the research was carried out by a network of international academic researchers, who contributed their country-specific expertise. All case studies were based on a common, cooperatively developed research framework with standardised indicators, which reflect national specifics. The discussion and comparison of the results, their embedding in the current state of research and in the theoretical debate, was organised and carried out by the authors of this chapter. The collection, production and interpretation of quantitative data and selected qualitative studies refer to developments over the last 20 years.

We divided our country cases into three groups - India and Bangladesh, China and Vietnam, and Brazil and South Africa.[5] As mentioned above, these groups represent different types of national industrial relations systems (see the chapter by Teipen & Mehl in this book). This is because we assume that social upgrading, in particular, depends on the degree of independence and assertiveness trade unions have been able to fight for in national systems of industrial relations. The long tradition of comparative industrial relations research advanced by Hayter (2018) for some countries in the Global South highlights the extent to which the formation of

[5] Results on the agricultural sector cover a number of further countries (for details see Karatepe & Scherrer in this book).

unions in the first place (associational power) and their legal entrenchment (institutional power) can vary across national institutional systems. This subsection is followed by a short comparison and then an overview of the macroeconomic effects of GVCs is presented.

India and Bangladesh—Limited Economic Upgrading, Weak Trade Unions and Market Despotism

Following Anner (2015), both Bangladesh's and India's labour regulation regime can be classified as 'market despotic', which is indicative of a political economy model whose international competitiveness is based on low wages, low productivity and low-skilled, labour-intensive activities.

Starting with *India*, we covered case studies on the apparel, automotive and IT services sectors.

Looking at the labour market, we have to address the discrepancy between the existence of strong formal labour regulations and the fact that less than 10% of workers benefit from them or have access to public social security systems. The vast majority of workers can be found in the informal sector, which is, however, intertwined in many ways with the formal economy and GVCs (Hammer, 2019). Small workshops, home workers and self-employed workers are often integrated into subcontracting networks, including those of global lead firms.

The labour market is also highly segmented by gender and caste. According to the ILO (2018), overall union density stood at only 10.7% in 2011 and has been declining for waged and salaried workers since the early 1990s. Although at times the trade union movement is successful at mobilising large numbers of people for nation-wide protests or strikes, regional, sectoral and political fragmentations exacerbate its structural weakness. Privatisation and labour market flexibilisation (which started in the early 1990s), the decentralisation of the system of industrial relations and an oversupply of labour have increased the pressure on workers to accept low wages and poor working conditions, and have weakened trade union organising efforts (Pattenden, 2016).

One of the few branches of the economy that, in contrast to the prevailing structure of the Indian labour market, has a high proportion of formal employment, is the IT services sector. In contrast to most other industries, the sector has also witnessed substantial economic upgrading. The Indian IT sector provides services from engineering services to

bookkeeping to call centres. Due to the diversity of IT services, the governance structure of the value chain is heterogeneous and can be modular, relational, captive or hierarchical. India is the world's most important destination for outsourcing and offshoring in this sector and has been able to establish itself in higher value segments of the GVC. It is worthwhile to mention that India, in comparison to China, has not been developing a strong hardware segment in the IT sector. In many cases, foreign lead firms are in a monopsony position with suppliers in India and can push down prices for services. They also hold an oligopoly position in their selling markets. In this constellation, double-sided rent-seeking for lead firms is possible. The Indian IT services sector shows not only product and process upgrading, but also functional upgrading with a number of Indian firms included in the group of leading international firms in the sector. Interaction with these firms reduces the possibility of rent-seeking by foreign lead firms.

Nevertheless, its international competitiveness in the industry results from lower wage costs compared to industrialised countries, with relatively high qualification levels of employees. However, the potential skills of employees are underutilised in most segments of the Indian IT sector. Although the wage level is high compared to the Indian average, the tasks carried out are often marked by repetitiveness and the labour process is organised by neo-Tayloristic forms of managerial control (Noronha & D'Cruz, 2020; Pattnayak & Chadha, 2019, see also the chapter by Noronha & D'Cruz in this book). Similar to the Indian economy as a whole, but also to the global industry in general, the level of unionisation is very low and wage negotiations are highly individualised. Since industrial disputes are rarely dealt with collectively and instead, job changes are sought to improve employment situations, the fluctuation rate in the sector is quite high (Feuerstein, 2013).

Summarising social upgrading in the IT services sector, we find that real wages in the sector are relatively high. However, wages in the industry are also influenced by the generally lower real wage level in India compared to countries in the Global North. Besides the availability of relatively high skilled workers in the country, labour arbitrage is the main rationale for outsourcing and offshoring to India. As trade unions do not play an important role in the industry, they were not able to push wages up to higher levels or prevent high internal wage dispersion. Despite weak trade unions, working conditions are overall above average in the sector, even if the situation differs between segments (e.g. software development,

consulting or call centre activities) and some violations of labour standards (e.g. overtime regulations) occur across the industry.

In the automobile sector, foreign multinational companies dominate the market for passenger vehicles, especially the lead segment, and produce in the form of FDI companies in India (Jha & Kumar, 2021, see also the chapter by Jha and Kumar in this volume). But there are some exceptions. For example, with Tata Motors Limited, India has its own multinational company in the sector. In some industry segments, for example, tractors, motorcycles as well as two- and three-wheelers, India occupies leading global market positions. The lower tiers of the automotive value chain in India are characterised by clusters of small workshops whose governance relationships can be described as captive rather than relational (Barnes, 2018). Economic upgrading in the form of increasing labour productivity has certainly taken place over the last twenty years and is expressed primarily through product and process upgrading. But FDI firms in India do not support the functional upgrading of their subsidiaries. Branding, top research and design are not transferred to India. However, especially with Tata, India has a national champion which at least tries to keep pace with the foreign-owned multinationals in the sector.

In comparison to other world regions, the degree to which not only precarious, but also informal employment relationships exist in the automotive sector, especially at lower supply tiers, is outstanding—for example, almost half of the labour force consists of contract workers (Jha & Kumar, 2021). To a limited extent, only the production sites of firms in the automotive sector in India are unionised, and the unions have weaker participation rights than, for example, in the Brazilian auto industry (Sinha, 2017). Collective bargaining takes place at the enterprise level, but, over a period of twenty years, there have been no, or only minimal, real wage increases at the aggregated level of the whole industry. Between 1999 and 2015, real wages of factory workers in the organised sector even declined by 16% on average (Jha & Kumar, 2021).

Low-wage costs, partly weak supplier firms for many intermediate products in India and oligopolistic selling markets allow automotive firms in India to develop a mixture of one-sided and double-sided rent-seeking. According to the ownership structure in the sector, mostly foreign multinational companies benefit from this.

In the apparel sector, foreign lead firms like international fashion firms or big retailers use India as a production destination. The country has

not developed its own international champions, for example, famous Indian brands.[6] In spite of its size and tradition, India did not develop as an important exporter of apparel. India's share in world exports of clothing in 2019 was only 3.5%. In comparison, China's share was 30.8% Bangladesh' share was 6.8% and Vietnam's share was 6.2% (Statista, 2021a). The most common model is subcontracting, whereas the governance mode is mainly captive. Clusters of small- and medium-sized enterprises, which are integrated into captive supplier networks, predominate in the apparel industry. For the last two decades, a substantial rise in productivity could be observed in the textile (and to a lesser extent also in the apparel) industry. This, however, has not been equally matched by real wage developments or increased profitability of suppliers (see Jha & Kumar, 2020), indicating that most productivity gains were reaped by buyer firms and consumers. The production of apparel is, compared to other industries, relatively simple and less capital intensive, which implies that the production process can be managed by many firms in the Global South. Over time, in many cases, big fashion firms or retailers have transferred additional functions like logistics or sourcing of inputs to suppliers, indicating a move towards relational or modular governance (cf. Gereffi et al., 2005). However, because stark power asymmetries between suppliers and lead firms continue to exist, suppliers can be easily switched, and the possibility for suppliers to develop their own internationally famous brands or open their own sales channels in the Global North are small, we judge the relationship between buyers and suppliers in the apparel sector as predominantly captive, despite the fact that many suppliers offer finished products. The same argument counts also for the apparel sector in Bangladesh, China and Vietnam, as discussed below.

Many workers in the Indian apparel sector are circular migrants from rural areas who are hired (often temporarily) with the help of labour brokers. They are often personally dependent on these intermediaries, making collective organisation and representation of interests even more difficult (Mezzadri, 2016). Collective bargaining is at least organised at the industry and regional levels and provides low wage standards for those who are covered (Rani & Sen, 2018, p. 36). Informally employed

[6] In all countries with an important apparel sector analysed in this chapter (Bangladesh, China, India, Vietnam) big segments of the industry produce for domestic markets and local brands developed which, however, have not the rent seeking power as international brands. We do not analyse these segments of the apparel market.

workers, which constitute the vast majority of those working in the apparel sector, are not protected by any regulation.

Given the monopsony structure in the supply market for lead firms, and in many cases the oligopolistic constellations in the selling market, double-sided rent-seeking is typical. This does not preclude the fact that in some segments of the selling markets, intensive competition exists and rent-seeking is limited.

In *Bangladesh*, we looked particularly at the apparel sector, which is by far the most important export sector for the country, accounting for 84% of all Bangladeshi exports in 2019 (Statista, 2021b). Similar to India, the majority of companies in Bangladesh's apparel industry are subcontractors at the lower end of the GVC and have made progress in terms of product and process upgrading, but less so in terms of functional upgrading (see chapter by Lohmeyer et al. in this volume). The captive supply relationships in the sector lead to steadily increasing cost pressure and the systematic violation of labour standards (Saxena, 2019). In Bangladesh, for lead firms the conditions regarding subcontracting are more or less similar as those in India. This is also true for the labour market. Democratic rights, including freedom of association, are formally guaranteed. However, severe rural poverty, high levels of underemployment, weak and fragmented trade unions as well as government policies against trade unions, all have a negative impact on the structural and associational power of workers. Wages in the apparel industry are among the lowest in the world and fall below the national poverty line (Khan et al., 2016). Attempts by the predominantly female workers to organise and to enter into collective bargaining are systematically obstructed by employers. Workers' grievances are expressed sporadically in the form of wildcat strikes as well as protests directed at the government, with the aim of raising the sectoral minimum wage. However, workers can hardly expect any support from state institutions due to the influence of employers' associations. Since Bangladesh's integration into GVCs is based on a labour-intensive, low-cost strategy, there are fears that rising labour costs will undermine the country's international competitiveness (Islam & Hossain, 2016; Rahman, 2014).

Public pressure following the Rana Plaza accident led to the signing of the Bangladesh Accord in 2013, which, to date, is considered to be the most far-reaching attempt to establish institutions of transnational labour regulation along GVCs. The agreement was concluded between international buyers, global union federations and Bangladeshi trade unions, with

the involvement of international NGOs. It obliges purchasing companies to enforce compliance with building safety and occupational health and safety standards in their suppliers' factories. The agreement is an excellent example of how public pressure in consumer countries can strengthen the power resources of workers in production countries. This is conceptualised as the mobilisation of coalitional power resources (Reinecke & Donaghey, 2015). As a result, there have been significant improvements regarding the labour standards covered by the agreement. However, an unintended side effect of the Accord was that additional costs for improved occupational safety were largely passed on to employees via an intensification of the labour process (Sinkovics et al., 2016). As minimum wages are not regularly adjusted for inflation, between 2013 and 2018, most workers also experienced real wage decreases of up to 20% (Bossavie et al., 2020). Despite the increase of the minimum wage in 2018, it still only covers 21% of what would be deemed a 'living wage' by the Asia Wage Floor Alliance, which is considerably lower than in other apparel-producing countries (Edwards et al., 2019). Trade union rights continue to be insufficiently enforced as the registration of new unions is frequently rejected by the Labour Ministry and employer repression against unionists is rarely sanctioned (Anner, 2020). Because the government and domestic employers have viewed the Accord as detrimental to the competitiveness of the sector, they have resisted a continuation of the agreement in its original form (Bair et al., 2020). In sum, both in Bangladesh and India, the captive value chain governance mode and oligopsonistic market structure of the global apparel industry results in a squeezing of domestic producers' profits, while the unfavourable labour market situation and the repressive stance of employers and the government have additionally impeded the improvement of working conditions and union power.

The picture in the agricultural sector is not much different to the apparel sector. In these two industries, in both India and Bangladesh, captive governance is typical as are monopsonistic or oligopsonistic structures in the supplier markets of lead firms. The lead companies in many cases act in oligopolistic selling markets. Producers in small farms and workers in bigger production units get the lowest part of value creation in the agricultural value chains. The explanation is that trade unions and workers' organisations as well as smallholder organisations and cooperatives are weak in the sector. Support from governments to improve the living conditions of workers and small farmers partly exists (for example,

the one-hundred-day employment scheme in India) but is not enough to substantially improve the situation.

China and Vietnam—Heavy Government Interventions, Economic Upgrading and State Corporatist Unitarism Without Independent Trade Unions

We put China and Vietnam in the same country group because both are ruled by communist parties and both systems of industrial relations exhibit the same state corporatist characteristics, with only one officially recognised, party-controlled trade union organisation, implying no freedom of association or independent collective voice structures. Both countries have been following similar paths as they opened their economies to the world markets, supported by comprehensive government policies to facilitate their ability to catch up with more developed countries. Both were successful overall, but the Chinese economy has been developing to such an extent that the US is considering it to be a serious challenge to their own hegemonic position in the world economy. Vietnam, from the perspective of productivity levels and innovative power, is still far behind China. Compared to China or the 'Asian tiger' countries, economic upgrading in Vietnam has been meagre.

As a result of economic reforms since the 1980s, *China* has established itself as the most important production hub for the global consumer goods industry and has become 'the factory of the world'. Their substantial economic and productivity growth was based on massive state investments and a large state-owned or state-controlled sector in key industries on the one hand, and low wage costs on the other. The competitiveness of the Chinese economy has been supported by a strategy to keep the Chinese currency undervalued to stimulate very high current account surpluses (Herr, 2010). By means of interventionist industrial policy, comprehensive economic upgrading has been achieved in many sectors in recent decades (Dünhaupt et al., 2019).

The labour market in China is segmented. Despite a relatively privileged segment of highly qualified and well-paid workers, a large semi-formal segment of low-skilled and low-paid workers still constitutes the backbone of most industries. In many cases, workers in this segment are domestic migrants (Nölke et al., 2020). In the state corporatist unitarism model of industrial relations, the state unions controlled by the communist party do not act as independent worker representation.

Collective agreements are largely limited to the firm level and are based on consultation rights without the possibility of legal strikes (Hayter, 2018).

The varying regional minimum wages fixed by provincial governments play an important role, especially for employees in the low-wage sector. Real minimum wages, as well as the real wage level in general, substantially increased in China due to high increases in productivity throughout the whole economy. However, despite the fact that low-income groups also benefited substantially from higher real income, inequality in China increased substantially (Herr, 2011). In 2010, the Gini coefficient for disposable income in China reached a maximum of 43.7, but then decreased to 38.5 in 2020.[7]

In spite of the country's rapid economic development, China is still the leading world exporter of apparel products and the apparel industry still plays an important role. The sector is dominated by relatively minimal qualification requirements in the lower segments of the GVC. However, in contrast to India, Bangladesh and Vietnam, Chinese companies have invested more heavily in technological upgrading, partly thanks to industrial policy support at the provincial level. Increasing wages and labour shortages in the coastal regions that have dominated the industry so far have also prompted some larger domestic firms to relocate production sites to neighbouring countries and Chinese interior regions. As in several other industries, China has developed into a regional hub that imports intermediate goods from other Asian countries and exports the further processed goods to the rest of the world (Altenburg et al., 2020; Liu, 2019). However, China has not managed to build-up big, famous international lead firms and brands. Most of the exports in the sector are integrated in GVCs, with lead firms in Europe or the US.

The governance mode in the apparel sector between lead firms and Chinese suppliers is mostly captive. As competition between suppliers worldwide is extremely high, oligopsonistic constellations between lead firms and suppliers prevail. Because in a large segment of the selling

[7] In comparison, the Gini coefficient in the US was 41.8 in 2020, showing an upward trend. The value for South Africa in 2020 was almost 62, and 52 in Brazil (World Bank 2021). Due to a large part of the population living at the same level of relatively low income, in Vietnam and India the Gini coefficient for disposable income in 2020 was around 36, and 32 in Bangladesh. In Germany, for comparison, the value in 2020 was 32 (Word Bank, 2020).

market lead firms are in an oligopolistic constellation, we can assume double-sided rent-seeking by lead firms.

Massive economic upgrading has occurred in the *electronics* hardware industry. In quantitative terms, however, labour-intensive industrial mass production using low-skilled migrant workers in precarious employment conditions still predominates. Characteristic of this modular type of value chain governance is Foxconn, the Taiwanese leading contract manufacturer for electronic devices producing in mainland China with a workforce of around 1.2 million in 2020 (Fannin, 2020). But China was also able to develop its own global lead firms in the field, for example, the telecommunication company Huawei. In the area of IT services, China, unlike India, has been less integrated into GVCs. Nevertheless, the sector is playing an increasingly important role for the domestic economy, especially against the background of government efforts to facilitate the digital transformation of industrial production (Butollo & Lüthje, 2017) and become more independent from imports (see Holzmann & Zenglein in this book). In contrast to India, the sector is also benefiting from its integration with the hardware industry. Although pay and working conditions are above average, employees are exposed to a high workload and excessive overtime, without any say in company decisions. It is worth mentioning that China managed massive product, process, functional and inter-sectoral upgrading in top segments of the sector without using foreign investors. Economic upgrading has been based on massive industrial policy and transferring technology without FDI. This is a big difference in comparison to the automotive industry, in which foreign companies played a major role in its development (Lo & Wu, 2014).

China plays a big role in global electronics contract manufacturing. As mentioned above, the governance mode in the industry is mainly modular as, in many cases, suppliers deliver finished products to foreign lead firms. For example, many of Apple's electronic devices produced in mainland China. Contract manufacturers in China, for example, Foxconn, are large multinational companies. Nevertheless, lead firms in the sector are extremely powerful as the selling market for final products is very big and characterised by a strong oligopoly. For example, in 2020, in the US smartphone market, US company Apple was the market leader with a market share of 61%, followed by Samsung from South Korea with 24%. In the global market, Samsung has the highest market share with 29%, followed by Apple with 27% and the two Chinese companies Xiaomi and Huawei each with 10% (David, 2021). Lead firms in the

sector benefit from their market power vis-à-vis first-tier suppliers as well as the substantial technological advances and huge economies of scale that first-tier suppliers are able to realise. The exploitation of low wages and poor working conditions by first-tier supply firms explains the relatively low supply prices on an international level. The oligopolistic constellation of the selling side of lead firms in the sector results in especially high rents for market leaders Apple and Samsung. In addition, it has to be stressed that smartphones are prestige products which allows market leaders to impose very high profit mark-ups. In other market segments of the electronics industry, rent-seeking power is much smaller. In IT services, China is not significantly integrated in GVCs but has developed their own lead firms which are in rent-seeking positions domestically. In the automotive industry, extensive economic upgrading has taken place through joint ventures and the establishment of Chinese lead firms and domestic supply chains. The combination of forcing foreign investors to engage in joint ventures in the sector and supporting industrial policy was of key importance to the development of the automotive sector. Not only product and process upgrading took place, substantial functional and inter-sectoral upgrading has also been achieved. In the ongoing restructuring of the sector towards electric vehicles, China is among the leading countries (see the chapters by Lüthje and by Holzmann and Zenglein in this book). However, production is almost completely oriented towards the domestic market. Internationally important Chinese champions with substantial exports and global production do not yet exist.

The production and employment regimes in the automotive industry vary according to the segment. Labour relations in the production facilities of multinational brand manufacturers and Chinese lead firms are characterised by relatively stable employment with above-average remuneration. Yet, as can be observed in the global automotive industry as a whole, there has been an increase in flexible work arrangements such as the more widespread use of temporary agency work (Lüthje, 2014). Protests and wildcat strikes, most of which are directed against outstanding wage payments or job redundancies, are partly tolerated by the state, provided they do not call into question the communist party's power hegemony (China Labour Bulletin, 2019; Zhang, 2015). If the industrial production model converges towards a vertically disintegrated, network-based mass production model (as analysed by Lüthje in this book) this would actually imply the danger of an erosion of social standards.

With respect to the market constellation, car companies in China operate in an oligopolistic selling market with joint venture companies and Chinese lead firms sharing the market and thus rent-seeking possibilities. On the suppliers' side, lead firms are confronted with a mix of both strong and weak domestic suppliers. In some cases, this also allows rent-seeking on the supply side of lead firms.

In sum, China's strategy of public investment in technological innovation has resulted in considerable economic upgrading in most sectors but has led to only mixed results in terms of social upgrading. While China recorded increases in average real incomes and living standards, which benefited all groups in society, the benefits of the development are unequally distributed. In addition, large portions of the labour force continue to be employed under precarious working conditions at the bottom of GVCs. The lack of freedom of association in the area of public governance leaves workers with limited possibilities to voice grievances and to influence employment conditions and wage dispersion (see also contributions in Scherrer, 2011).

