Economics, Law, and Institutions in Asia Pacific

Masahiro Kawai · Jong-Wha Lee *Editors*

Rebalancing for Sustainable Growth

Asia's Postcrisis Challenge

Springer

Economics, Law, and Institutions in Asia Pacific

The Asia Pacific region is expected to steadily enhance its economic and political presence in the world during the twenty-first century. At the same time, many serious economic and political issues remain unresolved in the region. To further academic enquiry and enhance readers' understanding about this vibrant region, the present series, Economics, Law, and Institutions in Asia Pacific, aims to present cutting-edge research on the Asia Pacific region and its relationship with the rest of the world. For countries in this region to achieve robust economic growth, it is of foremost importance that they improve the quality of their markets, as history shows that healthy economic growth cannot be achieved without high-quality markets. High-quality markets can be established and maintained only under a well-designed set of rules and laws, without which competition will not flourish. Based on these principles, this series places a special focus on economic, business, legal, and institutional issues geared towards the healthy development of Asia Pacific markets. The series considers book proposals for scientific research, either theoretical or empirical, that is related to the theme of improving market quality and has policy implications for the Asia Pacific region. The types of books that will be considered for publication include research monographs as well as relevant proceedings. The series show-cases work by Asia-Pacific based researchers but also encourages the work of social scientists not limited to the Asia Pacific region. Each proposal will be subject to evaluation by the editorial board and experts in the field.

More information about this series at http://www.springer.com/series/13451

Masahiro Kawai • Jong-Wha Lee
Editors

Rebalancing for Sustainable Growth

Asia's Postcrisis Challenge

Springer

Editors
Masahiro Kawai
Graduate School of Public Policy
The University of Tokyo
Tokyo
Japan

Jong-Wha Lee
Korea University
Seoul
Republic of Korea

ISSN 2199-8620
ISBN 978-4-431-55320-5
DOI 10.1007/978-4-431-55321-2

ISSN 2199-8639 (electronic)
ISBN 978-4-431-55321-2 (eBook)

Library of Congress Control Number: 2014954755

Springer Tokyo Heidelberg New York Dordrecht London

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Preface

The purpose of this book is to describe the challenges facing Asian economies in the post-global financial crisis environment and to identify structural issues and policies that can help guide Asian policymakers to expand the growth potential of domestic and regional demand in coming years, and thereby create a basis for balanced, sustainable, and inclusive long-term growth. These issues and policies span a variety of dimensions, including macroeconomic policy (monetary, fiscal, and foreign currency management), real sector issues (trade and industrial structure), infrastructure development, labor market and social policy, financial sector reform and regulation, and regional cooperation and architecture. It should be emphasized that the notion of balanced and sustainable growth includes environmental sustainability. Adjustments will be required both on the demand side and supply side of the economy.

Key recommendations to achieve these goals include measures to: deepen social protection to support social resilience; increase infrastructure investment to create a "seamless Asia"; enhance productivity in the services sector; establish a region-wide free trade agreement to encourage intraregional trade in goods and services and investment through economies of scale and dynamic efficiency of a larger market; promote a shift to a low-carbon society and support green growth; and deepen and integrate the financial markets to facilitate the recycling of Asia's high savings for investment within the region.

The study benefited from background papers presented in 17 seminars and conferences organized by the Asian Development Bank Institute (ADBI) on the general topic of the impact and implications of the global financial crisis for Asia. Two workshops were held in Tokyo in 2009 and 2010 to review draft chapters of the book. This ADB and ADBI joint study was led by ADBI and conducted in collaboration with ADB under our overall guidance.

We acknowledge the support of so many people and institutions in finalizing this book. Many individuals from ADBI and ADB and from outside contributed to the book. Mario Lamberte (The Asia Foundation) and Peter Morgan (ADBI) coordinated, managed, and finalized the study. They played a leading role in preparing the final book, as well as providing valuable inputs to Chap. 1 (Introduction and Overview) and Chap. 8 (Beyond the Crisis: Toward Balanced and Sustainable

Growth). Yung Chul Park (Korea University) produced Chap. 2 (Crisis Impact) with contributions by Armin Bauer (ADB), Hank Lim (Singapore Institute of International Affairs), and Venkatachalam Anbumozhi (ERIA). Masahiro Kawai (University of Tokyo) and Shinji Takagi (IMF Independent Evaluation Office) produced Chap. 3 (Improving Macroeconomic Stability). Willem Thorbecke (RIETI), Biswa Nath Bhattacharyay (McGill University), Hank Lim, Gloria O. Pasadilla (APEC), and Venkatachalam Anbumozhi produced Chap. 4 (Rebalancing Production) with contributions from Ganeshan Wignaraja (ADBI). Gloria O. Pasadilla and Bart W. Édes (ADB) produced Chap. 5 (Enhancing Social Protection) with contributions by Armin Bauer. David G. Mayes (University of Auckland), Peter J. Morgan, and Hank Lim contributed Chap. 6 (Deepening the Financial System). Finally, Chalongphob Sussangkarn (Thailand Development Research Institute) produced Chap. 7 (Forging Regional Cooperation).

We are most grateful to the reviewers of individual chapters who gave valuable comments They are: Barry Bosworth, Brookings Institution (Chap. 2); Charles Adams, National University of Singapore (Chap. 3); Shujiro Urata, Waseda University (Chap. 4); Gyorgy Szirazcki and Kee Beom Kim, International Labour Organization (Chap. 5); Andrew Sheng, China Banking Regulatory Commission (Chap. 6); and Josef Yap, Philippine Institute for Development Studies (Chap. 7). Additional comments were also provided by the following ADB staff: Juthathip Jongwanich, Rana Hasan, Cyn-Young Park, Donghyun Park, Hyun Son, Lea Sumulong, and Akiko Terada-Hagiwara. Reviews of the structure of the overall book were provided by Richard Baldwin (Graduate Institute of Geneva), Stephen Grenville (Lowy Institute), and Peter Petri (Brandeis University).

Masahiro Kawai
Graduate School of Public Policy
The University of Tokyo

Jong-Wha Lee
Korea University

Contents

About the Authors

Venkatachalam Anbumozhi is a senior economist at the Economic Research Institute for ASEAN and East Asia, and heads its Energy and Environment Intelligence Unit. His previous positions include capacity building specialist at the Asian Development Bank Institute (ADBI), assistant professor at the University of Tokyo, manager and senior policy researcher at the Institute for Global Environmental Strategies, Kobe, Japan, and senior engineer at Pacific Consultants International, Tokyo. He has also advised international agencies on sustainable development projects. He has published several books and numerous articles and reports on natural resource management, environmentally friendly infrastructure design, and public-private partnerships for sustainable development. He obtained his PhD from the University of Tokyo.

Biswa N. Bhattacharyay is a distinguished fellow with the Observation Research Foundation, New Delhi; Faculty, Desautels School of Management, McGill University, Montreal; Visiting Professor, China University of International Business and Economics, Beijing; and Adjunct Professor, FORE School of Management, New Delhi. Until March 2013, he was Advisor (equivalent to Director) at the Asian Development Bank (ADB), Manila. Previously, he was the lead professional and advisor to the dean with ADBI, and worked with ADB's Office of the President, Office of Regional Economic Integration, the Strategy and Policy Department, and the Economics and Research Department. Previous positions include chief researcher and training advisor, Kuwait Central Bank; economic advisor, Qatar Central Bank; professor, National Institute of Bank Management of India; National Institute of Industrial Engineering of India; and University of Missouri-Columbia. He obtained his PhD from Iowa State University and his bachelor's and master's degrees from the Indian Statistical Institute.

Bart W. Édes is director of ADB's Poverty Reduction, Gender, and Social Development Division providing advice, support, and quality assurance in the social sectors and on the social dimensions of loans and technical assistance. Previously he oversaw communications for SIGMA, the joint initiative of the European Union and the Organisation for Economic Co-operation and Development, assisting central and eastern European countries with public governance reform. Prior to that

he was an international trade specialist at the US Department of Commerce. He has a bachelor's degree in government from Georgetown University and a master's degree in public policy from the University of Michigan.

Masahiro Kawai is a project professor, Graduate School of Public Policy, University of Tokyo. Previously, he was dean and CEO of ADBI from 2007 through 2014 after serving as special adviser to the ADB President on regional economic integration and cooperation. He was formerly a professor of economics at the University of Tokyo. He also served as deputy vice minister of finance for international affairs of Japan's Ministry of Finance and chief economist for the World Bank's East Asia and the Pacific region. He has published a number of books and more than 150 academic articles on economic globalization, regional economic integration and cooperation in Asia, and the international currency system. He earned his BA in economics from the University of Tokyo and his PhD in economics from Stanford University.

Jong-Wha Lee is a professor of Economics at Korea University, Seoul, Republic of Korea. Previously he was ADB's Chief Economist and head of the Office of Regional Economic Integration from 2007 to 2010. He also served as a senior adviser for international economic affairs to the President of the Republic of Korea. He has over 20 years of professional experience in economics and academia, and has published numerous books and journal articles in English and Korean, especially on topics relating to human capital, growth, financial crisis, and economic integration. He obtained his PhD and master's degree in economics from Harvard University, and master's and bachelor's degrees in economics from Korea University.

Hank Lim is a senior research fellow at the Singapore Institute of International Affairs. Previously he was a faculty member at the Department of Economics, National University of Singapore. His areas of specialization include the Association of Southeast Asian Nations (ASEAN), Asia-Pacific Economic Cooperation (APEC), and East Asian economies. From 1990 to 1993, he served as the first director-general of the Pacific Economic Cooperation Council International Secretariat in Singapore. He was appointed as an expert for the APEC Individual Action Plan Review of the People's Republic of China in 2004, and for the Philippines in 2009. He holds a master's degree and a PhD in economics from the University of Pittsburgh.

David G. Mayes is director of the Europe Institute and Bank of New Zealand Professor of Finance at the University of Auckland; adjunct professor, University of Canterbury; and visiting professor, University of Buckingham. Prior to this, he held positions that include advisor to the Board, Bank of Finland (1997–2008); professor of economics, London South Bank University (1997–2007); and chief manager, Reserve Bank of New Zealand (1994–1997). His current focus is on the future development of monetary and financial integration and financial regulation. He holds an MA from the University of Oxford and a PhD from Bristol University. He has been an editor of the Economic Journal since 1976.

Peter J. Morgan is senior consultant for research at ADBI, where he follows macroeconomic and financial sector issues. Previously he served as Chief Asia Economist and Chief Japan Economist for HSBC, and earlier held similar positions at Merrill Lynch, Barclays de Zoete Wedd, and Jardine Fleming. He earlier was a consultant for Meta Systems Incorporated in Cambridge, Massachusetts, specializing in energy and environmental areas, and at International Business Information KK in Tokyo. He earned his bachelor's degree in economics from the University of California, Berkeley and his master's and PhD degrees in economics from Yale University.

Yung Chul Park is a distinguished professor in the Division of International Studies, Korea University. From 2005 to 2008 he was research professor and director of the Center for International Commerce and Finance at the Graduate School of International Studies, Seoul National University. He previously served as the chief economic adviser to the President of the Republic of Korea (1987–1988), as president of the Korea Development Institute (1986–1987), as president of the Korea Institute of Finance (1992–1998), and as a member of the Bank of Korea's Monetary Policy Board (1984–1986). He also worked for the International Monetary Fund (1968–1974). He has written and edited several books and numerous research papers.

Gloria O. Pasadilla is a senior analyst at the Policy Support Unit of APEC and a former research fellow at ADBI. She was convenor for the APEC Group on Services from 2007 to 2009, the Philippine lead negotiator for services in the ASEAN–Australia–New Zealand free trade agreement negotiations, and consultant for several international organizations. She has published journal articles and co-edited books on international trade policy, the latest of which is *Trade Policy in Asia: Higher Education and Media Services* published by World Scientific. She holds a PhD in economics from New York University and a master's degree in international law and economics from the World Trade Institute in Bern, Switzerland.

Chalongphob Sussangkarn is a distinguished fellow of the Thailand Development Research Institute (TDRI). He obtained his bachelor's, master's, and PhD degrees in economics from Cambridge University. He taught economics at the University of California, Berkeley (1977–1979), then worked at the research department of the World Bank in Washington, DC (1979–1985). He joined TDRI in 1985 and was appointed president of TDRI in 1996, a post he held until he was appointed Thailand's minister of finance in March 2007. After ending his duties as Minister of Finance in February 2008, he rejoined TDRI.

Shinji Takagi is assistant director at the Independent Evaluation Office of the International Monetary Fund. Now a professor emeritus of Osaka University, he has held numerous appointments including economist and advisor, International Monetary Fund; professorial lecturer, Johns Hopkins University; senior economist, Institute of Fiscal and Monetary Policy, Ministry of Finance, Japan; visiting professor of economics, Yale University; macro-financial expert, ADB; and most recently visiting fellow, ADBI. He holds a PhD in economics from the University of Rochester.

Willem Thorbecke is a senior fellow at Japan's Research Institute of Economy, Trade and Industry. Prior to that, he was a senior research fellow at ADBI and an associate professor of economics at George Mason University. His recent research has focused on exchange rates, trade, and global imbalances. He received a PhD from the University of California, Berkeley and was a visiting scholar at the Cowles Foundation for Research in Economics at Yale University.

Abbreviations

ABF	Asian Bond Funds
ABMI	Asian Bond Markets Initiative
ACIA	ASEAN Comprehensive Investment Agreement
ACU	Asian Currency Unit
ADB	Asian Development Bank
ADBI	Asian Development Bank Institute
ADO	Asian Development Outlook
AFSD	Asian Financial Stability Dialogue
AIA	ASEAN Investment Area
AIGA	ASEAN Investment Guarantee Agreement
AMRO	ASEAN+3 Macroeconomic Research Office
APRA	Australian Prudential Regulation Authority
ASEAN	Association of Southeast Asian Nations
ASIC	Australian Securities and Investments Commission
BAPEPAM	Badan Pengawas Pasar Modal
BFS	Board of Financial Supervision: Reserve Bank of India
BI	Bank Indonesia
BIS	Bank of International Settlements
BNM	Bank Negara Malaysia
BOE	Bank of England
BOJ	Bank of Japan
BOK	Bank of Korea
BOT	Bank of Thailand
BSP	Bangko Sentral ng Pilipinas
CAMELS	capital, assets, management, earnings, liquidity and sensitivity to market risk
CBRC	China Banking Regulatory Commission
CCT	conditional cash transfer
CDM	Clean Development Mechanism
CDS	credit default swap
CEPEA	Comprehensive Economic Partnership for East Asia
CER	closer economic relations

CGE	computable general equilibrium model
CGIF	Credit Guarantee and Investment Facility
CIRC	China Insurance Regulatory Commission
CMIM	Chiang Mai Initiative Multilateralization
CPIS	Coordinated Portfolio Investment Survey
CRR	cash reserve requirements
EAFTA	East Asia Free Trade Area
ECU	European Currency Unit
ERIA	Economic Research Institute for ASEAN and East Asia
EU	European Union
FAD	Fiscal Affairs Department
FOBF	Fund of Bond Funds
FRBMA	Fiscal Responsibility and Budget Management Act
FSB	Financial Stability Board
FSC	Financial Supervisory Commission
FSS	Financial Supervisory Service
FTA	free trade agreement
GATS	General Agreement on Trade in Services
GCI	Global Competitiveness Index
GDP	gross domestic product
HKMA	Hong Kong Monetary Authority
IC	Insurance Commission
ICT	information and communication technology
ILO	International Labour Organization
IMF	International Monetary Fund
IRDA	Insurance Regulatory and Development Authority
LDC	least developed country
LLDC	landlocked developing country
MAS	Monetary Authority of Singapore
METI	Ministry of Economy, Trade and Industry
MFN	most favored nation
MNC	multinational corporation
NIE	newly industrialized economy
OCI	Office of the Commissioner of Insurance
OCR	official cash rate
OECD	Organisation for Economic Co-operation and Development
PBoC	People's Bank of China
PKH	Program Keluarga Harapan (The Hopeful Family Program)
PRC	People's Republic of China
ROO	rules of origin
SDR	special drawing rights
SEBI	Securities and Exchange Board of India
SEC	Securities and Exchange Commission
SFC	Securities and Futures Commission

SMEs	small and medium-sized enterprises
SPI	social protection index
SPRING	Standards Productivity and Innovation Board
UNESCAP	United Nations Economic and Social Commission for Asia and Pacific
US	United States
VAR	value at risk

Chapter 1
Introduction and Overview

Masahiro Kawai and Jong-Wha Lee

Abstract In the past years, Asian economies have become more vulnerable to external shocks. The global financial crisis of 2007–2009 resulted in a huge downturn in export demand, and in some cases, capital flow volatility resulted in turbulence in foreign exchange and capital markets. The export-led growth model which had driven growth of Asian economies showed its limitations and may have aggravated the negative consequences of the global financial crisis for these economies. Asia's growth path needs to avoid large and unsustainable imbalances and address the widening economic and social divide and increasing environmental degradation that accompanied its rapid economic growth. This chapter argues that Asian economies need a new paradigm for development that will create more balanced growth. This new model would entail not only growth that is less dependent on exports, but also growth that is inclusive and environmentally sustainable. This change will require a series of domestic structural reforms in Asia and intensive regional policy coordination.

Keywords Global financial crisis · Asian economies · Export-led growth · Rebalancing growth · Structural reforms · Inclusive and sustainable growth

JEL Codes F13 · F41 · G01

1.1 Purpose of the Book

The global financial crisis of 2007–2009 did not originate in Asia, and Asian economies were mostly spared the direct losses from holdings of toxic assets or from the seizing up of the financial system. Nevertheless, Asian economies were hit hard

M. Kawai (✉)
Graduate School of Public Policy, Tokyo University, Tokyo, Japan
e-mail: mkawai@pp.u-tokyo.ac.jp

J.-W. Lee
Korea University, Seoul, Republic of Korea
e-mail: jongwha@korea.ac.kr

M. Kawai and J.-W. Lee (eds), *Rebalancing for Sustainable Growth,* Economics, Law, and Institutions in Asia Pacific, DOI 10.1007/978-4-431-55321-2_1

by the downturn in export demand, and, in some cases, by turbulence in foreign exchange and capital markets resulting from a sudden stop in the inward flow, and/or the withdrawal, of capital. Although the economic recovery has already begun, the longer-term implications of the global crisis are perhaps even greater than the short-term ones. That is, the export-led growth model, which was so spectacularly successful in driving Asian growth in earlier decades, has hit significant limits.

> However, the global financial crisis rudely shatters the delusion that there are no limits to external demand and hence to export-led growth. Asia is no longer a small economy that faces an effectively infinite global market and can always export its way to high growth rates. (Asian Development Bank [ADB] 2009a, p. 63)

For a variety of reasons, growth in the developed economies will likely fall compared with earlier decades. The continuation of the eurozone sovereign debt and banking crisis, together with the slow pace of recovery of the US economy are two of the most obvious reasons for this. This implies that developed economies are likely to provide less of a source of growth of demand for Asian exports than they did previously. Also, the period of rapid Asian export growth was accompanied by a sharp worsening of global payments imbalances. This appears to have accumulated economic vulnerabilities in Asian economies. Asia's future growth path needs to avoid such a large and unsustainable imbalance. In order to address the widening economic and social division and increasing environmental degradation that commonly accompany rapid economic growth, developing Asian economies must tackle the challenge of making growth more inclusive and sustainable.

Asian economies need to adapt to this difficult environment and to rebalance growth toward greater reliance on domestic and regional demand with a greater emphasis on social and environmental stability. By balanced growth, we mean not only growth that is consistent with smaller payments imbalances and less dependent on exports, but also growth that is inclusive and environmentally sustainable. This new development paradigm for Asia could enable the region to become not only a more important source of global demand but also an inclusive and green region. This change would require a series of domestic structural reforms in Asia and intensive regional policy coordination. We argue that this situation presents an excellent opportunity to make needed structural changes.

The purpose of this book is to identify structural issues and policies that can help guide Asian policymakers to expand the growth potential of domestic and regional demand in coming years, and thereby create a basis for sustainable and inclusive long-term growth. These issues and policies span a variety of dimensions, including macroeconomic policy (monetary, fiscal, and foreign currency management), real sector issues (trade and industrial structure), infrastructure, labor market and social policy, financial sector reform and regulation, and regional cooperation and financial architecture. ADB and the Asian Development Bank Institute (ADBI), together with numerous cosponsors, organized a number of conferences during 2009–2013 examining these issues. This book draws on the results of this research effort.

Section 1.2 reviews the background of export-led growth in Asia, including its results, advantages, and disadvantages. Section 1.3 describes the implications of the global financial crisis for Asia, including the differences from those of the Asian financial crisis of 1997−1998, and the role of global imbalances. Section 1.4 explains why growth rebalancing is a needed long-term adjustment to the crisis. Section 1.5 explains the various dimensions of rebalancing, including sustainable growth, inclusive growth and green growth. Section 1.6 describes the agenda for achieving such balanced growth, which encompasses the dimensions of improving macroeconomic stability, rebalancing production, enhancing social protection, deepening financial markets, and forging regional cooperation.

1.2 The Background of Export-Led Growth

1.2.1 A Strong Driver of Asian growth

Asian economies benefited greatly from a reliance on export-led growth in the pre-crisis two decades. Table 1.1 shows the weighted average growth in GDP over the period 1990–2010 for East Asian economies plus India, Australia, and New Zealand, together with the contribution to growth from domestic demand, exports, imports, and net exports. Average growth and contribution rates are shown for the periods 1990–1999 and 2000–2010. The latter period covers the growth experience of Asia after the Asian crisis of 1997–1998. Sustained growth of exports in both periods supported robust profit growth, which drove domestic private capital investment and consumption. In general, the contribution from net exports was relatively small in most countries, except for the People's Republic of China (PRC), which showed a large positive contribution of 4.7 percentage points in the latter period, followed by Singapore and Hong Kong, China. Between the two periods, GDP growth slowed significantly in the Republic of Korea; Malaysia; Singapore; Taipei,China; and Thailand, followed by a smaller slowdown in Japan. This mainly reflects the impact of the Asian financial crisis and Japan's banking crisis in the late 1990s, respectively. Growth in the PRC was unchanged, while that of India and the Philippines accelerated significantly, reflecting successful economic reforms.

1.2.2 But Running Out of Room?

As a result, the share of emerging Asia in the imports of the developed world expanded rapidly. Figure 1.1 shows the share of Asian exports to the United States (US) and Europe, both excluding and including Japan. Remarkably, the total Asian share of US imports remained stable over the past 20 years at an average of about 35%. The share of emerging Asia doubled from 15 to 30%, but all of this came at the expense of Japan. To be sure, some of this reflected the relocation of

Table 1.1 Contribution to growth of Asian gross domestic product by sector (average percentage points). (Sources: World Bank World Development Indicators (WDI) database, available at: http://data.worldbank.org/indicator, CEIC Data, available at: http://www.ceicdata.com and ADBI estimates)

	1990–1999					2000–2010				
	GDP	Domestic demand	Exports	Imports	Net exports	GDP	Domestic demand	Exports	Imports	Net exports
Australia	3.2	3.0	1.3	−0.7	0.6	3.1	4.0	0.5	−1.2	−0.6
Brunei Darussalam	2.1	2.0	1.6	−1.8	−0.2	1.8	2.7	0.5	−1.5	−1.0
Cambodia	7.2	8.1	6.7	−7.2	−0.4	9.1	9.4	10.3	−10.9	−0.5
PRC	10.0	10.2	2.0	−2.0	0.1	9.8	8.9	7.1	−4.3	2.8
Hong Kong, China	3.6	4.6	9.6	−10.4	−0.8	4.2	2.6	12.5	−11.3	1.2
India	5.8	5.8	1.2	−1.5	−0.2	7.0	6.6	2.0	−2.5	-0.5
Indonesia	4.8	4.9	1.6	−1.5	0.1	5.1	4.7	3.1	−2.4	0.7
Japan	1.5	1.5	0.3	−0.3	0.1	0.7	0.4	0.4	−0.2	0.2
Republic of Korea	6.3	6.3	2.5	−2.4	0.0	4.4	3.8	3.3	−2.5	0.8
Lao PDR	6.3	n/a	n/a	n/a	n/a	6.7	9.9	1.6	−2.2	−0.6
Malaysia	7.2	5.8	10.8	−9.2	1.5	4.8	5.4	5.3	−5.4	−0.1
New Zealand	2.7	2.6	1.5	−1.5	0.0	2.8	3.1	0.9	−1.0	−0.1
Philippines	2.8	3.9	2.3	−3.1	−0.8	4.6	4.3	1.9	−1.4	0.5
Singapore	7.6	3.5	17.1	−15.3	1.9	4.9	1.6	16.6	−15.0	1.6
Taipei,China	6.3	8.5	2.1	−4.3	−2.2	3.4	5.8	−0.8	−1.4	−2.2
Thailand	5.3	4.0	4.3	−2.9	1.5	4.1	3.4	3.3	−2.5	0.8

Table 1.1 (continued)

	1990–1999					2000–2010				
	GDP	Domestic demand	Exports	Imports	Net exports	GDP	Domestic demand	Exports	Imports	Net exports
Viet Nam	7.4	7.3	6.5	−6.3	0.2	7.5	8.9	13.2	−15.3	−2.1
ASEAN9	5.5	5.0	5.4	−4.8	0.6	5.0	4.8	5.5	−5.1	0.4
NIEs3	5.9	6.8	3.3	−4.0	−0.8	4.1	4.2	3.3	−3.3	0.0

ASEAN9 refers to the nine ASEAN member countries excluding Myanmar
NIEs3 refers to Hong Kong, China; Republic of Korea; and Taipei,China
Estimates for ASEAN9 and NIEs3 are based on weights of 2008 PPP GDP
Data coverage:
Brunei Darussalam (1990–2008)
Cambodia (1994–2010) for GDP; and (1994–2010) for domestic demand, exports, and imports
Lao PDR (1990–2010) for GDP; and (2001–2010) for domestic demand, exports, and imports
Viet Nam (1990–2010) for GDP; and (1995–2010) for domestic demand, exports, and imports
ASEAN Association of Southeast Asian Nations, *GDP* gross domestic product, *Lao PDR* Lao People's Democratic Republic, *NIE* newly industrializing economy, *PRC* People's Republic of China

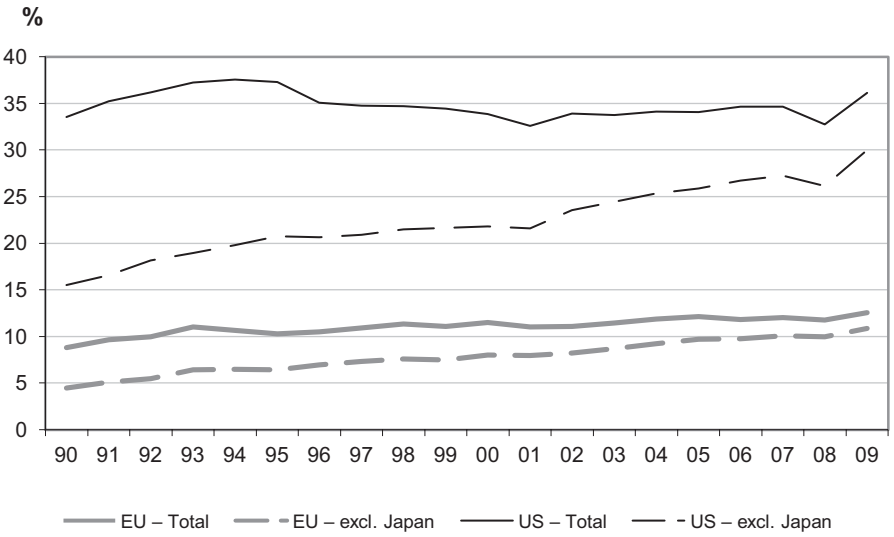

Fig. 1.1 Share of imports from Asia in US and European imports. (Note: *EU* European Union, *US* United States. Source: International Monetary Fund (IMF) Direction of Trade Statistics (DOTS) database, available at: http://www2.imfstatistics.org/DOT/. Accessed 11 April 2012)

production of Japanese companies to other Asian countries. However, a simple extrapolation of the ex-Japan line for the US implies that Japanese exports to the US would disappear entirely in about 10 years, which seems very unlikely. Therefore, the growth potential of the US market for emerging Asia looks capped, even before taking into account any long-term slowdown of US consumer spending. The picture for Asian exports to Europe looks brighter. The share of imports from emerging Asia more than doubled from 5% in 1990 to 12% in 2010, while the share from Japan dwindled to about 2%. This suggests that there may be greater growth potential for emerging Asia in Europe than in the US, although this has to be tempered in light of the effects of the eurozone crisis. Nevertheless, a continued rise of emerging Asia's import share in Europe is likely to become progressively more difficult over time.

1.2.3 Costs of Export-Led Growth

Asia's export drive has not come without costs. Many Asian countries deliberately depressed their exchange rates to encourage competitiveness. This reduced the attractiveness of investment in domestic services sectors and reduced real household income, tending to depress consumption. In some cases, prices of other inputs, including land and energy, were regulated to benefit exporting industries, which diverted income from the rest of the economy and created distortions. The exporting sectors

Table 1.2 Income inequality and poverty trends, 1990–2010 (Sources: World Bank All the Ginis Dataset, available at: http://data.worldbank.org/data-catalog/all-the-ginis; CIA World Factbook, available at: https://www.cia.gov/library/publications/the-world-factbook/; ADB Key Indicators, available at: https://sdbs.adb.org/sdbs/index.jsp)

	Gini coefficient		Poverty index (US$1.25/day, PPP)	
	Earlier	Most recent	Earlier	Most recent
Asia				
PRC	32.7 (1990)	47.8 (2007)	60.2 (1990)	12.3 (2008)
Hong Kong, China	46.0 (1991)	53.3 (2007)	n.a.	n.a.
India	31.2 (1990)	33.9 (2009)	49.4 (1994)	32.7 (2009)
Indonesia	29.2 (1990)	32.3 (2010)	54.3 (1990)	22.7 (2008)
Japan	24.8 (1993)	32.1 (2008)	–	–
Republic of Korea	31.0 (1993)	34.7 (2008)	–	–
Malaysia	47.6 (1992)	46.8 (2009)	2.0 (1992)	0.0 (2007)
Philippines	43.8 (1991)	39.2 (2009)	30.7 (1991)	18.1 (2009)
Singapore	41.7 (1992)	48.1 (2008)	–	–
Thailand	46.2 (1992)	39.3 (2009)	5.5 (1992)	0.3 (2008)
Viet Nam	35.7 (1993)	35.6 (2008)	63.7 (1993)	16.8 (2008)
Others				
Brazil	60.6 (1990)	52.7 (2011)	15.5 (1990)	4.7 (2009)
France	32.7 (1995)	32.7 (2008)	–	–
Germany	30.0 (1994)	27.0 (2006)	–	–
Mexico	51.1 (1992)	47.5 (2010)	4.5 (1992)	1.2 (2008)
Russian Federation	48.3 (1993)	42.2 (2010)	2.8 (1993)	0.0 (2008)
South Africa	59.3 (1993)	66.5 (2010)	24.3 (1993)	13.7 (2009)
United Kingdom	36.5 (1990)	35.9 (2010)	–	–
United States	42.8 (1990)	47.7 (2010)	–	–

Number in parentheses denotes year of observation
PPP purchasing power parity, *PRC* People's Republic of China, — not available

also received preferential access to credit in many cases, while financial repression deprived savers of adequate returns on their investments and reduced the supply of finance to domestic sectors and small and medium-sized enterprises (SMEs).

To be sure, poverty declined dramatically in the region as a result of rapid economic growth. The PRC showed by far the most dramatic result, with the share of the population below the poverty line of US$ 1.25 per day dropping from 60% in 1990 to only 13% in 2008 (Table 1.2). Viet Nam also registered rapid improvement in its poverty reduction efforts, as the share of its population below the poverty line declined to 17% in 2008 from 64% in 1993. Table 1.2 shows that at the same time, however, income inequality, as measured by the Gini coefficient, worsened in seven out of eleven major Asian economies. This provides some evidence that growth was becoming less inclusive.

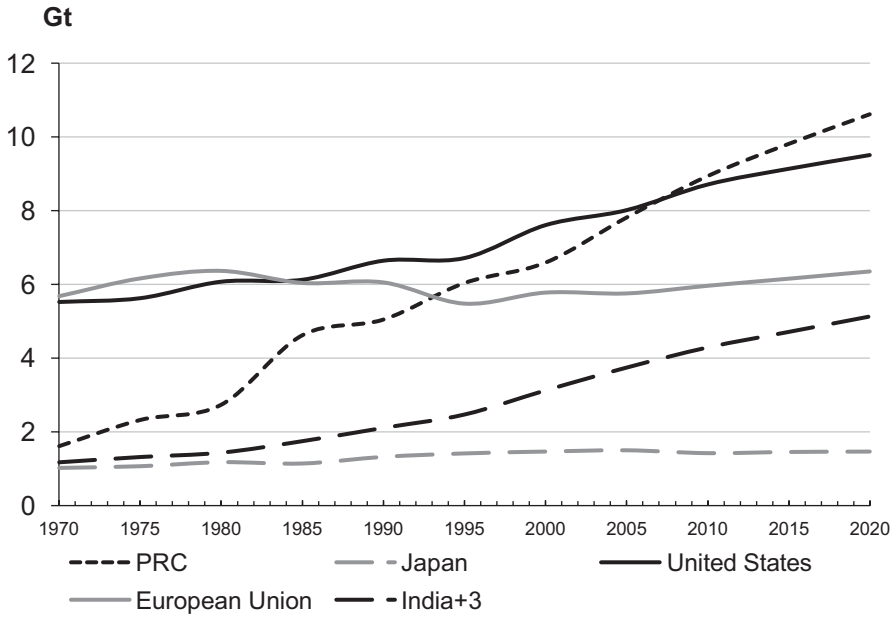

Fig. 1.2 Total greenhouse gas emissions in major regions and countries. (Note: *PRC* People's Republic of China, *Gt* gigaton, *India+3* Bangladesh, India, Pakistan, and Sri Lanka. Source: US Energy Information Administration 2009)

Moreover, rapid growth of manufacturing was also associated with widespread environmental degradation in many Asian economies, as exporters and governments sought to minimize their costs and governments turned a blind eye in their support for rapid growth. Figure 1.2 shows that greenhouse gas emissions rose rapidly in the PRC and India, with those in the PRC now surpassing those of the US.

In addition, export-led growth, particularly after the Asian financial crisis, increased the vulnerability of emerging Asia to external shocks. The region's reliance on external demand, especially from the US and Europe, made its growth dependent on the global business cycle. As seen during the global financial crisis of 2007–2009, the sharp drop in industrial country demand adversely affected growth in many export-oriented Asian economies.

1.3 The Global Financial Crisis and Asia

1.3.1 Differences from the Asian Financial Crisis

The global financial crisis of 2007–2009 differs greatly from the Asian financial crisis of 1997–1998, in its locus, causes, lessons, and responses. The Asian financial

crisis started in mid-1997 with the speculative attack on the Thai baht, and soon spread to a number of other countries, especially the Republic of Korea, Indonesia, and Malaysia. The circumstances of the crisis were hardly unique to Asia, as many emerging economies around the world encountered crises during the 1980s and 1990s. The fuel for all crises is excessive leverage, but the connecting thread for emerging markets in recent years was the trend of financial globalization, especially the liberalization of capital market flows. Capital poured in from developed economies in search of higher return, but local financial markets were not sufficiently deep or flexible to absorb such large and volatile capital movements, while local policy authorities often lacked the capacity to respond effectively and rapidly.

The acceleration of capital flows was compounded by the tendency of many Asian economies to maintain foreign exchange rates relatively fixed to the US dollar. The expectation of continued fixed exchange rates made it very attractive for local borrowers to borrow in US dollars, where interest rates were substantially lower, while investors tended to ignore currency risks as well. The easy availability of large-scale capital inflows led to unsustainable investment booms and large current account deficits across the region. This created the well-known problem of "double mismatches" of both maturity and currency.

However, many countries did not maintain sufficient foreign exchange reserves to sustain an effectively fixed rate in the face of ballooning foreign currency liabilities, and the unsustainability of the situation became apparent to market participants, leading to capital flight and speculative attacks on currencies. Banking sectors and bank regulation were weak. When currencies such as the Thai baht, Korean won, Malaysian ringgit, and Indonesian rupiah plunged during the Asian financial crisis, the sharp depreciation of currencies increased the net indebtedness and debt servicing burden of domestic borrowers in local currency terms, further exacerbating the crisis. Finally, these developments substantially outstripped the capacity of regulatory authorities to follow and control them.

Fortunately for Asia, growth in the developed economies had remained strong. This provided the support for an export-led recovery, which was further fueled by weakening currencies across much of the region. However, this lesson may have been learned too well.

1.3.2 Major Lessons from the Asian Financial Crisis

Several important lessons were learned from the Asian financial crisis, including:

- Greater exchange rate flexibility was needed;
- Central banks needed to improve their monetary policy framework and credibility;
- Banks and corporates needed to strengthen their balance sheets and reduce exposure to "double mismatches" of maturity and currency;
- Bank surveillance and regulation needed to be strengthened;

- Domestic bond markets needed to be deepened to provide an alternative source of funding;
- Prudential management of capital flows was necessary; and
- Countries needed higher levels of foreign exchange reserves, or the establishment of a credible regional facility, to provide hard currency liquidity.

In contrast, the global financial crisis originated in the developed economies, especially the US, that had large and sophisticated financial systems, but nonetheless allowed the buildup of systemic financial risks. Once again, excess leverage and maturity mismatches played a key role, as banks financed long-term investments in mortgage-related and other derivative products with short-term wholesale funding. The deceptive stability of the coveted AAA rating bestowed on complex structured products by the major credit rating agencies on the basis of sophisticated but insufficiently tested valuation models seemed to justify ever higher degrees of leverage.

As with many past crises in the financial center, product innovation played a key role—in this case, the alchemy of slicing, dicing, and repackaging of mortgage loans and similar types of assets, many of dubious and declining credit quality, to produce assets with supposedly superior returns. The proliferation of trading of such products and their derivatives in over-the-counter markets rather than on exchanges contributed to the distribution of opaque risk, and to the development of increasingly complex and sensitive financial networks. Once again, the regulatory authorities were well behind the curve in terms of their perception of the systemic risk that had built up in the financial system. Their faith in the functioning of free markets and market incentives to avoid the buildup of excessive risk also proved to be very wide of the mark.

Asian economies were for the most part innocent bystanders caught up in this financial train wreck. Their economic and financial fundamentals had improved substantially since the time of the Asian financial crisis. Their financial systems were still relatively "backward" in terms of the amount of reliance on sophisticated derivative products such as asset-backed securities, while their financial regulators were much less bewitched by notions of self-regulating markets, and hence much more willing to impose prudential norms on lending behavior. Asian economies' exposure to foreign currency debt was much reduced, and they had built up substantial foreign exchange reserves. Asia held relatively little of the toxic assets, so total financial losses accounted for only about 5% of global losses, according to IMF estimates (Table 1.3).

However, while exports were the main savior of Asian economies during the Asian financial crisis, they proved to be their chief source of vulnerability during the global financial crisis, due to the collapse of demand in the developed economies and the subsequent sluggish rate of recovery. During the frist quarter of 2009, GDP contracted in the more export-dependent Asian economies (on a year-on-year basis): by 9.5 % in Singapore; by 9.1% in Taipei,China; by 8.9 % in Japan; by 7.8 % in Hong Kong, China; by 7.1 % in Thailand; by 6.2 % in Malaysia; and by 4.2 % in the Republic of Korea. For many regional economies, the GDP decline bottomed in the first quarter of 2009. In addition, Asian economies suffered sharp capital outflows—as developed country financial institutions withdrew capital from the periphery to

Table 1.3 Total estimated financial sector losses (October 2009, US$ million). (Source: IMF 2010)

	Total assets	Losses	Losses as % of total assets	Losses as % of global losses
United States				
Total loans	8,059	654	8.1	34.5
Total securities	4,502	371	8.2	40.5
Total loans and securities	12,561	1,025	8.2	36.5
Europe				
Total loans	25,979	1,142	4.4	60.3
Total securities	9,261	476	5.1	52.0
Total loans and securities	35,240	1,618	4.6	57.6
Asia				
Total loans	6,150	97	1.6	5.1
Total securities	1,728	69	4.0	7.5
Total loans and securities	7,879	166	2.1	5.9
Total				
Total loans	40,188	1,893	4.7	100.0
Total securities	15,491	916	5.9	100.0
Total loans and securities	55,680	2,809	5.0	100.0

bolster the reserves in their home countries—which developed into a US dollar liquidity shortage in some countries, especially the Republic of Korea and Indonesia.

1.3.3 How the Crisis Happened in the US

Three major contributing causes of the crisis have been identified: excessively easy monetary policy in the US; regulatory failures, both at the micro and macroprudential levels; and the buildup of global payments imbalances. The first factor has featured in the debate between John Taylor (Taylor 2009) and US Federal Reserve (Fed) Chairman Ben Bernanke (Bernanke 2010) about the appropriateness of the monetary policy stance in the period 2002–2006. Moreover, the Fed was inclined not to lean against emerging asset price bubbles, as it believed that such bubbles were difficult to identify, and that it could move swiftly to clean up the damage afterward. The second factor includes numerous regulatory lapses, including the sharp deterioration of the quality of mortgage loans in the previous decade, the lack of oversight over "shadow banking" activities (including off-balance-sheet structured investment vehicles of banks), the proliferation of credit default swaps (CDS), the procyclical bias and scope for moral hazard of the Basel II capital requirements

for banks, the lack of oversight of and special resolution arrangements for non-bank financial institutions, overly fragmented regulatory structure, regulatory gaps, a lack of attention given to financial derivatives, excessive regulatory reliance on credit ratings, and the problem of "too-big-to-fail" and "too-interconnected-to-fail" institutions, especially those with large international operations. The third factor refers to the large and persistent current account deficits in the US and equally large and persistent current account surpluses in East Asian and oil producing countries. See, for example, IMF (2009a, 2009b and 2009c).

In Europe, financial institutions not only invested in toxic financial assets, but also had exposure to inflated domestic real estate and volatile Eastern European economies (a closer parallel to the Asian financial crisis). They financed these risky investments largely by wholesale funding through international and domestic capital markets. In the eurozone a single monetary policy allowed for divergences among countries in real interest rates and real effective exchange rates due to different inflation rates, while nominal interest rates had largely converged to the German level. As a result, countries with higher inflation rates faced lower real interest rates, thereby fueling active housing markets, property development, and foreign lending. These activities contributed to a buildup of macroeconomic financial risks in eurozone countries such as Greece, Ireland, Portugal, and Spain, while even more extreme risks developed in peripheral countries such as Hungary, Iceland, and the Baltic States, where European banks had large exposures.

The direct impact of the subprime troubles on Asia was generally small. The region's banking system was in relatively good health when the global financial crisis erupted, boosting their resilience to the shock. The region, however, was affected in other ways. Loss of investor confidence resulted in large sell-offs in equity markets and widening credit spreads for emerging Asian borrowers. As a result, new equity and bond issuance was either postponed or reduced (Lee and Park 2009).

1.3.4 The Role of Global Imbalances

Although Asia played little role in the first two contributing causes, it featured heavily, along with the oil-producing nations, in the third contributing factor. Figure 1.3 shows the trend of major current account imbalances. The US current account deficit tended to mirror Japan's current account surplus during the 1980s and 1990s. However, more recently, Japan's surplus was somewhat eclipsed by the rise of that of the PRC. Asia excluding Japan and the PRC recorded a consistently large and positive surplus after the Asian financial crisis of 1997–1998, although again it was overshadowed by that of the PRC from 2005 on. The surplus of oil-producing countries also contributed significantly to the overall balance during periods of high oil prices.

Figure 1.4 shows that Asia's large net savings surplus emerged in 1997 at the time of the Asian financial crisis, and persisted, despite the recovery of investment spending to previous levels by 2006. The view is widespread, although controversial, that the global payments imbalance contributed to the global financial crisis by fostering international capital flows from the surplus to deficit countries, which depressed global and US long-term interest rates, and thereby led to the development

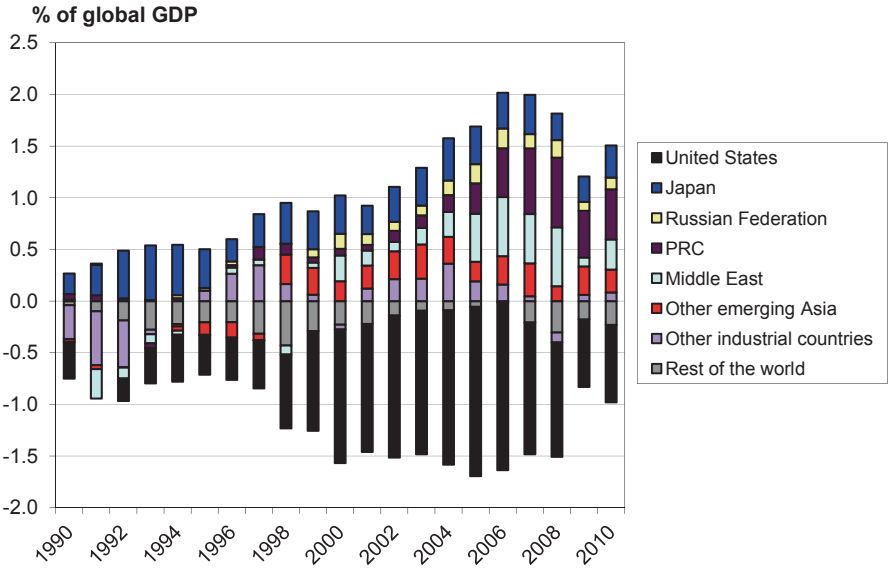

Fig. 1.3 Path of major current account imbalances. (Note: *GDP* gross domestic product, *PRC* People's Republic of China. Source: International Monetary Fund, World Economic Outlook database. available at: http://www.imf.org/external/pubs/ft/weo/2011/09/weodata/index.aspx. Accessed 6 March 2012)

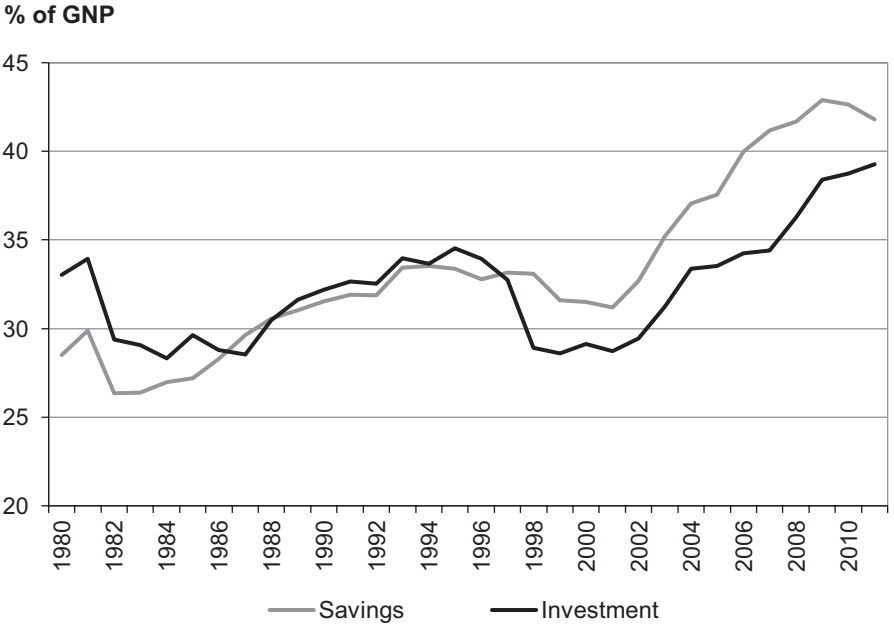

Fig. 1.4 Savings–investment balance in emerging Asia, 1980–2011. (Note: *GNP* gross national product. Source: International Monetary Fund, World Economic Outlook database, April 2012, available at: http://www.imf.org/external/pubs/ft/weo/2012/01/weodata/index.aspx. Accessed 3 July 2012)

of asset price bubbles, most notably in the US housing market. This capital movement fueled the "global savings glut" identified in Bernanke (2005) as the possible answer to the "conundrum" described by his predecessor Alan Greenspan (Greenspan 2005), i.e., the apparent decoupling of short-term and long-term US interest rates during the period 2002–2005.

We are skeptical about this view. To be sure, the accumulation of large-scale foreign exchange reserves by several Asian and other economies may have contributed to low long-term interest rates in the US and elsewhere. However, we believe that the main responsibility for the development of housing price bubbles and excessive financial risk-taking rests with the relevant domestic monetary and financial sector authorities. There is ample evidence of a wide range of policy and regulatory failures in the US and elsewhere. Perhaps the most persuasive piece of evidence is that Canada—which faced long-term interest rates very similar to those of the US during the past decade and bigger increases in housing prices—managed to avoid a financial crisis, mainly as a result of much more prudent financial sector regulation that limited the buildup of leverage.

Another contributing factor in the development of the crisis was a weak international financial architecture that was unable to cope with the pace and complexity of financial globalization and rapid innovation. The International Monetary Fund (IMF) failed to discern the depth and severity of the macroeconomic and financial risks, and was not able to compel either the US or Europe to take necessary policy steps to reduce such risks. Moreover, there was no international framework capable of regulating, monitoring, and supervising the cross-border activities of systemically important financial institutions, their products, and, more generally, global financial markets. The existing delegation of responsibilities between home- and host-country regulators proved woefully inadequate.

1.3.5 Impact of the Crisis on Asia

The US subprime mortgage crisis that had emerged by the summer of 2007 spread to the entire US financial system and financial markets of other industrialized countries. With the failure of Lehman Brothers in September 2008, the crisis in the US and Europe moved quickly from the financial sector to the real economy. Real GDP contracted sharply in the US, Europe, Japan, and other economies affected by sudden stops—or even reversals—of capital flows and sharp declines in exports. Exports plunged across the world, delivering a major shock to even those economies that were little affected by the initial financial shock.