In *Vietnam*, economic reforms since the mid-1980s have pursued similar goals to those in China: the privatisation of large parts of formerly state-owned companies and the opening-up of the economy to foreign direct investment were intended to trigger export-oriented industrialisation. This strategy was successful insofar as Vietnam has developed into an important production location for the global apparel and electronics industry. In contrast to China, however, it has not yet been possible to set any significant economic upgrading in motion through high foreign FDI and industrial policy. FDI did not result in the desired technology transfer, and industrial policy suffered from mismanagement and vested interests (Do, 2021, see also the chapter by Do in this book). In both sectors, low value-added activities dominate, i.e. 'cut, make and trim' in the apparel industry, and components assembly in the electronics industry. In addition, the exporting electronics sector is almost completely controlled by FDI firms, with Samsung as the biggest investor. Samsung's FDI in Vietnam is an exception, as most other lead firms in the sector use the modular contract manufacturing model. In terms of employment conditions and upgrading, the hierarchical integration in the case of Samsung did not result in any substantial advantages for Vietnam.

Most workers in both industries only receive the minimum wage, which is fixed at the regional level and was only moderately increased over time. Since 2010, there have been attempts to establish sectoral collective

bargaining in the apparel industry through the voluntary engagement of enterprises, but so far, the concluded agreements have only covered around 6% of all workers in the sector. Violations of labour standards regarding overtime, occupational health and safety, unfair dismissals, gender discrimination and child labour persist in both industries (Do, 2020). Similar decent work deficits can be observed in agricultural production. For example, in coffee production, despite the considerable economic upgrading achievements of domestic producers, social upgrading was rather limited. While some smallholders benefitted in the form of higher returns, the situation for dependent farm workers did not improve (see Karatepe & Scherrer in this book).

Vietnam is similar to China in terms of its system of industrial relations, which follows almost the same state-socialist tradition. Firm-level and limited national sectoral bargaining do at least exist in the Vietnamese apparel sector, which provides for minimum standards. In many cases, official union representatives have been involved in informally supporting temporary wage improvements won by wildcat strikes in the apparel sector (Do, 2020). Recent reforms, such as the ratification of ILO Convention 98 (Right to Collective Bargaining) and a law, which, for the first time, would permit the formation of independent trade unions, are nevertheless unlikely to lead to real improvements (Thu & Schweißhelm, 2020).

In the apparel, electronics and agricultural sectors, Vietnam is integrated in GVCs in a way which gives foreign lead firms a monopsony or oligopsony position. This pushes Vietnamese suppliers in to positions of low profits and creates pressure to keep wages and other cost factors low. In cases of FDI, firms' profits can be transferred freely within the multinational company. As in all industries discussed above, lead firms are also in a powerful position on their selling side. Given this, we must assume double-sided rent-seeking by lead firms as a rule.

Brazil and South Africa—Stagnant Upgrading and Democratic Corporatism Under Liberalising Pressure

In Brazil and South Africa, the system of industrial relations is characterised by a corporatist tradition with a strong role of the state in mediating the interests of employers and trade unions. However, huge differences between sectors exist, with strong unions in key industries, but no union representation in the large informal sector made up of

small companies, self-employed workers and overall precarious living conditions.

In *Brazil*, after the democratic transformation in the late 1980s, and especially after the election of the trade union leader Luiz Inácio Lula da Silva as president in 2003, the position of unions within the system of industrial relations was strengthened. In contrast to India (and even more so China and Vietnam), as representatives of independent interests, unions enjoy more institutional influence and constitute, at least on the sectoral level, powerful actors that are able to contribute to the enforcement of labour regulations. For example, in 2009/10, 'the level of compliance' with minimum wage legislation was 80% compared to 62.5% in India (Rani & Sen, 2018, p. 38). In addition, a compulsory trade union tax, to be paid by all employees, ensured stable financial resources for the unions. The government period of the Workers' Party (Partido dos Trabalhadores [PT]) was accompanied by important social reforms and the considerable reduction of both poverty levels and very high income inequality. This led to substantial social upgrading in the low-wage sector, even for farm workers (see Karatepe & Scherrer in this book). The substantial real minimum wage increases, the extension of labour legislation to previously informal workers, such as domestic workers, and the relatively strict enforcement of labour laws led to a strengthening of the power position of workers and trade unions (Berg & Schneider, 2018). In terms of economic upgrading, the performance was not as successful. Industrial policy was only successful to a limited extent; it failed to establish internationally competitive domestic lead firms in most sectors (Sproll, 2010).

Two of the most notable features of the *automotive industry* are the strong representation of foreign firms and the inability of Brazilian industrial policy to initiate functional upgrading (see chapter by dos Santos et al. in this book). Brazil does not have its own champions in the sector despite the large domestic market and the considerable exports of the Brazilian car industry, mainly to Latin America. However, productivity increases can certainly be observed in the field of product and process upgrading. But Brazil is almost an ideal showcase that lead firms from the Global North have no interest to transfer key competences to subsidiaries in the Global South.

Apart from that, the automotive industry is one of the key industries whose industrial relations are characterised by corporatist institutions with a high degree of unionisation, above-average wages and relatively

good working conditions. Employment relations are regulated by sectoral collective bargaining agreements on the regional level, which by law cover all employees, whether or not they are union members. In addition to sectoral agreements, firm-level agreements can include specific aspects such as working hours, variable remuneration, health and safety and company restructurings. Since the 1990s, car makers and components suppliers have increasingly sought to exploit regional wage and unionisation differences by relocating production and assembly sites within the country.

The dependence on FDI both in the lead firm and supplier segment hinges the influence of trade unions and government regarding restructuring decisions on the willingness of the headquarters in the home country of foreign investors. For example, in Volkswagen's biggest Brazilian plant in São Bernardo, in order to prevent the plant from being closed, the local union regularly agreed to considerable job and wage cuts as well as the flexibilisation of working time during the past 20 years. As a result, the factory stayed, but remuneration levels and working conditions at the different Volkswagen plants have tended to converge at a lowered level. Such concession bargaining was more difficult in the case of Nissan's new factory in Resende (part of Renault/Mitsubishi) (see the chapter by dos Santos et al., in this book). Despite these trends, labour relations in the Brazilian automotive sector continue to be much more regulated by collective bargaining and social dialogue than in India or China. Brazilian unions have also actively pursued strategies of coordinating nationally and seeking to influence foreign lead firm decisions via global framework agreements and world works councils. Overall, compared to the national level, real wages and working conditions are good.

In the electronics industry, as in Vietnam, the factories of global lead firms and multinational contract manufacturers tend to carry out simple assembly activities at the lower end of the GVC. The industry lacks competitiveness compared with Asian producers, but the big domestic market, high tariffs for final products, government subsidies and other support has stimulated FDI in the sector (Salas et al., 2019). Nevertheless, despite the absence of any functional upgrading, working conditions are much better when compared with Vietnam or China. The Brazilian production locations of companies such as Samsung or Foxconn are among the few worldwide that are unionised and covered by collective bargaining agreements (Campos et al., 2017). According to the data collected within the scope of our research project, average incomes in

the Brazilian electronics sector remained stable between 2003 and 2016 and have even slightly increased for production workers. Wage levels for production workers are 50–150% higher than the minimum wage, resulting in average incomes close to the average for formal employees in the whole manufacturing industry (Salas et al., 2019). Health and safety regulations are largely enforced through an efficient system of public labour inspectorates. For example, two lawsuits against Samsung in 2013 and 2015 because of labour law violations resulted in the imposition of high fines and improved compliance with overtime and safety regulations in the industry. The case shows that strong trade unions and effective labour regulations can lead to social upgrading (albeit limited) even in unfavourable GVC governance constellations.

Since the PT has lost political power in Brazil, trade union achievements and the progress made towards reducing extreme inequality are both at stake. Large sections of the middle and upper classes did not accept the societal changes triggered by social reforms—for example, that they may no longer be able to employ a fulltime domestic helper. After the government takeover by President Temer in 2017, the compulsory trade union tax was abolished, which has posed existential financial problems for many trade unions. President Bolsonaro, who has been in power since 2019, is pushing ahead with labour market deregulation, pension cuts and a weakening of trade unions as part of his authoritarian neoliberalism (Saad-Filho, 2020).

The governance mode in the automotive industry in Brazil is partly hierarchical because of the high importance of FDI and partly relational. Lead firms, in substance multinational companies, are in an oligopolistic position on the selling side, while on their supply side they are at least partly confronted with strong companies, in many cases also multinational companies. Overall, we can judge the rent-seeking position as one-sided. Certainly, some of the suppliers are in oligopsony or monopsony constellations, but conditions are not comparable with those in the apparel industry, for example.

In *South Africa*, independent trade unions have also established themselves as a relevant social force. COSATU, the largest union confederation, forms part of the South African government as a member of the so-called 'Tripartite Alliance' (together with the African National Congress and the Communist Party). With the end of apartheid in the early 1990s, tripartite institutions were created to coordinate economic, labour market and social policy. In addition, a centralised, sectoral collective bargaining

system was established via the creation of so-called 'bargaining councils' in some industries (see the chapter by Mashilo in this book). In comparison with other countries of the Global South, union density is quite high. In key industrial sectors such as the mining and metal industry, as well as in the public sector, trade unions exert high levels of associational power, which they use to secure high wages and above-average working conditions for the core workforce. However, unions were not able to use their institutional power to tackle the deeper structural problems of the South African economy, like the high unemployment rate. The result is extreme inequality, which is also caused by high wage dispersion and a large informal sector, with both problems still unsolved today (Webster, 2015).

The South African automotive sector, like the Brazilian one, is dominated by foreign companies and shows considerable product and process upgrading (Mashilo, 2019). Functional upgrading, however, remained limited to a few suppliers. As in Brazil, despite South Africa's leading role in Sub-Saharan Africa, the country was not able to create its own champions in the sector. Overall industrial policy in South Africa was very liberal and thus very open to non-concessionary FDI, without substantially improving the conditions for the economic upgrading of the manufacturing sector in general.

Unlike in China and India, the automotive industry in South Africa has sectoral collective bargaining, although divided into the two segments of final manufacturers and component suppliers. Labour relations at the final manufacturers, all of which are subsidiaries of multinational corporations, are characterised by comparatively stable employment and high wage levels which are much higher than in most industries, except mining. However, cost pressure from foreign parent companies has led to increasing automation and a shift of part of production to suppliers, resulting in employment reduction in the lead firm segment (Mashilo, 2019), a trend that is also observable in automotive sectors across the world. Regarding working conditions, South African trade unions have been able to use their high associational power to defy the global industry trend of employment precarisation and flexibilisation. For example, in the assembly segment unions were able to conclude collective agreements that bar the use of temporary agency work. In the components supply segment, which is even more dominated by foreign companies than in other countries (such as China, India or Brazil), the degree of organisation is also above average. Here, trade unions have been less successful

in fending off the flexibilisation trend, leading to lower wages than in the assembly segment and the introduction of temporary agency work. However, the expansion of its use could be limited, through collective bargaining, to a maximum of 35% of the workforce (Mashilo, 2019). Overall, employment conditions in both the assembly and the components segment are much more collectively regulated compared to the car industry in India or China, due to the strong position of sectoral unions within the South African system of industrial relations. Governance structures and rent-seeking possibilities in the automotive industry in South Africa are almost identical to those in Brazil.

Comparative Analysis

In summary, economic upgrading in the form of product and process upgrading took place in all analysed industries, although to different extents. This implies that over the long period of twenty years, in all sectors, productivity and real wages increased, but often only minimally. No significant processes of convergence with the Global North have taken place. Wage levels for unskilled workers in some of the analysed sectors were too low to have a life of dignity and working conditions were not acceptable. Substantial functional and intersectoral upgrading, which is the precondition for entire sectors and countries to catch up with the productivity levels and living standards of countries in the Global North, only took place in China in all analysed sectors. The basis for this has been comprehensive government interventions including targeted industrial policy, cluster policy and successfully using FDI for the transfer of technology, for example, in the form of joint ventures. In China, a special type of capital-intensive industrialisation path (Lo & Wu, 2014) and 'state-permeated capitalism' (Nölke et al., 2020) developed which, in contrast to many expectations, seems not to adjust to Western liberal or coordinated market economies. In almost all economic sectors, China has developed national champions that play a big role in the domestic market or even in the global economy. India also managed functional upgrading, but more or less only in the IT services industry. Here, national champions could be created. The Indian IT services industry was also massively supported by industrial policy measures from the start. However, compared to China, India's IT services industry is massively dependent on exports and lacks strong links to the domestic economy. India's electronics hardware sector also plays a lesser role than China's. In the automotive sector, India has

a few national champions, but the economy lacks functional upgrading in many sectors which seems to be a precondition for the catching up of a country. We can conclude that in all sectors analysed which showed functional and inter-sectoral upgrading, industrial policy played a key role. We can also conclude that the domination of sectors by FDI firms does not lead to functional upgrading or any kind of sectoral or national development. Good examples of this are the automotive and/or hardware electronics sectors in Brazil, South Africa and Vietnam.

In all sectors analysed, rent-seeking by lead firms, in most cases multinational companies, was possible. On the selling side of lead firms, they all acted in oligopolistic markets even though the oligopolistic power of firms can be very different, reaching from very strong in the case of famous international brands to relatively low in no-name product markets. Some firms, especially in the apparel, agricultural and electronics hardware sectors, were in a position to extract income from suppliers and final consumers, thus occupying a double-sided rent-seeking position.

If we look at *social upgrading* across the industries, our research has revealed considerable national differences regarding the position of trade unions and how they were able to use their negotiation spaces. Starting with wage levels, wage increases in China are mainly the result of aggregate economic upgrading dynamics initiated by state authorities in cooperation with businesses, but without visible trade union participation. Among our cases, the only country where significant wage increases in the apparel sector were recorded was China, which can be attributed to the overall economic development that has led to higher minimum wages in all sectors, tighter labour markets and an incremental shift towards higher value-added activities. However, the continuing lack of freedom of association and collective bargaining puts workers at the mercy of employers and the government and has not resulted in significant improvements of most aspects of working conditions. In Bangladesh, some improvements in occupational safety were achieved through the Accord and the public pressure on multinational buyer firms, but no significant improvements regarding wages, working conditions or unionisation could be observed. Unions in Bangladesh are weak and politically divided, and the government makes the organising of workers difficult. The same picture appears in India with trade unions divided along political parties and even religion and caste.

In the sectors analysed above, the first thing that stands out are the social downgrading risks in the apparel industry, resulting from its captive

governance relations as well as the unfavourable labour market situation of comparably low-skilled female workers. Asymmetric power relations based on captive governance and monopsony or oligopsony structures lead to hyper-competition among suppliers and create an extreme pressure to cut costs in supplier companies. Our research results validate the assumption that the relational mode of GVC governance associated with the automotive sector is more conducive to social upgrading compared to either the modular constellations of electronics hardware production or especially the captive forms of governance dominating the apparel sector. The agricultural sector more or less fits in the same constellation as the apparel sector.

The IT services sector is diverse and has a generally low level of unionisation. Wages in the sector can be very different depending on the concrete task taken over and the shortage of skills. Overall, pay and working conditions are generally better in the IT services sector compared to other sectors, although excessive overtime and repetitive, mundane tasks often prevail.

The relatively high real wage level and good working conditions observed in the South African and Brazilian *automotive sectors*—despite much less pronounced economic upgrading trends compared to China—are mainly attributable to the influence and strength of independent sectoral trade unions. In contrast, in the Indian automotive industry, historical transformation periods have not provided any opportunities for unions to boost their influence against the dominating anti-labour coalitions between the state and businesses. In decentralised bargaining rounds and nationwide strikes, trade unions have been struggling with their still weak structural position in the context of a huge 'reserve army of labour', the widespread resistance of employers to unionisation and their refusal to engage in social dialogue as well as the state's neglect in the sanctioning of labour rights violations. These conditions have subsequently prevented considerable wage negotiation successes and hindered the ability of unions to ward off the increasing informalisation and precarisation of employment in the sector.

When comparing social upgrading outcomes in electronic hardware production, Vietnam (like Brazil) did not experience much economic upgrading, and independent trade unions—which could advocate for better wages and working conditions—do not exist. Working conditions in the electronics hardware sector include long working hours and health risks for the predominantly female workforce, and conditions are even

worse than in the apparel sector in Vietnam (Do, 2021). In contrast, Brazilian trade unions in the same GVC segment, supported by effective state policies, were able to enforce more decent employment conditions.

Hence, substantial negotiation successes by relatively strong national trade unions were observed in the Brazilian electronics sector and in the automotive sectors in both South Africa and Brazil. The example of South Africa in particular shows that this was also a consequence of their active role in the democratic transformation process, which strengthened their role in collective bargaining institutions. Consequently, the ban respectively the limiting of the use of temporary agency work in the automobile assembly and components sectors could at least be made the subject of such negotiations—an achievement that even sectoral unions in the Global North rarely achieve.

However, the example of South Africa, and almost to the same extent Brazil, also reveals two limitations with regard to trade union power at the industry level. First, the power of trade unions is segmented along the GVC. The cost pressures that the lead firms passed on to the component suppliers resulted in less favourable collective agreements and a wider use of temporary workers among suppliers. Secondly, the strong position of unions is limited to only some industrial sectors, while gains for the majority of South African workers have been minimal at best.

Summary of Macroeconomic Effects

When evaluating the effects of GVCs on economic and social upgrading, it is important to not only consider firm-level or sector-level development, but also the effects for the whole economy. From our analyses it became evident that even positive developments triggered by GVCs related to technological and skill-level upgrading in single firms, or even single sectors, are not sufficient for positive macroeconomic developments. The positive effects of GVCs can, nonetheless, be increased when stronger links to the rest of the economy are established. If a country takes over a task in a GVC and all inputs are imported and the output is exported, jobs and income in the sector are created, but the benefit for the whole economy is small. There is the danger that in the Global South, dual economies emerge with a relatively developed sector that is integrated into the global economy and a big 'traditional' sector (characterised by informal (under)employment in agriculture, small-scale manufacturing and petty trading) with almost no economic and social progress. Of

course, there can be links between the two sectors in the form of demand of the export-oriented sector for cheap labour or via second -, third- or fourth-tier outsourcing, but such links would be too weak for general, positive development.

At first sight, it seems to be surprising that, at least since the beginning of this century, no positive relationship exists between the intensity of a country's integration in GVCs and increases in productivity and overall employment share (see Dünhaupt & Herr in this book). At second glance, these empirical findings can be well explained. First, we found that functional upgrading in top activities of GVCs is the exception. Second (and in this context more important), we see that over the last couple of decades the share of manufacturing of GDP in most countries of the Global South decreased. Africa, Latin America and the countries of the former Soviet Union showed decreasing manufacturing shares, only in Asian countries can a different trend be observed (Rodrik, 2015). High quality services in these countries are incapable substitutes for this missing industrialisation. The danger is that these countries will be characterised by big sectors of informal employment with precarious jobs and poverty wages, dominated by small companies and self-employment. We cannot hold GVCs responsible for these depressing tendencies, but we can conclude that the explosion of GVCs after the 1990s has not been able to trigger a catching-up process in most countries.

It is also no surprise that positive macroeconomic employment effects from GVC integration cannot be detected. The main factor for negative or positive employment effects of international trade are current account imbalances. A high level of integration of a country into GVCs is no guarantee that the country will develop a trade or current account surplus, as this depends on factors other than GVC integration. Thus, countries can be intensively integrated into GVCs and at the same time have high current account deficits and negative employment effects from trade.

From a macroeconomic perspective, it should be asked who has benefited from the massive increase of GVCs between the Global South and Global North during the last decades. Lead firms are mostly located in the Global North and take over the highest value-adding functions. In addition, Table 20.1 shows that rent-seeking on both the supply and selling side of lead firms is very common. In general, over the last few decades, there has been a tendency towards more concentration of power in many markets. As Stiglitz (2020, p. 55) notes, 'in market after market, the number of competitors is falling or the fraction of sales that go to the

top two or three firms is increasing, or both'. In the US, 75% of industries witnessed an increase in market concentration between 1997 and 2012. The increasing market power of firms, together with weaker trade unions (which, in many countries lost their power to force firms to share rents with their employees), contributed to increasing profit shares in relation to total income (Dünhaupt, 2017). We have to assume that rent-seeking by lead firms in GVCs contributed substantially to this development. Driven by financialisation tendencies from the 1990s onwards, firms have been intensifying rent-seeking, concentrating on core competences with high value-adding, while offshoring low value-adding functions to the Global South. Increasing profit shares contributed to more unequal income distribution between and within countries, as profit income flows, to a large extent, to the rich and super rich (Milberg & Winkler, 2013, Chapter 6). There is consensus among economists that rent-seeking is welfare reducing. In the Global North, simple tasks tend to be transferred to the Global South. The effect is that demand for low-skilled employees in comparison with high-skilled workers decreases. If there are no counteracting policies against this development, wage dispersion increases. Unfortunately, in almost all countries in the Global North, no policies counteracting these trends have been implemented. The opposite is the case: a flexibilisation of labour market regulations and a weakening of trade unions as safeguards for employment protection has intensified this tendency.