Asian economies were hit hard by the downturn in export demand, and, in some cases, by turbulence in foreign exchange and capital markets as a result of a sudden stop in the inward flow, and/or the withdrawal, of capital. (See Chap. 2 for a more detailed description of these impacts.) Exports virtually collapsed, industrial production declined sharply, and real GDP contracted steeply in Japan; in the newly industrialized economies of Hong Kong, China; the Republic of Korea; Singapore; and Taipei,China; and in export-dependent middle-income Association of Southeast

Asian Nations (ASEAN) countries like Malaysia and Thailand. Real GDP did not contract in the PRC, India, or Indonesia but their growth rates slowed.

The global financial crisis had an adverse impact on employment in Asia, slowing down job creation and even leading to job losses in some sectors. Workers reacted in different ways to this downturn in the labor market. In more developed countries like the Republic of Korea, the crisis led to a reduction in labor force participation as workers were discouraged to enter the labor market or chose to withdraw from the labor force. In developing countries like Thailand, the crisis' adverse impact on employment led to formal sector workers (mainly in industry) seeking employment in the informal sector (mainly in unpaid family work and working for their own account). On the other hand, in order to avoid mass layoffs, some firms in countries with flexible labor laws (e.g., the Republic of Korea) coped with the crisis by reducing working hours or enforcing forced leaves among their employees. Meanwhile, special rules had to be drawn up in countries with more rigid labor laws—an example is the Philippines where the Department of Labor and Employment issued a special advisory that temporarily allowed firms to implement flexible working arrangements.

One problem highlighted by the crisis is youth unemployment, particularly in the Republic of Korea. In early 2008, employment among the youth actually picked up as firms perceived that the crisis would be short-lived. However, as the crisis dragged on in late 2008 and into 2009, the youth were hit the hardest in terms of employment, practically wiping out the employment gains in early 2008. The crisis thus exacerbated the trend of declining youth employment in the Republic of Korea, which has been happening since 2001. A reason for this may be the structural change in the Korean economy toward more knowledge- and technology-intensive industries, which reduces demand for labor in general but increases the demand for more skilled and experienced workers.

The crisis also slowed down the gains the region had made in poverty reduction. Under the current outlook, it is estimated that in 2009, about 53.3 million more people (using US$ 1.25 poverty line) and 71.3 million more people (using US$ 2 poverty line) have remained in poverty than if Asia's robust pre-crisis growth rates had continued. In 2010, the corresponding figures are estimated to be about 78 million and 108 million people, respectively (ADB 2010).

1.3.6 Lessons from the Global Financial Crisis

The global financial crisis highlighted numerous weaknesses in the financial systems of developed economies and in the global financial architecture. It also pointed out unfinished work for Asian economies left over from the Asian financial crisis, and new work as well. Lessons of the crisis for the developed economies and the global architecture highlighted the following needs[1]:

[1] See IMF (2009), de Larosière (2009), FSA (2009), and the Group of 30 (2009) among others.

- expand the regulatory perimeter, close regulatory gaps, and prevent regulatory shopping;
- strengthen capital requirements, especially for systemically important institutions;
- define liquidity standards and strengthen liquidity provision;
- establish a macroprudential framework that identifies risks building up in the system as a whole, which possesses the prudential tools and the authority to take steps to ameliorate those risks;
- reduce the procyclicality of regulation and accounting rules;
- develop a robust framework for clearing and monitoring trades of derivative products;
- expand the monetary policy framework to take financial stability and asset prices into account;
- increase coordination of global surveillance;
- reform the relation of home- and host-country regulators for internationally active financial institutions; and
- establish a framework for the resolution of all systemically important financial institutions.

Specific challenges for Asian economies include the following:

- improve the Chiang Mai Initiative Multilateralization (CMIM) as a regional financial safety net, including strengthening the surveillance capacity of the ASEAN+3 Macroeconomic Research Office (AMRO);
- develop the policy tools to lessen the negative impact of volatility of capital flows;
- take further steps to deepen domestic bond markets and otherwise enhance the ability to recycle savings within the region to support long-term investment and consumption; and
- expand intra-regional trade, especially for final goods, to reduce overdependence on extra-regional export markets.

However, perhaps the greatest lesson for Asian economies is the need to reduce reliance on exports to the developed economies by taking measures to enhance the growth potential of domestic and regional final demand. This is the theme of the entire book, and will be discussed at greater length below.

1.3.7 Short-Term Implications—Need for Dramatic Policy Response

The severity and synchronous nature of the global downturn soon led to the realization that it had the potential to become a global depression, potentially the worst since the Great Depression. The IMF and other global organizations called for large-scale and coordinated global responses to provide support for both the global economy and financial sector (Freedman et al. 2009). The Group of 20 (G20) summit,

first held in Washington (November 2008) and then in London (April 2009) and in Pittsburgh (September 2009), became the premier forum for international policy coordination efforts to enable the global economy to recover from the crisis and put economic activity back on track to sustainable growth.

Developed economies injected massive liquidity into their financial markets to avert a systemic collapse of their banks and financial institutions. At the same time, central banks reduced policy rates to historic lows. New measures were also introduced to ensure the availability of funds to keep financial markets functioning. In addition, massive fiscal stimulus packages were implemented to prevent a sharp contraction in the economies of the US, Europe, Japan, and the PRC. Overall, the combination of these measures staved off a meltdown that had threatened the industrial world (ADB 2009b).

Similar to the US and Europe, many Asian economies responded with aggressive measures to ease monetary and fiscal policy and to support national financial systems. Although it is difficult to estimate the actual impact of these packages, ADB estimated that fiscal stimulus measures taken by the PRC, Malaysia, Singapore, and Viet Nam exceeded 5% of GDP, while those of Hong Kong, China; India; Japan; the Republic of Korea; the Philippines; Taipei,China; and Thailand amounted to between 2 and 5% of GDP (ADB 2009a). These policy actions are described in detail in Chapter 3.

As a result of these large-scale measures, combined with their fundamental financial and economic resilience, Asian emerging economies led the global growth recovery, having averaged 10% annualized growth on a simple average basis from April through September 2009, a very impressive performance indeed. Growth was especially strong in the PRC, India, the Republic of Korea, Malaysia, Singapore, Taipei,China, and Viet Nam. In view of its size, the PRC made by far the largest contribution to regional growth, and the largest to global growth.

The fact that Asian economies were able to take aggressive policy measures underscored the dramatic improvement that had taken place in their macroeconomic and financial sector fundamentals since the Asian financial crisis of 1997–1998. A number of regional central banks had achieved low inflation, as a result of commitments to non-inflationary policy, while many governments had substantially reduced fiscal deficits and contained levels of public debt. Private sector banks and nonfinancial corporations had also achieved stronger balance sheets—including lower non-performing loan ratios and higher capital adequacy ratios—and less exposure to adverse currency movements.

1.4 Long-Term Response—Why Rebalancing Is Important

Having achieved the goal of short-term economic recovery, Asian policymakers now need to focus on measures to restore sustainable medium- to long-term economic growth. This means that Asia should not simply go back to a pattern of export-led growth as followed prior to the global financial crisis. We believe that

the new reality requires measures to reduce internal and external imbalances and lessen excessive dependence on export growth targeted at the US and European markets. Moreover, the new growth pattern needs to be more inclusive and environmentally sustainable, in order to offset some of the excesses that developed during the period of export-led growth. There are four factors behind this consideration.

1.4.1 Reduce Dependence of Growth on Exports to the Developed World

First, Asian economies benefited tremendously from export-led growth centered on US and European markets during the years leading up to the global financial and economic crisis. This growth model, however, can no longer be relied upon to sustain the region's economic growth. The reason for this is that US consumer spending will likely remain sluggish over many years to come, and this will be a structural phenomenon, not a temporary one. US personal consumption was excessively large until mid-2008, reflecting homeowners' inflated ability to borrow against the bloated housing equity created by the housing price bubble. This overconsumption in the US is now under retrenchment, forcing households to repay debt and rebuild wealth, a process which will last for some time. In addition, the eurozone crisis is likely to depress growth in the EU until major structural adjustments are completed. As a result, US (and European) consumers are unlikely to be the major source of growth for export-oriented Asian economies. In addition, the size of US and European potential GDP may have shrunk and their potential growth rates are likely to be lower over the medium-term.

1.4.2 Reduce Risks Associated with Unsustainable Global Imbalances

Second, the global payments imbalance was a reflection of US overspending and East Asia's (and oil producers') underspending relative to their respective outputs. Asia needs to reduce its payments surplus by expanding demand. A more balanced pattern of growth in Asia is likely to contribute to more stable growth, both in the region and globally. Of course, Asia cannot achieve this alone, as imbalances need to be addressed by both surplus and deficit countries.

1.4.3 Reduce Vulnerability to External Shocks

Third, the size of the shock experienced by Asian economies during the global financial crisis was roughly proportional to the share of exports in GDP, especially

exports directed at final demand in the developed economies. Until the global financial crisis export volatility had been seen as a necessary price to achieve high growth. Now that the potential growth of developed economy export markets has slowed, the volatility entailed by such export-dependence becomes less tolerable. Relying more on domestic and regional demand should lessen the degree of correlation with global cycles, thereby potentially reducing the volatility of output. Strengthening domestic financial systems, surveillance, regulation, and monetary policy frameworks, as well as enhancing regional economic and financial cooperation, could also contribute to reducing vulnerability to external shocks and reducing the likelihood of internal shocks developing.

1.4.4 Reduce Distortions to Economic Structure That Hinder Growth and Reduce Welfare

Fourth, the easy path of export-led growth led many Asian countries to ignore or suppress measures that could raise the growth potential from domestic and regional demand. These include exchange rate adjustments, deregulation, dismantling of export subsidy arrangements, financial development, regional trade and investment agreements, measures for income redistribution, and improvements in social safety nets. The falling away of the export crutch provides a golden opportunity to refocus policy attention in these areas that received insufficient policy attention earlier.

Exchange rate adjustments are a key aspect of growth rebalancing. The appreciation of Asian currencies against the US dollar is likely to be a necessary and important ingredient for global rebalancing. Before the global financial crisis, pressure from exporters favored undervalued exchange rates that benefited them but discouraged investment in services and other non-tradables. Undervalued exchange rates also tended to depress real incomes and purchasing power, which discouraged consumer spending.

Productivity growth in services sectors has often been hindered by excessive regulation and barriers to entry that stifle competition. Deregulation of services sectors, including financial services, and development of regional investment and free trade agreements (FTAs) were often not given sufficient priority. Financial "repression" was used as a tool to guide domestic savings toward favored sectors, especially exporters, while denying consumers the ability to achieve higher asset returns or borrow against future income. Credit provision to small- and medium-sized enterprises (SMEs) was frequently given short shrift as well.

Exporting sectors were often viewed as the primary vehicle for absorbing excess labor from the agriculture sector. However, in many cases, they proved to be not very effective in this role, mainly because of the high capital intensity of export industries limited the degree of labor absorption. Studies show that labor absorption of exporting sectors over the past decade was in many cases much lower than in earlier periods. As a result, dual labor market structures persisted. The new reality provides a good opportunity to review labor market policy with an eye toward making labor markets more inclusive and overcoming dualistic labor markets. Income distribution policies also need to be reviewed.

Expansion of manufacturing production was often encouraged regardless of the cost in terms of degradation of public health and the environment, and excessive consumption of fuels whose use generates greenhouse gases. Such a development path is no longer sustainable. Moreover, innovations related to energy conservation and greenhouse gas reduction may prove to be dynamic new sources of growth.

1.5 Rebalancing for a Stable, Balanced, and Sustainable Development

The concept of "rebalancing" should not be limited to the idea of correcting unsustainable current account imbalances, although that is the starting point. A closely related aspect is balanced growth, i.e., growth that is socially and environmentally more sustainable. Asia's growth model so far has neither adequately emphasized the importance of social inclusiveness nor environmental consequences of growth. As a result, high economic growth has been accompanied by the social divide—such as inequalities in income distribution—and environmental degradation. Asia needs to achieve growth that is more inclusive, in that it creates employment and reduces poverty and income disparity; and growth that is sustainable, in that it is consistent with long-term stabilization of greenhouse gas emissions and other resource constraints.

1.5.1 Rebalancing Spending and Production

The idea of growth rebalancing starts from the point that the global current account imbalance that developed during the previous decade and a half was excessively large and not sustainable. Moreover, the imbalance exacerbated the negative consequences of the global financial crisis. What levels of imbalances are sustainable in the long run remains a matter of much debate. Some have argued that the US now needs to run a current account surplus to offset previous deficits, but this sounds too extreme, at least as long as the US dollar remains a reserve currency that other countries are happy to accumulate. There is some consensus in favor of a deficit of 3 % of GDP or less as being sustainable, although this depends on other variables, including the potential growth rate, returns on investment, and time preference.

To be sure, the global payments imbalances have already corrected substantially since the global financial crisis as a result of the implosion of US consumption and investment, which more than offset the sharp rise in the fiscal deficit of the US. The US current account surplus abruptly shrank to 2.7 % of GDP in 2009, a shrinkage of over half from the peak. However, this improvement was largely cyclical, a result of the economic downturn, and it remains to be seen whether the imbalances begin to expand again as the US economy recovers.

Correction of the global current account imbalance needs to be addressed by both surplus and deficit countries. However, it is clear that some Asian policies have contributed to such imbalances. These include: depressing foreign exchange rates through large-scale accumulation of foreign exchange reserves; distorting resources toward exporting sectors through various subsidy programs; maintaining an underdeveloped financial sector that limits consumption-related borrowing; and excessive regulation of services sectors that limits their expansion and productivity growth.

To achieve balanced and sustainable growth requires related adjustments on both the demand side and the supply side of the economy. Adjustments on the demand side encompass shifts in the spending composition toward tradable goods and an expansion of domestic demand and regional demand for goods and services. Adjustments on the supply side encompass shifts in the production structure toward non-tradable goods and services, innovations that create regional demand, and increases in productivity in services sectors through structural reforms and deregulation. These changes could result from policy changes, such as deregulation and increases in public and private investment.

The first priority is to expand domestic demand, including consumption and investment. High national savings rates, relative to national investment rates, are the sources of current account surpluses in the region and, thus, have contributed to the global imbalances. A reduction of current account surpluses would require increases in consumption and investment. Household consumption can rise from an increase in household income and/or the propensity to consume, so effective measures would be those that raise household income and stimulate the propensity to consume.

In some countries, such as the PRC, the share of household income in GDP is low, and both corporate and household savings are large relative to GDP. Substantial scope exists for these economies to reduce corporate savings and increase household consumption. For example, government policies to raise dividend revenues from state-owned enterprises and transfer such revenues to households would effectively augment household income and thus stimulating household consumption. These policies at the same time reduce corporate savings and discourage excessive and often inefficient investment by state-owned enterprises.

Studies of the PRC, the Philippines, and Taipei,China show that precautionary demand for savings—created as a result of low levels of government spending on social safety nets—has been an important determinant of overall saving behavior of households. Structural measures to reduce precautionary savings—and thus stimulate the household propensity to consume—should be given high priority, particularly through the strengthening of social protection systems, including larger public spending for basic health care, education, and housing as well as system building for health and unemployment insurance and retirement pensions. In addition, income redistribution from the rich to the poor would also stimulate national household consumption as the poor typically have a higher propensity to consume than do the rich.

In contrast, scope exists to encourage investment in a number of countries, especially those such as India, where infrastructure investment needs are high and

several ASEAN countries including Indonesia, Malaysia, the Philippines, and Thailand, where the ratio of investment to GDP dropped sharply after the Asian financial crisis of 1997–1998. Investment can be encouraged both through targeted public investment, especially in infrastructure, and improvement of the investment climate to attract private investment including foreign direct investment.

The second priority is to strengthen the supply side of the economy in order to promote areas with future potential for long-term growth through investment, innovation, and deregulation. These areas include human resources (education, health care, and training), knowledge activities (research and development [R&D], and information and communication technology [ICT]), physical infrastructure, services sectors, and green growth. Investment in human resources and knowledge is the key driver of competitiveness and economic growth in the current era of globalization.

Infrastructure development, particularly in transport, energy, and ICT, is essential to forge cross-border connectivity and expand trade and investment opportunities. Strong regional cooperation among Asian economies is crucial for establishing Asia-wide physical connectivity toward a "seamless Asia" (ADB and ADBI (2009)). Regional infrastructure will need to be geared increasingly toward supporting Asian production networks and regional supply chains to target Asian markets and promote intra-Asian trade.

Asia has 1.1 billion people who are middle class or wealthier, and the number is growing rapidly. Trade liberalization, especially the creation of a large region-wide FTA, can make a notable contribution to growth rebalancing. This could expand markets for Asian firms and consumers and create greater trade and investment opportunities within the region, allowing more production and spending.

1.5.2 Social Inclusion

Sustainable growth means growth that reaches all segments of society, expands access to opportunities, and contributes decisively to reduce poverty. In some countries, the perpetuation of dual labor market structures limits the extent to which economic growth benefits a substantial segment of the population. In others, such as the PRC, labor market distortions and limits on domestic labor mobility depress the overall level of household income as well as tending to increase income inequality. Governments need to examine a variety of ways in which the distribution of income can be improved, including, in some cases, targeted income transfer programs. Labor market policies emphasizing investments that maximize employment opportunities can also contribute to this.

Enhancing social protection and increasing public investment in infrastructure, health, and education contribute to the sustainability and inclusiveness of growth by making it easier for people to participate in economic growth. Expansion of social security, public health insurance, and unemployment insurance can reduce the need for private precautionary savings, which can be an inefficient way of guarding against adverse exigencies. Investment in public education is one of the biggest

keys to opening up paths of economic advancement for an increasing proportion of the population. Labor market reforms to increase employment of young adults, improve the flexibility and relevance of skills training systems, and create more secure jobs with adequate social protection can reduce uncertainty in income prospects. SMEs provide the bulk of employment in Asian economies, and effective policies are needed to promote SMEs and service industries to better align domestic production with domestic demand and trade within the region.

1.5.3 Environmental Improvement

Balanced and sustainable growth also means growth that is consistent with environmental constraints. The biggest long-term challenge is to develop an economic growth path consistent with reduction of greenhouse gas emission levels to a level consistent with only a modest rise in global average temperatures. Other concerns that need to be addressed include environmental degradation, and shortages of key resources such as energy and water. This new development paradigm should focus on green growth and fostering strong regional cooperation. These efforts can also contribute to the reduction of greenhouse gases (such as carbon dioxide) emissions and, hence, mitigate climate change. Asia needs to focus on innovation and technological capacity in order to integrate the guiding principles of energy efficiency and environmental protection into all economic activity. Thus, Asia should put a high priority on supporting R&D toward eco-innovation and green services as well as investment in skills development and local capacity to supply green products. In this way, a "green Asia" can be created.

1.6 Agenda for Rebalancing for Sustainable Growth

Chapters 3−7 of this book identify priorities and policies that will enable Asian economies to respond to the more challenging global economic environment and to achieve the kind of balanced and sustainable growth described in the previous section. These priorities and policies are organized by the respective chapters into five thematic areas, which are described in this section. The first four thematic areas involve, for the most part, measures that can be implemented at the national level. However, they can also be augmented by intensive cooperation at the regional level, which is the final thematic area.

1.6.1 Improving Macroeconomic Stability

Chapter 3 argues that more efforts are needed to make macroeconomic policy frameworks consistent with stable and sustainable growth. First, monetary policy

may take asset prices and financial stability into account. More broadly, there is a need for coordinating monetary policy and macroprudential supervisory policy to achieve the objectives of price stability and financial stability. Second, the region's fiscal authorities need to put greater emphasis on making countercyclical fiscal policy more effective. Third, regarding management of capital flows, national authorities must improve their ability to prevent capital flow volatility from adversely affecting their economies. Capital controls could be considered as a viable macroprudential measure if designed and implemented properly. Fourth, policymakers need to ensure that they have access to international liquidity in the event of a liquidity shortage and/or a currency crisis, through the IMF, central bank currency swaps, or a regional arrangement such as the Chiang Mai Initiative Multilateralization (CMIM). Fifth, Asian policymakers need to develop an institutional framework that helps to facilitate better coordination on exchange rates, which will accommodate a general adjustment of their currencies and reduce concerns about unilateral currency adjustment, as well as greater intraregional exchange rate stability. The immediate focus of such cooperation is not necessarily the stabilization of intra-regional exchange rates (although that is helpful in itself) but on increasing the currencies' collective flexibility against the US dollar.

1.6.2 Rebalancing Production

Chapter 4 focuses on the need to reorient demand toward domestic and regional demand through a concomitant adjustment in the supply side of the economy to support a more sustainable growth path. Broadly, it is likely to involve a shift from tradables to non-tradables. Such an adjustment can be promoted policies such as eliminating subsidies and factor price distortions that favor exporters, deregulating services sectors and enhancing their productivity growth, promoting "green" industries, and liberalizing regional trade and investment.

Today, the services sector is the single largest sector in Asia that provides the bulk of employment for the skilled and unskilled workforce. An efficient services sector is critical to a country's competitiveness and economic growth. But a large part of Asia's services sector, particularly non-tradable services (such as health care, education, distribution, transport, and public utilities), remains unproductive. Increasing services sector productivity should be an important priority for Asian economies. Removing regulatory distortions in services sectors—including in health, education, transportation, information and telecommunications, and finance—in Asia would create a more open, efficient, and competitive environment for services provision. This would not only raise productivity in the services sector, but also in many other sectors, because services such as transportation and telecommunications are important inputs into an economy's overall production process. Business services which are potentially tradable should be supported. Higher levels of investment in R&D and education should also be encouraged.

Fostering new "green" industries is an important initiative as it promotes economic growth that is much less dependent on extraregional markets, while addressing Asia's environmental and climate change challenges. In the post-crisis period, Asian economies should not simply follow the same course as before, relying heavily on a few export-oriented polluting industries that use a narrow range of carbon-intensive energy sources. Green economic growth is consistent with long-term sustainability and, at the same time, could help create jobs, raise skills, and boost Asia's competitiveness. A green Asia could be a world leader in low-carbon technology, innovation, and growth.

Infrastructure investment also plays a key role in facilitating faster growth of productivity and bringing together demand and supply within the region. Infrastructure investment needs are high, which will require regional planning and financing arrangements in many cases. Asian policymakers should focus on the "soft" component—policies, regulations, rules, and procedures—in order to make the "hard" component of infrastructure work. In many cases, public–private partnerships are essential to attract private sector funding and management know-how while mitigating risks involved.

Given the importance of trade and investment for economic growth in Asia, it is critical that Asian nations affirm their support for free trade and reject any drift toward protectionism. Beyond this, the creation of an Asia-wide FTA, with more harmonized rules, procedures, and standards, would contribute to the goal of rebalancing growth. In addition to the liberalization of trade in goods and services, the liberalization and harmonization of cross-border investment is also critical to further expanding regional markets. Both firms and consumers in Asia would benefit from economies of scale, dynamic efficiency, and greater trade and investment opportunities within the region. Consolidating the existing Asian "noodle bowl"—an array of overlapping bilateral and plurilateral FTAs in the region—into a single agreement such as the Regional Comprehensive Economic Partnership (RCEP) among ASEAN+6 countries (ASEAN plus Australia, the PRC, India, Japan, the Republic of Korea, and New Zealand) is thus a high priority.

1.6.3 Enhancing Social Protection

Chapter 5 takes up the issue of social protection. Asian countries should seize the opportunity presented by the recent global economic and financial crisis to reform and expand their social protection systems in ways that expand coverage, provide more adequate benefits, and operate in a financially sustainable manner. These changes include broadening the coverage of major programs such as public health insurance, unemployment insurance, and public pension schemes.

The need for improved social sector protection in Asia is particularly keen, considering the prevailing low levels of Asian social protection. ADB constructed a social protection index (SPI) and ranks SPI values for 31 Asian countries. It found that the overall level of social protection in a country is not perfectly correlated with

that country's per capita GDP. This suggests some scope for any country to achieve high levels of social protection irrespective of its income level.

1.6.4 Financial Deepening

Chapter 6 emphasizes that a further deepening and integration of its financial markets could also help support the region's long-term growth by helping to recycle Asia's high savings for investment in worthy projects in the region, particularly when capital flows from other regions are volatile. Deeper and more integrated capital markets can also provide a "spare tire" to guard against the withdrawal of bank lending from the region during economic downturns.

Improving surveillance and strengthening regional financial sectors against future financial shocks can make an important contribution of supporting stable domestic demand growth. The global financial crisis showed the importance of implementing a framework for macroprudential financial supervision and regulation—a powerful systemic stability regulator—that possesses effective prudential tools. Steps to improve microprudential regulation and reduce the procyclicality of financial regulation are also important.

Crisis management can be improved by: having a coordinated set of financial authorities that between them cover all phases of the crisis; ensuring there are credible ex ante means of handling failures in all financial institutions, particularly those that operate across borders; implementing an effective deposit insurance system; and improving resilience against shocks by substantial enhancement of regional mechanisms, among others, through an Asian financial stability dialogue (AFSD).

Developing bond markets further can be achieved by: encouraging foreign participation, especially by multinational institutions and corporations; improving government debt management, including maintenance of a reliable set of risk-free benchmarks and adequate liquidity; improving market infrastructure to allow issuers to hedge maturity and currency risk; encouraging expanded coverage of private issues by credit rating agencies; strengthening national credit rating agencies and harmonizing their standards across the region; and integrating markets at the regional level to achieve adequate scale economies, including development of a market for bonds denominated in an Asian Currency Unit (ACU).

A financial sector that can finance SME businesses—including trade—and consumer purchases of durable goods and residential housing is also quite important to strengthen both the supply and demand sides of the economy.

1.6.5 Forging Regional Cooperation

The global financial crisis highlighted the need for policy coordination, not only within regions, but across regions as well. This implies that tackling a global problem, such as the global financial crisis, requires global and regional cooperative

efforts. Regional cooperation is a necessary foundation for financial stability in the region and across the globe. So Chapter 7 turns attention to regional cooperation. The crisis underlined the importance of preventing, managing, and resolving financial crisis, and it is imperative that financial excesses be corrected and the global financial architecture be strengthened. Asia fully supports these efforts, particularly since it views corrective action as necessary to avert future crises. As Asia leads the global economic recovery, the region's expanding role in the global economy has been accentuated. Its rise from the crisis has provided a good opportunity for the region to contribute to reshaping the global economic and financial architecture. Developing Asia must let its voice be heard. But it must first intensively pursue regional cooperation and integration in trade, investment, finance, and economic surveillance so that the rest of the world will hear the region's one, collective voice.

The strengthening of the Chiang Mai Initiative Multilateralization as a regional financial safety net, including the surveillance capacity of the ASEAN+3 Macroeconomic Research Office (AMRO), could contribute importantly to creating a regional institution to monitor international risks and provide hard currency liquidity when needed. The creation of an Asian financial stability dialogue can also further the cooperation of fiscal, monetary, and financial authorities in the region. Moves to encourage exchange rate coordination in the region may also be considered. Further development of Asian bond markets (through the Asian Bond Markets Initiative and the Asian Bond Funds) could provide important support to countries seeking to increase investment for growth, whether for infrastructure or other types of private investment. ASEAN+3 countries (ASEAN plus the PRC, Japan, and the Republic of Korea) should accelerate the process of enhancing the Credit Guarantee and Investment Facility (CGIF) to provide credit guarantees for private bond issuance in regional currencies. Development of a market for bonds denominated in an ACU could also contribute to widening the regional bond market. Other measures such as encouraging regional credit rating agencies, harmonizing tax rules and regulations on inward investment, and developing an infrastructure for currency hedging and swaps can make regional bond markets more attractive to issuers and investors. An Asian infrastructure investment fund could facilitate regional infrastructure investment.

Intra-regional trade can be enhanced by more systematically aligning regional cooperation efforts. Institutional mechanisms can be put in place that will facilitate the establishment of a single region-wide free trade agreement such as RCEP that will standardize rules, tariffs, and agreements. This will not only ease implementation but can encourage greater trade across the region.

Reform of the international financial architecture can play a key role in stabilizing financial systems and promoting growth. Asian policymakers should actively participate in forums such as the Group of 20 and the expanded Financial Stability Board to put their imprint on reforms of the global financial system, and support regional cooperation and integration initiatives. Asian economies need to contribute to the reform of global supervision, regulation, and resolution of cross-border financial activities of both systemically important and less important financial institutions.

Asian policymakers should also aggressively support reforms of both the function and the governance structure of the Bretton Woods institutions, including the IMF and the World Bank. The governance structure of these institutions needs to reflect the increased economic importance and voice of Asia, as well as its successful experience in weathering the global financial crisis. The effectiveness of these institutions needs to be enhanced to help support growth in emerging economies.

1.7 Conclusions

Asian economies have already recovered strongly from the global financial crisis, reflecting their aggressive moves to ease monetary and fiscal policy as well as the underlying fundamental strength of their economies. However, the biggest challenge lies ahead. Given that it is unlikely that the US and Europe will be engines of global growth, Asian economies should contribute to global economic adjustment by creating their own growth engines. This is the only way for Asia to be able to sustain long-term economic growth in the post- crisis era, and would also contribute to growth of the global economy. In order to achieve this, Asia needs to transform itself into a large consumer market while maintaining its competitiveness, by rebalancing sources of growth away from excessive dependence on extra-regional demand—particularly the US and the European Union—toward domestic and regional demand. Asian firms can target the rising high-income and middle class in emerging Asia—the PRC, India, and ASEAN—which could become a major source of final consumption demand. The global financial crisis should be viewed as a positive opportunity to push ahead with these needed structural changes.

This growth rebalancing effort requires closer policy coordination in Asia in order to pursue structural adjustment, integration of regional markets, and socially inclusive and environmentally sustainable growth. Such cooperation would go a long way in creating foundations for Asia's prosperity and stability. Key elements of this cooperation include measures to: deepen social protection to support social resilience; increase infrastructure investment to create a "seamless Asia"; enhance productivity in the services sector; establish a region-wide FTA such as RCEP to encourage intra-regional trade in goods and services and investment to benefit from economies of scale and the dynamic efficiency of a larger market; promote a shift to a low-carbon society and support green growth; and deepen and integrate the financial sector to facilitate the recycling of Asia's high savings for investment within the region. A stronger, balanced, and more resilient Asian economy, with multiple sources of growth, could provide benefits to the global economy, and be a source of global leadership.

References

ADB. 2009a. *Asian Development Outlook: Rebalancing Asia's growth.* Manila: ADB.

ADB. 2009b. *Asian Development Outlook 2009 Update*. Manila: ADB.

ADB. 2010. The impact of the crisis on people, vulnerability and poverty. Regional and Sustainable Development Department. Unpublished report.

ADB, and ADBI. 2009. *Infrastructure for a seamless Asia*. Manila: ADB.

Bernanke, B. 10 March 2005. The global saving glut and the U.S. current account deficit. Remarks at the Homer Jones Lecture, St. Louis, Missouri. http://www.federalreserve.gov/boarddocs/speeches/2005/20050414/default.htm. Accessed 10 January 2011.

Bernanke, B. 3 January 2010. Monetary policy and the housing bubble. Speech at the annual meeting of the American Economic Association, Atlanta, Georgia. http://www.federalreserve.gov/newsevents/speech/bernanke20100103a.htm#fs4. Accessed 10 February 2011.

de Larosière, J. 2009. *The High Level Group on the Financial Crisis: Report*. Brussels: European Commission.

Financial Services Authority (FSA). 2009. *The Turner review: A regulatory response to the global banking crisis*. London: FSA.

Freedman, C., M. Kumhof, D. Laxton, and J. Lee. 2009. The case for global fiscal stimulus. IMF Staff Position Note SPN/09/03. Washington, DC, IMF.

Greenspan, A. 20 July 2005. Testimony to the committee on financial services, U.S. House of Representatives on the Federal Reserve Board's semiannual monetary policy report. http://www.federalreserve.gov/boarddocs/hh/2005/july/testimony.htm. Accessed 20 December 2010.

Group of 30. 2009. *Financial reform: A framework for financial stability. Working Group on Financial Reform*. Washington, DC: Group of 30. http://www.group30.org/pubs/recommendations.pdf. Accessed 15 December 2010.

IMF. 2009. *Initial lessons of the crisis.* Washington, DC: IMF.

IMF. 2010. *World Economic Outlook: Rebalancing growth*. Washington, DC: IMF.

Lee, J.-W., and C.-Y. Park. 2009. Global financial turmoil: Impact and challenges for Asia's Financial Systems. *Asian Economic Papers* 8 (1): 9–40.

Taylor, J. 2009. The financial crisis and the policy responses: An empirical analysis of what went wrong. NBER Working Paper No. 14631. Cambridge, Massachusetts, NBER.

US Energy Information Administration. 2009. *International Energy Outlook*. Washington, DC: Office of Integrated Analysis and Forecasting, US Department of Energy.

Chapter 2
Crisis Impact

Yung Chul Park

Abstract Asia's quick recovery after the global financial crisis raises an important question as to how a region that had suffered during the crisis could make a turnaround and break out of the recession ahead of other regions. This chapter argues that emerging Asia had built up enough resilience through extensive reform of its financial, corporate, and public sectors since the 1997–1998 Asian financial crisis. The region's banking sector was not heavily loaded with non-performing assets, it did not indulge in acquiring US toxic assets, and maturity and currency mismatches in balance sheets had been by and large under control. Governance, transparency, and the financial soundness of the corporate sector had all improved. On macroeconomic policy, greater flexibility of foreign exchange rate systems softened the impact of the liquidity crunch. Finally, the depreciation of the region's currencies against the US dollar during the height of the crisis subsequently helped to improve the competitiveness of exports to propel East Asia's recovery.

Keywords Global financial crisis · Asian financial crisis · Trade and financial channels of contagion · Economic and social impacts of the crisis

JEL Codes F42 · F31 · F32

2.1 Introduction

The 2008–2009 global financial crisis and its subsequent manifestations, particularly the eurozone sovereign debt and banking sector crisis, have been another painful reminder to emerging economies in Asia that they are part of a world where global finance is precarious, and that no matter what they do, there is a limit to their security against financial crises. The repercussions of the crisis were varied in their scope and impact, but many economies in the region, especially Hong Kong, China;

Y. C. Park (✉)
Korea University, Seoul, Republic of Korea
e-mail: yungcp@korea.ac.kr

M. Kawai and J.-W. Lee (eds), *Rebalancing for Sustainable Growth,* Economics, Law, and Institutions in Asia Pacific, DOI 10.1007/978-4-431-55321-2_2

Japan; the Republic of Korea; Malaysia; Singapore; Thailand; and Taipei,China have suffered severe recession and financial turbulence that have interacted to complicate crisis management and recovery.

Despite its initial virulence, the crisis appears to have been short lived. Since the second quarter of 2009, East Asia engineered an impressive rebound ahead of other regions, although recent developments in and outside the region cast doubts as to whether this resurgence can lead to a full-fledged recovery.

This chapter reviews the short- and long-run impact of the 2008–2009 global financial crisis on East Asian economies. Section 2.2 examines the causes and short-run consequences of the crisis in East Asia. It focuses on the macroeconomic impact of the contagion of the crisis and searches for the factors that have propelled the rebound. Section 2.3 reviews the relative importance of the two channels of contagion in transmitting the effects of the financial meltdown in North America and Europe—the trade channel and the financial market channel. Section 2.4 describes the economic and social impacts. Section 2.5 describes the environmental impacts. Section 2.6 analyzes the factors behind the economic resurgence. It concludes that, despite the large fiscal injections throughout the region, it appears that the recovery in some countries has been driven by external demand. Section 2.7 examines the long-term effect of the crisis and the prospects for rebalancing growth that is expected to reorient the development strategy to allocate more resources to the nontradables sector. Conclusions are in Section 2.8.

2.2 Short-Run Impact of the Global Financial Crisis: From Crisis to Recovery

2.2.1 Crisis Contagion: Export Collapse and Recession

Amid the deepening global economic crisis, East Asia[1] appeared to have suffered less from the global crisis compared to other regions as late as in the third quarter of 2008. Until then, it was expected that East Asia would weather the crisis relatively better than other regions. In emerging East Asia, overall economic fundamentals were reckoned to be sound: robust growth, stable prices, healthy fiscal balances, current accounts in surplus, and large holdings of foreign exchange reserves. And the crisis had originated in the US. Unlike those in Europe, the region's financial institutions were sound and more profitable as they held a lot less US toxic assets. Capping it all, there was a growing argument that decoupling of East Asia from the cyclical movements of the rest of the world had taken root (World Bank 2007; Anderson 2007). In view of this economic strength, it was believed that the region would remain a favorable destination for foreign direct and portfolio investments

[1] Here, East Asia is defined as the region comprising ASEAN plus the People's Republic of China, Japan, and the Republic of Korea (ASEAN+3).

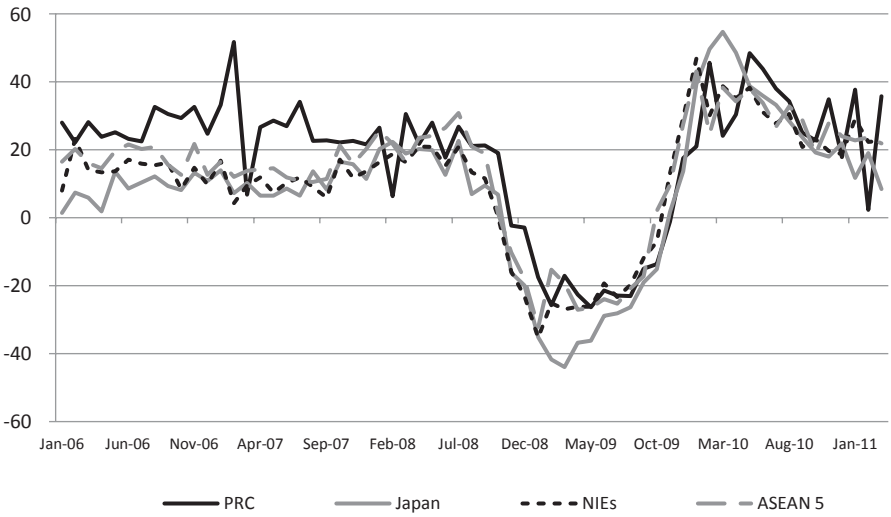

Fig. 2.1 Export growth in East Asia (% change). (Notes: *ASEAN* Association of Southeast Asian Nations, *NIE* newly industrializing economy, *PRC* People's Republic of China. Calculations are annual growth rates on a monthly basis. ASEAN 5 refers to Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam. NIEs refers to Hong Kong, China; the Republic of Korea; Singapore; and Taipei,China. Sources: International Monetary Fund, International Financial Statistics database, available at: http://www.imfstatistics.org/imf/; CEIC Data, available at: http://ceicdata.com. Accessed 28 March 2012)

even during the crisis. Indeed many forecasts, including the November update of the *World Economic Outlook* (IMF 2008) echoed the prevailing optimism as they suggested that, as a whole, East Asia would deliver robust growth while the US and eurozone would be struggling with the prospect of a contraction of their economies from 2009.

But during the fourth quarter of 2008 following the bankruptcy of Lehman Brothers in September, East Asia took a turn for the worse: many economies slid into a recession deeper than anticipated, and the Republic of Korea and Indonesia faced significant financial shocks. Although the degree of the decline differed from country to country, from September 2008 to the second quarter of 2009, all of East Asia's emerging economies saw the rates of their export growth plunging into negative territory (Fig. 2.1) and, in most cases, falling output (Fig. 2.2), in some cases quite sharply. Reflecting the collapse of domestic demand and exports, and a steep fall in the prices of oil and other raw materials, import demand plummeted more throughout the region. As a result, practically all East Asian economies were generating surpluses during the same period. Not surprisingly, inflation rates fell and in Japan deflation returned. The overall macroeconomic deterioration was serious enough to dash much of the hope that East Asia would serve as a regional engine of growth strong enough to moderate the downturn of the global economy.

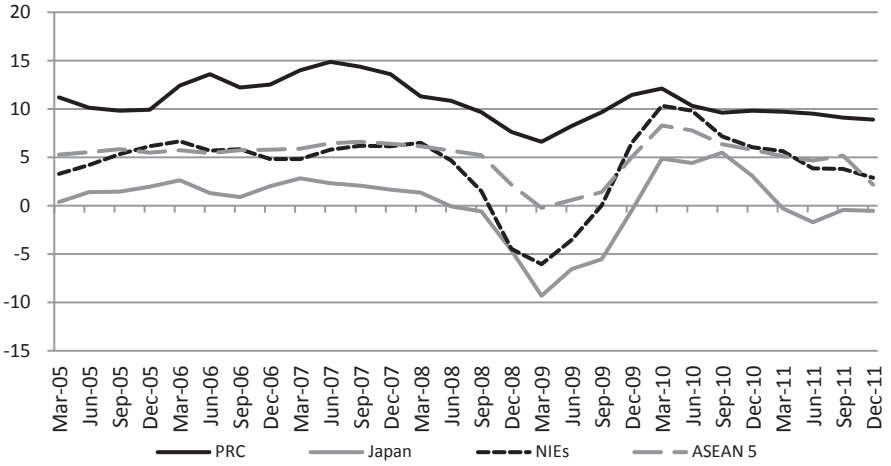

Fig. 2.2 Real gross domestic product growth in East Asia (% change). (Notes: *ASEAN* Association of Southeast Asian Nations, *NIE* newly industrializing economy, *PRC* People's Republic of China. Calculations are annual growth rates on a quarterly basis. ASEAN 5 refers to Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam. NIEs refers to Hong Kong, China; the Republic of Korea; Singapore; and Taipei,China. Source: CEIC Data, available at: http://ceicdata.com. Accessed 13 April 2012)

2.2.2 Financial Instability

East Asia's financial markets also displayed considerable instability since the outbreak of the global financial crisis. Stock prices nosedived throughout the region and exchange rates, except for the Japanese yen (which appreciated) and those pegged to the dollar, generally depreciated against the US dollar and exhibited higher degrees of volatility than before until the second quarter of 2009 (Figs. 2.3 and 2.4). Sovereign spreads over US Treasuries widened dramatically, and CDS premia, a measure of the quality of financial liabilities, also soared, before dropping early in 2009 (Fig. 2.5).

In this bleak crisis landscape, banks and other financial institutions were cutting back their lending operations by recalling existing loans, let alone granting new ones—as the availability of both local and foreign currency liquidity evaporated, future economic prospects looked dim, and their losses were piling up. Most damaging was the drying up of trade credits, which further slashed sagging exports. Some countries such as the Republic of Korea suffered large capital outflows as many foreign investors were liquidating their holdings of East Asian financial assets to buy into more liquid assets such as US Treasuries, to deleverage, and to cover their losses back home. These outflows were combined with the pessimistic economic outlook to weaken and generate expectations of further depreciation of the currencies of these countries vis-à-vis the US dollar, inducing further capital outflows. Amid the financial deterioration, most emerging economies held up well, but the Republic of Korea could not ward off a liquidity crisis that broke out in the

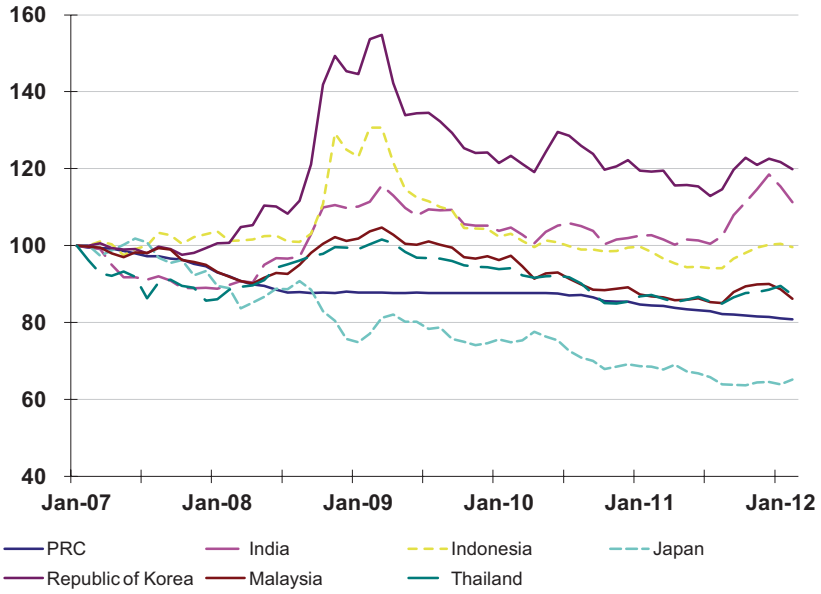

Fig. 2.3 Exchange rates against the US dollar of East Asian economies. (Note: *PRC* People's Republic of China. Source: Asian Development Bank, Asia Regional Integration Center Economic and Financial Indicators database, available at: http://aric.adb.org/macro_indicators.php. Accessed March 2012)

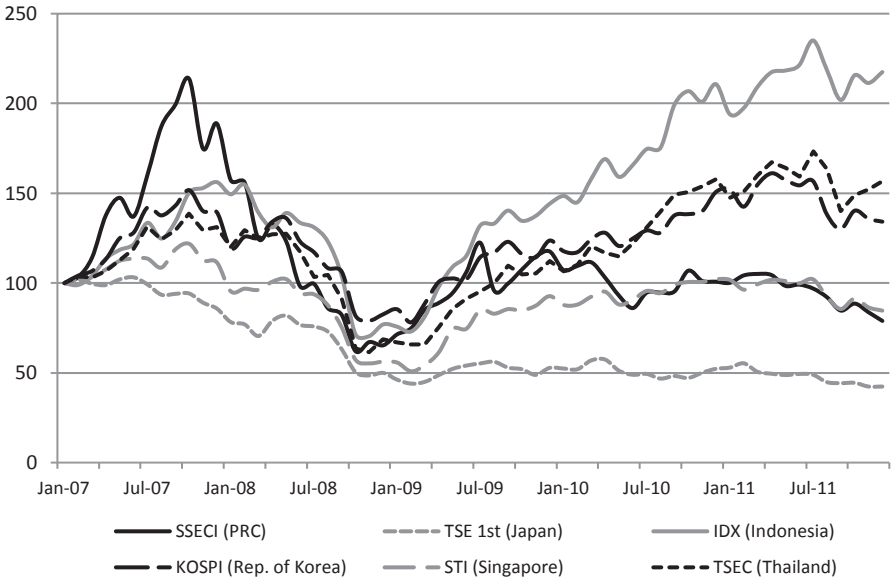

Fig. 2.4 Stock price movements in East Asia. (Note: *IDX* Indonesia Stock Exchange, *KOSPI* Korea Stock Exchange, *PRC* People's Republic of China, *SSECI* Shanghai Stock Exchange Composite Index, *TSE* Tokyo Stock Exchange. Source: ADB Asia Regional Integration Center Economic and Financial Indicators Database, available at: http://aric.adb.org/macro_indicators.php. Accessed 13 April 2012)

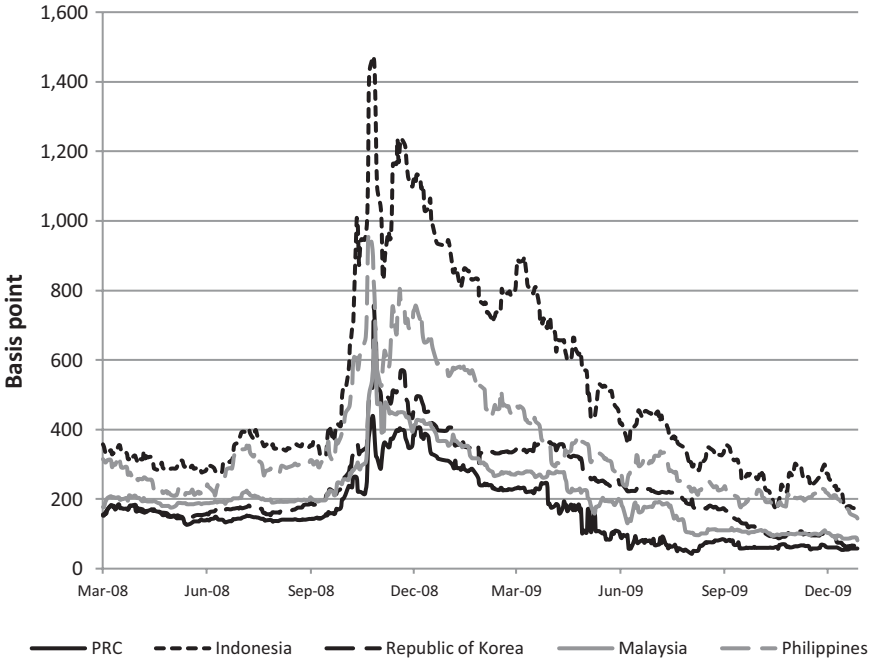

Fig. 2.5 Sovereign spreads: foreign currency denominated sovereign bond spreads (versus US treasury notes, in basis points). (Note: *PRC* People's Republic of China. Source: Korea Center for International Finance, available at: http://www.kcifny.org/Statistics/Database.asp. Accessed 14 March 2010)

fourth quarter of 2008 and lasted for about six months. During this period, the crisis inflicted large output and reserve losses on the Republic of Korea, caused a massive depreciation of its currency, and one time posed the systemic risk of insolvency of financial institutions.

2.2.3 Rebounding: Astounding?

Against all odds, beginning in the second quarter of 2009, East Asia staged an impressive rebound. As shown in Figures 2.1 and 2.2, the rebound was impressive, and has once again revived the hope that the region will be leading the way out of the crisis for the global economy. It has rekindled the debate on the decoupling of East Asia from the consumers of the US and Europe. However, export growth has slowed steadily since then, reflecting continued weakness in both the US and Europe, suggesting that, once again, decoupling has been shown to be a myth, at least in cyclical terms.