It would be wrong to stress that only the owners of lead firms in the Global North and skilled workers are the beneficiaries of GVCs. Even in oligopolistic markets, low supply costs for inputs of lead firms in GVCs will lead to falling prices for final products. Except for the case of status goods, which are at least partly bought because of the high price, lower production costs, even for a monopoly, lead to lower prices, as a profit-maximising monopoly reduces prices to increase sales. Further research could investigate how the benefits of GVCs are distributed within the Global North.

Regarding the distributional effects of GVCs within countries of the Global South, Rodrik (2015) expects that, in general, integration of countries in global trade adds to income inequality in the Global South, because even if real wages are low in the export sectors compared to the Global North, they tend to be higher than in comparable jobs in the non-export sectors. Also, Feenstra (2010) argues that in GVCs the tendency of higher wage dispersion exists in the Global South and the Global North

because GVCs reduce the demand for relatively unskilled workers in the Global North and increase the demand for relatively skilled workers in the Global South, even if the qualification level in the Global South is relatively low. Like in the Global North, consumers in the Global South benefit from low production costs in GVCs and are affected by welfare losses caused by rent-seeking.

As a last point, it has to be noted that the Global South does benefit from GVCs through productivity increases as a result of process upgrading. How did this affect global income distribution? Milanović (2016, Chapter 1) in his comprehensive analysis together with World Bank economists identified the following changes in the global distribution of income: of the total increase of world income between 1988 and 2008, the top 1% of the world population received 19%, the top 5% got 44% and the top 10% got 68%. The remaining 90% of the world population had to share the remaining 38% which were also distributed very unequally. Expressed in international USD from 2005 levels, in the year 2008 the disposable per capita income of the top 1% of the world population averaged USD 71,000, the median per capita income was USD 1400 and the income of the poorest 10% of the world population averaged only USD 450.

In order to analyse whether convergence between countries has taken place, GDP per capita can be a useful measure, as it can be also taken as an indicator for national productivity development and average living standards. According to data provided by the Global Change Data Lab (2021), world GDP per capita increased by USD 5297 between 2000 and 2018 (in 2011 international USD). Western Offshoots (US, Canada, Australia, New Zealand) increased GDP per capital over this period by USD 9428; followed by the Middle East with USD 8790; East Asia (including Japan, South Korea, Taiwan and PR China) with USD 8223; Western Europe with USD 7254; South and South East Asia with USD 4212; and Latin America with USD 3851. During this period, China increased GDP per capita by USD 5048 and India by USD 4053—both below the world average. These figures show that there was no tendency towards the convergence of productivity levels or living standards between countries. Even when considering the 'stars' of catching up, China and India, GDP per capita increases were below the increases of Western countries. The Middle East is a special case which is based on the rent-seeking of natural resources. What we find is a reduction in absolute poverty in all regions in the world, with the exception of

Sub-Saharan Africa—and increasing real incomes, but no convergence. Milanović (2016, Chapter 3) calculated, with all the statistical uncertainties, a Gini coefficient of disposable income for the population of the world. Since the early nineteenth century, the world Gini coefficient increased from around 50 to levels around 70. It stagnated from the late 1980s until around the end of the century. Then it fell by 2.5 points up until 2008. However, if the fact that top incomes are systematically statistically underestimated is taken into account, the reduction is estimated to be only 0.5 points. Stagnation of the world Gini coefficient is almost completely caused by developments in China and, to a lesser extent, in India. It would be wrong to blame GVCs for the lack of convergence. But we can conclude that the proliferation of GVCs, including the increase of FDI inflows in the Global South, were not able to trigger convergence.

Theoretical and Policy Conclusions for Economic and Social Upgrading in Global Value Chains

Based on our empirical analysis in the previous sections, the following serves to highlight some theoretical implications and policy recommendations for economic and social upgrading in GVCs. Figure 20.1 attempts

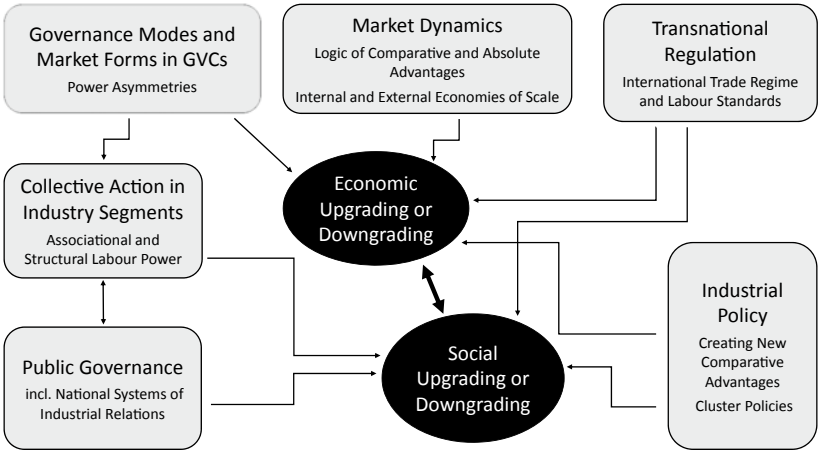


Fig. 20.1 Overview of factors influencing economic and social upgrading or downgrading

to illustrate the multitude of interrelations and explanatory factors that we believe should be taken into account when analysing economic and social upgrading trajectories. Economic and social upgrading are interlinked and depend on a number of factors. Besides market dynamics and industry-specific power asymmetries, we consider labour power resources as well as national institutional systems and policies.[8]

In the following, we will briefly present some general conclusions from the analysis of our case studies and other literature on the relationship between economic and social upgrading and discuss possible policy recommendations. We start with the need for industrial policy, followed by the debate on the extent to which social upgrading is needed as a precondition for economic upgrading. Finally, different social upgrading strategies are discussed.

The Need for Industrial Policy

One key conclusion of this book is that comprehensive industrial policy is a precondition for economic upgrading. To allow the market to work means pushing countries in the Global South into low-skill-labour-intensive-low-tech production, and restricts research and development, the development of new technologies, learning effects or the development of high skills mainly to the Global North. Dynamic sectors with high development potential become concentrated in the Global North. The market logic of absolute and comparative advantages, and the disadvantage of latecomers in cases of external or internal economies of scales, is responsible for this.[9] With the exception of China and to a certain extent India, all of the countries studied (to varying degrees) pursued liberal trade policies, which meant that the integration of these countries into GVCs was predominantly subject to the principle of comparative cost advantage. Very low wages in countries like Bangladesh or Vietnam and the systematic disregard of international labour standards due to weak trade unions provided cost advantages and shaped international trade.

[8] Figure 20.1 is not intended to encompass all of the factors that can influence economic or social upgrading/downgrading. Additional institutional or societal factors such as migration policies or gender and care regimes certainly also play a role (Dunaway, 2013; see also the chapter by Sproll in this book).

[9] For example, Krugman (1981) develops a model only based on external economies of scale which prevents the catching up of latecomers.

As a result, the export-oriented industries in these countries are mainly dominated by labour-intensive and low-skilled activities, especially in the apparel and electronics industries. In countries like Brazil or South Africa, which are characterised by relatively high technological standards in some sectors, for example, the automotive sector, upgrading stagnated despite the near total dominance of foreign companies in the sector.

In short: market mechanisms can support productivity development, but they do not lead to convergence in the way that less developed countries catch up. Historically, all of the economically important and now developed countries, from England to the United States to Germany, developed under a regime of high protection and comprehensive industrial policy and not under free trade (Chang, 2003). The proliferation of GVCs did not change the logic of markets. And it should be noted that, compared to traditional trade in GVCs, much more direct power asymmetries exist between lead companies in the Global North and suppliers in the Global South which make functional and inter-sectoral upgrading more difficult in many cases.

To avoid misunderstandings: The argument for protection and comprehensive industrial policy is not an argument against international trade, which in many cases can be welfare increasing. The argument is that free trade among unequally developed countries leads to fundamental market failure that makes catching up more difficult for less developed countries. To remedy this market failure, it is necessary to regulate trade to a certain extent and to create *new* comparative advantages in countries in the Global South via protection and industrial policy. East Asian countries, for example Japan, South Korea and Taiwan, which managed to catch up, combined protection, regulation of trade and comprehensive industrial policy with export orientation (Stiglitz, 1996). China is also an example of such policy action.

Under certain conditions, GVCs support economic upgrading. Taking over simple tasks in GVCs can be a relatively easy starting point for industrialisation. GVCs make it easier to exploit economies of scale and the development of bigger companies which gain competitiveness. China is a good example. After the start of the reforms at the end of the 1970s, China expanded labour intensive low-tech productions. But at the same time, it permanently tried to move to higher value-adding productions in existing GVCs and beyond via massive and comprehensive industrial policy (Lo & Wu, 2014).

As mentioned above, in GVCs it can be expected that in cases of FDI, or even subcontracting, lead-firms will support product and process upgrading, or even that second tier firms will support third tier firms in this respect, etc. Lead firms have a high interest in ensuring that the quality of the supplied products is high and the price is low. However, a lead firm is selective in transferring knowledge. Usually, scientific knowledge is not transferred, and knowledge which belongs to the key competences of a buyer is also not transferred. Additionally, important sales channels are monopolised by lead firms. Schmitz (2007, p. 154) summarises the argument: 'The acquisition of capabilities which is against the buyers' interests is less likely to thrive and might even be discouraged, notably knowledge-creating activities in chain co-ordination, design and marketing. Suppliers acquiring such capabilities would threaten the buyers' core competence which tends to lie in product definition, marketing and chain co-ordination'. These arguments stress the need for independent suppliers in GVCs, which means suppliers that have the freedom of functional and inter-sectoral upgrading.

And the arguments also stress the need for national champions as an important ingredient for catching up. Alice Amsden (2009, p. 413) makes this very clearly: 'If all industry were foreign-owned, a developing country would never develop the top skills and highest-paying jobs (CEO, CFO, Regional Manager, Lead Scientist) that rocket the modern corporations. The developed country would never become advanced enough to earn the entrepreneurial rents, that tacit technology and associated brand names earn'. The successful catching up of Asian countries and the lack of substantial catching up in Latin America can be explained by the different ownership structure. In Latin America, to a large extent, the big firms are owned by foreign firms, whereas Asian countries supported domestically owned firms and tried to create national champions (Shapiro, 2007). Industrial policy has to support or even create national champions. State-owned companies or co-ownership in companies and even start-ups can be one of the industrial policy instruments used by governments.

FDI plays an important role in GVCs, and international institutions such as the World Bank (2020) acknowledge its capacity to trigger development (2020). FDI, when intelligently used by countries in the Global South, can play a role in catching up, but there are a number of conditions that need to be considered (Akyüz, 2017). First, to increase the positive effects of FDI, domestic backward and/or forward linkages to FDI firms must be created. Long ago, Albert Hirschman (1958) correctly

stressed the need to actively create domestic backward and forward linkages for FDI projects and industrial policy in general. The OECD (2013, p. 35) speaks about the 'increasingly footloose character of MNE (multinational enterprises, authors) (…) The risk is particularly acute for small emerging and developing economies where access to the domestic market or local knowledge is of limited importance to MNEs' location decisions'. It is not in the interest of developing countries that the World Trade Organisation (WTO) banned local content rules for FDI in the sphere of goods production. Second, as mentioned, when a sector becomes dominated by FDI, the ability for firms to functionally upgrade becomes unlikely and the crowding-out of promising domestic firms can occur. Third, FDI in certain sectors may have no, or only a very small, positive effect for the host country. FDI, for example, in a booming real estate sector adds to a real estate bubble and does not trigger substantial technological know-how. The same is the case in the retail sector. In general, in many service sectors, FDI does not trigger economic upgrading. Or, to sell all big financial institutions to foreign investors does not help domestic economic development. Foreign banks usually have no interest in financing small- and medium-sized local companies and prefer lending to foreign subsidiaries or big domestic firms or channel deposits abroad (Stiglitz & Greenwald, 2003, chapter 10). Fourth, FDI is no free lunch. As the profits of FDI firms are transferred abroad, a high stock of FDI burdens the current account and, under certain conditions, forces countries to realise high trade surpluses to establish external equilibrium.

This is not the space to discuss industrial policy in detail or the room which is left by international trade and investment agreements which restrict industrial policy (for details see Dünhaupt & Herr, 2020a, 2020b, 2020c; Herr, 2019). However, some key points should be mentioned. It is crucial to note that horizontal industrial policy in the form of general investment in education, infrastructure, etc., is important, but not enough. In addition to this, vertical industrial policy is needed in the form of supporting certain sectors or even companies. In the centre of vertical industrial policy is the creation and support of economic clusters. For GVCs, this means the support of functional and inter-sectoral upgrading and the creation of clusters. Firms benefit from industrial clusters mainly due to external economies of scale and scope. These are based on factors like proximity to suppliers, labour pooling, more specialised labour supply, joint use of certain sources, knowledge spill-overs, cheaper access to inputs, easier market access and joint actions for common

purposes. External economies of scale and scope develop as the size of the cluster grows.[10] Of key importance for clusters is their governance structure: the mode of inter-firm relations within the cluster, the type of industrial relations and involvement of trade unions, firms' relations with employers' or business associations and public or public–private institutions in the industry. All of these factors affect a firm's ability to upgrade and its national and international competitiveness (Humphrey & Schmitz, 2002). Clusters must have a certain character to reap their benefits and, in many cases, need government aid to be established and developed. For example, collaborations between big and smaller firms and research institutions create collective benefits. Selected FDI, which is integrated in clusters and is forced to support technological and skill transfers, can support upgrading. Governments can facilitate collaborations by funding projects with specific aims such as the product, process, functional or even inter-sectoral upgrading of companies (for examples of cluster policies see Herr & Nettekoven, 2017). What is needed in clusters is a combination of cooperation and competition, co-opetition as Brandenburger and Nalebuff (1996) called it. There are conditions that make it difficult to develop co-opetition. Cut-throat competition prevents it as does strictly hierarchical or captive supply chain governance.

National champions play a role in catching up because only they can guarantee that domestic firms play in the same league as foreign competitors. Of course, small countries will not be able to have important national companies in many sectors. At least the provision of public utilities like the water supply, energy sector, public transport, etc. should be taken over by state-owned companies owned by different levels of governments.

Development banks can play an important role by channelling funds into sectors which should be developed. Such sectors can be high-tech sectors, the sector of small- and medium-sized companies or start-ups. In select cases, development banks can even hold equity in companies. The German state-owned development bank KfW, the third biggest German bank, follows all of these policies in an overall successful way (Dünhaupt & Herr, 2020c). Countries in the Global South should not hesitate to follow the example of countries in the Global North that implement comprehensive cluster policy including the support of national champions and a significant role for development banks.

[10] The literature on such clusters goes back to Marshall (1890/1920) and is stressed by many authors (see, for example, Krugman, 1981; Porter, 1998).

The WTO allows almost all elements of cluster policy, including the support of national champions and (to a limited extent also) policies by development banks. In the area of services, the leeway of countries under the WTO framework can be even higher, depending on the concessions that they have made. Regional trade agreements, especially bilateral trade and investment agreements, are in most cases very restrictive for industrial policy. Countries should be very cautious about this. Though, termination of such agreements is possible and several countries from the Global South have done this (Dünhaupt & Herr, 2020a).

For the development of industrial policy, plans, implementation, supervision and adjustment are of key importance to the flow of information between relevant stakeholders. Also, independent experts should contribute to the development of industrial policy. Dani Rodrik (2004, p. 3) summarises this idea: 'The right model for industrial policy is not that of an autonomous government applying Pigovian taxes or subsidies, but of strategic collaboration between the private sector and the government with the aim of uncovering where the most significant obstacles for restructuring lie and what type of interventions are most likely to remove them. Correspondingly, the analysis of industrial policy needs to focus not on the policy outcomes - which are inherently unknowable ex ante – but on getting the policy process right'. Institutions, if not already existing, have to be created to discuss and define industrial policy with the government, employer's associations, experts in the field and, in the ideal case, should also include trade unions and civil society. A cabinet minister, or even president or prime minister, should be directly in charge of supervising industrial policy and its implementation. This guarantees that industrial policy gets the importance it deserves.

Addressing Income Inequality and Economic Upgrading

It is obvious that without economic upgrading social upgrading remains limited. A different question is whether economic upgrading automatically leads to social upgrading via so-called trickle-down effects (see Chapter 1 of this book). Theoretical considerations as well as the analysed case studies make it clear that social upgrading does not automatically follow economic upgrading. Integration into GVCs can even lead to social downgrading in the form of increasing precarious contract work and low wages. In addition, it was argued above that GVCs have the potential to

increase inequality in terms of income distribution and/or keep it at very high levels, which is characteristic for many countries in the Global South.

In this subsection, it will not only be argued that social upgrading does not automatically follow economic upgrading, but moreover macroeconomic arguments will be presented as to why social upgrading is a precondition for the economic upgrading of economies. The consequence is that social upgrading in GVCs becomes an important element for supporting economic upgrading.

Extensive empirical research by the International Monetary Fund (IMF), which is not famous for radical economic and political approaches, concluded that too-high inequality is detrimental for economic growth. In a number of econometric studies, IMF economists found that longer periods of high growth become unlikely if inequality becomes too high (see, for example, Ostry, 2015; Ostry et al., 2014). In addition, a number of other econometric studies supported this. In their comprehensive meta-analysis, Neves et al. (2016) summarised that there is a negative relationship between higher inequality and long-term growth, especially in developing countries. It seems that short periods of growth are compatible with high or increasing inequality but not long-term, sustainable development. Furthermore, for growth, inequality at the bottom of society seems to be more problematic than at the top. Boushey and Price (2014, p. 16) summarised their findings from a review of the research in this area as follows: 'This most recent work provides strong evidence that higher levels of income inequality are detrimental to long-term economic growth and that the policies some nations have taken to redress inequality not only do not adversely impact growth, but, instead, spur faster growth. Notably, this finding applies to both developed and developing countries'.

There are a number of convincing supply side and demand side arguments to explain this. On the supply side, we can argue that the reproduction of the power of labour, especially of poor workers (better health care, better housing and sanitation, better education, less insecurity), improves and increases productivity. Second, with higher income equality, mobility in society will increase, which will trigger positive productivity effects. For example, expanded opportunities for poorer people to become entrepreneurs increases the dynamic in a society. Third, the same argument counts when gender equality is improved. Joseph Stiglitz (1996) stressed that the improved education of women and gender equality was one of the elements that explained the East Asian economic miracle after World War II. Fourth, greater equality contributes

to social coherence and political stability. And fifth, many negative social effects, like criminality, alcoholism and discrimination, which create costs for society, are positively correlated with inequality.

From the demand side, high inequality of income and wealth distribution reduces consumption demand. Groups with high income and wealth have a lower propensity to consume than groups with low income and wealth. Depending on the credit system, the poor can increase their consumption by taking credit. This in turn increases the risk of over-indebtedness of poor households and financial crises. Without enough stable consumption demand, which is by far the biggest demand element in almost all countries, overall demand, including investment demand, will suffer. A relatively equal income distribution and the inclusion of all social groups in economic progress was the basis of the overall successful 'Fordist model' in Western countries after World War II, which was characterised by high consumption demand, high investment and high productivity increases.

The clear policy conclusion from these insights is that there is a need for policies which lead to social upgrading. Gunnar Myrdal, the famous development economist, already pointed out long ago that for developed and developing countries it must be highlighted, 'that wisely planned social reforms can have the character of "investment", leading not only to greater "justice", but also to higher productivity. Such "investments" often require considerable time before maturing in the shape of returns, but should not for this reason be forgotten more than other long-term investment' (Myrdal, 1972, p. 193). Social upgrading in GVCs, which in many countries of the Global South play an important role, must be a high priority for any catching-up strategy of Global South countries that are highly integrated into GVCs. In the next subsection, possible trajectories for social upgrading are discussed.

Collective Voice and Public Governance

As already discussed in the introduction of this book as well as in the chapters by Teipen and Mehl, and Lohmeyer et al., we do not concede much chance of success for social upgrading strategies that merely rely on private and market regulation of employment relations. Drawing on Gereffi and Lee's (2016) classification of different social upgrading paths, we find that neither the market-driven and CSR-driven paths nor the

cluster-driven and multi-stakeholder paths are likely to lead to substantial, long-term social upgrading. Instead, we would emphasise that the most promising way of inducing social upgrading would be via the public governance and labour-centred paths. This implies that local and state governments must have the will and assertiveness to enforce compliance with labour standards at firms operating in their countries. There is also the need for strong, inclusive worker organisations at the sectoral and national level as well as transnational coordination of trade unions along GVCs.