The severity of the impact of the crisis varied from country to country. The ASEAN original five (Indonesia, Malaysia, Singapore, the Philippines, and Thailand)

coped with the crisis better than other neighboring countries as, in aggregate, they registered positive growth in 2009. The GDP of the PRC grew almost 9% in 2009—more than the PRC authorities forecast—to the point where the PRC was threatened with inflation of asset and consumer prices. The Asian NIEs (Hong Kong, China; the Republic of Korea; Singapore; and Taipei,China), which were battered the most by the crisis, made a strong comeback. Monetary authorities of the PRC; the Republic of Korea; and Hong Kong, China, became increasingly concerned about building up of inflationary pressure and have begun formulating an exit strategy. Nevertheless, these developments do not add up to provide any empirical evidence either supporting or disputing the decoupling phenomenon. It may also be premature to conclude that East Asia's recovery is strong enough to pull the global economy out of the recession.

Figure 2.2 presents annual rates of GDP growth of emerging Asia on a quarterly basis. There is indeed a clear indication of a V-shaped recovery in emerging Asia. What then are the sources of demand that have powered the rebound? Export growth resumed since the early months of 2009, and the large fiscal stimulus packages most East Asian countries introduced late in 2008 contributed to growth as well. At the same time, East Asia saw the return of foreign lenders and investors. Capital inflows into the region picked up again, easing US dollar liquidity shortages.

In subsequent sections, this chapter attempts to bring to light some of the factors that may account for the initial sharp downturn and an equally swift revival in emerging Asia. For this purpose, this chapter examines the relative importance of the two channels—trade and finance—of crisis contagion to gauge the extent to which some of the structural features of the economy below have contributed to deepening and recovering from the crisis in East Asia: export dependence, share of manufactures in total exports, degree of deregulation and openness of financial markets, and flexibility of the exchange rate.

2.3 Channels of Crisis Contagion

2.3.1 Trade Channel

Dependence on and Dominance of Manufactured Exports If there is one defining feature of East Asia, it is the region's export orientation. A large falloff of exports to the markets of the US and the European Union (EU) on which East Asia heavily depends for growth would therefore wreak havoc on its economy, and it has. Compared to a decade earlier, it is true that the region has become less reliant on the two markets as a result of trade integration in the region, but, taken together, the US and EU still accounted for a combined 35% of its total exports in 2008. Although its impact would be less damaging than before, a recession in both regions, which accounted for 46% of global GDP in 2008, would certainly ripple through to East Asia via the trade channel to depress its growth. It was therefore not surprising that,

at the early phase of the crisis, exports of these mostly export-oriented East Asian economies were dropping at double-digit rates (Fig. 2.1).

Not only the size of exports relative to GDP but the product structure of exports also mattered in transmitting the external shocks. As shown by Blanchard (2009), compared to economies with a diversified mix of export products, those that concentrated heavily on a limited number of manufactured export goods, which are highly cyclical, have been hit harder by the crisis. The Republic of Korea, Singapore, and Taipei,China, of which exports are heavily concentrated in manufactures, experienced a deeper slowdown than others such as Indonesia and the Philippines, which export relatively more agricultural and other non-manufactured products. A case in point is the Republic of Korea's export product makeup.[2] In 2007, 57% of its total exports were in four industries—automobile, shipbuilding, electronics, and chemicals. Over the past decade, the top 10 export products comprised more than 65% of the Republic of Korea's total exports. Given that the income elasticity of import demand is higher for manufactured than non-manufactured imports (Goldstein and Khan 1985), a global recession would therefore bring down export earnings of countries such as the Republic of Korea more than those of other economies.

2.3.2 Decoupling and the PRC Factor

If the decoupling had taken root before the crisis, then one would expect that East Asia could have remained relatively immune to or spared partially at least, the effects of adverse shocks originating in countries outside the region such as the US. Although a number of studies quoted earlier suggest that East Asia was becoming more insulated from the cyclical movements of the US, Europe, and other regions, the increase in intraregional trade among East Asian economies in 2007 and 2008 did not appear to have moderated the impact of the 2008–2009 global financial crisis (Grunwald and Hori 2008). In fact, the worsening of the economic crisis had weakened much of the empirical ground of decoupling before being resurrected after the rebound has taken place in the region. To be sure, even before the crisis, some had gone so far as to denounce it as a myth.[3]

[2] It should be noted, however, the heavy concentration has an advantage too: once a full recovery begins, output growth will accelerate.

[3] Consistent with the theory of international product fragmentation, ADB (2008) concluded that the story of decoupling, or uncoupling in their terminology, was no more than a myth. The report showed that emerging Asia is closely tied to global goods markets and impulses run from the US, EU, and Japan backward through the region. Another empirical study by Haltmaier et al. (2007) also challenged the role of the PRC as a regional engine of growth. It shows that external demand continues to be an important source of growth, and in particular for more advanced economies in the region. The PRC has become a more independent source of demand in recent years, but it is still more of a conduit importing parts and components from other countries in the region and assembling them into final goods to be exported. Ahearne et al. (2006) also show that the PRC and a group of other East Asia's emerging economies maintain a complementary relationship in which their export expansion is driven by, among other factors, global growth.

The structure of intra-regional trade in Asia is often compared to a conveyer belt carrying parts, components, and other intermediate inputs produced by Japan and other Asian economies to the PRC for assembly and exports to the rest of the world.[4] In this conveyor system, the PRC serves as the export platform where it imports more from other East Asian economies and exports more to the rest of the world. Up until the second quarter of 2009, the conveyer belt had been slowing down, if not coming to a screeching halt, as the PRC had cut down its imports substantially, dispelling the notion that the country could serve as a regional engine of growth. In 2007, total exports of the 12 East Asian economies (ASEAN plus Japan and the Republic of Korea) to the PRC amounted to US$ 416.6 billion, compared to US$ 365.2 billion to the US. In 2008, growth of exports to the PRC of Japan, the Republic of Korea, and ASEAN 5 had all turned to negative, before the reversal took hold in early 2009.

Despite the loss of exports, the slowdown of growth in the PRC was only been moderate, which suggests that much of its current recovery has been powered by the expansion of domestic demand supported by fiscal stimulus packages, which has in turn absorbed relatively larger amounts of imports from other East Asian countries than before.[5]

As shown in Figure 2.6, since the first quarter of 2009, there was a surge in the PRC's imports, the bulk of which has been coming from other East Asian emerging economies. The share of East Asia in the PRC's total imports rose to 45% in the fourth quarter of 2009, from 43% earlier. However, the trend since then began to decline again, partly reflecting increased resource imports from other regions.

The data on intra-regional trade in ASEAN+3 countries up to 2008 also show that economies in the region were trading more among themselves than in the past. This trend appears to have continued largely because the PRC has been capable of absorbing a growing share of exports of other Asian countries. In the process, the PRC has strengthened its foothold as a hub for regional trade in East Asia. This increase in intraregional trade has not been able to cushion the decline in their exports to the rest of the world, but contributed in part to staging a recovery. Nevertheless, it is too early to conclude whether East Asia's business cycle will be increasingly independent.

[4] Athukorala and Kohpaiboon (2009) argued that international product fragmentation—the cross-border dispersion of component production and/or assembly within vertically integrated production processes—is an important driving source of the deepening intraregional trade integration in East Asia. Since the final destination of assembled goods is more likely to be elsewhere, for example, the US or Europe, he argues, that "product fragmentation has made the East Asian growth dynamism increasingly reliant on extra-regional trade." If this is the case, a negative shock in the US or Europe would reduce imports of final goods from East Asia, thereby affecting the region's business cycles and undermine the decoupling argument. Furthermore, since the bulk of these exports to the PRC represent a derived demand for the PRC's exports to the US and EU, when the PRC's export figures are adjusted, the US is still an important export market for ASEAN+3.

[5] Jia (2010) provided detailed effects of the fiscal stimulation package on output, income, and investment published by the National Bureau of Statistics.

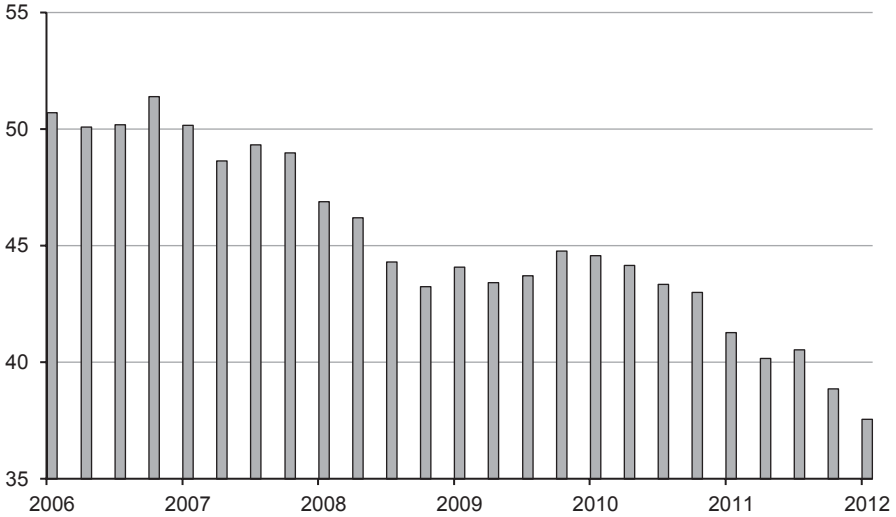

Fig. 2.6 Exports from major Asian countries to the PRC as share of PRC total imports. (Note: *PRC* People's Republic of China, *ASEAN* Association of Southeast Asian Nations. Source: CEIC Data, available at: http://www.ceicdata.com/. Accessed 5 July 2012)

It is also too early to tell whether the PRC domestic demand led-growth would be sustainable and if it can be, whether it will boost intraregional trade enough to lay down a firmer base of decoupling. Most of the empirical studies on decoupling cover the period before the current crisis. As a result, they do not shed much light on whether the PRC would be able to provide enough demand for imports from other emerging economies to help emerging Asia withstand a significant slowdown in the global economy.

2.3.3 Finance Channel

The adverse impact of financial turmoil with its origins in the US has spread to East Asia through cross-border financial transactions. It has rendered many regional financial markets dysfunctional, exacerbating the economic downturn brought on by the export decline throughout the region. The severity of the contagion was varied in scope and impact from country to country. The Republic of Korea was the only country that fell victim to a debilitating liquidity crisis during the fourth quarter of 2008 following the bankruptcy of Lehman Brothers in September of the same year. In the aftermath of the 1997–1998 Asian financial crisis, the Republic of Korea had embarked on financial deregulation and opening, which included phasing out controls on capital flows. In 2006, the Republic of Korea's policymakers stepped up deregulation of capital outflows in part to restrain appreciation of the won. The deregulation deepened and diversified the Republic of Korea's financial ties with

the global financial system, opening wide the financial channel that allowed turbulences in a financial center country to be transmitted to destabilize its financial markets and institutions with little time lag (Park 2009).

2.3.4 Financial Decoupling

One study (IMF 2008) presented evidence showing that during a crisis period, financial markets can be as devastating a channel for crisis contagion as the trade channel for emerging economies including those in East Asia.

As a whole, East Asia is a net lender to the rest of the world. Conventional wisdom would suggest that such a region would have a better ability to fend off contagion of external crises. But the net position has not been of much help in the way of erecting a buffer against external shocks for two reasons. One is that what matters in global finance is not a net, but a gross position as shown by the 1997–1998 Asian crisis and the 2008–2009 global financial crisis. East Asia depends heavily on global financial intermediation conducted in reserve currencies—the US dollar and euro—and dominated by global financial institutions and markets located in the US and Europe. None of East Asia's commercial banks made the list of top 10 global retail banks in 2008 (Business Insights 2008). None of East Asia's investment banks was among the top 10 global investment banks (Reuters 2009). Singapore and Hong Kong, China are not regional financial centers—they are regional outposts of global financial centers.

Despite its promises and advantages, Tokyo has never developed into a global financial center and after two decades of internationalization efforts, the yen still remains a minor international currency (Takagi 2009). Under these circumstances, there is a limit to East Asia's central and commercial banks' ability to supplement shortages of liquidity in reserve currencies (mostly the US dollar or euro) caused by a shrinkage of the volume of global financial intermediation. For instance, when foreign lenders and investors sell off their East Asian assets and refuse renewal of their short-term loans, US dollar or euro liquidity dries up. If financial market participants overreact as they did in response to the failure of Lehman Brothers, the liquidity shortfall could provoke a currency crisis and a run on central bank reserves.

Unlike the US Federal Reserve or European Central Bank (ECB), none of the East Asian central banks are able to create dollar or euro liquidity, although they can make additional liquidity available by dipping into their foreign exchange reserves. During the 6-month period beginning in September 2008, the liquidity squeeze brought about the breakdown of foreign currency lending including trade financing at banks. Central banks stepped in to ease the liquidity shortage, but the subsequent loss of foreign exchange reserve precipitated further currency depreciation, thereby setting off a chain of reactions in which the depreciation ended up in a further reserve loss. In the end, the squeeze threatened solvency of those banks unable to roll over their external loans.

Another reason for East Asia's susceptibility to crisis contagion was that the region as a whole imports safe financial assets and exports risky ones (Crockett

2002). Because of this asymmetry, capital would flow out of the region when both foreign and domestic investors shift their portfolio investments to high quality low-risk assets as they have done since the crisis broke out. East Asian governments have amassed large amounts of foreign reserves, the bulk of which consist of safe assets such as US Treasuries. After the 1997 crisis, East Asian financial institutions have also become risk averse in managing their asset portfolios. They were highly selective and careful in investing in risky structured derivative products in preference for safe assets. As a result, when the crisis touched off, investors from outside the region began divesting themselves of their holdings for risky East Asian assets, but East Asian investors—private as well as institutional—did not have incentives to liquidate their holdings of relatively safe US and euro-denominated assets. This asymmetric behavior induced capital outflows and led to US dollar liquidity crunch.

It is true that East Asia holds collectively more than US$ 4 trillion in foreign exchange reserves, but the bulk of these reserves are held by the PRC and Japan. Some East Asian economies may not have held enough reserves to prevent currency speculation, especially the Republic of Korea and Indonesia. ASEAN+3 has established a reserve pooling scheme for liquidity support for its members, but it has played little role during the crisis, thereby failing the market test. Except for Hong Kong, China; Singapore; and Japan, financial markets of other East Asian economies are far less integrated into the global financial markets than those in Europe.

Although East Asia's financial institutions were less exposed to US toxic assets, the worsening of the global financial crisis raised concern as to whether East Asia's financial institutions were safe and sound enough to withstand the virulence of the global financial crisis when financial titans of the US and Europe were falling down one by one. In the end, the liquidity squeeze and vanishing export markets turned out to be a deadly combination of putting the brakes on the export machine and undermining growth potential of East Asia.

2.3.5 Financial Openness and Free Floating

Past episodes of financial crises throughout the global economy show that countries with a rigid foreign exchange rate system are more prone to currency overvaluation and hence are more exposed to financial crises than those with a free floating foreign exchange rate system. Since embarking on overall financial reform, the Republic of Korea has lifted most of the restrictions on capital inflows and outflows to establish an open financial system, although, an index for capital account openness estimated by Chinn and Ito (2009) showed that the Republic of Korea's capital account has been subject to a higher degree of control than in other East Asia's emerging economies such as Indonesia, Malaysia, and the Philippines. It remains unclear in theory as well as in practice whether capital account liberalization would make it harder or easier for countries to safeguard against financial crises; free floating was expected to facilitate deflecting the contagion of the global financial crisis. But it was not the case in all East Asian economies.

According to the IMF, the Republic of Korea's exchange rate system is classified as free floating. Although the Republic of Korea's policymakers have intermittently intervened in the foreign exchange market to stabilize the won–US dollar exchange rate, there is little doubt that the Republic of Korea's foreign exchange rate system has become much more flexible since the 1997–1998 Asian crisis and it is certainly more flexible than in other emerging economies in East Asia.

During the fourth quarter of 2008, the won fell vis-à-vis the US dollar more than other regional currencies and stock prices nosedived more than in other regional equity markets. As shown in Figure 2.7, the won depreciated 28.3% in the fourth quarter of 2008 alone. To what extent did the flexibility contribute to calming down speculation and easing the liquidity drain? In the absence of any counterfactual analysis, it is difficult to answer this question, because the Republic of Korea escaped from the financial crisis by arranging a currency swap amounting to US$ 30 billion with the US Federal Reserve.

The Republic of Korea's experience with the liquidity crisis clearly shows that when the market overreacts and shows symptoms of a run on banks, currency depreciation displays an implosive trajectory as it builds up extrapolative expectations. That is, in a bank run situation, free floating does not discourage speculation. Instead, it could easily induce a runaway depreciation, thereby wiping out foreign exchange reserve holdings and provoking a currency crisis (Park 2009). Once the liquidity crisis was brought under control, however, the depreciation has turned out to be a blessing in disguise as it has improved the competitiveness of the Republic of Korea's exports measured by the real effective exchange rate in particular vis-à-vis exports of the PRC and Japan (Fig. 2.7a and 2.7b). The subsequent pick up in exports has paved the way for a faster recovery by selling more abroad than other countries in East Asia and produced a current account surplus amounting to US$ 46 billion in 2009.

2.4 Employment and Social Impacts[6]

2.4.1 Employment Impacts

While the global financial crisis had an impact on employment, it did not result in mass unemployment or rapid worsening of poverty in Asia. To be sure, job losses were substantial in key export manufacturing sectors in many countries, but they do not seem to have been long lived. The PRC government estimated that at its peak, the crisis made 41 million people unemployed in the PRC. In the PRC, the Philippines, and Thailand, employment in the manufacturing sector fell 2% from April 2008 to April 2009. However, many of these unemployed were not registered as

[6] This section was contributed by Armin Bauer, Regional and Sustainable Development Department, ADB.

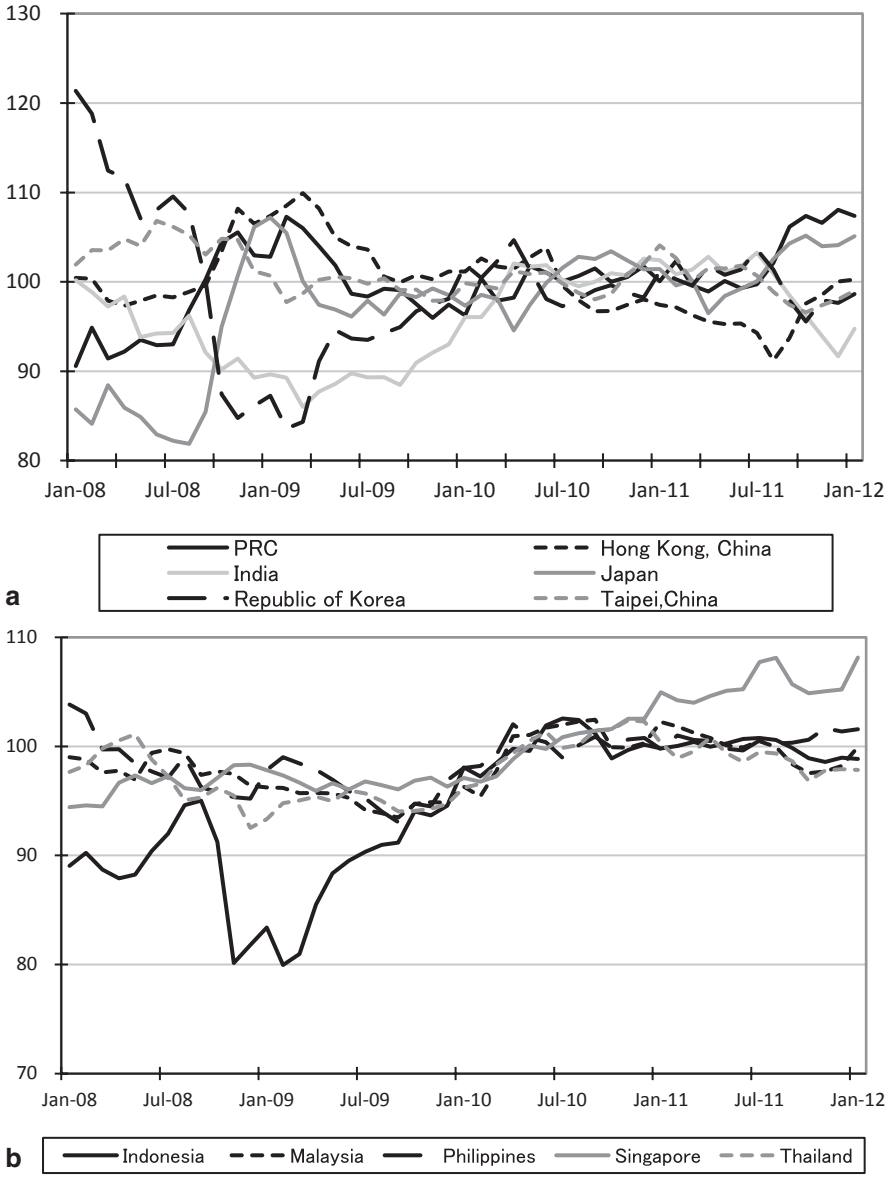

Fig. 2.7 Real effective exchange rates of East Asian economies (2010 = 100). **a** Note: *PRC* People's Republic of China. (Source : Bank for International Settlements (BIS) Statistics Database, available at: http://www.bis.org/statistics/eer/index.htm. Accessed March 2012). **b** Real effective exchange rates of East Asian economies (2010 = 100). (Source: Bank for International Settlements (BIS) Statistics Database, available at: http://www.bis.org/statistics/eer/index.htm. Accessed March 2012)

Table 2.1 Impact of the global financial crisis on unemployment by sex and region. (Source: International Labour Organization (ILO) Statistical Database, available at: http://www.ilo.org/global/What_we_do/Statistics/lang--en/index.htm. Accessed 12 April 2010)

	2007	2008	2009
Unemployment rate (%)			
East Asia	3.8	4.3	4.4
Male	4.3	4.9	5.0
Female	3.2	3.6	3.7
Southeast Asia and Pacific	5.4	5.3	5.6
Male	5.2	5.2	5.5
Female	5.8	5.6	5.9
South Asia	5.0	4.8	5.1
Male	4.7	4.5	4.8
Female	5.8	5.6	5.9
Total unemployment (millions)			
East Asia	31.4	35.6	36.9
Change (%)		4.3	1.3
Southeast Asia and Pacific	15.6	15.5	16.7
Change (%)		−0.1	1.2
South Asia	30.8	30.4	33.0
Change (%)		−0.4	2.6
Total Asia	77.8	81.5	86.6
Change (%)		3.8	5.1

they are migrant workers, and many others found work arrangements in the informal sector. Since mid-2009, companies have begun hiring again. In the PRC, the Republic of Korea, and the Philippines, these job losses were accompanied by job creation in low-productivity (and low-earning) sectors such as agriculture, trading, and construction, with a large share of the jobs in some countries in the informal sector. Moreover in the PRC, India, Indonesia, and the Republic of Korea, new publicly financed jobs were created as a result of the fiscal stimulus packages. However, most infrastructure projects implemented in the stimulus packages remain highly capital-intensive.

Table 2.1 shows the estimates of the International Labour Organization on unemployment in the region. The cumulative rise in unemployment from 2007 to 2009 in the region as a whole was about 9 million. Over 60% of the impact was in East Asia, primarily Japan and the PRC, followed by 25% in South Asia and 12% in Southeast Asia and the Pacific.

Companies reacted mainly by reducing working hours rather than conducting mass layoffs. Another reason why the crisis did not result in mass unemployment is the flexible response of the private sector by cutting production time rather than employment. This is because the crisis was perceived as being more short term, investments in the modern export sectors are relatively capital-intensive and productive, costs for labor in the region are already low, and available skills and management

cannot be so quickly transferred to regions in the world with lower labor costs. For the workers, reduced production or further outsourcing to the informal sector through value chains meant less working hours in the formal sector, and often overtime with less pay in the informal. This lowered the earning of the vulnerable poor, which in some cases also pushed them into poverty.[7]

Another reason for the relatively small impact is that the crisis affected mainly the export sectors. While these sectors are important for stimulating further productivity in the economy, they are less important for the labor markets. In many countries, export and trade-related activities in the formal sector and its value chain subsidiaries contribute 30–60 % to growth, but only 15–25 % to jobs (Papanek and Basri 2009). Interestingly, job creation in modern industries was very small during the last decade of globalization, much smaller than in the 1990s, when the Asian economies started their export orientation through labor-based production.

Nonetheless, the rural and services sectors were affected as well. A good part of the Thailand and Viet Nam export industries is located in rural areas. This is particularly so for food processing industries but also for other sectors such as textile and garments (in India), leather industries (in Viet Nam), or furniture making (in Indonesia), which have value chain arrangements to the villages. Studies on Indonesia and Viet Nam showed that rural income losses of farmers and people working in manufacturing, trade, and services are about 15–35 % on average.

While there was substantial return migration in some countries such as Armenia, Bangladesh, and Tajikistan, overall, the crisis did not result in a substantial drop in remittances for Asia as a whole. However, the global recession has not resulted in major return migration in Asia, and remittances flows remained stable. In Central Asia, countries' remittance flows make up 30–50 % of the GDP; they have declined massively due to the crisis in the Russian Federation and Kazakhstan. Flows to Armenia and Tajikistan fell by more than 30 % in the first half of 2009. Different to this, remittances to South Asia grew strongly despite the global economic crisis. In the first nine months of 2009, flows increased by 24 % in Pakistan, 16 % in Bangladesh and 13 % in Nepal. The resilience of the remittances against the crisis was due to different reasons: (i) overseas foreign workers worked in sectors that were less affected by the crisis (Philippines); (ii) overseas workers did not return and preferred temporary unemployment abroad as the labor markets in their home countries do not provide them adequate job opportunities; and (iii) natural disasters (such as the various storms, earthquakes, and tsunamis that struck Southeast Asia and the Pacific in 2009) triggered additional money to help the families affected.

[7] Much of this section is based on the Ha Noi conference on the social impact of the global recession, jointly organized by ADB, ASEAN Secretariat, and the governments of the PRC and Viet Nam and 12 development partners. The conference produced various background studies on the gender impact of the crisis. There were overview studies on gender and social protection impact in the footwear, electronics, car parts, call center, furniture-making, and toy-making sectors for Cambodia, the PRC, Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam. In addition, a cross-sector study on gender implications of the crisis on informal sector workers in India and Thailand was prepared. The papers can be downloaded from the conference website at http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp.

Table 2.2 Poverty estimates for Asia and the Pacific (ADB's developing member countries). (Source: ADB 2010)

		Actual	Projections			
		2005	Without crisis		With crisis	
			2009	2010	2009	2010
Extreme poor (US$ 1.25)	Million people	903.4	666.2	586.5	719.4	666.2
	% of population	27.1	19.2	16.7	20.7	18.9
Moderate poor (US$ 1.25–US$ 2)	Million people	899.2	860.9	844.9	879.0	872.8
	% of population	26.9	24.7	24.0	25.3	24.9
Vulnerable poor (below US$ 2 poverty line)	Million people	1802.6	1527.1	1431.4	1598.4	1539
	% of population	54.0	43.9	40.7	46.0	43.8

Although much attention was focused on the impact of the crisis on female workers, this crisis already elaborates a more differentiated gender perspective. Depending on the sector, men are sometimes more disfavored than women. For example, in the Viet Nam leather and footwear industry, only 37% of the retrenched workers were women as enterprises preferred female workers, who are seen as "more industrious and hardworking." The reasons for the gender differentiation are less related to the crisis and more to underlying gender differentiation in the labor markets. Women are less trained, have more insecure labor contracts, and are less organized.

2.4.2 Poverty Impacts

While poverty had been decreasing in the region mainly because of high growth and mostly pro-poor policies in many countries, the crisis caused some backsliding. It is estimated that the crisis has led in 2009 to an additional 53.3 million extreme poor (US$ 1.25 poverty line) and 71.3 million vulnerable poor (US$ 2 poverty line) (ADB 2008).[8] Based on current growth forecasts (see Table 2.2), the number of additional poor due to the crisis by 2010 would be about 78 million (extreme poor) and 108 million (vulnerable poor).

[8] The numbers are based on the empirical relationship between economic growth and poverty reduction observed over 1990–2005 and the updated growth numbers and forecasts for 2005–2010 as indicated in the *ADO Update* of September 2009. The data consider population increase. The baseline scenario (without crisis) projects poverty in 2009 and 2010 based on 2007 growth rates. The calculation does not consider the extent to which growth is pro-poor, nor does it estimate growth on the average annual growth rate in GDP per capita from 2003 to 2007, as done in the November 2008 publication of ADB on the World Bank's new poverty data. As a result, poverty reduction trends with and without crisis may be too optimistic. Figures from the World Bank, the United Nations Economic and Social Commission for Asia and Pacific (ESCAP), and other United Nations institutions are also slightly lower, as they are based on even higher growth data and assumed better growth-poverty elasticities. World Bank estimates for East and Southeast Asia are 9 million additional poor in 2009 and 14 million in 2010.

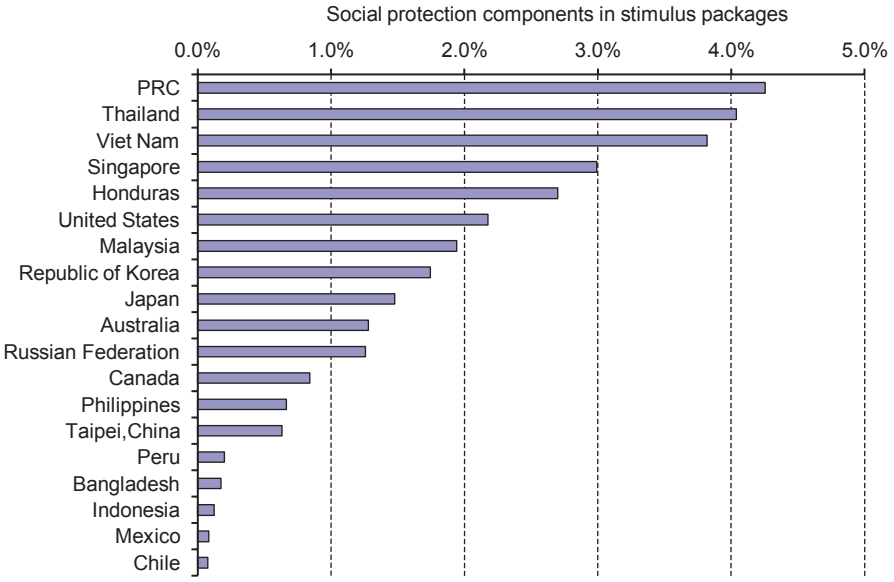

Fig. 2.8 Size of social protection stimulus measures (as share of GDP). (Notes: *GDP* gross domestic product, *PRC* People's Republic of China. Source: Zhang et al. (2009) based on official government documents and IMF 2009a)

2.4.3 Stimulus Measures

Governments' fiscal responses to the global financial crisis are both similar and varied. They are similar in the sense that major fiscal expenditures resulted from the crisis in order to mitigate the drop in external demand and prevent further economic contraction. However, the emphasis of the fiscal stimulus packages has been varied. Figure 2.8 shows that the social protection component of the fiscal stimulus packages in selected Asian and Pacific economies, as a percentage of GDP, is markedly different across economies. Social protection expenditure shares range from close to 0 % (Mexico, Chile) to more than 4 % (PRC, Thailand).[9]

2.5 Environmental Impacts[10]

Given the historical relationship between output and pollution, the sharp drop in output no doubt led to short-term improvement in the environment. However, this is hardly a positive development—the key long-term indicator for environmental

[9] The Zhang et al. (2009) study was based on announced fiscal stimulus measures. The definition of social protection employed in the study is also more broad than the "traditional" social protection programs. See Chapter 5 for more discussion of this issue.

[10] This section was contributed by Anbumozhi Venkatachalam, Capacity Building Specialist, ADBI.

improvement is in terms of efficiency per unit of output. Moreover, the global financial crisis may have had negative impacts in delaying needed investments in environmental protection and green growth industries. On the other hand, many governments included environment-related measures in their economic stimulus packages, which should contribute to longer-term progress in this area. Both these setbacks and stimulus measures are discussed below.

2.5.1 Negative Impacts

Many ongoing projects on energy efficiency are being slowed in many countries due to the credit crunch and a number of downward revisions are seen in pollution prevention projects (OECD 2009a). Renewable energy sector investments were also affected by financing difficulties, as well as by weak demand for green energy, which is costly. The International Energy Agency (2009) estimates that global renewable electricity consumption dropped by as much as 3.5 % from December 2008 to August 2009, the first annual contraction since the 1997 crisis. Risk-adverse investors are diverting funding for low-carbon energy projects to proven technologies in attractive markets. The slowdown in wind and solar energy sectors is due to contraction in sources of finance. Lower fossil-fuel prices also reduced the economic incentive for new investment during the crisis period. Commercial borrowing has become more difficult for new renewable energy projects as the cost of capital has risen markedly; venture capital and private equity investment has fallen sharply (Sawin and Moomaw 2009). The outlook for 2010 investment in renewable-based power project is mixed, depending on the policy framework, but is generally falling proportionately. Yamaguchi and Yanagi (2009) estimated that for next few years, investment in renewable energy could drop by as much as 7 % as a whole in countries like India, Indonesia, and the PRC. If a recovery takes longer than expected, and energy prices remain at depressed levels relative to recent peaks, a shift to coal and gas-fired plants at the expense of renewable could be seen, although this will depend on the policies, stimulus packages, and other support mechanisms individual countries have in place. Businesses and households are spending less on energy efficiency measures.

Tighter credit make investment in energy savings and environmental conservation less attractive financially when the private sector equity is more, while the economic crisis is encouraging end users to rein in spending across the board as a defensive measure. This is delaying the deployment of a more efficient generation of green technology and equipment in major economies like the PRC, India, and Malaysia (Rao 2009). Furthermore, private sector and the research community as solution providers are reducing their investment in research, development, and commercialization of cleaner production technologies and green services (Ramanathan 2009). Additional delay by many countries in implementing plans to build effluent treatment plants to limit the discharge of pollutants into the rivers is expected to have an adverse effect on the water environment.

The economic slowdown had a negative impact on the land use patterns by increasing the pressure to clear forests for firewood, timber, or agricultural purposes,

which are the livelihood opportunities available for the migrants who moved from urban to rural areas after losing their jobs. By official figures, at least 20 million migrants in the PRC returned to rural areas after losing urban jobs (Zhang 2009). The same migration and unemployment trend was eclipsed in other hard-hit countries like Indonesia (Muto and Shimokoshi 2009), where most of the migrants are unskilled workers. They were quickly absorbed by the agriculture and forestry sectors. With limited spending power and saving rates, migrants relied heavily on agriculture for employment and traditional fuels such as agricultural and animal wastes and forest fire wood to meet a substantial part of their demand for livelihood. Cutbacks in rural energy investment because of the crisis also impeded the access by poor households to electricity and other forms of modern energy (Khan 2009). An estimated 900 million people in Asia still lack access to electricity. Bangladesh, Myanmar, and Viet Nam are among the countries that still obtain about half or more their energy requirements from traditional forest fuels. India, Indonesia, Pakistan, the Philippines, and Thailand still rely on these fuels for at least 20 % of their total energy needs. Within this context, the natural resources and ecosystem services provided by the forests that are essential to support economic growth are being stressed during the crisis period.

2.5.2 Environmental Component of Stimulus Packages

The collapse in demand through falling exports and the inability of the private sector to generate growth led most Asian governments to expand domestic demand by introducing stimulus measures, as shown in Table 2.3. These rescue packages were unusually large in size and had wide scope. Japan had the largest stimulus package both in terms of total size and as a percentage of GDP (US$ 774 billion), followed by the PRC (US$ 586 billion) and the Republic of Korea (US$ 86 billion). Among Asian countries, these three countries comprehensively tackled environmental problems and a substantial part of their stimulus package is devoted to greening the economy and solving the emission and pollution challenges. These countries emphasize the importance of creating jobs with respect to the environmental measures in their recovery packages. For example, the Government of the Republic of Korea hoped to create nearly 1 million jobs over four years in green technology and industry as a result of its “Green New Deal” economic stimulus package, which includes not only investments in environment-related infrastructure, but also in research and development and a range of tax breaks or loans to help households move toward less environmentally damaging consumption choices. In Japan, employment in environmental industries is expected to double to 2.8 million by 2020. The PRC is developing its low-carbon industrial strategy, which aims to realize a step-change in energy efficiency and low-carbon energy infrastructure, develop and produce a low-carbon vehicle, and contribute to developing new skills.

Table 2.3 Green measures of fiscal stimulus packages in East Asian countries. (Source: Anbumozhi and Bauer 2009; Robbins et al. 2009)

Country	Amount (US$ billion)	As % of GDP	Green measures taken
Japan	774	116.4	Investments to support low-carbon revolution; tax measures to encourage green investment and purchase of green products; eco-point systems to reward consumers when they purchase energy saving home appliances; financial support via local "Green New Deals"
PRC	586	114	Investment in energy conservation, emission reductions, and ecological engineering
Republic of Korea	86	112.8	Investments in green transport—measure to promote rail transport and green car purchase; investments to secure alternative water sources—protection of four major river basins; investments in waste recycling; eco-towns; measures to improve forests as carbon sinks; replacement of public sector lighting with light-emitting diodes (LEDs)
Malaysia	18.1	110	Rehabilitation of public amenities, public housing, public transport, skills training
Viet Nam	17.6	222	Subsidies and loans to small and medium-sized enterprises, infrastructure projects, social security, special measures to support export sectors
Singapore	13.8	110.7	Job credit program, corporate tax cut; personal income tax cut
Philippines	6.5	44.6	Job creation, tax reduction, infrastructure projects
Indonesia	6.1	11.2	Tax breaks for individuals and companies, infrastructure spending, diesel subsidy, rural development
Thailand	3.3	11.2	Sufficient economy fund, infrastructure projects on energy, transport and communication

PRC People's Republic of China

Even though many of the measures introduced in the stimulus packages were aimed at new infrastructure, tax rebates, and switching to hybrid cars, the overall environmental consequences of these measures need to be carefully assessed. Japan's and the Republic of Korea's stimulus packages were to support more environmentally friendly vehicles and appliances. The PRC also put in place financial compensation schemes to prompt businesses to discard or scrap old cars. While these measures may help remove older, less efficient vehicles from the economy, they may also encourage greater material consumption, vehicle use, and ultimately increased emissions—thus offsetting the environmental benefits if they are not carefully designed. Measures aimed to support to eco-products also have the potential to generate inter- and intrasectoral distortions, and can act as a trade protectionist measure. Thus, the economic, trade, and environmental impacts of these measures should be carefully assessed.

2.6 Impact on Small and Medium-Sized Enterprises[11]

The SME sector forms the backbone of the Asian economy. It accounts for more than 90 % of the number of all private sector firms in the regional economy, and employs a considerable proportion of the domestic workforce in each country, ranging from 40–90 %, accounts for more than a quarter of exports (Wengel and Rodriguez 2006), and plays different dynamic roles that drive economic growth and industrial development in the developing Asia. For example, SMEs in Singapore provide a flexible and skilled production base that attracts multinational companies, while in Viet Nam, SMEs and rural enterprises were instrumental in the transition process from a planned to market economy.

While multinational enterprises and domestic large enterprises have been playing an important role in accelerating the industrialization process, SMEs provide the crucial industrial linkages to set off a chain reaction of broad-based industrial development. Without SMEs as subcontractors and suppliers of intermediate inputs to multinational companies and large enterprises, industrial growth in developing countries will not be able to provide a sustainable increase in domestic value-added, employment, productivity, and industrial linkages.

In the globalizing era of the borderless environment, along with regionalization and liberalization, SMEs are an important source of domestic employment and resiliency against external economic fluctuations and act as a mechanism for local capacity building.

2.6.1 Channels of Impacts of the Crisis on Firms and Small and Medium-Sized Enterprises

Broadly speaking, firms and/or SMEs in Asian economies are being affected by the global crisis through two channels: international trade and the availability of finance. There are also other channels, both direct and indirect. For example, the tourism and construction sectors saw a shelving of investment plans due to a decline in foreign direct investment. More broadly, the fall in aggregate demand originating from the decline of exports can be expected to leave virtually no sector unaffected. Although SMEs and large enterprises were affected by the sharp decline in export demand, they face relatively greater impacts via trade finance, as financing to SMEs in general tends to fall off sharply during economic crises.

[11] This section was contributed by Hank Lim, Director of Research, Singapore Institute of International Affairs.

Surprisingly, economic literature on the linkages between trade volumes and financing is very thin (IMF 2009b). The survey done by the IMF in conjunction with the Bankers' Association for Finance and Trade tended to support the anecdotal conclusion that trade finance is more expensive and harder to obtain in emerging markets—where much of the intraregional trade is in low-profit margin items that are part of the manufacturing production network or supply chain for exports to western developed economies. Although higher costs of trade finance are global, the decline in availability has occurred more in the emerging markets, especially in Asia. This phenomenon could be explained because of the absence of a corporate credit information database and credit guarantee system, and generally inefficient financial and capital markets in the region.

2.6.2 Small and Medium-Sized Enterprises in Asia: Impact and Implications

The impact of the global financial and economic crisis on SMEs in the region varies from country to country. Generally, the adverse impact is less in countries that have large domestic markets and are not too exposed or dependent on export-oriented growth, SMEs are much less adversely affected. Because the main transmission of the current global economic crisis is through the sharp decline of exports to the US and other western developed markets, countries such as India, Indonesia, and the PRC have been less affected. These three large Asian economies continued to register significant positive economic growth in 2009.

2.6.3 Small and Medium-Sized Enterprise Policies

Policy regimes and institutional arrangements for the sustainable development of SMEs have been minimal. Although empirical studies indicate SMEs are structurally more flexible in adjusting fixed and variable costs in times of economic crisis, their financial resiliency is determined by the extent of the crisis and certain sectors of the economy where demand for their products is inelastic and large domestic markets exist.

However, the supervision and regulation of the financial and banking sector in Northeast and Southeast Asia have improved since the Asian financial crisis in 1997–1998. With the infusion of fiscal and monetary stimulus programs by individual governments, the enhancement of the Chiang Mai Initiative among the ASEAN+3 countries and ADB's financial and capital initiatives, the adverse impacts of the global crisis in Asia have been minimized.

2.7 Internal or External Demand-Led Recovery?

2.7.1 Fiscal Stimulus: Did It Expand Consumption and Investment?

Beginning in the fourth quarter of 2008, most governments in East Asia including that of the PRC have implemented large fiscal stimulus packages as part of their efforts to offset the decline in export earnings. Although there has been a global chorus of approval for fiscal stimulus, the fiscal policy-led recovery strategy has not been without its detractors who questioned its effectiveness and sustainability in East Asia, in particular in countries where an efficient institutional setup to manage large government spending programs or tax cuts is lacking.

East Asian economies have traditionally refrained from spending out of an economic downturn whenever possible. They consider fiscal profligacy a sign of macroeconomic mismanagement. Since the 1997–1998 Asian crisis, East Asian economies have been lectured by many international financial institutions to be on guard over fiscal indiscretion as this could sow the seeds of another crisis. Japan, the second largest economy in the world, has been an exception. Japan used fiscal policy repeatedly, if sporadically, in the 1990s in failed attempts to engineer an escape from its decade-long slump (Kuttner and Posen 2002). Memories of those failures, in conjunction with a high net debt/GDP ratio and aging population, have rendered other East Asian economies reluctant to repeat the unsuccessful experiment. Nevertheless, faced with a rapid deterioration of the economy and in the absence of other effective short-run stimulation measures, Japan has elected to supplement monetary easing by ramping up government expenditure on various projects ranging from the construction of physical infrastructure to environmental protection (Park et al. 2010). These stimulus measures, their impacts and effectiveness are discussed in detail in Chapter 3.

2.7.2 Internal or External Demand-Driven Recovery?

There is a widely held presumption that much of the rebound in East Asia has been fueled by an expansion of internal demand supported by the implementation of large fiscal stimulus packages. To ascertain the extent to which both internal and external demand have contributed to the recovery, this section (i) examines current account developments for a measure of changes in the external demand, and (ii) conducts an ex post decomposition of the GDP identity on a quarterly basis from the first quarter of 2007 to the second quarter of 2009 for a number of East Asian economies (excluding the PRC because of the lack of data).

The effect of the growth of external demand on the recovery has varied throughout East Asia as shown by the decomposition in the table in Appendix 2.1. In Indonesia, the Republic of Korea, and Thailand, external demand has clearly driven the economic rebound. In contrast, in Japan and Malaysia it has not. The table shows

that, in all countries except Japan, government spending also contributed to the recovery, adding at least 0.5 percentage points to growth.

2.8 Long-Term Impact of the 2008–2009 Global Financial Crisis

2.8.1 From Rebound to Recovery?

Mainly reflecting the rise of the PRC as a major economic power, East Asia has increasingly been entrusted with a larger role to play in the global economy. Now that it is growing faster than any other region, it is expected that East Asia will lead the world in recovering from the 2008–2009 global financial crisis. Reflecting the growing confidence in the economy of emerging Asia, the stock market has managed a sustained rally and the region's currencies have gained on the US dollar. However, this optimism must be tempered by several risk factors and uncertainties, pointing to a rocky recovery trail with hidden mines that could derail the region's efforts to return to a sustainable long-term growth path.

As noted earlier, given the dependence of its exports on markets outside the region, there is simply no way for East Asia to return to the pre-crisis rapid growth unless North America and Europe pull themselves out of the recession.

A more serious risk stems from the unsustainability of fiscal stimulus. East Asian economies with a possible exception of the PRC may have exhausted the policy tools they can use in case recovery stalls. If indeed the effects of the fiscal stimulus packages either wear off or are short lived, there is the danger that some of the East Asian economies may succumb to the temptation of promoting export to sustain recovery.

Even when fiscal policy stimulus is proven to be effective, over the medium term, it may result in a massive increase in government spending, which is likely to raise the level of public debt beyond the sustainable level, will weigh on efficiency and financing costs, and hence economic growth. These prospects could lead to an increase in emerging East Asia's sovereign spreads and limit access to international capital markets particularly as the global bond supply is expected to increase. High real interest rates are likely to crowd out further private sector spending (Krueger 2009).

A third uncertainty that grips the minds of emerging Asia's policymakers more than anything else at this stage of the recovery is undoubtedly the prevention of the recurrence of liquidity crisis in the future. Any default in Europe could potentially spill over to East Asia through the common link of western European banks. Although it is highly unlikely that East Asian borrowers would be forced into large-scale defaults on external liabilities even when a reversal of capital flows takes place, emerging Asia's policy authorities must be prepared for such circumstances.

Finally, there is the growing dissatisfaction with the state of macroeconomics and in particular the widespread concern about the absence of a reliable macroeconomic

policy framework emerging economies could use for their crisis management. Most emerging economies of East Asia realize the inefficiency of inflation targeting as a framework for monetary policy they adopted right after the 1997–1998 Asian crisis, but cannot find a new one to replace it. When combined with low interest rates, a large fiscal stimulus package could then rekindle a speculative demand for real assets such as housing, commercial real estate, and land in addition to stocks and other financial assets to create real asset market bubbles. These issues are discussed in more detail in Chapters 3 and 6.

2.8.2 Prospects for Rebalancing Growth in East Asia

The viability of the region's export-led growth paradigm has been reexamined throughout East Asia. The export-led development strategy would not have worked had it not been for the voracious appetite of US consumers for Asian exports. Now that demand for Asian manufactures by US and European consumers is likely to remain weak for years to come, even when the global economy recovers and financial stability is restored, exporting out of the crisis may no longer be a practical option. This awareness has led to an emerging consensus that short-run policy adjustments for recovery should not be an end in themselves, but a first step toward breaking away from the export-led development to depend more on domestic demand than before as a source of growth. This new policy would then require economic restructuring and institutional changes designed to allocate more resources to the non-tradables sector.

According to the *Asian Development Outlook* (ADB 2009), rebalancing growth in Asia is not only a long-term reform objective, but the key to enduring the global economic crisis—although the meaning of "rebalancing" is left open. However defined it is, rebalancing or recalibration does not mean that East Asia should abandon altogether its export-led growth model. According to ADB "rebalancing represents return to the generally more balanced structure of demand and growth that prevailed in the region prior to that crisis" (ADB 2009, p. 66). For example, even though current imbalances lessened after the crisis, this merely reflected the economic downturn, and the mismatch between production structure and demand structure actually intensified.

In rebalancing growth, it is important to distinguish between an export-led growth strategy and export-led growth. The former is a strategy in which the underlying incentive structure is biased in favor of exports over non-tradables, whereas in export-led growth it is not. Because of comparative advantage and other structural characteristics, some market-oriented open economies may rely more on external demand for growth than others, even though their incentive schemes are neutral. These countries may run either deficit or surplus on their current accounts, which is a cyclical phenomenon.[12] Some of the economies oriented toward export-led

[12] The ratio of exports to GDP is close to 60% in the Netherlands and it is about 45% in the Republic of Korea on average in recent years. No one would argue that the Netherlands is a country pursuing an export-led industrialization.

growth may run persistent current account surpluses for a long period of time as Japan and Taipei,China have. In contrast, a country like the Republic of Korea, which is known for its success in promoting an export-push strategy, had suffered from a chronic current account deficit during much of the post-war period before the 1997–1998 Asian financial crisis.

Most of East Asia's emerging economies, with the possible exception of the PRC, have phased out much of subsidization of exports, including keeping the currency undervalued. Nevertheless, the 2008–2009 global financial crisis provides an opportunity for these economies to reexamine whether or not their export-led growth is still biased in favor of tradables—that is, whether the relative prices of tradables are kept at artificially higher levels to induce allocation of resources to export-oriented industries. To this end, rebalancing should be viewed as a process of removing the remnants of tax and other incentives of the old dirigiste regime that favor export-oriented industries. The rebalancing strategy may make emerging East Asia less vulnerable to external shocks, but the shift of resources to the less productive non-tradables sector runs the risk of bringing down the total factor productivity of the economy. The growth rebalancing therefore needs to be complemented by measures such as market deregulation and opening that could narrow the productivity gap between the tradables and non-tradables sector.