Within the scope of our research, we assessed whether social upgrading (i.e. the positive developments of real wages and working conditions as well as freedom of association and collective bargaining) has been observed. Based on the results of our comparative case studies, successful economic integration into GVCs is by no means necessarily associated with better working conditions, nor with positive employment and welfare effects. The involvement of the Global South in industrial production and services has allowed lead companies in the Global North to divide and relocate undertakings worldwide. It also supported industrialisation in a number of countries in the Global South as it is easier to start with a task in a value chain than with the production of a complete product. A glance at the different market forms has made one point clear above all else: In the case of FDI and demand monopolies or oligopolies, there is a kind of 'income extraction' on the part of the leading companies—with negative effects on the countries of the Global South. The dependent companies are left with little or no profits to reinvest. Therefore, we cannot take it for granted that the development of export-oriented industries in the Global South creates the conditions for technological spill-over effects, productivity increases and social welfare gains in all cases.

We found that real wage development in GVCs in the Global South depends, first of all, on the national level of real wages and thus on the national level of productivity development. Even the much faster development of productivity in GVCs does not necessarily lead to corresponding increases in real wages—this lack of correlation is true to a greater extent when we consider its relevance for the economy as a whole. Comprehensive social upgrading requires independent voice arrangements as well as effective public control of labour standards. This is particularly evident in the example of the apparel industry with its captive GVC governance. In the countries we studied, only in the Chinese apparel industry could we

identify substantial upgrading in the area of wage development that can be attributed to overall economic development. However, this did not include improvements in terms of collective representation of interests. In Bangladesh, there have been some improvements in occupational safety and health as a result of the Accord and public pressure on international buyers, at least on the first-tier supplier level. Overall, the comparative view of the industries confirmed our assumption that social upgrading is more likely to succeed under the relational governance constellations of the automotive and IT services industries than under the modular and captive governance constellations of electronics or apparel manufacturing. However, it has also been shown that looking at industry differences and the governance of the GVC alone is not sufficient to explain social upgrading. Rather, other factors must be taken into account.

In terms of the country selection for our research project, we did not find a national pathway of public governance that curbs the unfavourable industry-related GVC constellations in the apparel sector. Future research could examine more country examples in this regard. Preliminarily, our results confirm the hypothesis that, in the Global South, the sectoral influence of captive governance in the apparel industry is more significant than variations in national institutional systems in the field of social upgrading. In the cases analysed here, in addition to the lack of institutional power resources in market despotic or state corporatist unitarism regimes, captive value chain governance has the most negative impact, as workers have little structural or associational power to leverage. One explanation for this fact is that GVCs in the apparel sector mainly integrate countries in the Global South where workers have little institutional power. Another explanation is the suppliers' heavy dependence on the lead companies, which does not leave them much room for social upgrading.

This applies all the more for the captive constellations in the agricultural sector, where the political mobilisation of landless farm workers in Brazil forms an exception of the dominant picture, in which large producers and retailers are collectively organised far better than smallholders and farm workers. However, the comparative case study design has also revealed that there are often variegated social upgrading outcomes in the same sector, depending on country-specific factors.

A look at national systems of industrial relations has confirmed their influence, but also brought to light considerable differences. In any case, in market despotic employment regimes, the paths of public governance

and labour-centred governance are not very promising for achieving social upgrading. The former would require state institutions willing to effectively protect workers from corporate arbitrariness and strengthen their social rights. However, if, as in the cases of the apparel industry analysed, integration into GVCs is based primarily on a low-cost strategy, there are hardly any incentives for strengthening the power of labour and introducing strict social regulations on the part of the state, since this results in a perceived reduction in their competitive international position. Social upgrading by means of the labour-centred path, in turn, presupposes a relatively strong position of power on the part of the employees.

As already argued by Anner (2015), in relation to the Bangladesh Accord, in market despotic regimes and captive governance constellations, approaches of transnational regulation seem most likely to improve the situation of workers in the lower value chain segments. However, only a few cases of effective transnational multi-stakeholder initiatives comparable to the Bangladesh Accord exist so far, as they usually require an extraordinarily high level of public pressure in consumer countries.

However, our investigations revealed that national characteristics of industrial relations and government regulations in labour markets had a more significant impact in the automotive sector than in the apparel sector. While the positive wage development in China was primarily a consequence of the overall economic upgrading including minimum wage policy, in the case of the South African and Brazilian automotive industries, substantial social upgrading was achieved despite lower economic upgrading, which can be attributed, in particular, to the strength of free trade unions in the sector. In India, on the other hand, there was no social upgrading in the automotive sector, despite partial economic upgrading. This development is related to the weaker position of the industry unions in India compared to South Africa or Brazil. In the Chinese automotive industry, substantial social upgrading in the form of higher real wages took place. In big lead firms, with their partly paternalistic structures, good working conditions exist despite the lack of free trade unions. However, in first-tier suppliers located in China real wage increases and social upgrading was lower than in lead firms. This segmentation is a common pattern across many countries.

There were significant differences in the contract manufacturing of electronic hardware depending on the national context. Contrary to the theoretical assumptions of the GVC approach, no advantages of modular over captive governance for social upgrading per se can be diagnosed.

Even if suppliers' room for manoeuvre is greater under modular governance, it cannot be exploited automatically to the benefit of workers under unfavourable public governance and weak trade unions. China is a good example of this, as in the country's electronic hardware sector real wage increases and working conditions were poor. In Vietnam, for example, there was even a pattern of social downgrading, expressed in low real wage increases, excessive overtime and health risks for the predominantly female workforce in electronics manufacturing. In Brazil, on the other hand, trade unions, supported by effective state labour regulations, were able, at least under the worker friendly governments (2003–2014), to implement a more employee-friendly counter-model in the electronic hardware industry.

GVCs in the IT services sector are very specific in different dimensions. First, the type of IT services outsourced to the Global South can demand very low qualifications, for example, call centres, but also very high qualifications, for example, supporting architecture services. Second, unionisation in the IT services sector is traditionally very low. This implies that in the sector very different governance modes exist as well as market constellations. India's integration of the IT services sector in GVCs is the show case here. While China showed massive catching up in the sector, it is very weakly integrated into GVCs due to its domestic market orientation, the lower availability of requested language skills and security concerns of Western governments. Real wages in some segments of the sector are, in comparison to the national level, relatively high, while other dimensions of social upgrading are typically not as developed.

On the other hand, relational governance of GVCs has a more positive effect across countries than modular and captive governance. This can be seen, for example, in the comparatively more favourable situation of Indian automotive workers in the lead firm segment compared to apparel workers. However, for social upgrading, industry-specific relational governance can be improved through public governance, i.e. institutional resources in the national system of industrial relations. Substantial bargaining successes of relatively strong sectoral unions were thus observed in the automotive sector in South Africa and Brazil. In the case of South Africa, it became clear that the leading role of trade unions in the democratic transformation process helped them to achieve a strong institutional position of power, which they used for the long-term preservation of centralised sectoral collective bargaining systems. In negotiations, for example, this enabled them to successfully restrict the

employment of temporary workers—a feat rarely achieved even by automotive unions in the Global North. Thus, it becomes apparent that the greatest potential for both the public governance path and the labour-centred path exists in countries with democratic corporatist systems of industrial relations. Moreover, it is clear that the two pathways are to some extent mutually dependent and intertwined. Guaranteeing union rights such as freedom of association and collective representation, more consistent enforcement of labour law and enabling union participation in political decision-making processes results in stronger institutional and associational power for workers than in other regimes. Labour-friendly government regulations and overall strong trade unions also have a positive effect on those workers who have little structural power under modular GVC governance, as the example of the Brazilian electronics industry, in particular, shows. The three indicators of social upgrading—the development of real wages, working conditions and freedom of association/collective bargaining—are thus determined both by national factors and by factors stemming from the sector-specific governance of the GVC.

The example of the South African automotive industry also illustrates the limits of trade union action at the industry level alone. Firstly, the power of the trade unions is segmented along GVCs, and trade unions in different tiers within GVCs have different degrees of power. For example, in South Africa the cost pressure exerted by lead firms on component suppliers led to less favourable wage agreements and the use of subcontracted labour at the supplier level. Secondly, so far, the spill over effects of the comparatively well-organised unionised automotive sector for the country's labour market as a whole have been small. South Africa is characterised by extremely high wage dispersion and is one of the most unequal countries in the world.

As transnational regulatory initiatives such as the Bangladesh Accord or the ACT initiative (Ashwin et al., 2020; see also the contributions by Zimmer, Lohmeyer et al., and Hoffer in this book) currently succeed only sporadically, the national context in the countries of the Global South makes the most important difference in this respect. Successful social upgrading thus crucially depends on whether national trade unions have sufficient associational and institutional power to stand up to dominant national coalitions in transformation struggles. While Brazil and South Africa are examples of—albeit limited—social upgrading paths,

poor social upgrading or even downgrading tendencies prevail in countries with generally weak or no independent trade unions and weak and/or not enforced government regulations in labour markets, such as India, Bangladesh and Vietnam. A special case is China, where wages have risen as a result of the long-term economic catching up, but without workers having collective, independent representation of their interests. The dependence of Chinese and Vietnamese trade unions on state government parties has thus prevented social upgrading in the area of freedom of association and collective bargaining. In individual cases, wildcat strikes did successfully mobilise structural power resources. However, they are temporarily limited as long as there is no institutional recognition of independent unions as negotiating partners and thus no comprehensive social upgrading is possible.

Concluding Remarks

Informal and precarious working conditions are widespread and persistent phenomena within GVCs. Social upgrading is—according to our general conclusion—highly conditional and requires the consideration of a multitude of intertwined factors at the national and industry-specific value chain level. It is the contribution of this book, with its comparative focus, to highlight the relevance of power asymmetries in GVCs, between companies and groups of employees at various levels. These asymmetries are central for economic and social upgrading or downgrading. It also becomes clear that the country-specific context of a particular industry plays a greater role in determining these effects than is often assumed. This is because sectoral economic and social upgrading is embedded in national trade and industrial policy strategies, national industrial relations systems as well as the general economic and social development of the whole country. At the same time, it can be asserted from this book that without coherent industrial policy strategies, collective action, labour-friendly trade agreements and more binding legal innovations, it is not possible to realise the opportunities for development that arise as a result of deeper integration into the global economy.

For some scholars a surprising conclusion of this book is that economic and social development, despite intensified globalisation, is still first of all a national project. This is true for economic and social upgrading in GVCs which integrate the Global South, but it is even more the case when

considering economic and social upgrading for whole economies and societies. Companies in GVCs, including lead firms, follow their individual strategy to cut costs as part of their profit maximising strategy and exploit, and in some cases deepen, inequalities in the Global South based on class, gender, race or migration. Lead firms have no interest in transferring key competences to, or opening attractive sales channels for, companies in the Global South. Non-binding regulations like corporate social responsibility demanding moral behaviour only have limited effects as companies are exposed to competition and pressure from financial markets to earn high returns. Even binding transnational regulations like the Bangladesh Accord, global framework agreements or supply chain due diligence laws have had only limited effects compared to the influence of GVC characteristics (sector, governance mode, market constellation) and national regulations and policies. Given the stronger position of lead companies in the Global North vis-à-vis suppliers in the Global South, more binding regulations are needed to harness this influence, especially in countries where employment protection and workers' rights are weaker. Regulatory arrangements—whether at the transnational or national level—and collective mobilisation must take into account the interests of precarious workers and marginalised communities if they are to break down existing segmentations and inequalities. The COVID-19 pandemic has once again made these requirements particularly clear (see the last chapter of this book).

References

Abdulsamad, A., Frederick, S., Guinn, A., & Gereffi, G. (2015). *Pro-poor development and power asymmetries in global value chains*. Center on Globalization, Governance & Competitiveness. Duke University.

Akyüz, Y. (2017). *Playing with fire: Deepened financial integration and changing vulnerabilities of the Global South*. Oxford University Press.

Altenburg, T., Chen, X., Lütkenhorst, W., Staritz, C., & Whitfield, L. (2020). *Exporting out of China or out of Africa? Automation versus relocation in the global clothing industry* (Discussion Paper, No. 1/2020). Deutsches Institut für Entwicklungspolitik (die).

Amsden, A. H. (2009). Nationality of firm ownership in developing countries: Who should "crowd out" whom in imperfect markets. In M. Cimoli, G. Dosi, & J. E. Stiglitz (Eds.), *Industrial policy: The political economy of capabilities accumulation* (pp. 409–423). Oxford University Press.

Anner, M. (2015). Labor control regimes and worker resistance in global supply chains. *Labor History, 56*(3), 292–307.

Anner, M. (2020). Squeezing workers' rights in global supply chains: Purchasing practices in the Bangladesh garment export sector in comparative perspective. *Review of International Political Economy, 27*(2), 320–347.

Ashwin, S., Oka, C., Schüßler, E., Alexander, R., & Lohmeyer, N. (2020). Spillover effects across transnational industrial relations agreements. *ILR Review, 73*(4), 995–1020. https://doi.org/10.1177/0019793919896570

Bair, J., Anner, M., & Blasi, J. (2020). The political economy of private and public regulation in post-Rana Plaza Bangladesh. *ILR Review, 73*(4), 969–994.

Barnes, T. (2018). *Making cars in the New India: Industry, precarity and informality*. Cambridge University Press.

Barrientos, S., Gereffi, G., & Rossi, A. (2011). Economic and social upgrading in global production networks: A new paradigm for a changing world. *International Labor Review, 150*(3–4), 319–340.

Berg, J., & Schneider, E. (2018). Industrial relations and inclusive growth in Brazil: The swinging pendulum. In S. Hayter & C.-H. Lee (Eds.), *Industrial relations in emerging economies: The quest for inclusive development* (pp. 115–150). Edward Elgar.

Bossavie, L., Cho, Y., & Heath, R. (2020). *The effects of international scrutiny on manufacturing workers: Evidence from the Rana Plaza Collapse in Bangladesh* (Policy Research Working Paper No. 9065). World Bank.

Boushey, H., & Price, C. C. (2014). *How are economic inequality and growth connected? A review of recent research*. Washington Centre for Equitable Growth.

Brandenburger, A. M., & Nalebuff, B. J. (1996). *Co-opetition: A revolution mindset that combines competition and cooperation*. Crown Business.

Butollo, F., & Lüthje, B. (2017). Made in China 2025: Intelligent manufacturing and work. In K. Briken, S. Chillas, M. Krzywdzinski, & A. Marks (Eds.), *The new digital workplace: How new technologies revolutionise work* (pp. 42–61). Macmillan.

Campos, A., Gomes, M., & Schipper, I. (2017). Labor conditions at foreign electronics manufacturing companies in Brazil—Case studies of Samsung, LGE and Foxconn. Good Electronics Network (2017). Available online at https://www.somo.nl/wp-content/uploads/2018/01/Labour-conditions-at-foreign-electronics-manufacturing-companies-in-Brazil.pdf. Accessed 13 July 2021.

Chang, H.-J. (2003). *Kicking away the ladder—Development strategy in historical perspective*. Anthem Press.

China Labor Bulletin. (2019). *Worker protests on the rise as China's car industry shrinks*. China Labor Bulletin. Available online at https://clb.org.hk/con

tent/worker-protests-rise-china%E2%80%99s-car-industry-shrinks. Accessed 30 June 2020.
David, J. (2021). *Competitors of Apple*. howandwhat.net. Available online at https://howandwhat.net/competitors-apple. Accessed 25 June 2021.
Do, C. Q. (2020). *Social and economic upgrading in the garment supply chain in Vietnam* (Working Paper 137). IPE.
Do, C. Q. (2021). Mangel an ökonomischem und sozialem Upgrading in der Elektronik- und Bekleidungsindustrie in Vietnam – Risiken systematischer Barrieren. *WSI-Mitteilungen, 74*(1), 20–27.
Dunaway, W. (Ed.). (2013). *Gendered commodity chains: Seeing women's work and households in global production*. Stanford University Press.
Dünhaupt, P. (2017). Determinants of labour's income share in the era of financialisation. *Cambridge Journal of Economics, 41*(1), 283–306.
Dünhaupt, P., & Herr, H. (2020a). *Catching up in a time of constraints—Industrial policy under world trade organization rules, free trade agreements and bilateral investment agreements*. Friedrich Ebert Foundation Singapore, http://library.fes.de/pdf-files/bueros/singapur/16373.pdf
Dünhaupt, P., & Herr, H. (2020b). Global value chains—A ladder for development? *International Review of Applied Economics, 35*(3–4), 456–474. https://doi.org/10.1080/02692171.2020.1815665
Dünhaupt, P., & Herr, H. (2020c). Trade, global value chains and development—What role for national development banks? *Vierteljahreshefte zur Wirtschaftsforschung, 89*(3), 9–33.
Dünhaupt, P., Herr, H., Mehl, F., & Teipen, C. (2019). Entwicklungschancen durch Integration in globale Wertschöpfungsketten: ein Länder- und Branchenvergleich. *WSI-Mitteilungen, 72*(6), 403–411.
Edwards, R., Hunt, T., & LeBaron, G. (2019). *Corporate commitments to living wages in the garment industry*. SPERI and University of Sheffield.
Fannin, R. (2020, March 2). The rush to deploy robots in China amid the coronavirus outbreak, CNBC. https://www.cnbc.com/2020/03/02/the-rush-to-deploy-robots-in-china-amid-the-coronavirus-outbreak.html. Accessed 20 June 2021.
Feenstra, R. C. (2010). *Offshoring in the global economy: Microeconomic structure and macroeconomic implications*. MIT Press.
Feuerstein, P. (2013). Patterns of work reorganization in the course of the IT industry's internationalization. *Competition and Change, 17*(1), 24–40.
Gereffi, G., & Lee, J. (2016). Economic and social upgrading in global value chains and industrial clusters: Why governance matters. *Journal of Business Ethics, 133*(1), 25–38.
Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy, 12*(1), 78–104.

Global Change Data Lab. (2021). Our world in data: GDP per capita, 1 to 2016. https://ourworldindata.org/grapher/maddison-data-gdp-per-capita-in-2011us-single-benchmark. Accessed 26 June 2021.

Hammer, A. (2019). Comparative capitalism and emerging economies: Formal-informal economy interlockages and implications for institutional analysis. *Review of International Political Economy, 26*(2), 337–360.

Hayter, S. (2018). Industrial relations in emerging economies. In S. Hayter & C.-H. Lee (Eds.), *Industrial relations in emerging economies: The quest for inclusive development* (pp. 1–26). Edward Elgar Publishing.

Herr, H. (2010). Credit expansion and development: A Schumpeterian and Keynesian view of the Chinese Miracle. *Intervention. European Journal of Economics and Economic Policy, 7*(1), 71–90.

Herr, H. (2011). Perspectives on high growth and rising inequality. In C. Scherrer (Ed.), *The Chinese Labour Question* (pp. 7–27). Heiner Hampp Verlag.

Herr, H. (2019). *Industrial policy for economic and social upgrading in developing countries*. Friedrich-Ebert Foundation Singapore. http://library.fes.de/pdf-files/bueros/singapur/15190.pdf.

Herr, H., & Nettekoven, Z. (2017). *The role of small and medium-sized enterprises in development: What can be learned from the German experience?* Friedrich Ebert Foundation. http://library.fes.de/pdf-files/iez/14056.pdf.

Hirschman, A. O. (1958). *The strategy of economic development*. Yale University Press.

Humphrey, J., & Schmitz, H. (2002). How does insertion in global value chains affects upgrading in industrial clusters. *Regional Studies, 36*(9), 1017–1027. https://doi.org/10.1080/0034340022000022198.

ILO. (2013). *Decent work indicators: Guidelines for producers and users of statistical and legal framework indicators: ILO manual: Second version*. ILO.

ILO. (2016). Decent work in global supply chains, ILC105/4. ILO.

ILO. (2018). *India wage report—Wage policies for decent work and inclusive growth*. ILO.

Islam, M. S., & Hossain, M. I. (2016). *Social justice in the globalization of production: Labor, gender, and the environment nexus*. Palgrave Macmillan.

Jha, P., & Kumar, D. (2020). *India's participation in the GVCs and some implications for economic and social upgrading: A case study of the textile and clothing sector*. Unpublished Manuscript.

Jha, P., & Kumar, D. (2021). *India's participation in global value chains and some implications for economic and social upgrading: A case study of the automobile sector* (Working Paper 156). IPE.

Khan, M. E., Anker, R., Anker, M., & Barge, S. (2016). *Living wage report—Dhaka, Bangladesh and Satellite Cities*. The Global Living Wage Coalition, Series 1, Report 7.

Krugman, P. (1981). Trade, accumulation, and uneven development. *Journal of Development Economics, 8*(2), 149–161.

Liu, X. (2019). *Report on China's apparel industry: Social and economic upgrading*. Unpublished manuscript.

Lo, D., & Wu, M. (2014). The state and industrial policy in the Chinese economic development. In J. M. Salazar-Xirinachs, I. Nübler, & R. Kozul-Wright (Eds.), *Transforming economies: Making industrial policy work for growth, jobs and development* (pp. 307–326). ILO.

Lüthje, B. (2014). Labor relations, production regimes and labor conflicts in the Chinese automotive industry. *International Labor Review, 153*(4), 535–560.

Marshall, A. (1920). *Principles of economics* (8th ed.). Macmillan.

Mashilo, A. (2019). *Auto production in South Africa and components manufacturing in Gauteng Province* (Global Labour University Working Paper 58). ILO.

Mezzadri, A. (2016). *The sweatshop regime: Laboring bodies, exploitation, and garments made in India*. Cambridge University Press.

Milanović, B. (2016). *Global inequality. A new approach for the age of globalisation*. Belknap Press of Harvard University Press.

Milberg, W., & Winkler, D. (2013). *Outsourcing economics—Global value chains in capitalist development*. Cambridge University Press.

Myrdal, G. (1972). *Against the stream: Critical essays on economics*. Pantheon Books.

Neves, P. C., Alfonso Ó., & Silva, S. T. (2016). A meta-analytic reassessment of the effects of inequality on growth. *World Development, 78*(C), 386–400.

Nölke, A., ten Brink, T., May, C., & Claar, S. (2020). *State-permeated capitalism in large emerging economies*. Routledge.

Noronha, E., & D'Cruz, P. (2020). *The Indian IT industry: A global production network perspective* (Working Paper 134). IPE.

OECD. (2013). *Interconnected economies: Benefitting from global value chains*. OECD Publishing.

Ostry, J. D. (2015). Inequality and the duration of growth. *European Journal of Economics and Economic Policies, 12*(2), 147–157.

Ostry, J. D., Berg, A., Charalambos, G., & Tsangarides, C. B. (2014). *Redistribution, inequality and growth*. (IMF Staff Discussion Note 14/02). IMF.

Pattenden, J. (2016). Working at the margins of global production networks: Local labor control regimes and rural-based laborers in South India. *Third World Quarterly, 37*(10), 1809–1833.

Pattnayak, S. S., & Chadha, A. (2019). India in global services value chain. *Journal of Southeast Asian Economies, 36*(2), 204–223.

Porter, M. (1998). Clusters and the new economics of competition. *Harvard Business Review, 76*, 77–90.

Rahman, S. (2014). *Broken promises of globalization: The case of the Bangladesh Garment Industry*. Lexington Books.

Rani, U., & Sen, R. (2018). Labor relations and inclusive growth in India: New forms of voice. In S. Hayter & C.-H. Lee (Eds.), *Industrial relations in emerging economies* (pp. 27–68). Edward Elgar.

Reinecke, J., & Donaghey, J. (2015). After Rana Plaza: Building coalitional power for labor rights between unions and (consumption-based) social movement organisations. *Organization, 22*(5), 720–740.

Rodrik, D. (2004). *Industrial policy for the twenty-first century* (Working Paper No. RWP04-047). John F. Kennedy School of Governance, Harvard University.

Rodrik, D. (2015). Premature deindustrialisation. *Journal of Economic Growth, 21*, 1–33.

Rossi, A. (2019). Social upgrading. In S. Ponte, G. Gereffi, & G. Raj-Reichert (Eds.), *Handbook on global value chains* (pp. 272–284). Edward Elgar.

Saad-Filho, A. (2020). Varieties of Neoliberalism in Brazil (2003–2019). *Latin-American Perspectives, 47*(1), 9–27. https://doi.org/10.1177/0094582X19881968

Salas, C., Rocha, M. A., & Welle, A. (2019). Electronic industry and global value chains in Brazil. Structure and evolution 2003–2015. Unpublished manuscript.

Saxena, S. B. (Ed.). (2019). *Labor, global supply chains, and the garment industry in South Asia: Bangladesh after Rana Plaza*. Routledge.

Scherrer, C. (Ed.). (2011). *The Chinese labour question*. München.

Schmalz, S., Ludwig, C., & Webster, E. (2018). The power resources approach: Developments and challenges. *Global Labor Journal, 9*(2), 113–134.

Schmitz, H. (2007). Transitions and trajectories in the build-up of innovation capabilities: Insights from the global value chain approach. *Asian Journal of Technology Innovation, 15*(2), 151–160.

Shapiro, H. (2007). *Industrial policy and growth* (UN DESA Working Paper No. 53).

Silver, B. J. (2003). *Forces of labor: Workers' movements and globalization since 1870*. Cambridge University Press.

Sinha, P. (2017). Trade unions and industrial relations in the car industry in India. In R. Traub-Merz (Ed.), *The automotive sector in emerging economies: Industrial policies, market dynamics and trade unions* (pp. 206–219). Friedrich-Ebert-Stiftung.

Sinkovics, N., Hoque, S. F., & Sinkovics, R. R. (2016). Rana Plaza collapse aftermath: Are CSR compliance and auditing pressures effective? *Accounting, Auditing and Accountability Journal, 29*(4), 617–649.

Sproll, M. (2010). High Tech für Niedriglohn: neotayloristische Produktionregimes in der IT-Industrie in Brasilien und Mexiko. Münster: Westfälisches Dampfboot.

Statista. (2021a). *Share in world exports of the leading clothing exporting countries*. https://www.statista.com/statistics/1094515/share-of-the-leading-global-textile-clothing-by-country/. Accessed 20 June 2021.

Statista. (2021b). *Share of total exports of ready-made garments (RMG) in Bangladesh from 2011 to 2020*. https://www.statista.com/statistics/987683/bangladesh-garment-share-total-exports/. Accessed 14 July 2020.

Stiglitz, J. E. (1996). Some lessons from the East Asian Miracle. *World Bank Research Observer, 11*, 151–177.

Stiglitz, J. E. (2020, first published 2019). *People, power and profits: Progressive capitalism for an age of discontent*. Penguin Books.

Stiglitz, J. E., & Greenwald, B. (2003). *Towards a new paradigm in monetary economics*. Cambridge University Press.

Teipen, C., & Mehl, F. (2021). Global Value chains and industrial relations in the global south: Social Upgrading paths in different industries. *Journal of Labor and Society, 24*(1), 214–236.

Thu, M. H., & Schweißhelm, E. (2020). *Labor rights and civil society empowerment in the EU-Vietnam free trade agreement* (Working Paper 135). IPE.

Webster, E. (2015). The shifting boundaries of industrial relations: Insights from South Africa. *International Labor Review, 154*(1), 27–36.

World Bank. (2020). *Trading for development in the age of global value chains*. World Development Report 2020. The World Bank Group.

World Bank. (2021). Gini index (World Bank estimate). https://data.worldbank.org/indicator/SI.POV.GINI. Accessed 20 June 2021.

Wright, E. O. (2000). Working-class power, capitalist-class interests, and class compromise. *American Journal of Sociology, 105*(4), 957–1002.

Zhang, L. (2015). *Inside China's automobile factories—The politics of labor and worker resistance*. Cambridge University Press.

CHAPTER 21

Economic and Social Effects of the COVID-19 Pandemic and the Future of Global Value Chains

Petra Dünhaupt, Hansjörg Herr, Fabian Mehl, and Christina Teipen

> The coronavirus pandemic is the worst global crisis since World War II … and it could trigger conflicts around the world. The scale of the crisis was due to a disease that represents a threat to everybody in the world and … an economic impact that will bring a recession that probably has no parallel in the recent past.
>
> UN Secretary-General António Guterres (ILO, 2020a, p. iv)

P. Dünhaupt · H. Herr · F. Mehl · C. Teipen (✉)
HWR Berlin (Berlin School of Economics and Law), Berlin, Germany
e-mail: christina.teipen@hwr-berlin.de

P. Dünhaupt
e-mail: petra.duenhaupt@hwr-berlin.de

H. Herr
e-mail: hansjoerg.herr@hwr-berlin.de

F. Mehl
e-mail: fabian.mehl@hwr-berlin.de

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2_21

This was the assessment and concern of UN Secretary General António Guterres that he expressed on March 31, 2020. At the time of writing, one and a half years have passed since the start of the COVID-19 pandemic, which has claimed 3.8 million lives as of June 2021, reported at least to the World Health Organization (WHO, 2021) as COVID-19-related deaths. The number of unreported cases is likely to be much higher. Worldwide, there has been a tremendous increase of people living in extreme poverty due to the pandemic: an additional 97 million people in 2020 are living on less than USD 1.90 a day (Mahler et al., 2021). According to UNICEF estimates, an additional 121 million people experienced acute food insecurity because of the pandemic. According to further estimates, 1.6 billion children in 199 countries worldwide were affected by school closures. For some of these children, school closures mean that they also do not receive school meals (Borkowski et al., 2021). The world was pushed into a recession. And yet many say the crisis could have been much worse (IMF, 2021a).

Certainly, the year 2020 will go down in history as the year in which the novel COVID-19 virus spread worldwide at a rapid pace to the remotest areas, taking a significant economic and human toll, advancing to a global crisis and challenging situation. As a first reaction, the world—as we knew it until then—came (more or less) to a significant halt in early 2020. Most countries initially relied on a shutdown strategy. Whatever could be closed was closed, be it borders, workplaces, or schools. People were told not to leave their homes. Curfews were imposed. In many places, economic activities in certain sectors came to a standstill. While wealthy countries quickly put together relief packages for businesses and workers, workers and firms in other parts of the world were left out in the cold with no income and no support payments.

In any case, the COVID-19 crisis is unique in many respects and thus "*a crisis like no other*" (IMF, 2021a, p. 43). A global economic contraction occurred that was unprecedented in its speed and depth. Support packages were put together in some parts of the world that also dwarfed anything seen up to that point. Also, the massive differences in how countries, sectors and people were affected by the crisis is unusual in many respects. What is already visible is that national government policies are playing a significant role in the course of the pandemic and its impact on social groups. While some transnational initiatives are significant, such as the work of WHO, particularly its COVAX project of vaccine delivery, and the UN's USD 2 billion COVID-19 Global Humanitarian

Response Plan, there are huge differences in response capabilities and policies among countries in the Global South. In addition, we need to mention national policies in the Global North, such as "pharmaceutical protectionism" (McCann & Ó hAdhmaill, 2020, p. 31) which can have a direct impact on the availability of medicines in the Global South because of the unequal distribution of patents, financial means, and bargaining power. At the same time it became very clear how interlinked the world is and how vulnerable supply chains and production have become, for example, due to the just-in-time system, where inventory is reduced as much as possible due to cost savings.

In the following, we will briefly assess the impacts of the COVID-19 pandemic up to now (July 2021) and discuss possible future trends for the reorganization of global value chains (GVCs). First, we will give an overview of the pandemic's economic and social effects as well as various policy responses by governments and international organizations. Second, we will discuss the effects of the pandemic on GVCs as well as different scenarios of further restructuring dynamics in GVCs. Concluding, we will argue that although the COVID-19 pandemic might not fundamentally alter the current globalization model, it could serve as a catalyst for already ongoing changes.

Short-Term Economic and Social Effects of the COVID-19 Pandemic

A Global Economic Contraction and Its Effects

The COVID-19 crisis has resulted in the global economy contracting by an estimated 3.3% in 2020. Global output thus fell three times more than during the global financial crisis of 2008/09 and it only took half the time to do so (IMF, 2021a, p. 43). The International Monetary Fund (IMF) forecast from April 2021 predicts global growth to reach 6% in 2021—but the forecast is subject to a great deal of uncertainty, as it is difficult to predict what the pandemic future will look like. Certainly, a lot depends on whether new dangerous mutations come up, on how global vaccination progress develops and whether further lockdowns become necessary. Table 21.1 shows the output shrinkage in 2020 for various world regions and individual countries, and some exceptional cases where there was even output growth, like, for example, in Bangladesh, China, and Vietnam, as well as the projections for the years 2021 and 2022. In

Table 21.1 Real GDP growth rate; percent change; IMF Economic Outlook Projections April 2021

	Year over year			
			Projections	
	2019	*2020*	*2021*	*2022*
World output	2.8	−3.3	6.0	4.4
Advanced economies	1.6	−4.7	5.1	3.6
United States	2.2	−3.5	6.4	3.5
Euro area	1.3	−6.6	4.4	3.8
Germany	0.6	−4.9	3.6	3.4
Japan	0.3	−4.8	3.3	2.5
United Kingdom	1.4	−9.9	5.3	5.1
Emerging markets and developing economies	3.6	−2.2	6.7	5.0
Emerging and developing Asia	5.3	−1.0	8.6	5.8
Bangladesh	8.2	3.8	5.0	7.5
China	5.8	2.3	8.4	5.6
India	4.0	−8.0	12.5	6.9
Vietnam	7.0	2.9	6.5	7.2
Emerging and developing Europe	2.4	−2.0	4.4	3.9
Latin America and the Caribbean	0.2	−7.0	4.6	3.1
Brazil	1.4	−4.1	3.7	2.6
Middle East and Central Asia	1.4	−2.9	3.7	3.8
Sub-Saharan Africa	3.2	−1.9	3.4	4.0
South Africa	0.2	−7.0	3.1	2.0

Note For India, data and forecasts are presented on a fiscal year basis, with FY 2020/2021 starting in April 2020 (IMF, 2021a)
Source IMF World Economic Outlook, April 2021a

the advanced countries, the decline in output was far more pronounced than in other world regions, which can certainly be explained by the fact that not all world regions could afford to implement hard lockdowns and bring (economic) life in certain areas to a temporary standstill.

The IMF (2021a) shows that a V-shaped recovery occurred in the manufacturing sector already in the second half of 2020. In early 2020, global manufacturing initially experienced a massive drop in output, albeit one which was relatively short-lived. Regarding the recovery, there were differences between the industries. The automotive industry, for example, initially recorded a global drop in demand of 40% in April 2020 but had already reached its pre-crisis sales level by December 2020 and was responsible for 35% of the rebound in global manufacturing. Various factors are held responsible for the upswing in demand for cars, including an increased wish for safety among people, who avoid public transportation whenever possible, as well as government-subsidized sales programs and tax reductions. Other manufacturing products also benefited from increased demand during the pandemic, especially electronics items, as people who were allowed and able to do so set up home offices and required the appropriate equipment. Also benefiting from the crisis were goods such as plastics, rubber, and textiles needed to produce protective clothing and equipment. At least in April 2021, no significant recovery could yet be reported around some capital goods. Obviously, the future was too uncertain for a recovery of investment demand (IMF, 2021a). Last but not least the demand for building materials remained high and even increased as there was no lockdown in the construction sector and many private households started to renovate their flats or houses.

The International Labor Organization (ILO, 2021) has calculated that 8.8% of global working hours were lost in 2020. These are the hours worked by 255 million full-time workers for one year. Half the loss of working time reflects the loss of working hours for workers, who at least managed to keep their jobs. The other half concerns the workers who lost their jobs directly. In 2021, there were also further losses of working hours, some of them considerable, especially in Latin America and the Caribbean, Europe, and Central Asia. The result of the reduction of working time is devastating, as the loss of labor income has led to an increase in poverty. According to the ILO (2021), global labor income in 2020 was 8.3% lower than it would have been without the pandemic. In US dollars this reflects a loss of USD 3.7 trillion.

The hardest hit were women, young workers, and informal workers. This is explained on the one hand by the fact that their position in the labor market was already relatively precarious before the crisis. Moreover, they are often employed in sectors that were particularly affected by

the government's measures to contain the pandemic, such as the hospitality industry. Research shows that worldwide more women lost their jobs during the crisis, and many of them are not actively looking for new jobs. This raises concerns that much of the progress made in recent years towards gender equality has been undone. Young people also had a higher risk of being unemployed even before the crisis, and they were often in less stable employment relationships. During the crisis, they were 2.5 times more likely to be affected by layoffs than their older counterparts. Regarding informal employment, 60% of the global workforce, or 2 billion workers, were already considered informally employed in 2019. When the crisis hit, they were three times more likely to lose their jobs than formal workers. Informally employed workers have no social security entitlements, and thus have benefited much less from government support measures (ILO, 2021).

Women in particular have been additionally negatively affected by an increase in the amount of unpaid care work at home and by a rise of domestic violence cases (Kabeer et al., 2021). Feminist scholars have long pointed out that societal crises are often accompanied by an upsurge of gender-based violence. With respect to the COVID-19 crisis, some have termed this phenomenon a "shadow pandemic" (Guidorzi, 2021), as public health measures were focused on stopping transmissions, while less resources were directed to the needs of women affected by abuse and violence. Long-term consequences regarding women's rights and gender equality, especially in the Global South, might well be an increase in early age marriages, early school drop-out of girls, and sexual exploitation of women and children.

On the other side of the spectrum, however, there are also the clear crisis winners. Figure 21.1 shows the S&P 500 Index. Shaded in dark gray are phases in which the economy is in recession. Unlike at other times of recession, the financial markets are in a boom, triggered by expansionary monetary policy. This is not only the case in the US as shown in Fig. 21.1 but globally. Of course, this has distributional effects since wealth is distributed even more unequally than income. For example, Forbes (2021) reported in April 2021 that U.S. billionaires increased their wealth by USD 1.2 trillion during the pandemic. Moreover, U.S. billionaires not only increased their wealth during the crisis—the number of billionaires also increased. According to the latest global wealth report from Credit Suisse (2021), global household wealth increased by USD 28.7 trillion in 2020. After taking exchange rate fluctuations into account,

Fig. 21.1 S & P 500 (Standard & Poor's 500), share index of the biggest 500 US stock companies, 1991–2021 (*Note* Shaded in gray, we see periods when the economy has been in recession. *Source* Macrotrends, 2021)

global wealth grew by 4.1%. This development is not only due to price increases on the stock markets, according to the study. House prices have also risen sharply.

Fiscal Response

The COVID-19 crisis has posed major economic and social challenges to countries, and governments have tried to respond to these challenges with various fiscal policy instruments. The instruments can roughly be divided into two categories. On the one hand, there are instruments that have an immediate impact on the budget deficit, through additional spending and forgone revenue in the form of tax relief. On the other hand, there are instruments that do not directly affect the budget but can lead to an increase in debt or additional borrowing, such as equity and loans given to companies to bridge financial bottlenecks. Governments have also issued guarantees to companies. These do not affect the budget deficits or the

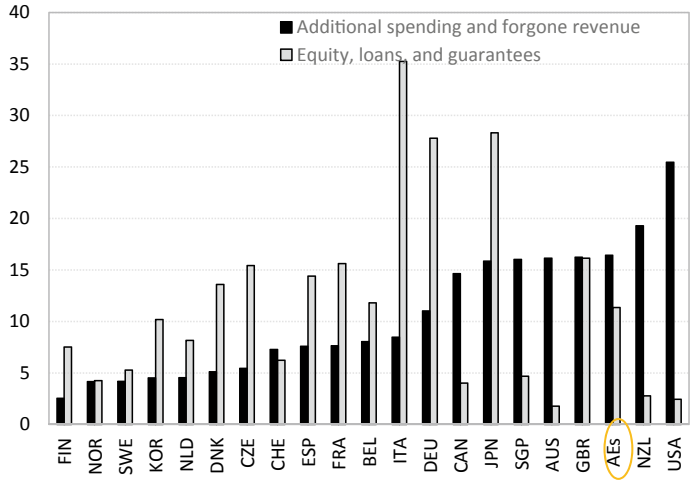


Fig. 21.2 Discretionary fiscal response to the COVID-19 crisis in advanced economies (Percent of GDP) (*Source* IMF, 2021b)

debt level immediately but can pose a financial risk to governments in the future (IMF, 2020, p. 22). Figures 21.2, 21.3 and 21.4 show the magnitude of discretionary fiscal response for both categories of instruments, i.e., additional spending and forgone revenue and equity, loans and guarantees in percent of GDP for advanced economies, emerging economies, and low-income developing countries.[1] The figures do not include so-called automatic fiscal stabilizers, meaning endogenous reductions of tax revenues and additional spending caused by changes in economic activities. This means actual budget deficits are much higher. Based on the figures, one can see very clearly the substantial differences in terms of the leeway that countries have been able to use. While advanced economies spent on average 16.4% of GDP on additional expenditures and forgone revenue as a result of fiscal policy action, and 11.3% of GDP on equity, loans, and guarantees, emerging economies spent on average just 4 and 2.5%, and low-income developing countries spent a meager 1.6 and 0.2%.

[1] For a detailed overview of fiscal policy measures in response to the COVID-19 crisis, see the IMF's Database of fiscal policy responses to COVID-19, which is updated at monthly intervals: https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19, last accessed 23 June 2021.

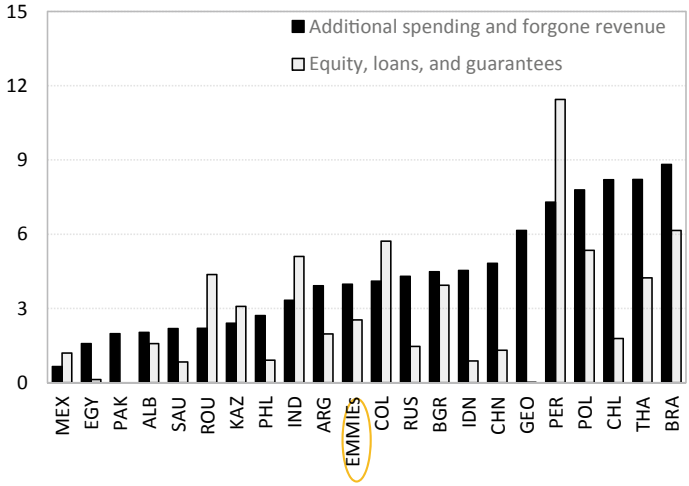


Fig. 21.3 Discretionary fiscal response to the COVID-19 crisis in emerging economies (Percent of GDP) (*Source* IMF, 2021b)

In advanced economies, most of the money has gone to preserving employment and supporting household incomes. The health sector has also been highly supported. In terms of corporate support, large companies have benefited the most compared to small- and medium-sized enterprises. In this group of countries, governments have mostly introduced multi-year programs to promote and accelerate recovery. By comparison, in the emerging economies, most funds have gone into public works, i.e., infrastructure projects, but also into maintaining employment via other channels. Many measures tended to take place in 2020 and were only minimally extended to 2021 (IMF, 2021c).