While vanishing export markets add urgency to the need for growth rebalancing, the prospects for reform for internal demand-driven growth in the region are not as promising as they may appear. Emerging East Asia's policymakers are not likely to take the risk of the rebalancing unless they are persuaded that a new internal demand-led growth strategy would be as effective as an export-led one in sustaining rapid growth. There is also institutional inertia. The region may not be able to turn around its export-oriented economy through expansionary monetary and fiscal policy to fill the void created by the decline in external demand. In a region where exports account anywhere from 40–70% of its GDP, exporters would find it difficult to sell in domestic markets what they cannot ship abroad, when exports fall by more than 30% in a given year. In a country like the Republic of Korea where large industrial groups sell more of their products in foreign rather than domestic markets, rebalancing can hardly be an overriding reform objective as long as the incentive system is not skewed against non-tradables.

2.9 Conclusions

The recovery of emerging Asia raises an important question as to how a region that had been buried deep in a slump only three months earlier could make such a quick turnaround to break out of the recession ahead of other regions. One could argue that unlike the 1997–1998 Asian crisis, emerging Asia had been dealt collateral damage caused by a crisis of which the epicenter was located elsewhere and hence bore less burden of resolving it. In retrospect, one could argue that emerging Asia has suffered a transitory nominal shock that it could absorb more readily than before

as its economy had built up enough resilience through an extensive reform of its financial, corporate, and public sectors since the 1997–1998 Asian crisis.

The region's banking sector was not heavily loaded with non-performing assets—certainly not large enough to threaten its solvency or systemic risk. Nor did it indulge in acquiring US toxic assets. Maturity and currency mismatches in the balance sheets, which were at the root of the insolvency of many banks and other financial institutions during the Asian financial crisis, had been by and large under control. Governance, transparency, and the financial soundness of the corporate sector have all improved. On macroeconomic policy, greater flexibility of the foreign exchange rate system throughout the region should be given some credit for softening the impact of the liquidity crunch, although it could not avert a run on the central bank reserve in the Republic of Korea. The depreciation of the region's currencies against the US dollar during the height of the crisis has subsequently helped to improve competitiveness of exports to propel East Asia's recovery.

Although it is premature to judge, fiscal stimulus packages may not have been as effective as claimed, and certainly may not be sustainable. Once East Asia's emerging economies exhaust the countercyclical policy tools available, they may be forced to do what they do very well—promote exports. The experience with managing the 2008–2009 global financial crisis may also persuade them to accumulate more of their foreign exchange reserve holdings beyond the adequate level prescribed by the Greenspan-Guidotti-Fischer rule, which requires holding a reserve equal to the amount of short-term external liabilities.

This will put emerging Asia in a dilemma because it will need to continue to generate current account surpluses, which may in turn tempt its policy authorities to keep the real exchange rate undervalued. Reserve accumulation could be a costly option if it means eschewing a free-floating exchange rate in favor of an intermediate regime and returning to capital controls. This regime change runs the risk of setting off frictions with its major trading partners, and of being blamed for exacerbating the global trade imbalance. Despite these risks, emerging Asia may not eschew the reserve-accumulation option unless the central banks of reserve currency countries, international financial institutions, or regional cooperative arrangements could provide short-term liquidity in case the country is faced with an impending liquidity crisis.

Governments can use the financial crisis as an opportunity to develop a cleaner, high technology industrial sector by increasing the need and demand to become a global leader in green technology and renewable energy investment. Governments can also use the current crisis as a spur to strengthen and rationalize their policy framework for supporting SMEs.

Appendix 2.1 Contribution to Gross Domestic Product Growth by Sector and Country (Year-on-year % Points)

	Private consumption	Fixed investment	Government expenditure	Net exports	Inventories	GDP growth rate
Australia						
Q3 2008	1.5	3.4	0.7	−2.6	0.2	2.5
Q4 2008	0.8	2.0	0.5	−0.4	−1.5	1.0
Q1 2009	−0.2	−0.7	0.5	3.4	−1.0	1.0
Q2 2009	0.4	−1.9	0.3	3.7	−0.5	0.9
Q3 2009	0.7	−1.7	0.0	3.4	−1.1	0.9
Q4 2009	1.3	0.5	0.3	0.5	0.9	2.7
Q1 2010	1.1	1.7	0.3	−1.7	1.1	2.4
Q2 2010	1.4	2.1	0.6	−1.8	0.4	3.1
Q3 2010	1.8	2.0	0.9	−2.0	−0.3	2.7
Q4 2010	1.7	0.6	0.7	−1.0	0.5	2.7
Q1 2011	1.9	1.2	0.7	−3.2	−0.1	1.0
Q2 2011	1.7	1.1	0.6	−3.4	1.3	1.4
India						
Q3 2008	4.5	2.7	0.7	−4.7	−2.3	6.9
Q4 2008	3.8	0.3	5.2	−3.3	−2.1	3.1
Q1 2009	3.6	−0.2	−0.3	0.9	−2.0	3.9
Q2 2009	4.3	1.8	1.5	−0.2	1.0	5.7
Q3 2009	6.2	2.6	2.2	1.6	1.1	6.5
Q4 2009	4.4	3.3	0.9	−0.7	1.1	7.0
Q1 2010	3.6	6.3	0.7	−3.0	2.0	12.6
Q2 2010	5.8	2.9	1.2	−2.5	1.2	9.5
Q3 2010	5.4	2.4	1.3	−0.8	1.1	8.9
Q4 2010	4.7	3.6	0.6	1.6	1.1	10.1
Q1 2011	4.2	0.1	0.5	2.3	0.2	7.7
Q2 2011	3.7	1.6	0.3	−1.1	0.1	8.5
Q3 2011	1.8	−1.4	0.6	3.1	−0.2	6.7
Q4 2011	3.8	−0.4	0.5	−2.1	0.0	6.3
Indonesia						
Q3 2008	3.0	2.7	1.0	0.7	−0.5	6.2
Q4 2008	2.9	2.2	1.5	2.5	0.3	5.3
Q1 2009	3.4	0.8	1.2	0.5	−1.3	4.5
Q2 2009	2.7	0.5	1.3	0.9	0.0	4.1
Q3 2009	2.7	0.8	0.8	2.1	0.4	4.3
Q4 2009	2.3	1.0	1.9	1.2	0.0	5.6
Q1 2010	2.3	1.8	−0.6	1.3	1.4	5.9

	Private consumption	Fixed investment	Government expenditure	Net exports	Inventories	GDP growth rate
Q2 2010	2.8	1.8	−0.6	0.3	0.8	6.3
Q3 2010	2.9	2.2	0.4	0.3	0.8	5.8
Q4 2010	2.8	2.1	0.8	1.7	−0.6	6.8
Q1 2011	2.6	1.7	0.2	0.5	0.5	6.4
Q2 2011	2.6	2.2	0.3	2.3	1.3	6.5
Q3 2011	2.7	1.7	0.2	3.1	0.2	6.5
Q4 2011	2.8	2.9	0.3	0.1	−0.1	6.5
Japan						
Q3 2008	−0.4	−0.4	−0.1	0.4	−0.8	−1.4
Q4 2008	−1.0	−1.1	−0.1	−2.2	0.6	−4.1
Q1 2009	−5.	−2.6	−0.1	−4.0	−0.7	−9.3
Q2 2009	−4.9	−2.4	0.7	−2.7	−1.6	−6.6
Q3 2009	−4.5	−2.7	0.9	−2.2	−1.2	−5.6
Q4 2009	−3.3	−1.3	1.1	1.2	−2.5	−0.5
Q1 2010	0.4	−1.0	0.9	3.5	−0.2	4.8
Q2 2010	2.1	0.1	0.5	2.1	0.6	4.4
Q3 2010	3.8	0.6	0.3	1.5	1.4	5.5
Q4 2010	2.7	0.1	−0.1	0.7	1.1	3.1
Q1 2011	0.2	−0.1	−0.3	−0.1	0.0	−0.3
Q2 2011	−0.8	−0.1	0.5	−1.3	−0.5	−1.7
Q3 2011	−0.3	−0.1	0.4	−0.5	−0.4	−0.4
Q4 2011	0.1	0.6	0.4	−1.0	−0.8	−0.6
Republic of Korea						
Q3 2008	0.7	0.5	0.6	0.5	1.1	3.1
Q4 2008	−1.9	−2.2	0.7	1.5	−1.2	−3.4
Q1 2009	−2.5	−1.7	1.1	2.4	−3.6	−4.0
Q2 2009	−0.6	−0.8	1.0	3.8	−5.1	−2.0
Q3 2009	0.2	−0.4	0.8	3.9	−3.6	1.2
Q4 2009	3.0	1.9	0.4	0.9	0.0	6.3
Q1 2010	3.7	2.5	0.5	−1.1	1.3	8.6
Q2 2010	2.1	1.5	0.4	0.0	3.0	7.4
Q3 2010	2.0	1.5	0.3	−0.3	1.1	4.5
Q4 2010	1.6	0.7	0.5	1.5	0.5	5.0
Q1 2011	1.5	−0.7	0.2	3.3	1.1	4.0
Q2 2011	1.6	0.3	0.3	0.8	0.4	3.5
Q3 2011	1.0	−0.3	0.5	2.1	0.4	3.7
Q4 2011	0.6	−0.4	0.3	1.6	0.8	3.4
Malaysia						
Q3 2008	4.2	0.7	0.8	−2.7	1.7	4.8

	Private consumption	Fixed investment	Government expenditure	Net exports	Inventories	GDP growth rate
Q4 2008	2.7	−2.3	2.1	−5.2	2.8	0.1
Q1 2009	−0.4	−2.6	0.3	4.9	−8.4	−6.2
Q2 2009	0.1	−2.4	0.3	−1.7	−0.1	−3.9
Q3 2009	0.7	−1.7	1.3	−2.1	0.6	−1.2
Q4 2009	0.9	1.8	0.3	0.7	0.9	4.6
Q1 2010	2.9	1.2	0.8	−3.2	8.4	10.1
Q2 2010	4.1	2.9	0.9	−5.8	6.8	9.0
Q3 2010	3.6	2.2	−1.4	−3.4	4.3	5.3
Q4 2010	3.3	2.1	0.0	−1.7	1.1	4.8
Q1 2011	3.6	1.3	1.4	−6.5	5.5	5.2
Q2 2011	3.3	0.7	0.8	1.3	−1.9	4.3
Q3 2011	4.0	1.4	2.6	1.3	−3.5	5.8
Q4 2011	3.8	1.8	4.1	−1.8	−2.7	5.2
Philippines						
Q3 2008	3.5	1.2	0.8	−1.4	0.4	4.6
Q4 2008	3.9	0.0	0.1	−6.8	−2.3	2.9
Q1 2009	1.3	−1.7	0.6	2.6	−0.8	1.0
Q2 2009	2.8	−0.8	1.2	−2.2	−0.4	1.6
Q3 2009	0.4	−0.1	1.2	1.1	−1.9	0.5
Q4 2009	2.0	1.0	1.1	−0.8	−2.0	1.4
Q1 2010	2.9	3.7	2.3	−1.8	1.1	8.4
Q2 2010	1.4	4.8	0.9	1.0	1.2	8.9
Q3 2010	1.7	2.9	−0.7	1.8	1.9	7.3
Q4 2010	3.6	3.0	−0.6	−3.1	2.8	6.1
Q1 2011	3.7	2.7	−2.0	−4.5	5.1	4.6
Q2 2011	3.7	−2.1	0.5	0.6	0.5	3.1
Q3 2011	4.5	0.7	0.7	−7.4	4.2	3.6
Q4 2011	4.9	1.1	0.4	−0.6	−2.2	3.7
Thailand						
Q3 2008	1.4	0.4	0.4	−1.1	1.7	2.9
Q4 2008	1.1	−1.1	1.0	−7.5	2.4	−4.2
Q1 2009	−1.3	−3.6	0.5	4.9	−7.6	−7.0
Q2 2009	−1.2	−2.2	0.7	−1.2	−1.3	−5.2
Q3 2009	−0.7	−1.3	0.9	3.1	−4.9	−2.8
Q4 2009	0.8	−1.0	0.6	6.8	−1.6	5.9
Q1 2010	2.1	2.3	1.0	−2.8	9.0	12.0
Q2 2010	3.6	2.5	0.8	2.3	0.3	9.2
Q3 2010	2.7	1.8	0.4	−2.6	4.8	6.6
Q4 2010	2.0	1.2	0.3	1.0	−0.7	3.8

	Private consumption	Fixed investment	Government expenditure	Net exports	Inventories	GDP growth rate
Q1 2011	1.6	1.8	0.2	2.5	−3.0	3.2
Q2 2011	1.5	0.9	0.1	0.3	0.1	2.7
Q3 2011	1.2	0.7	0.6	0.9	0.3	3.7
Q4 2011	−1.6	−0.7	−0.3	−6.1	−0.1	−9.0

Sources: CEIC Data, available at: http://ceicdata.com (accessed 30 March 2012) and ADBI estimates.
GDP gross domestic product

References*

ADB. 2008. The World Bank's new poverty line. Implications for Asia-Pacific and the ADB. http://www.adb.org/Documents/Presentations/New-Poverty-Estimates/Poverty-Data-Implications.pdf. Accessed 17 April 2010.

ADB. 2009. *Asian Development Outlook: Rebalancing Asia's growth*. Manila: ADB.

ADB. 2010. The impact of the crisis on people, vulnerability and poverty. Regional and Sustainable Development Department. Unpublished report.

Ahearne, A., J. Fernald, P. Loungani, and J. Schindler. 2006. *Flying geese or sitting ducks: China's impact on the trading fortunes of other Asian countries*. International Finance Discussion Paper No. 886. Washington, DC: IFC.

Alun, T. 2009. Financial crises and emerging market trade. IMF Staff Position Note. SPN/09/04 Washington, DC: IMF.

Anbumozhi, V., and A. Bauer. 2009. Impact of the global recession on sustainable development and poverty linkages. Proceedings of the conference on the impacts of global economic slowdown on poverty and sustainable development in Asia and the Pacific, Ha Noi, Viet Nam, 28–30 September.

Anderson, J. 2007. *Is China export led? UBS investment research Asian focus*. Hong Kong, China: UBS Asia Securities Ltd.

Athukorala, P., and A. Kohpaiboon. 2009. *Intra-regional trade in East Asia: the decoupling fallacy, crisis and policy challenges*. ADBI Working Paper 177. Tokyo: ADBI.

Blanchard, O. 2009. Emerging market countries in the crisis. Keynote address delivered at the ABCDE conference, Seoul, June 22–24.

Business Insights. 2008. *Top ten global retail banks*. London: Business Insights.

Chinn, M., and H. Ito. 2009. A new measure of financial openness. *Journal of Comparative Policy Analysis* 10 (3): 307–320.

Crockett, A. 2002. Capital flows in East Asia since the crisis. Speech given at the meeting of deputies of the ASEAN+3, Beijing, 11 October.

Goldstein, M., and M. S. Khan. 1985. Income and price effects in foreign trade. In *Handbook of international economics,* eds. R. W. Jones and P. B. Kennen. Amsterdam: Elsevier.

Grunwald, P., and M. Hori. 2008. *Intra-regional trade key to Asia's export boom. IMF survey magazine: Countries and regions*. Washington, DC: IMF.

Haltmaier, J., S. Ahmed, B. Coulibaly, R. Knippenberg, S. Leduc, M. Marazzi, and B. A. Wilson. 2007. *The role of China in Asia: Engine, conduit, or steamroller?* International Finance Discussion Paper No.904. Washington, DC: Board of Governors of the Federal Reserve System.

IMF. 2008. *World Economic Outlook update* (November). Washington, DC: IMF.

* The Asian Development Bank refers to China by the name People's Republic of China.

IMF. 2009a. *World Economic Outlook update* (April). Washington, DC: IMF.
IMF. 2009b. Finance & development, a quarterly publication of the International Monetary Fund March 2009, vol. 46, no. 1.
IMF. 2010. *World Economic Outlook* (April). Washington, DC: IMF.
International Energy Agency. 2009. The impact of global financial crisis on global energy investment. Background paper for the G8 environmental minister's meeting, International Energy Agency, Rome, 25 May.
Jia, K. 2010. Meeting the challenges of financial crisis—China's practice from developing countries' perspective. Paper presented at the conference on the global financial and economic crisis organized by ADBI, Ministry of Finance Policy Research Institute, and Hitotsubashi University, Center for Intergenerational Studies-International Development Research Centre, Tokyo, 19 January.
Khan B. N. 2009. Studying the environmental implications of the global financial crisis in Asia. Proceedings of the conference on the impacts of global economic slowdown on poverty and sustainable development in Asia and the Pacific, Ha Noi, Viet Nam, 28–30 September.
Krueger, A. 2009. Development prospects in light of the crisis. A keynote address delivered at the World Bank annual bank conference on development economics, Seoul, 23 June.
Kuttner, K. N., and A. S. Posen. 2002. Passive savers and fiscal policy effectiveness in Japan. Peterson Institute Working Paper Series WP02-2. Washington, DC: Peterson Institute for International Economics.
Muto, M., and S. Shimokoshi. 2009. Urban-rural transmission mechanisms in Indonesia in the context of the crisis. Proceedings of the conference on the impacts of global economic slowdown on poverty and sustainable development in Asia and the Pacific, Ha Noi, Viet Nam, 28–30 September.
Organisation for Economic Co-operation and Development (OECD). 2009a. *Overcoming the crisis and beyond*. Paris: OECD.
Organisation for Economic Co-operation and Development (OECD). 2009b. Turin roundtable on the impact of the global crisis on SME & entrepreneurship financing and policy responses, Turin, Italy, 26–27 March.
Papanek, G., and M.C. Basri. 2009. *Labor market and social protection impact of the crisis in Indonesia*. Unpublished.
Park, Y. C. 2009. *Global economic recession and East Asia: How has Korea managed the crisis and what has it learned*. Working Paper 409. Seoul: Institute for Monetary and Economic Research, The Bank of Korea.
Park, D., S. K. Hur, S. Jha, and P. Quising. 2010. Did fiscal stimulus lift developing Asia out of the global crisis?: A preliminary empirical investigation. Paper presented at the conference on the global financial and economic crisis organized by ADBI, Ministry of Finance Policy Research Institute, and Hitotsubashi University, Center for Intergenerational Studies-International Development Research Centre, Tokyo, 19 January.
Ramanathan, K. 2009. Adopting mitigation technologies in post crisis environment. Proceedings of the conference on the impacts of global economic slowdown on poverty and sustainable development in Asia and the Pacific, Ha Noi, Viet Nam, 28–30 September.
Rao, N. B. 2009. Clean tech—The next big thing in India now. India Brand Equity Foundation.
Reuters. 25 September 2009. FACTBOX—Top 10 rankings for investment banking fees.
Robbins N., R. Clover, and C. Singh. 2009. *A climate for recovery: The colour of stimulus goes green*. London: HSBC Bank plc.
Sawin J. L., and W. R. Moomaw. 2009. An enduring energy future. In *State of the world*. Washington, DC: World Watch Institute.
Takagi, S. 2009. Internationalizing the Yen, 1984–2003: Unfinished agenda or mission impossible? Paper presented at the Bank of Korea-BIS seminar, Seoul, 19–20 March. http://www.bis.org/repofficepubl/arpresearch200903.04.pdf. Accessed 13 April 2010.
Wengel, J., and E. Rodriguez. 2006. SME export performance in Indonesia after the crisis. *Small Business Economics* 26:25–37.

World Bank. 2007. East Asia and Pacific update: November. Washington, DC.
Yamaguchi, K., and M. Yanagi. 2009. Alternate energy options of Asia in crisis. Proceedings of the conference on the impacts of global economic slowdown on poverty and sustainable development in Asia and the Pacific, Ha Noi, Viet Nam, 28–30 September.
Zhang, Y. 2009. Implications of global slowdown on rural and urban migrants. Proceedings of the conference on the impacts of global economic slowdown on poverty and sustainable development in Asia and the Pacific, Ha Noi, Viet Nam, 28–30 September.
Zhang, Y., N. Thelen, and A. Rao. 2009. *Social protection in fiscal stimulus packages: Some evidence*. UNDP/ODS Working Paper. New York: United Nations Development Programme.

Chapter 3
Improving Macroeconomic Stability

Masahiro Kawai and Shinji Takagi

Abstract Although the initial impact of the global financial crisis on the region appeared limited, Asia was hit hard when the crisis spread to the real sector and caused the volume of world trade to collapse. Policymakers in almost all economies in the region responded to the sharp contraction of output by easing macroeconomic policies. However, the output gaps they faced were quite different, reflecting differences in business cycles. Subsequently, almost all economies in the region experienced a narrowing of the output gap. This chapter draws broad lessons from the recent macroeconomic policy experience of the region's economies. It reviews and assesses the principal measures taken by Asian and other economies in response to the global financial crisis in the area of monetary policy, fiscal policy and exchange rate/reserve management policies, and provides policy recommendations on how to improve the effectiveness of macroeconomic policies.

Keywords Macroeconomic policy · Monetary policy · Fiscal policy · Exchange rate policy · Reserve management policy · Global financial crisis

JEL Codes E63 · E52 · F31 · F32 · F42

3.1 Introduction

The global financial crisis severely impacted Asia from late 2008 to early 2009. Although the initial impact appeared limited, the region was hit severely when the crisis spread to the real sector and caused the volume of world trade to collapse. The hardest hit among the region's economies in terms of output declines were Japan;

M. Kawai (✉)
Graduate School of Public Policy, Tokyo University, Tokyo, Japan
e-mail: mkawai@pp.u-tokyo.ac.jp

S. Takagi
Independent Evaluation Office of the International Monetary Fund,
Washington, DC, United States
e-mail: stakagi@imf.org

M. Kawai and J.-W. Lee (eds), *Rebalancing for Sustainable Growth,* Economics, Law, and Institutions in Asia Pacific, DOI 10.1007/978-4-431-55321-2_3

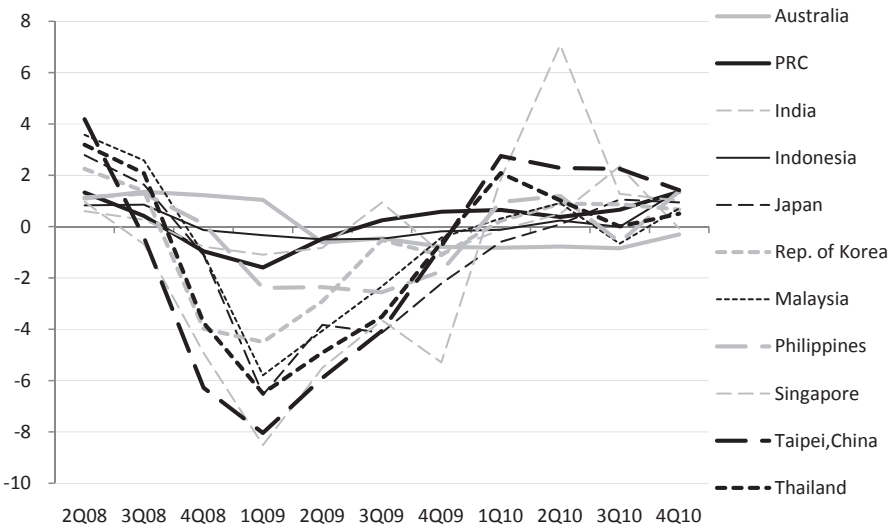

Fig. 3.1 Quarterly output gaps in selected Asian economies, Q2 2008–Q2 2010 (in % deviation from detrended GDP). (Note: *PRC* People's Republic of China. Sources: Estimates by Peter Morgan of the Asian Development Bank Institute; for Australia only, authors' own estimates; detrended GDP data are obtained by the Hodrick-Prescott filter)

Taipei,China; Singapore; Thailand; and Malaysia, which all experienced a large drop in real gross domestic product (GDP) from 2008 to 2009. While the adverse impact appeared large at the outset, the Republic of Korea somehow managed to achieve positive growth in 2009. Most other Asian economies were able to maintain positive growth as well, notably the People's Republic of China (PRC), India, and Indonesia. Even so, the PRC and India experienced a significant deceleration of output growth from 2007 to 2008 and early 2009, and Indonesia from 2008 to 2009.

Though policymakers in almost all economies in Asia responded to the sharp contraction of output or output growth by easing macroeconomic policies substantially, the output gaps they faced in late 2008 and early 2009 were quite different, reflecting the differences in the phases of their business cycles. In terms of output gap, the economies that were most severely affected in the fourth quarter of 2008 were Taipei,China; Singapore; and the Republic of Korea, while the output gaps in Indonesia, Malaysia, and Australia were not very large (Fig. 3.1; also, Table 3.1, columns 1–3). In the first quarter of 2009, the negative impact intensified particularly for Singapore; Taipei,China; and Japan, but the impacts on the PRC and India are estimated to have remained relatively limited over the two quarters. Subsequently, almost all economies in the region experienced a narrowing of the output gap, with the PRC even showing a positive gap as early as the second quarter of 2009.