In the advanced economies, revenues fell sharply in 2020, while at the same time huge relief programs were adopted for state and local governments, companies, and households. This has led to an increase in the debt-to-GDP ratios, which has risen to 120% on average in 2020 compared to 103.8% in 2019 before the outbreak of COVID-19 for this group of countries. In emerging economies, quite different emphases were set. After an extremely rigorous lockdown at the beginning of 2020, China was able to transition to a new normal far more quickly than other

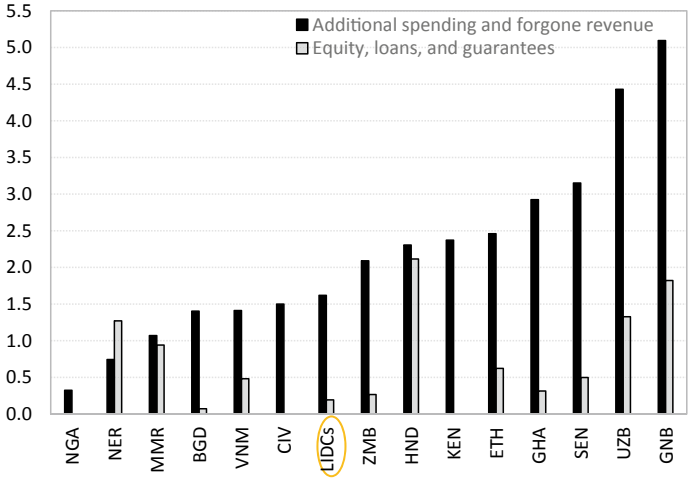


Fig. 21.4 Discretionary fiscal response to the COVID-19 crisis in low income developing countries (Percent of GDP) (*Note* Estimates as of March 17, 2021. Numbers in US dollars and percent of GDP are based on April 2021 World Economic Outlook Update unless otherwise stated. Country group averages are weighted by GDP in US dollars adjusted by purchasing power parity. Data labels use standardized country codes by international organizations. AEs = advanced economies; EMMIEs = emerging market and middle-income economies; LIDCs = low-income developing countries. *Source* IMF, 2021b)

countries. China has primarily supported demand. As can be seen from Table 21.1, China has recovered surprisingly quickly and effectively from the crisis and is well back on track for growth. India announced a support package in November 2020 that focused on multi-year investment incentives, additional agricultural subsidies, measures to promote housing as well as formal and rural employment. In Brazil, the social safety net was expanded. There were special programs to support the elderly, the poor, and the unemployed. Among other things, the *Bolsa Familia* transfer program has been extended to even more users, providing cash payments, and there have been other cash programs specifically to support informal workers and poor households. An employment protection program was

also introduced, and other measures were taken.[2] At the end of 2020, the government debt-to-GDP ratio in the group of emerging economies was 64.4%, and thus the debt level was 10 percentage points higher than in 2019. In the group of low-income developing countries, the average level of government debt-to-GDP rose to 49.5% at the end of 2020 compared to 44.3% in 2019. These countries had no financial leeway for additional spending, so expenditure remained relatively constant while revenues fell sharply in some cases, leading to an increase in the debt ratio (IMF, 2021c).

The World Bank (2021a) has expressed concerns that a debt crisis is looming that could ultimately result in a lost decade for developing countries. Even before the COVID-19 pandemic, emerging and developing countries were accumulating record levels of debt. In 2019, total debt (i.e., debt of the corporate sector, government, and private households) for these countries was already 176% of GDP, with 123% of GDP accruing to the private sector alone. According to the World Bank (2021a), several points are particularly worrying: first, the increase in debt has not been accompanied by investment or even solid growth. On the contrary, despite low interest rates and new financial instruments, in many countries real investment and growth have been poor after the financial crisis. The pandemic has now led to a further sharp increase in both private and public debt. Without significant growth, however, the debt burden increases further, and the debtors have difficulties servicing the debt. This must be seen against the background that in some cases a high proportion of the debt is external debt denominated in foreign currency or in case of dollarization, domestic debt denominated in foreign currency. Second, there is a multitude of creditors. Today, China is the largest official creditor to developing countries. In addition, private debt flows to the Global South massively increased in the years before the financial crisis in 2008, but especially after the financial crisis. Total stock of external debt of low- and middle-income countries between 2011 and 2019 increased by 60.8%. In 2009, external debt of low- and middle-income countries was 24% of gross national income and increased to 39% in 2019. In 2011 the share of private not guaranteed debt was 34.6%,

[2] For a detailed overview, compare the IMF's Database of fiscal policy responses to COVID-19, which is updated at monthly intervals: https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19; last accessed 23 June 2021.

in 2019 it increased to 38.8% (World Bank, 2021b). This accumulation of high debt stocks increases the risk of a debt crisis and the variation in creditors and sometimes secretive and opaque loan agreements make debt deferral as well as concerted actions, such as debt forgiveness, challenging. Since May 2020, after all, International Development Association (IDA) countries have been allowed by the G20 countries, at the initiative of the World Bank and the IMF, to suspend bilateral debt repayments. This should give the world's poorest countries a little more financial leeway during the crisis (World Bank, 2021c). As of March 2021, 47 out of 73 eligible countries have participated in the so-called debt service suspension initiative (DSSI) (UNCTAD, 2021).

Monetary Policy

When it became clear in early 2020 that the virus would spread worldwide and develop into a pandemic, the level of uncertainty escalated, and financial markets subsequently came under stress. This becomes evident if we look at the S&P 500 share price index, for example, which is shown in Fig. 21.1 and reflects developments of financial markets. Initially, there were tremendous price losses in 2020, so the index declined and returned to October 2018 values. Around the world, central banks[3] immediately after the outbreak of the pandemic reacted quickly to the crisis and coordinated their interventions with fiscal policy measures. Share prices recovered and climbed to new records despite the pandemic, reflecting the fact that the rates of return for monetary wealth in the U.S. or Europe was close to zero and it was expected that this kind of monetary policy implemented during and after the financial crisis would continue. This makes the COVID-19 crisis very special as even though the real economy was contracting in 2020 and real GDP in the U.S. declined by −3.5%, the stock index nevertheless continued to rise.

Central banks in advanced economies have pursued two main objectives: at the very beginning of the pandemic, the first objective was to calm the financial markets so that the pandemic would not turn into a financial crisis. A glance at Fig. 21.1 shows that this has obviously been achieved. The policy was based on two instruments, namely the purchase

[3] The Bank for International Settlements (BIS) has set up a database that provides information on central bank responses and is updated on an ongoing basis: https://www.bis.org/publ/work934_data.xlsx, https://www.bis.org/publ/work934_data.xlsx.

of public bonds and the provision of liquidity to the financial system on very favorable terms. As the pandemic progressed, priorities changed. It became necessary to provide the private household and corporate sectors with credit on favorable terms to avoid a liquidity squeeze (Cantú et al., 2021).

The pandemic led in early 2020 to massive capital outflows in emerging markets and massive depreciations of currencies in this country group. Obviously trust in the stability of exchange rates and financial markets in many countries in the Global South broke down. Especially portfolio investment outflows showing signs of panic seemed to trigger a new widespread financial crisis in many countries in the Global South. Also, foreign direct investment (FDI) decreased. Greenfield FDI dropped in 2020 to 42% of the level of the 1990s (Altman & Bastian, 2021). The IMF reacted quickly and with several different programs to support countries in the Global South. Until June 2021 total support provided by the IMF to 85 countries added up to USD 250 billion, still leaving much room for an additional USD 750 billion in case of emergency (IMF, 2021d). More important were swap-agreements by central banks, especially by the U.S. Federal Reserve and the European Central Bank. In such an agreement, for example, the Federal Reserve provides US dollars to another central bank in exchange with the latter's own currency. Via swap agreements, central banks in the Global South immediately got access mainly to US dollars and also to euro and had the room to refinance domestic financial institutions with foreign currency and stabilize the exchange rates via interventions in foreign exchange markets. In early- and mid-2020 such swap agreements amounted to around USD 440 billion. In comparison, during the financial crisis in 2008 swap agreements added up to almost USD 600 billion (Clarida et al., 2021), however for a shorter period. The help of central banks and the IMF together were substantial and added up to almost 20% of German GDP in 2019. Surprisingly, towards the second half of 2020 private capital outflows from the Global South stabilized and private investors from the Global North started again to channel money to the Global South. The actions by the IMF and central banks as lender of last resort during the panic had, similar to the stock markets, stabilized the situation and a combination of low interest rates in the U.S. or Europe, already high stock market prices, positive returns of investment in the Global South and pressure to realize positive returns by investors in the Global North had stabilized the situation.

Central banks in emerging economies were also able to focus on supporting domestic demand, despite sometimes high capital outflows and large currency devaluations following the start of the pandemic, however to a much lower degree than in the Global North. In the Global South, too, interest rates were cut in many cases and—as in the advanced economies—asset purchase programs were launched. However, a focus rested also on foreign exchange interventions and reserve policies (Cantú et al., 2021).

Global Merchandise and Service Trade

Figure 21.5 shows the quarterly export growth rates, each compared with the previous quarter, for the world and various world regions, from the first quarter of 2018 until the first quarter of 2021. There was a collapse in exports worldwide in the first quarter of 2020, which was particularly pronounced in Asia. This is certainly attributable to China, which imposed a rigorous lockdown at the beginning of 2020 and brought part

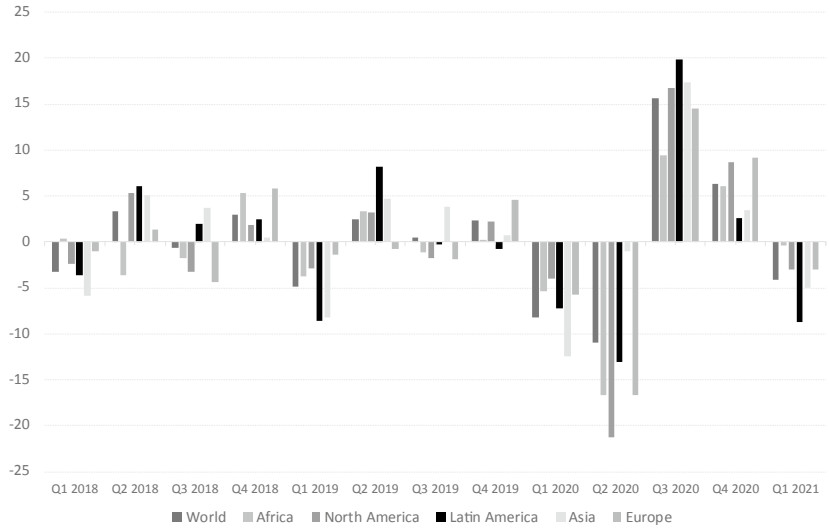


Fig. 21.5 Global and regional merchandise export volumes; quarterly data, 1st quarter 2018–1st quarter 2021 (growth rate over previous quarter; in percent) (*Source* UNCTAD Statistics, 2021)

of its production to a standstill. In the second quarter of 2020, there was a massive drop in exports worldwide. These were the months when public (and parts of commercial) life came close to a standstill in most regions of the world, after lockdowns had been imposed. The third and fourth quarters saw a return to growth in export volumes compared with the previous quarters. However, the first quarter of 2021 saw a renewed decline in export volumes, which can certainly be attributed to a renewed rigorous lockdown and lower global demand.

Figure 21.6 shows quarterly growth rates for global and regional export of services, in comparison to the previous quarter. While there was a slight decline in the first quarter of 2020, the second quarter of 2020 saw a massive drop compared with the previous quarter. In all regions of the world, this decline was more than 20%; in Latin America, it was as much as 46%. Not surprisingly, these dramatic declines in exports in the service sector can be explained primarily by the tourism industry, which was affected more than almost any other sector by the border closures

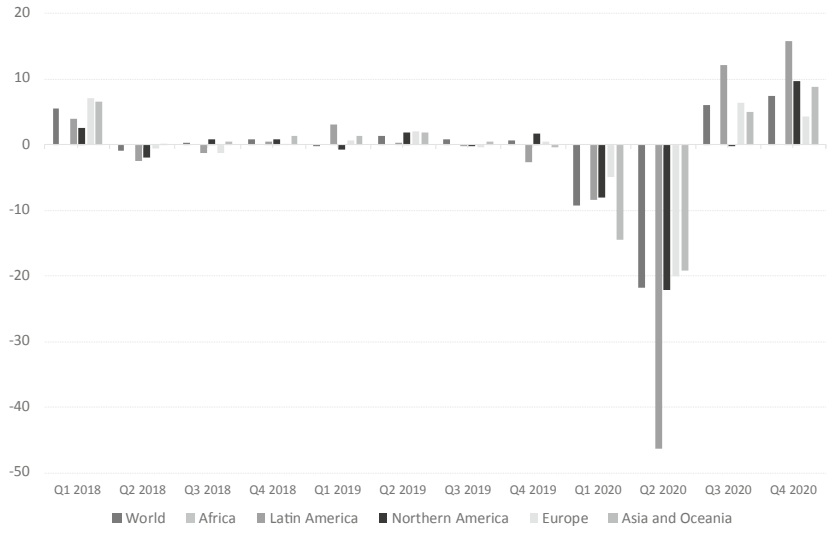


Fig. 21.6 Global and regional export of services; quarterly data, 1st quarter 2018–4th quarter 2020 (Growth rate over previous quarter; in percent) (*Note* No data available for Africa. *Source* UNCTAD Statistics, 2021)

and travel restrictions. At least in the third and fourth quarters of 2020, service exports turned positive again.

Different Policies in Different Countries

ILO Director-General Guy Ryder remarked that "the effects of the crisis continue to be highly uneven, with stark differences across countries and among workers depending on where they work, the type of work they do, and the characteristics of their job" (ILO, 2021, p. 3).

Indeed, the economic and social impacts of the pandemic are highly uneven among countries. Some of the worst affected were countries whose economies are very dependent on tourism and other high contact services, as the global travel restrictions and border closures were felt particularly hard here. Countries that are heavily dependent on natural resource exports were also hard hit and those that have little or no room for maneuver to respond to the crisis also recover very poorly from the downturn (IMF, 2021a).

Due to different economic and political structures and capacities, national governments responded with a variety of pandemic management strategies, ranging from strict control in countries such as China and Vietnam, to a law-and-order policy with little solidarity and almost no social compensation, as in India, to complete ignorance of pandemic containment measures by the federal government in Brazil. If one takes the Indian pandemic management as an example, many workers, especially informal workers, were banned from performing their jobs, but without any compensation being offered. This resulted in increasing poverty and existential social risks, as well as a migration movement in which people, simply to secure their livelihood, set out in crowded buses and trains to return to their families in the countryside. The government under Modi allowed election rallies and a religious Hindu festival, so the contagion rate steeply increased (Ghosh, 2021). India, the world's largest producer of vaccines, also does not have enough vaccines and other much-needed materials such as oxygen for its own population. Populations with "authoritarian- populist leadership and public health denialism combined with deadly effect" have not fared much better (Khoo, 2020, p. 34), for example, Brazil. This makes it clear that a minimum level of social protection is a prerequisite for public health and pandemic containment measures to work. Even more, as McCann and Matenga (2020, p. 163) put it: "the pandemic has acted as a catalyst for the accelerated divergence

in life-preserving public sector interventions between the most and least privileged people around the world."

In this context, the successful containment policies of governments in Australia or New Zealand, but also China and Vietnam, who reacted strictly and decisively comparatively early on, have to be mentioned. The development in the last two countries must be seen as a political challenge for Western countries. Vietnam particularly stands out. What needs to be explained, therefore, is "why a communist one-party state, like Vietnam, which has been internationally lauded for its success in controlling the pandemic but also citizens' satisfaction with its response, worked to establish safeguards for workers in partnership with the state-sponsored union" (Ford & Ward, 2021, p. 433). In addition to the comparatively well-equipped health care system, it appears that the state-controlled Vietnamese trade union was able to negotiate an effective crisis management strategy in a social dialogue with the government and companies that led to low unemployment and a rapid recovery of the labor market. Here, a certain independence of the trade union from the government could apparently be used in a productive way. However, it should not be overlooked that Vietnam has nevertheless been affected by sharply rising incidences since July 2021.

Effects on Global Value Chains

Following the outbreak of the COVID-19 virus confirmed in China at the beginning of 2020 and the lockdown imposed there, it soon became evident how globalized and interconnected the economy is today, as the shortage of supplies from China was quickly noticed around the world. Supply shocks were compounded by temporary trade restrictions, resulting in sudden supply shortages for a wide range of goods (see the shrinking trade in goods and services in Figs. 21.5 and 21.6). Particularly memorable were the shortages of medical supplies and medical safety equipment (Shih, 2020). Gereffi (2020) has analyzed in more detail the medical supply sector incidents that occurred in early 2020 and concludes that in terms of mask shortages in the U.S. it was more a case of policy failure than market failure. According to Gereffi, the export restrictions imposed at the beginning of the crisis and other policies contributed to a shortage of masks.

Deglobalization, Renationalization, and Regionalism

A lively debate has arisen as to whether globalization has gone too far and whether there will be relocations, especially regarding strategic goods such as medical items. In this debate on how the pandemic will affect global value chains, a variety of viewpoints can be found (Curran & Eckhardt, 2021). Witt et al. (2021) ponder why, from a political perspective, it might well make sense for the U.S. and its allies to disengage from China and suggest that re-shoring might be necessary to minimize risks and increase resilience. The authors place the COVID-19 crisis in a debate that started even before the pandemic, and which is about deglobalization and a decoupling from China due to the fear that China could replace the U.S. as hegemon in the future. They discuss whether high-tech companies in Western countries have a chance in the future if the Chinese state supports Chinese technology companies. It may be painful in the short term for the U.S. and its allies to cut business ties with China, but it could strengthen the country's own position in the long term: "The main objective of decoupling is to weaken China by cutting it off from inputs that the country needs for sustaining its economic growth and military power, ideally in collaboration with other major countries. … Decoupling and attendant de-globalization imply an economic cost for the US … As long as these measures hurt China more than the US, under realist logic, they make perfect sense. … Analogously, it would be logical for US allies to accept the economic losses needed to contain China" (Witt et al., 2021, p. 12).

Others disagree with this view. The NGO Médecins Sans Frontières points to the negative consequences of an innovation and development strategy that relies purely on national market-based competition among private companies: "The current monopoly-based pharmaceutical research and development (R&D) system fails to develop, produce and distribute lifesaving medical tools in the interest of public health (…) With control over the market as a result of patents or other exclusive rights, or even the way in which global production and supply chains are organized, pharmaceutical companies have the decision-making power to determine who ultimately has access (…) When global demand outstrips production and supply capacity, medical tools are often allocated not based on public health need, but on the ability to pay high prices" (MSF, 2020, p. 1).

Evenett and Baldwin (2020) argue that a renationalization strategy does not promote resilience. Rather, they argue that beside the COVID-19 crisis and the threat of "vaccine nationalism" all the other pressing challenges currently facing the global community—be it the climate crisis, the rising importance of digitalization and e-commerce, and the trade war between the U.S. and China, which also reflects a rivalry of modes of capitalism—must be addressed. Since this only works multilaterally, they position themselves in defence of the World Trade Organization (WTO) and plead for a renewal and strengthening of the multilateral system. Enderwick and Buckley (2020) predict stronger regionalization trends instead of a more deepened globalization. The authors argue that the pandemic is leading to concerns about the vulnerabilities of global value chains, which may lead to de-globalization, from which, however, a renewed focus on regional alliances, i.e., on neighbouring countries, may well emerge. Regional alliances have the advantage of overcoming the disadvantages of small states while benefiting from economies of scale. Curran and Eckhardt (2021) believe that there are diverging developments in different sectors. In sectors where cost differences are very large and there are few alternative technologies, GVCs will certainly remain global. In other sectors, such as medical equipment, government interference is likely due to the experience of the pandemic. Probably, the changes might not be too strong, because at the end of the day it is companies that control GVCs and that pursue certain motives, and the influence of governments only has a limited impact on their decision-making.

Supply Constraints

While Gereffi's (2020) contribution examines the impact of the pandemic on the medical supply sector, his findings can be applied to other sectors as well. In his view, two aspects are worrying: firstly, excessive dependence on one supplier, in this case China, and secondly, the just-in-time business model, in which almost no inventories are held and thus no supply bottlenecks can be bridged. According to his view, to build resilience in the future, it is critical to diversify in all directions. Recommendations range from expanding capacity in the home country, to a broader international supplier base, to the selection of large sales markets, to strategic partnerships with companies in similar industries.

One characteristic of the COVID-19 crisis is that it is not only a demand crisis as in usual recessions, but in addition supply constraints

could be observed. Since the beginning of the crisis, supply shocks have been repeatedly reported in the media. Due to the drastic changes in the daily life of many people and new needs resulting from lockdown conditions, there was a change in demand. In the first year of the pandemic, this led to a sharp drop in commodity prices. Online retailers and certain electronics goods suppliers were confronted with a boom. Also, the stimulus programs adopted by governments in advanced economies have increased demand in certain sectors, for example the construction industry.

Decisions were also made by companies at the beginning of the pandemic which caused disruptions. A striking example in this respect is the shortage of semiconductors, which in early 2021 forced automobile manufacturers all over the world—despite high demand for vehicles—to shut down their production and register short-time work because not enough chips were available. According to a report by Ezell (2021), after the start of the crisis in early 2020, when sales figures fell sharply in some countries, automotive suppliers cancelled their orders for electronics and semiconductors or revised them downward. In some cases, reference was even made to contract clauses that included natural disasters. However, the forecast proved to be wrong, as demand quickly picked up again. In the meantime, however, the manufacturers had switched production to a more modern variant of semiconductors that are needed for electronic items, for example, in telephones and game consoles.

Changes to Bargaining Power in GVCs

There are clear indications that during the COVID-19 crisis the imbalances in bargaining power within GVCs became even more pronounced. Within multinational companies, the bargaining power of subsidiary companies vis-à-vis the parent company is the weakest. To secure profits, transnational corporations can shut down their subsidiaries in the Global South. For example, in early 2021 Ford, the fifth largest auto manufacturer in Brazil, announced that it will completely shut its three plants within the year, after producing in Brazil for over a century (VOA News, 2021).

In the case of legally independent suppliers in the Global South, the most unfavorable COVID-19 responses took place in the apparel sector with its captive GVC governance. When we look at economic and social impacts of the COVID 19 pandemic, we need to distinguish between factors that were already apparent before the crisis and those that are

directly related to the pandemic. The clothing industry already made negative headlines in the 1990s, when it became public knowledge that large fashion companies had their clothes made under sweatshop conditions in factories in poor countries, sometimes even by children. Massive public pressure has served to ensure that multinational companies now present themselves as part of the solution, suggesting to the public through a range of voluntary measures that they will expose, address, and prevent exploitation in their supply chains (LeBaron, 2020). However, the way fashion companies and brand manufacturers have behaved over the course of the pandemic has severely tarnished their credibility (see the Chapter by Anner in this book).

Producing countries in the apparel industry felt the effects of dependencies in GVCs twice in early 2020. After China entered a lockdown in January 2020, many other countries lacked material and intermediate products for further production. This first supply shock was quickly followed by a second shock, this time in the form of a drop in demand from the Global North (ITUC, 2020). In Europe and the U.S., governments-imposed shutdowns and curfews in March and April. If we take the Vietnamese garment industry as an example, the factories integrated into GVCs were more affected by the international decline in orders and demand than those oriented to the domestic market (Ford & Ward, 2021, p. 438). In countries like Bangladesh or Cambodia the situation was similar. The massive export dependence of manufacturing countries on customers in the U.S., Japan, and the European Union—61.5% of all apparel exports in 2018 were destined for these regions—has had a huge impact on the producing countries (ILO, 2020b). In view of an acute drop in demand for clothing, brand manufacturers and retailers canceled their orders. In some cases, goods shipments were already on their way, and in many cases, they had already been manufactured. In the Global South this has led to thousands of companies having to close, some of them probably forever. The workers, in turn, were often sent home without pay (ILO, 2020b). The effects in the producing countries were devastating. Surveys have shown that the failure to pay wages has led to acute hunger and inadequate nutrition among affected workers and their families (Kyritsis et al., 2020). By canceling orders that had already been manufactured, the brands and retail chains violated their obligations both under the UN Guiding Principles on Business and Human Rights (UNGPs) and the OECD Guidelines for Multinational Enterprises (ECCHR, 2020).

Current events and developments in the apparel sector have once again focused attention on various issues and for the producing countries in the Global South, it became very clear how potentially harmful it is to specialize in the production of a single export good. In the event of a collapse in demand, virtually all production in the affected sector comes to a standstill. The reactions in response to the COVID-19 pandemic can once again be used to support the argument that voluntary initiatives appear insufficient to bind companies to any obligations in crisis situations.

Similarly, the crisis reactions indicate that industry differences and the different segments within value chains will continue to carry considerable weight for social up or downgrading in the future. While production-oriented work sectors have been affected by periods of complete work stoppage, some industries such as the IT services industry have even benefited economically from the COVID-19 pandemic. In addition, many IT professionals have been able to switch much more easily to work-from-home jobs (Shankar, 2020), a privilege of white-collar work that many blue-collar workers do not have.

Conclusion

There is a high level of uncertainty regarding how GVCs and globalization in general will develop after COVID-19. Hulme and Horner (2020) have convincingly pointed out that there are three conceivable scenarios for how the pandemic will affect future developments. In the first scenario, they expect the situation to worsen towards a "global meltdown" due to the difficult social developments. The second scenario is the one, which also aligns with our thesis and in which ultimately only the developments that were already apparent before the pandemic are perpetuated in a more clearly defined and pronounced form—a view that Rodrik (2020) also shares in principle. The third scenario is the most optimistic, in which pandemic-related investments and problem solutions are used simultaneously to solve pre-existing challenges, such as overcoming the climate crisis.

In our opinion, if the development of GVCs is left to the market once the current phase of COVID-19 crisis management subsides, only moderate changes in the medium term can be expected. For example, the expansion of GVCs may be slower in the future than in the 1990s and

2010s if countries in the Global South manage to take over more value-adding activities in GVCs. China is a good example for this. In general, traditional economic theory predicts that in case of economic convergence one central reason for international trade, comparative advantages, become smaller or disappear. Another potential, more long-term, trend may be that automation destroys the comparative advantages of low wages in the Global South and hitherto labor-intensive production tasks might be shifted back to the Global North, leading to a further slowdown or even shrinking of GVCs.

Other possible future developments in GVCs may be more sector specific. In GVCs with relatively simple technology, like garments or simple electronics goods production, cost advantages in the Global South are immense and became even bigger during the COVID-19 crisis due to the depreciations of many currencies of the Global South. In such areas the market incentive for outsourcing is overwhelming. The same may be the case in the field of outsourcing certain services from the Global North to the Global South. Transaction costs in this area are low and technological possibilities are improving. Milanović (2021) expects an explosion of GVCs in this area with the result of increasing pressure in the low-wage sector in the Global North. In other sectors, for example, the automotive sector, development of regional clusters will most likely continue. Again in other sectors, political interventions may enforce more domestic or regional productions, for example, medicinal products, comparable to many regional agricultural productions which are motivated by the desire to have certain autonomy in the provision of food products.

Faster and more radical changes can generally be expected with global crises and political interventions. It seems that the neoliberal globalization era which started in the 1980s with deregulation of international trade, international capital flows, and also labor markets is entering a new phase. For example, industrial policy is becoming fashionable again in the U.S. but also in Europe and other countries in the Global North. Partly responsible for this is the successful catching up of China, which extensively uses industrial policy and state-owned or state-controlled companies. One important aspect of expected industrial policy trends amplified by COVID-19 is the establishment of more regional clusters in high-tech industries to become less dependent on foreign markets. An important additional role is played here by the U.S., which wants to aggressively prevent the further technological upgrading of China given it currently views China as a serious challenge for its own hegemony. In

addition, in China there are tendencies to become less dependent on the rest of the world and create regional economic clusters. Such intensified political attempts to push national developments will most likely not find favor with multinational companies which prefer to act all over the planet. Conflicts between more and more powerful multinational companies and governments can therefore be expected.

Beyond the potential importance of the above mentioned factors for the development of GVCs, dark clouds hang over globalization in general. COVID-19 has further destabilized the world economy after the shock of the financial crisis in 2008 and the Great Recession. The previously unimaginable explosion of central bank balance sheets, high private and government debt quotas elaborated on in the first section of this chapter was unfolding even before COVID-19 all over the world. In combination with the high and to a large extent private external indebtedness of many countries in Global South, zero interest rates in many countries, and the thereby stimulated risky investment strategies in stock markets and investments in the Global South, these factors have all been pushing the world economy into a fragile constellation for over a decade (Heine & Herr, 2021). We would argue that a high level of economic policy intervention and cooperation between countries will therefore be needed to stabilize the situation and prevent a deep and long-lasting crisis which would also fundamentally affect GVCs.

Last but not least the ecological crisis seems to be getting worse, and radical political actions are becoming increasingly urgent. Globalization and especially the existing GVCs have clearly negative ecological effects as a result of high levels of goods transportation and the shifting of production to countries with low ecological standards. Efforts to internalize the negative external effects of global transportation and industrial policies to support regional circuits in the interest of ecological transformation could also massively reduce the importance of GVCs.

Overall, we can conclude that while COVID-19 will not lead to more fundamental changes in GVCs once the crisis subsides, it massively stimulates and speeds-up changes which are in any case underway.

Acknowledgements For helpful comments and suggestions, we would like to thank Bruno de Conti, Premilla d'Cruz, Clare Hollins, Praveen Jha and Ernesto Noronha. Financial Support by the Volkswagen Foundation is gratefully acknowledged.

References

Altman, S. A., & Bastian, P. (2021, March 18). The state of globalization in 2021. *Harvard Business Review*. https://hbr.org/2021/03/the-state-of-globalization-in-2021. Accessed 16 July 2021.

Borkowski, A., Correa, J., Bundy, D., Burbano, C., Hayashi, C., Lloyd-Evans, E., Neitzel, J., & Reuge, N. (2021). *COVID-19: Missing more than a classroom: The impact of school closures on children's nutrition* (Innocenti Working Papers No. 2021–01). UNICEF Office of Research.

Cantú, C., Cavallino, P., De Fiore, F., & Yetman, J. (2021). *A global database on central banks' monetary responses to COVID-19* (BIS Working Papers No. 934). Bank for International Settlements. https://www.bis.org/publ/work934.pdf. Accessed 25 June 2021.

Clarida, R. H., Duygan-Bump, B., & Scotti, C. (2021). The COVID-19 crisis and the Federal Reserve's Policy Response. *Finance and Economics Discussion Series 2021–035*. Board of Governors of the Federal Reserve System. https://doi.org/10.17016/FEDS.2021.035. Accessed 16 July 2021.

Credit Suisse. (2021). *Global wealth report 2021*. Credit Suisse Research Institute. https://www.credit-suisse.com/about-us/en/reports-research/global-wealth-report.html. Accessed 26 June 2021.

Curran, L., & Eckhardt, J. (2021). Why COVID-19 will not lead to major restructuring of global value chains. *Management and Organization Review, 17*(special issue 2), 407–411.

ECCHR. (2020). *Farce majeure: How global apparel brands are using the COVID-19 pandemic to stiff suppliers and abandon workers* (Policy Paper). ECCHR. https://www.ecchr.eu/fileadmin/ECCHR_PP_FARCE_MAJEURE.pdf. Accessed 29 June 2021.

Enderwick, P., & Buckley, P. (2020). Rising regionalization: Will the post-COVID-19 world see a retreat from globalization? *Transnational Corporations, 27*(2), 99–112.

Evenett, S., & Baldwin, R. (2020). Revitalising multilateral trade cooperation: Why? Why now? And how? In S. Evenett & R. Baldwin (Eds.), *Revitalising multilateralism: Pragmatic ideas for the new WO Director-General* (pp. 9–38). Centre for Economic Policy Research (CEPR).

Ezell, S. (2021). *Short-term chip shortages don't merit government intervention; long-term competitiveness in the semiconductor industry does*. Information Technology & Innovation Foundation. https://itif.org/publications/2021/02/18/short-term-chip-shortages-dont-merit-government-intervention-long-term. Accessed 5 July 2021.

Forbes (2021). *How much money America's billionaires have made during the COVID-19 pandemic*. Forbes. https://www.forbes.com/sites/chasewithorn/2021/04/30/american-billionaires-have-gotten-12-trillion-richer-during-the-pandemic/?sh=23ecb48df557. Accessed 26 June 2021.

Ford, M., & Ward, K. (2021). COVID-19 in Southeast Asia: Implications for workers and unions. *Journal of Industrial Relations, 63*(3), 432–450.

Gereffi, G. (2020). What does the COVID-19 pandemic teach us about global value chains? The case of medical supplies. *Journal of International Business Policy, 3*, 287–301.

Ghosh, J. (2021, April 27). *Covid-19 in India—Profits before people*. Social Europe. https://socialeurope.eu/covid-19-in-india-profits-before-people. Accessed 16 July 2021.

Guidorzi, B. (2021). The 'shadow pandemic': Addressing gender-based violence (GBV) during COVID-19. In P. Carmody, G. McCann, C. Colleran, & C. O'Halloran (Eds.), *COVID-19 in the Global South—Impacts and Responses* (pp. 117–127). Bristol University Press.

Heine, M., & Herr, H. (2021). *The European Central Bank*. Agenda Publishing.

Hulme, D., & Horner, R. (2020). After the immediate coronavirus crisis: Three scenarios for global development. In P. Carmody, G. McCann, C. Colleran, & C. O'Halloran (Eds.), *COVID-19 in the Global South—Impacts and responses* (pp. 183–192). Bristol University Press.

ILO. (2020a). *Envisaged impacts of COVID-19 pandemic on public works programmes and recommended mitigation measures*. International Labor Organization. https://www.ilo.org/wcmsp5/groups/public/---africa/---ro-abidjan/documents/publication/wcms_750570.pdf. Accessed 17 June 2021.

ILO. (2020b). The supply chain ripple effect: How COVID-19 is affecting garment workers and factories in Asia and the Pacific. Research Brief. International Labor Organization.

ILO. (2021). *World employment and social outlook: Trends 2021*. International Labor Organization.

IMF. (2020, April). *Policies to support people during the COVID-19 pandemic*. Fiscal Monitor, Chapter 1. International Monetary Fund.

IMF. (2021a). *World economic outlook April 2021*. International Monetary Fund.

IMF. (2021b, April). *Fiscal monitor: Database of country fiscal measures in response to the COVID-19 pandemic*. International Monetary Fund Fiscal Affairs Department. https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19. Accessed 16 June 2021.

IMF. (2021c). Fiscal monitor—A fair shot, April 2021. International Monetary Fund.

IMF. (2021d). *COVID-19 financial assistance and debt service relief, latest update June 30, 2021*. International Monetary Fund. https://www.imf.org/en/Topics/imf-and-covid19/COVID-Lending-Tracker. Accessed 1 July 2021.

ITUC. (2020). *Covid-19 pandemic: A brief analysis of the impacts on employment, government's initial responses and trade union's actions in*

the Asian and Pacific Region. International Trade Union Confederation. https://socialprotection.org/sites/default/files/publications_files/20200505%20ITUC-AP%20Report%20%28final%29.pdf. Accessed 1 July 2021.

Kabeer, N., Razavi, S., & van der Meulen Rodgers, Y. (2021). Feminist economic perspectives on the Covid-19 pandemic. *Feminist Economics*. https://doi.org/10.1080/13545701.2021.1876906

Khoo, S. (2020). COVID-19 pandemic ignorance and the 'worlds' of development. In P. Carmody, G. McCann, C. Colleran, & C. O'Halloran (Eds.), *COVID-19 in the Global South—Impacts and responses* (pp. 30–39). Bristol University Press.

Kyritsis, P., LeBaron, G., & Nova, S. (2020). *Hunger in the apparel supply chain: Survey findings on workers' access to nutrition during Covid-19*. Worker Rights Consortium Research Report. https://www.workersrights.org/wp-content/uploads/2020/11/Hunger-in-the-Apparel-Supply-Chain.pdf. Accessed 16 July 2021.

LeBaron, G. (2020). *Combating modern slavery—Why labour governance is failing and what we can do about it*. Polity Press.

Mahler, D., Yonzan, N., Lakner, C., Aguilar, A., & Wu, H. (2021, June 24). *Updated estimates of the impact of COVID-19 on global poverty: Turning the corner on the pandemic in 2021?* World Bank Blogs. https://blogs.worldbank.org/opendata/updated-estimates-impact-covid-19-global-poverty-turning-corner-pandemic-2021. Accessed 25 June 2021.

McCann, G., & Matenga, C. (2020). COVID-19 and global inequality. In P. Carmody, G. McCann, C. Colleran, & C. O'Halloran (Eds.), *COVID-19 in the Global South—Impacts and responses* (pp. 161–171). Bristol University Press.

McCann, G., & Ó hAdhmaill, F. (2020). International human rights and global welfare in the midst of the COVID-19 Pandemic. In P. Carmody, G. McCann, C. Colleran & C. O'Halloran (Eds.), *COVID-19 in the Global South—Impacts and Responses* (pp. 29–38). Bristol University Press

Macrotrends (2021). *S & P Index—Historical chart*. Macrotrends. https://www.macrotrends.net/2324/sp-500-historical-chart-data. Accessed 23 June 2021.

MSF (Médecins Sans Frontières). (2020, May 18). *MSF briefing on agenda item: COVID-19*. World Health Assembly. Médecins Sans Frontières. https://msfaccess.org/sites/default/files/2020-05/WHA73-Briefing-18May2020.pdf. Accessed 16 July 2021.

Milanović, B. (2021, April 20). A shrinking and expanding world. *International Politics & Society*. https://www.ips-journal.eu/work-and-digitalisation/a-shrinking-and-expanding-world-5113/. Accessed 16 July 2021.

Rodrik, D. (2020, April 6). Will COVID-19 remake the world? *Project Syndicate*. https://www.project-syndicate.org/commentary/will-COVID19-remake-the-world-by-dani-rodrik-2020-04?barrier=accesspaylog. Accessed 16 July 2021.

Shankar, K. (2020). The impact of COVID-19 on IT services industry—Expected transformations. *British Journal of Management, 31*(3), 450–452.

Shih, W. (2020, September–October). Global supply chains in a post-pandemic world: Companies need to make their networks more resilient. Here's how. *Harvard Business Review*. https://hbr.org/2020/09/global-supply-chains-in-a-post-pandemic-world. Accessed 29 June 2021.

UNCTAD. (2021). Impact of the COVID-19 pandemic on trade and development—Recovering, but unevenly, Situation as at 31 March 2021. United Nations Conference on Trade and Development. https://unctad.org/programme/covid-19-response/impact-on-trade-and-development-2021. Accessed 26 June 2021.

VOA News. (2021, January 12). Ford shuts down manufacturing operations in Brazil. *Voice of America News*. https://www.reuters.com/article/us-ford-motor-brazil-idUSKBN29G2E9. Accessed 11 July 2021.

WHO. (2021). WHO Coronavirus (COVID-19) Dashboard. World Health Organization. https://covid19.who.int. Accessed 12 June 2021.

Witt, M. A., Li, P., Välikangas, L., & Lewin, A. Y. (2021). De-globalization and decoupling: Game changing consequences? *Management and Organization Review, 17*(1), 1–10.

World Bank. (2021a). *How has the pandemic made the fourth wave of debt more dangerous? Box 1.1. Global economic prospects* (pp. 12–18). World Bank.

World Bank. (2021b). *Debt service suspension and COVID-19*. World Bank. https://www.worldbank.org/en/news/factsheet/2020/05/11/debt-relief-and-covid-19-coronavirus. Accessed 26 June 2021.

World Bank. (2021c). *International debt statistics*. World Bank. https://datatopics.worldbank.org/debt/ids/region/LMY. Accessed 1 June 2021.

Index

A

ACT (Action, Collaboration, Transformation), 110, 471, 480, 486, 490, 493–496, 498, 556
Agricultural sector, 157, 335, 506, 513, 519, 525, 531, 538, 553
Apparel/garment sector, 73, 74, 100, 115, 203, 361, 364, 377, 386, 390, 391, 397, 399–402, 406, 471, 477, 498, 512, 522–525, 527, 531, 537–539, 553, 554, 584, 586
Apple, 99, 512, 513, 528, 529
Asian 'tigers', 288
Automobile sector, 201, 204, 223, 224, 243, 469, 522

B

B2B (Business to Business), 121, 122, 124–126
Backward linkage(s), 85, 204, 208–210, 223, 265
Backward participation, 81, 202
Bangladesh, 79, 112, 206, 210, 305, 336, 345–348, 350, 363, 375, 377, 388–391, 395, 401–403, 406, 471, 474, 494, 497, 498, 506, 509, 518–520, 523–525, 527, 537, 544, 553, 557, 567, 568, 585
Bangladesh Accord/The Accord, 110, 378, 389, 394–397, 403, 406, 407, 468, 469, 471, 472, 481, 486, 490, 491, 496, 524, 525, 537, 553, 554, 556, 558
Brazil, 26, 78, 81, 112, 113, 248, 260, 261, 263–268, 270, 272, 274, 276–282, 339, 344, 346–349, 351, 353, 388, 506, 513, 515, 518, 519, 527, 531, 532, 534–537, 539, 545, 553–556, 574, 580, 584
Buyer-driven, 99, 123, 151, 175, 288, 291, 304, 363, 364

C

Capital accumulation, 50, 153, 312

C. Teipen et al. (eds.), *Economic and Social Upgrading in Global Value Chains*, https://doi.org/10.1007/978-3-030-87320-2

Capitalism, 18, 35–43, 45, 47, 49, 50, 104, 135, 136, 148, 152, 153, 163, 197, 235, 312, 316, 317, 319, 583
Captive governance, 5, 100, 115, 362, 388, 511, 514, 525, 538, 553–555
Catching up, 50, 56, 57, 84, 87, 132, 288, 506, 515, 537, 542, 544–546, 548, 557, 587
China, 27, 39, 43, 45, 47, 48, 50, 56, 60, 61, 66–68, 71, 73, 74, 79, 105, 112, 114, 206, 289, 299, 300, 312, 315–330, 366, 375, 388, 413–431, 497, 506, 508–510, 512, 516, 518, 519, 521, 523, 526–533, 535–538, 542–545, 554, 555, 557, 567, 568, 573–575, 578, 580–583, 585, 587, 588
Cluster-driven path, 22, 23, 101, 397, 404–406
CMT (cut, make, trim) production, 296, 298, 380
Collective agreements, 114, 239, 245, 275, 279, 303, 353, 468, 527, 535, 539
Collective bargaining, 19, 20, 23, 26, 27, 107, 109, 110, 112, 113, 154, 176, 177, 186, 227, 228, 232, 234–240, 242–246, 248, 251, 253, 255, 272, 274, 275, 277–280, 302–304, 330, 348, 362, 378, 379, 381, 386, 440, 468, 471, 472, 479, 490, 492, 493, 495, 496, 517, 518, 522–524, 531, 533–537, 539, 552, 555–557
Colombia, 78, 344–346, 349, 351, 352, 354
Commodity chains, 40, 99, 114, 148, 149, 151
Corporate Social Responsibility (CSR), 22, 23, 28, 108, 126, 129, 135, 154, 374, 377, 394, 437, 444, 450, 456, 458–461, 486–489, 496, 558
COVID-19, 28, 160, 164, 262, 282, 362, 363, 374, 380, 392, 487, 493, 558, 566, 567, 570–576, 581–584, 586–588
CSR-driven path, 101, 108, 387, 388, 393, 404, 551

D

Decent Work Agenda (ILO), 19, 21, 109, 290, 336, 386, 517
Deglobalization, 582
Deindustrialisation, 40
Democratic corporatism, 113, 518, 531
Deregulation, 2, 36, 59, 61, 63, 70, 132, 151, 173, 180, 534, 587
Digitalisation, 311, 314, 315
Discrimination, 20, 136, 145, 146, 149, 153, 154, 159, 162, 163, 399, 474, 531, 551
Due diligence, 379, 381, 438–442, 444–449, 452–460, 462, 488, 489, 496, 497, 558

E

East Asian countries, 59, 291, 366, 545
Ecological standards, 16, 511, 588
Economic development, 3, 16, 24, 27, 65, 66, 69, 82, 90, 240, 260, 402, 413, 414, 417, 418, 420, 527, 537, 547, 553
Economic upgrading, 15, 16, 18, 19, 21, 23, 25–27, 65, 89, 112, 129, 135, 154, 156, 157, 176, 198, 202, 203, 208–211,

223, 228, 232, 246, 254, 267, 288–292, 294, 295, 297, 301, 304, 338, 339, 341, 342, 345–348, 362, 376, 377, 380, 386, 388, 390, 413, 418, 420, 425, 429, 515–517, 520, 522, 526, 528–532, 535–538, 544, 545, 547, 549, 550, 554
Electronics sector, 26, 114, 150, 301, 422, 512, 534, 537, 539
Enabling rights, 19, 20, 176, 177, 189, 290, 362, 386, 517, 518
European Union, 74, 75, 367, 403, 439, 585
Exploitation, 41, 50, 103, 146–150, 153, 157, 158, 161–164, 239, 246, 444, 529, 570, 585
Export orientation, 57, 62, 63, 545

F

FDI (foreign direct investment), 5, 12, 17, 19, 26, 37, 46, 59, 61–63, 68, 69, 84, 89, 91, 132, 133, 200, 204, 206, 223, 287–290, 292, 293, 295–297, 300, 302, 318, 381, 419, 485, 511, 512, 514, 516, 522, 528, 530, 533, 536, 537, 546–548, 552, 577
Financialisation, 14, 18, 44, 316, 541
Fiscal policy, 261, 571, 572, 575, 576
Flexibilization, 107, 151, 157, 162
FoA/Indonesian Freedom of Association Protocol, 27, 110, 468–474, 478–481
Fordist/Fordism/neo-Fordist, 47, 150, 291, 312, 313, 315–317, 327–329, 551
Forward linkage(s), 208–210, 223, 289, 290, 546, 547
Forward participation, 81, 202
Foxconn, 315, 321–323, 512, 528, 533
France, 27, 47, 438, 447, 450
Freedom of association, 19, 20, 23, 26, 106, 112, 176, 177, 184, 186, 239, 275, 290, 304, 361, 386, 440, 451, 472, 473, 475, 476, 478, 491, 495, 517, 518, 524, 526, 530, 537, 552, 556, 557
French Duty of Vigilance Law, 438, 439, 441, 446, 448, 449, 455, 457, 459, 460
Functional upgrading, 18, 65, 80, 84, 85, 176, 202, 289, 297, 298, 300, 338, 377, 390, 420, 515, 516, 521, 522, 524, 532, 533, 535–537, 540

G

Gender, 3, 20, 21, 146–150, 152–158, 160–163, 181, 189, 239, 291, 353, 368, 387, 520, 544, 550, 558, 570
Gendered division of labour, 147, 150
German Supply Chain Due Diligence Act, 441, 452–454, 458, 460
Germany, 27, 47, 56, 203, 322, 389, 392, 421, 423, 438, 453, 472, 527, 545
GFAs (Global Framework Agreements), 109–111, 407, 486, 491, 492, 496, 533, 558
Ghana, 338, 345, 351
Globalization, 12, 24, 70, 74, 89, 107, 148, 150, 151, 419, 421, 467, 468, 567, 582, 583, 586–588
Global North, 1, 2, 11, 15, 16, 18, 19, 24, 56–58, 61, 63, 68, 90, 91, 98, 99, 101, 106–108, 114, 116, 117, 158, 160, 174, 506, 511–516, 521, 523, 532, 536, 539–542, 544, 545, 548, 552,

556, 558, 567, 577, 578, 585, 587
Global South, 2, 3, 11, 13, 15–21, 24, 25, 27, 43, 47, 48, 56–58, 61, 63, 64, 66, 68, 73, 77, 78, 87, 90, 91, 97–99, 101, 106–108, 112–114, 116, 117, 145, 151, 155, 158, 160, 255, 336, 337, 471, 506, 507, 511, 512, 515–517, 519, 523, 532, 535, 539–546, 548–553, 555–558, 567, 570, 575, 577, 578, 584–588
Global value chains (GVCs), 1–6, 9–28, 35, 43, 45–47, 50, 51, 56, 57, 64–66, 68, 70, 74, 77, 79–91, 97–107, 109–111, 113, 114, 116, 121–124, 127, 135, 137, 145–148, 150–160, 162–164, 173–177, 181, 183, 198, 202, 208–211, 222–224, 228, 229, 250, 252, 253, 260, 262, 264, 265, 267, 282, 287–291, 297, 300, 304, 305, 330, 336, 338, 361–364, 369, 374–376, 379–381, 413, 414, 418–422, 425, 426, 429, 430, 437, 440–442, 446, 449, 455, 457–462, 467, 475, 506, 507, 512–518, 520, 521, 524, 527–531, 533, 534, 538–547, 549–558, 567, 581–588
Global Value Systems (GVSs), 35–37, 42
Governance gaps, 362, 363, 376, 437
GPNs (Global Production Networks), 35, 98, 101–104, 122, 126, 127, 152, 155, 173, 174, 176, 177, 186–189, 197, 198, 288, 312, 313
Gramsci/neo-Gramscian, 25, 122, 130, 131, 134, 137
GUFs (global union federations), 467–471, 476, 477

H

Hegemony, 122, 130–134, 137, 529, 587
Hierarchy governance, 5
Huawei, 320, 528
Human rights, 137, 154, 379, 380, 403, 437–442, 444, 447, 449, 450, 452–462, 488, 489, 496, 497

I

IFAs (international framework agreements), 27, 467–474, 476, 480
ILO (International Labour Organization), 45, 109, 110, 153–155, 164, 247, 248, 297, 301, 377, 386, 398, 399, 403, 467, 469, 481, 492, 517, 569
IMF (International Monetary Fund), 16, 21, 63, 132, 261, 291, 550, 567, 569, 576, 577
Imperialism, 41–43, 50, 51
Import substitution, 24, 55, 57–63, 66, 132, 262, 378
India, 26, 39, 45, 47, 48, 112, 133, 174, 178, 180, 182–189, 198–202, 204, 206–211, 213, 224, 228–231, 246–248, 251, 255, 344–346, 348–353, 362, 363, 365–370, 374–381, 388, 471, 497, 506, 508–510, 518–525, 527, 528, 532, 533, 535–537, 542–544, 554, 555, 557, 568, 574, 580
Industrialisation, 39, 40, 50, 179, 289, 304, 517, 530, 536, 540, 545, 552

IndustriALL, 28, 110, 279, 395, 469, 471, 477, 481, 486, 490, 491, 494, 495, 498
Industrial policy, 3, 26, 27, 55, 56, 59, 62–64, 90, 91, 98, 163, 201, 232, 255, 264, 267, 268, 288, 289, 291–295, 301, 304, 329, 413–417, 421, 430, 507, 526–530, 532, 535–537, 544–547, 549, 557, 587
Industrial relations, 3, 25, 98, 99, 101, 102, 105, 109–116, 177, 183, 235, 379, 493, 507, 518–520, 526, 531, 532, 536, 548, 553–557
Informal labour markets, 147
Institutionalism/institutionalist, 98, 122, 128, 136, 163, 492, 493, 507
Institutions, 3, 14, 19, 26, 45, 51, 63, 66, 69, 98, 102, 111, 122, 123, 126, 128–131, 133, 134, 136, 137, 154, 181, 189, 243, 245, 275, 290, 365, 381, 400, 417, 418, 420, 493, 518, 524, 532, 534, 539, 546–549, 554, 577
International trade, 2, 12, 19, 56, 60, 61, 64, 70, 82, 133, 344, 367, 420, 440, 481, 540, 544, 545, 547, 587
Intersectional, 148, 155, 162, 163
Intersectional inequalities, 25, 146, 147, 155, 159, 163
Inter-sectoral upgrading, 18, 84, 85, 90, 515, 516, 528, 529, 537, 545–548
IT/Information Technology services sectors, 8, 25, 44, 64, 106, 116, 173, 174, 180, 181, 184, 189, 313, 320, 520, 521, 538, 555

J

Joint venture(s), 200, 223, 289, 293, 312, 317, 318, 320, 325–327, 329, 421, 512, 529, 530, 536

L

Labor-centered, 114, 403
Labour-centred path, 22, 23, 101, 112, 114, 388, 399, 404, 405, 552, 554, 556
Labour-centric mechanisms, 377, 378, 381
Labour law, 23, 177, 207, 228, 236, 248, 253, 262, 275, 281, 373, 378, 379, 381, 481, 532, 534, 556
Labour market flexibility, 379, 381
Labour rights, 145, 228, 235, 239, 242, 245, 268, 276, 288, 291, 304, 305, 380, 475, 477, 485, 495, 538
Latin America, 40, 46, 59, 63, 68, 69, 74, 85, 90, 134, 150, 532, 540, 542, 546, 569, 579
Lead firms, 2, 4, 5, 9, 11, 12, 14, 17, 19, 22, 26–28, 56, 70, 74, 84, 90, 91, 98–101, 106, 108, 114–116, 173–175, 183, 210, 229, 289, 290, 296, 297, 301, 320, 361, 362, 364, 375, 377, 378, 380, 381, 387, 388, 392–394, 396, 399, 404, 406, 437, 438, 461, 506, 507, 511–516, 520, 521, 523, 524, 527–534, 537, 539–541, 546, 554, 556, 558
Liberalization, 2, 26, 55–57, 61, 63, 64, 70, 73, 108, 112, 134, 351, 355
Living wage, 159, 246, 303, 361, 362, 378, 391, 399, 407, 459, 471, 486, 490, 493, 497, 525

M
M&As (Mergers and Acquisitions), 61, 69, 70
Market-despotic regulation, 116, 319, 553
Market despotism, 112, 399, 518, 520
Market-driven path, 22, 101, 387, 392, 393, 404, 406
Marx/Marxist political economy, 36, 38, 48
Measurable standards, 19, 176, 290, 386, 517
mHRDD (Mandatory Human Rights Due Diligence Laws), 27, 108, 439, 441, 461
MNCs (multinational corporations), 1, 11, 37, 41, 108–110, 173, 177, 179, 231, 232, 388, 535
Modular governance, 12, 99, 100, 114, 115, 511, 512, 514, 519, 523, 555, 556
Monetary policy, 59, 266, 570, 576
Monopoly, 4, 8–13, 24, 41, 45, 58, 70, 124, 183, 351, 428, 514, 515, 541, 582
Monopsony, 9–11, 14, 70, 74, 77, 124, 341, 513, 514, 521, 524, 531, 534, 538
Multi-stakeholder path, 23, 101, 387, 390, 395, 397, 404, 406, 552

N
National champions, 62, 63, 90, 91, 267, 292, 327, 516, 536, 537, 546, 548, 549
Neoliberal, 36, 43–45, 49, 50, 63, 123, 132–135, 137, 145, 223, 259, 260, 262, 263, 267, 280, 534, 587
Network-capitalist regulation, 318, 323
NEV (new energy vehicles), 312, 314
NUMSA (National Union of Metalworkers of South Africa), 227, 228, 236–238, 241–243, 246–251, 253, 255

O
OECD (Organisation for Economic Co-operation and Development), 45, 82, 153, 174, 203, 547
Oligopoly, 8, 10–13, 74, 124, 514, 521, 528
Oligopsony, 9–11, 14, 124, 513, 531, 534, 538
Organised labour, 240, 260, 274, 276
Outsourcing, 2, 17, 48, 64, 100, 105, 123, 132, 136, 137, 162, 174, 177, 184, 263, 278, 280, 313, 372, 487, 506, 511, 521, 540, 587
Own champions. *See* National champions

P
Pakistan, 79, 344, 346–348, 351, 355, 497, 498
Power asymmetries, 4, 5, 9, 27, 98–100, 113, 121, 123, 161, 162, 363–365, 367, 374, 377, 388, 396, 440, 452, 461, 511, 516, 518, 523, 544, 545, 557
Precarization, 158, 162
Process upgrading, 18, 80, 84, 90, 176, 183, 189, 203, 211, 233, 297–299, 338, 339, 390, 420, 515, 516, 521, 522, 524, 529, 532, 535, 536, 542, 546
Product upgrading, 18, 151, 176, 202, 289, 297, 298, 300, 338, 347, 390, 420

PT/Workers' Party, 113, 260, 261, 280, 339, 350, 353, 532, 534
Public governance, 23, 27, 101, 107, 108, 112, 113, 116, 353, 362, 377–379, 381, 406, 407, 530, 553, 555
Public governance path, 23, 101, 388, 402, 404–406, 552, 553, 556

R
Rana Plaza, 27, 386, 389, 391–397, 399, 401–404, 490, 491, 524
Regionalism, 582
Relational governance, 5, 100, 115, 362, 511, 519, 553, 555
Renationalization, 582, 583
Rent-seeking, 8–12, 14, 18, 63, 66, 70, 74, 79, 91, 507, 513–515, 521, 524, 528–531, 534, 536, 537, 540–542
Reproductive work, 147, 158, 159
Resistance, 23, 103, 111, 124, 125, 127, 130, 131, 137, 150, 155, 160, 188, 189, 243, 538
Role of labor, 102, 103, 113

S
Samsung, 293, 296, 299, 300, 512, 513, 528–530, 533, 534
SLAs (service-level agreements), 178, 183
Smallholders, 26, 336–340, 342–349, 351, 352, 354–356, 531, 553
Smile curve, 16, 17, 68, 422
Social dialogue, 20, 21, 28, 112, 268, 277, 278, 336, 337, 401, 471, 480, 492, 533, 538, 581
Social downgrading, 177, 254, 301, 364, 377, 537, 549, 555
Social reproduction, 147–150, 152, 153, 155, 158–161, 164
Social upgrading, 3, 15, 19–28, 97–99, 101, 103, 111–117, 145–148, 153, 154, 156, 157, 159, 162–164, 174, 176, 180, 181, 198, 202, 203, 205, 208, 211, 214, 216, 220, 222–224, 228, 233, 242, 245, 246, 248, 250, 251, 255, 268, 288, 290, 291, 304, 337–339, 341, 345, 346, 349, 352–355, 361–365, 367, 369, 376–381, 386–390, 392–394, 397–399, 402–407, 429, 456, 462, 467, 506–508, 516, 517, 519, 521, 530–532, 534, 537–539, 543, 544, 549–558
SOE (state-owned enterprises), 292, 293, 300, 303, 312, 318, 320, 415–418, 421
Sourcing squeeze, 22, 27, 362, 365, 369, 373, 374, 396
South Africa, 26, 106, 112, 113, 227–233, 235, 244, 247, 248, 253, 255, 388, 506, 515, 518, 519, 527, 531, 535–537, 539, 545, 554–556
Suppliers, 2, 4–6, 9, 11, 12, 14, 17, 19, 21–23, 27, 37, 46, 48, 59, 65, 70, 71, 77, 84, 89, 90, 98–102, 105, 108, 109, 114–116, 123–125, 129, 132, 133, 135, 151, 154, 174–176, 178, 184–186, 189, 231, 237, 240, 263, 279, 289, 290, 296–302, 304, 313–316, 318–322, 326–329, 341, 348, 361–368, 370–378, 380, 381, 387–389, 392–394, 396, 397, 399, 404, 406, 417, 420, 422, 437, 440, 441, 443, 444, 447–449, 451–453, 455, 456, 458–462, 469, 473, 474, 478, 480, 486,

488, 491, 493–495, 497, 507, 511–514, 516, 521–523, 525, 527–531, 533–535, 537–539, 545–547, 553, 554, 556, 558, 583, 584
Sustainable development, 398, 550
Sustainable growth, 27, 204

T
T&Cs (textile and clothing industries), 198–200, 202, 206–210, 216, 222–224
TNCs (transnational corporations), 41–43, 49–51, 122, 132, 136, 137, 163, 164, 584
Trade Unions, 3, 13, 14, 19, 20, 23, 26, 58, 91, 103, 105, 108, 110, 112, 113, 116, 126, 146, 160, 162–164, 189, 228, 234, 235, 239–242, 244, 245, 247, 248, 255, 260, 272, 274–279, 281, 313, 315, 330, 374, 378, 381, 385, 391, 399–402, 439, 441, 444, 448, 450, 451, 454, 456, 460, 467, 469–481, 486, 490–493, 495, 496, 498, 513–515, 517–521, 524–526, 531–535, 537–539, 541, 544, 548, 549, 552, 554–558, 581
Trans-nationalisation, 197, 198

U
UK MSA (Modern Slavery Act of the United Kingdom), 441–446, 448, 458–460
UK (United Kingdom), 27, 134, 189, 344, 389, 404, 441–443
UNGPs (UN Guiding Principles on Business and Human Rights), 108, 438, 439, 448, 449, 453, 455, 457, 458, 585
Unitarist state corporatism, 518, 526
USA (United States of America), 14, 210, 351, 445

V
Value capture, 123, 135, 157, 336, 338, 341
Vertical integration, 5, 99, 263, 316, 322, 323, 328, 424, 428, 511, 513, 514
Vietnam, 26, 82, 105, 112, 202, 206, 288, 290, 291, 293, 295–302, 304, 305, 344–346, 351, 352, 366, 377, 388, 497, 506, 513, 518, 519, 523, 526, 527, 530–533, 537–539, 544, 555, 557, 567, 580, 581
VW (Volkswagen), 229, 232, 237, 263, 277, 315, 533, 588

W
Washington Consensus, The, 17, 21, 43, 63, 68, 90, 134
WHO (World Health Organization), 566
Wintelism, 313, 315, 316
Women, 59, 147, 150, 153–161, 164, 213, 216, 217, 269, 271, 272, 291, 346, 368, 391, 392, 396, 400, 550, 570
World Bank, The, 16, 21, 51, 56, 58, 63, 68, 153, 336, 429, 546, 575, 576
WPC (worker participation committees), 391, 401, 402
WTO (World Trade Organization), 16, 45, 64, 71, 129, 292, 366, 419, 547, 549, 583