The purpose of this chapter is to draw broad lessons from the recent macroeconomic policy experience of the region's economies. Section 3.2 reviews the princi-

Table 3.1 Macroeconomic conditions at the onset of the global financial crisis in selected Asian economies. (Sources: International Monetary Fund, International Financial Statistics database, available at: http://www.imfstatistics.org/imf/; IMF, World Economic Outlook database, available at: http://www.imf.org/external/ns/cs.aspx?id=28; IMF (2009b); Central Bank of Taipei,China; and calculations by Peter Morgan of the ADB Institute, except for Australia (for which the same methodology was replicated by the authors))

Economy	GDP gap (%)[a]			Consumer price index inflation (% per year)		Key policy interest rate (% per year)	General government fiscal balance (% of gross domestic product)	Gross public sector debt (% of gross domestic product)
	3Q 2008 (1)	4Q 2008 (2)	1Q 2009 (3)	2007 (4)	2008 (5)	Peak in 2008 (6)	2007 (7)	2007 (8)
Australia	0.8	−0.4	−0.8	2.3	4.4	7.25	1.5	9.8
PRC	0.7	−0.9	−1.1	4.8	5.9	7.47	0.9	20.2
India	0.9	−0.6	−1.2	6.4	8.4	9.0	−5.8[b]	80.5
Indonesia	1.0	−0.1	−0.5	6.0	9.8	9.5	−1.2[c]	35.1
Japan	1.2	−1.8	−5.0	0.0	1.4	0.5	−2.5	187.7
Rep. of Korea	2.1	−3.8	−4.4	2.5	4.7	5.25	3.5[c]	29.6
Malaysia	2.4	−0.3	−5.9	2.0	5.4	3.5	1.5	50.6
Philippines	1.4	0.6	−2.5	2.8	9.3	6.0	−1.7[c]	60.9
Singapore	1.2	−4.1	−8.2	2.1	6.5	–	11.1	96.9
Taipei,China	2.9	−5.4	−8.2	1.8	3.5	3.625	−0.2	–
Thailand	2.2	−3.4	−5.5	2.2	5.5	3.75	−0.2	38.1

PRC People's Republic of China, – not available

[a] Percentage deviations from quarterly GDP series detrended by Hodrick-Prescott filter

[b] Fiscal year

[c] Central government only

pal measures taken by Asian and other economies in response to the global financial crisis in the area of monetary policy and discusses the issues that emerged out of the experience. Sections 3.3 and 3.4 cover much the same ground in the areas of fiscal and exchange rate/reserve management policies, respectively. Finally, Section 3.5 concludes the chapter with a forward-looking discussion of longer-term measures to improve the effectiveness of macroeconomic policies. The focus throughout the chapter is on Asia's 11 major economies (Australia; PRC; India; Indonesia; Japan; Republic of Korea; Malaysia; Philippines; Singapore; Taipei,China; and Thailand), although occasional references are made to other economies as well.

3.2 Monetary Policy Issues

3.2.1 Monetary Policy Measures in Asia

Although all economies in the region eased monetary policy in the latter part of 2008, the background at the outset of the crisis was somewhat different for each. Japan still maintained the legacy of an easy monetary policy it had inherited from the beginning of the millennium. Most other economies in Asia, on the other hand, came into the onset of the global financial crisis with substantially tighter monetary policies. The United States (US) financial crisis had little impact on these economies, whose pressing concerns instead were about the inflationary consequence of overheating and rising commodity prices as inflation picked up from 2007 to 2008 (Table 3.1, columns 4–5).[1] With monetary policy focused on price stability, the People's Bank of China (PBC), for example, raised reserve requirements in April, May, and June of 2008. Likewise, the Reserve Bank of India (RBI) raised the policy interest rates through early September 2008. Similar policies were followed by the central banks of such economies as the Republic of Korea; the Philippines; and Taipei,China. In the meantime, the Monetary Authority of Singapore (MAS) continued to allow its currency to appreciate in nominal effective terms as it managed its exchange-rate-centered monetary policy. Indonesia maintained a tight policy stance for quite some time, well into late 2008. In view of the pressure on its foreign exchange reserves as international liquidity tightened,[2] Bank Indonesia (BI) raised its policy rate as late as October, from 9.25 to 9.5%. Likewise, the Bank of Thailand (BOT) kept the prevailing policy rate in October 2008 when its monetary policy committee met for the first time following the failure of Lehman Brothers in September 2008.

[1] Australia and New Zealand in particular were two countries that benefited from rising commodity prices through early 2008.

[2] Indonesia's foreign exchange reserves had declined from US$ 60.6 billion in July 2008 to US$ 57.1 billion in September 2008.

When the real impact of the global financial crisis was felt, all central banks in the region shifted to monetary easing. The subsequent softening of energy and commodity prices, especially after the Lehman shock, allowed monetary authorities to cut policy interest rates aggressively, aided by the substantial monetary policy space they possessed in terms of the level of policy interest rates (Table 3.1, column 6). As noted, however, there was a considerable variation in the pace with which they acted and the specific measures they took (see Appendix 3.1 for detailed monetary policy actions adopted by some of the region's central banks). New Zealand was the first country to shift to monetary easing when its central bank cut the policy rate, or official cash rate (OCR) in July 2008; from July to April 2009, the Reserve Bank of New Zealand reduced the OCR in several steps from 8.25 to 2.5%. Australia was the next to follow. From September 2008 to February 2009, the Reserve Bank of Australia lowered the policy rate (the cash rate) by four percentage points, from 7.25 to 3.25%; it further cut the rate to 3% in April 2009.

Following the Lehman shock, the response of the PBC was immediate. On 16 September 2008, it reduced the benchmark lending rate by 27 basis points, from 7.47 to 7.2%; it subsequently cut the rate further by an additional 189 basis points through the end of the year. The next to cut the policy rate was the central bank of Taipei,China, which on 25 September 2008 reduced the key policy rates by 12.5 basis points each (the discount rate from 3.625 to 3.5%, the collateralized accommodation rate from 4 to 3.875%, and the uncollateralized accommodation rate from 5.875 to 5.75%); it further cut the policy rates six more times by a total of 225 basis points through February 2009. Other central banks, including those in India, the Republic of Korea, and Thailand, took similar actions between October and December 2008. The Bank of Japan (BOJ), with little policy pace, pushed the policy rate (the uncollateralized overnight call rate) downward from 0.5 to 0.3% on 31 October and further to 0.1% on 19 December 2008. As a result of these actions, market interest rates in Asia edged downward in late 2008 and early 2009, though the levels of interest rates remained high in Indonesia, India, and the Philippines (Fig. 3.2).

Some Asian central banks not only cut interest rates but also attempted to increase the flow of credit through conventional tools. For example, the PBC removed limits on credit growth, which led to an extraordinary expansion of bank lending in the first quarter of 2009. At the end of March 2009, broad money (M2) was up by 25.4% from a year earlier, while bank credit was higher by 27.0%, and the rapid growth continued. With a drying up of capital inflows and the associated rise in demand for credit from the domestic banking system, the initial response of the RBI on 16 September 2008 was to raise the ceiling on deposit rates. Though BI did not begin to cut the policy interest rate until December, it immediately responded to the onset of the global financial crisis by lowering the overnight repo rate on 16 September 2008 to maintain liquidity. The BOJ (in October) and the Bank of Korea (in December) began to pay interest on excess reserves and required reserves, respectively.

A number of central banks also cut statutory reserve or cash requirements. For example, the PBC reduced reserve requirements four times from September to December 2008. The RBI made a one-time cut in liquidity requirements in November. Similar actions were taken by the central banks of Indonesia; Malaysia;

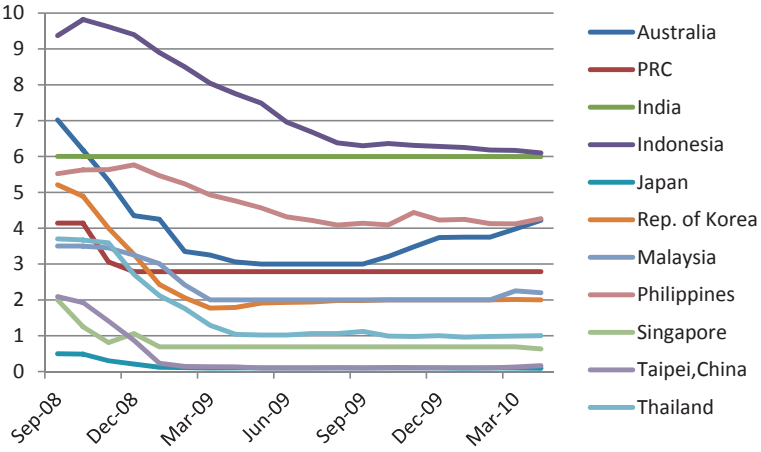

Fig. 3.2 Market interest rates in selected Asian economies, September 2008–November 2011 (in %). (Note: *PRC* People's Republic of China. Sources: IMF, International Financial Statistics database, available at: http://www.imfstatistics.org/imf/; for Taipei,China only, Central Bank of Taipei,China, Financial Statistics, available at: http://www.cbc.gov.tw/mp2.html. In both sets of data, market interest rates refer to line 60b)

the Philippines; and Taipei,China. Exchange rate policy was another tool of monetary easing in some countries. In the second half of 2008, the PRC abruptly halted the policy of allowing the yuan to appreciate gradually against the US dollar. In October 2008, Singapore shifted to a zero percent appreciation of the nominal exchange rate, ending a policy of graduate appreciation it had followed since April 2004. In a further move, in April 2009, the MAS, while keeping the zero appreciation policy, re-centered the policy band to the prevailing level of the nominal exchange rate, which represented an effective depreciation of the currency.

3.2.2 Unconventional Monetary Policies

The effectiveness and usefulness of unconventional policies, used not only in Asia but more importantly in the US and Europe, is perhaps the single most important monetary policy issue that came out of the crisis experience. Effectiveness is ordinarily defined in terms of impact on output. However, in the context of the global financial crisis, expansionary monetary policy may have contributed substantially to maintaining financial stability. This would have been a very big contribution by monetary policy, even if it did not directly affect output. The literature generally classifies unconventional policies into two types. First, quantitative easing refers to policies that aim to increase free reserves of the banking system, through open market operations or foreign exchange market intervention. It is well known that the BOJ pursued this policy from 2001 to 2006 when it faced deflationary pressure even

though it hit the zero interest bound. The BOJ raised outright purchases of government bonds from ¥ 1.2 trillion per month (which had been set in October 2002) to ¥ 1.4 trillion in December 2008 and further to ¥ 1.8 trillion in March 2009. The Bank of England (BOE) adopted a type of quantitative easing when it set a target for reserve deposits in March 2009 (which it raised in May).

Second, credit easing (or qualitative easing) refers to policies aimed at affecting the composition of the central bank's balance sheet, for example, through an exchange of government bills for government bonds or purchases of private sector financial assets. It would raise the prices of financial assets to be purchased, thereby stimulating aggregate demand. Although credit easing includes direct lending to market participants and therefore, like quantitative easing, generally involves an increase in the size of the central bank's balance sheet, the focus is on the composition of assets, not the size of liabilities. Most of the measures used in Asia (see below) fall in this category, including bilateral currency swap agreements with the US Federal Reserve.[3] To the extent that central banks purchase private sector financial assets, they assume significant credit risk.

Credit easing measures were actively used by the central banks of advanced economies. For example, the US Federal Reserve created a number of new credit facilities to mitigate stresses in various market segments, including the Term Auction Facility, the Term Securities Lending Facility, the Primary Dealer Credit Facility, the Asset-Backed Commercial Paper Money Market Fund Liquidity Facility, the Commercial Paper Funding Facility, the Money Market Investor Funding Facility, and the Term Asset-Backed Securities Loan Facility. The BOE accepted as collateral commercial paper, corporate bonds, bonds issued under the United Kingdom's credit guarantee scheme, syndicated loans, and asset-backed securities created in viable securitization structures. Within Asia, the BOJ lowered the credit rating of corporate bonds acceptable as collateral from A- to BBB, and accepted debt instruments issued by real estate investment corporations as collateral; it began outright purchases of commercial paper (CP) and asset-backed CP (ABCP) in January 2009 and corporate bonds in February 2009.

As noted, most of the unconventional measures adopted by Asian central banks during the crisis fell in the category of credit easing. Many of them involved expanding the scope of central bank market operations. BI, for example, extended the term for fine-tuning operations, as well as for foreign exchange swaps, and relaxed conditions for access to its liquidity facility. A number of them extended credit to the private sector though various channels. BI began to purchase exporters' bankers' acceptances. The central banks of the Republic of Korea; Malaysia; Philippines; and Taipei,China expanded the range of eligible collateral or eligible institutions for their standing facilities. The RBI introduced a rupee–dollar swap facility for Indian banks and a refinance window for non-banking financial companies, making resources available to banks to refinance credit extended to small industries,

[3] The US Federal Reserve concluded bilateral currency swap arrangements with 14 foreign central banks, including the Reserve Bank of Australia, the Bank of Japan, the Bank of Korea, and the Monetary Authority of Singapore (within the region), as well as the Bank of England, the European Central Bank, and the Swiss National Bank (outside the region).

housing, and exports. In India, however, all allocation of liquidity was channeled through banks, and the RBI's balance sheet did not expand very much because of the unwinding of the government securities bought by the central bank to sterilize the impact of capital outflows on the monetary base (Mohanty 2009).

3.2.3 Effectiveness

There is a well-established consensus in the literature that monetary policy is a powerful instrument of countercyclical macroeconomic policy during normal times. The effectiveness of countercyclical monetary policy is more ambiguous, however, when an economic downturn is associated with a financial crisis or the zero interest bound is reached. A recent study by the IMF (2009a), in a "duration analysis" of over 100 recessions and recoveries in developed countries, show that expansionary monetary policy was typically associated with shorter recessions. Specifically, a 1 % reduction in the real interest rate beyond that implied by the Taylor rule was found to raise the probability of exiting a recession in a given quarter by about 6 %. When recessions are associated with financial crises, however, the effect of monetary policy on the duration of a recession becomes statistically insignificant. This is consistent with the view that a financial sector problem can impair the working of the interest rate and bank lending transmission channels of monetary policy.

Because the financial sectors in Asian economies were for the most part sound, it is believed that the usual transmission channels of monetary policy were largely intact, and that the aggressive monetary easing adopted helped boost the pace of economic recovery. This must be particularly true with those economies in which the level of interest rates was sufficiently high to begin with. In India, for example, Mohanty (2009) claims that the changes in the RBI's policy rates were quickly transmitted to the money and debt markets, though the transmission to the credit market was slower. Park et al. (2010) used a sample of 24 countries in the G20 and developing Asia to obtain evidence that monetary policy had a statistically significant impact on aggregate demand during the recent crisis in Asia's emerging market economies.[4] They find a statistically significant impact of monetary policy on the gap between predicted GDP and actual GDP, where monetary policy is measured by the policy interest rate as well as the term spread as a proxy for quantitative easing designed to lower expected future interest rates.

In the countries where the level of interest rates was already low (or virtually zero in some cases) to begin with or where the financial sector was in difficulty, the usual interest rate transmission mechanism was probably impaired. Morgan (2012) discussed the effectiveness of unconventional monetary policies in such cases, though recent evidence is hard to come by. The available empirical evidence, which is largely based on the past experiences of Japan and the US, suggests that, among

[4] The sample consists of 18 G20 economies (all except for the European Union and Saudi Arabia), Hong Kong, China; Malaysia; Philippines; Singapore; Taipei,China and Thailand.

the several channels through which unconventional policies might work, the commitment or duration effect (whereby verbal commitments by central banks to maintain very low interest rates for a certain period affect market expectations) seems to work. In fact, most studies of the commitment effect in Japan and the US suggest that central bank statements do lower market interest rates, though the impact is mainly limited to short-term rates.

On the other hand, empirical evidence on the effectiveness of quantitative easing is less conclusive, though most studies find the impact on interest rates and economic activity to be generally positive. In terms of the global financial crisis experience, Morgan (2012) observes that, after the announcement of a target for reserve deposits by the BOE in March 2009, the spread between the 3-month sterling London Interbank Offered Rate and the base rate narrowed rapidly. As to the effectiveness of credit easing, the impact of outright purchases of government bonds on bond yields looked limited. Morgan (2012) noted that the recent experience of the US Federal Reserve and the BOE was not encouraging, though Filardo and Genberg (2012) note that central bank purchases of government bonds were more successful in reducing the term premiums. In contrast, credit easing was successful in relieving credit-related stresses in other market segments. The US Federal Reserve's Term Auction Facility and currency swaps programs with foreign central banks seemed to achieve their intended objectives, as did the BOE's move to provide unlimited dollar liquidity to the banking sector.

3.2.4 Designing Monetary Policy for the Future

Exiting from ultra-easy monetary policy has two dimensions: the level of interest rates and unconventional measures. Some central banks, such as the PBC, had a relatively straightforward task, as they did not resort to unconventional measures in responding to the crisis. Their task was the usual countercyclical response—determining the timing of raising reserve requirements and the policy interest rate—a step that began in the PRC in January 2010. Monetary tightening is important not only from the point of view of preempting any surge in inflationary pressure as economic recovery takes hold, but also from the point of view of securing sufficient policy space during good times. The recent experience has shown that those economies that came into the crisis with a sufficiently high level of interest rates were able to use monetary policy more effectively. Economies with extremely low interest rates must therefore resist the natural tendency toward the asymmetric use of monetary policy (i.e., interest rate action tends to be more decisive during downturns than during upturns) by raising interest rates decisively when recovery firms up.

In terms of unwinding the unconventional measures, even though the scale of intervention in Asia was modest compared to that of the US or the United Kingdom, the policy measures nonetheless represented a more intrusive intervention of the public sector in the allocation of credit, which during normal times should best be

left to the market. Filardo and Genberg 2012 argue that, by taking on credit risk, a central bank runs the risk of having to ask the government for additional capital in case a significant portion of its credit portfolio underperforms, which could compromise its independence and lead to a deterioration of its ability to carry out its mandate. In this respect, the execution of the exit policy may be made easier by announcing the time-bound nature of the unconventional measures that are introduced. Communication is essential to convey right signals so that market participants may not ascribe too much to each decision (Smaghi 2009). Even though a central bank may announce well ahead of time that a particular measure would expire as scheduled it should make sure to avoid the impression that it was withdrawing monetary stimulus prematurely.

Filardo and Genberg (2012) discussed medium-term issues for monetary policy, including the type of policy regime Asia's central banks should adopt going forward. Prior to the global financial crisis, almost all central banks in Asia aimed for price or exchange rate stability as the overarching objective of monetary policy. Empirical evidence suggests that inflation rates in Asia remained well anchored for both inflation targeting and non-inflation targeting central banks. It is thus clear that, as long as there is a correct policy focus, inflation targeting is not the only way to achieve price stability.

Much less consensus exists on the extent to which central banks should take account of asset prices in the conduct of monetary policy. The conventional wisdom until recently was that central banks should not lean against possible financial imbalances as they build up but should respond aggressively once they collapse—on the assumption that significant imbalances are nearly impossible to detect with confidence in real time and the costs of the cleanup are generally expected to be low and manageable. But the global financial crisis has opened up the debate regarding "leaning versus cleaning" (Filardo and Genberg 2012). There is now a widely held view that too narrow a focus by central banks on price stability helped to create a speculative bubble in the asset market and led to excessive risk-taking in financial markets, and monetary policy therefore should give greater attention to financial stability.

In the aftermath of the crisis, there are indeed increasing calls for central banks to be more proactive in responding to signs that an asset price bubble may have emerged: "lean against a bubble." At the same time, most central bankers are aware that monetary policy is too blunt an instrument to prick bubbles effectively because it cannot be targeted precisely and will affect other financial and macroeconomic variables; the typical changes in interest rates that a central bank might contemplate are likely to be too small to produce big changes in asset prices in any case (Evans 2009). Some therefore argue that the focus of monetary policy should be to achieve financial stability broadly defined, rather than identifying and purging asset price bubbles per se. Regulatory policy may be a better instrument to deal with undesirable financial market developments. When there are indications that asset markets may be exuberant, for example, capital requirements could be raised. These measures and issues are explained at greater length in Chapter 6.

This argument does not mean that central banks should formally be assigned the task of achieving financial stability since assigning such a task would be difficult without providing an operational definition of financial stability. Unlike price stability, it is difficult to agree on a single numerical indicator of financial stability against which the success or failure of central banks is assessed. Stabilizing asset prices might be difficult as it would require such large adjustments in the policy interest rate that it could be destabilizing for inflation, output, and employment. Financial stability, however defined, should not come at the expense of price and macroeconomic stability. Based on these considerations, Filardo and Genberg (2012) argue that price and financial stability are not mutually incompatible, and that central banks can achieve financial stability without being given an explicit mandate. As long as their objective is to minimize some combination of fluctuations in inflation around a target value and fluctuations of output around its natural level, central banks are supposed to consider all relevant information, including asset prices.

3.3 Fiscal Policy Issues

3.3.1 Fiscal Policy Measures in Asia

Given the unprecedented collapse of real economic activity, and the awareness in some countries that further monetary easing might be limited, many governments in the region, as elsewhere, resorted to aggressive easing of fiscal policy. Fiscal positions deteriorated sharply throughout Asia from 2007 to 2008, and further in 2009 (Fig. 3.3). The sharpest deteriorations from 2007 to 2009 were experienced by the PRC (from a surplus of 0.9% of GDP to a deficit of 3.1%), Japan (a rise in the deficit of 7.9 percentage points of GDP), and Singapore (from a surplus of 10% of GDP to a deficit of 0.8%). Except in Japan, such an active use of countercyclical fiscal policy was a radical departure from the fiscal conservatism that had characterized the economic policymaking of most Asian economies. In fact, emerging Asian economies had not used countercyclical fiscal policy actively, except at the time of the Asian financial crisis of 1997–1998.

Of course, not all of the fiscal deterioration in a country was due to the introduction of a crisis-related fiscal stimulus package, as automatic stabilizers also kicked in (though automatic stabilizers in emerging Asia were not as well developed as in developed countries). It is not easy to estimate the size of the fiscal stimulus packages, net of the automatic stabilizers and the spending or tax reduction measures that had already been planned;[5] the announced spending increase in some cases, moreover, also included prospective contributions from the private sector and may even include an amount which will never be implemented in the end. When all these

[5] In the Philippines, for example, only P50 billion of the P160 billion package represented a net increase in government spending, with the rest coming from a reallocation of funds that would have been spent in any case (Doraisami 2011).

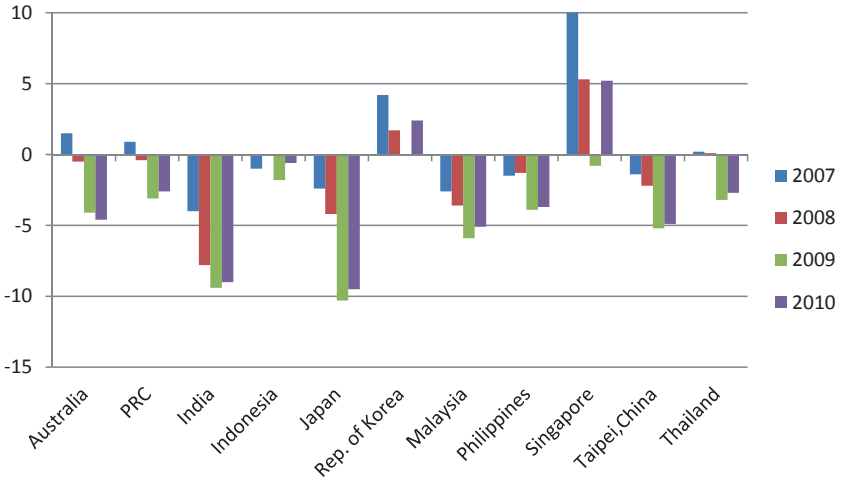

Fig. 3.3 Fiscal balances in selected Asian economies 2007–2011 (% of GDP). (Note: *GDP* gross domestic product, *PRC* People's Republic of China. Sources: International Monetary Fund, World Economic Outlook database, available at: http://www.imf.org/external/pubs/ft/weo/2011/09/weodata/index.aspx; Public Information Notices for Article IV consultations. The figures for 2011 are IMF WEO estimates)

adjustments are made, the IMF (2009b) estimated that the size of the crisis-related discretionary fiscal measures relative to 2007 was particularly large in the PRC (3.1 and 2.7% of GDP in 2009 and 2010), Australia (2.9 and 2.0% of GDP, respectively), and the Republic of Korea (3.6 and 4.7% of GDP, respectively) (see Table 3.2). These compare with the G20 average of 2.0% of GDP in 2009 and 1.6% of GDP in 2010 (Horton 2010). On average, among the G20 countries, the size of stimulus measures was larger in Asia. In view of the estimated GDP gaps (see Table 3.1, columns 1–2), however, a case can be made that the fiscal reactions of some countries, especially Australia and the PRC, were excessive.

It was the relatively healthy state of government finances that allowed the aggressive use of countercyclical fiscal policy in many, but certainly not all, Asian economies (see Table 3.1, columns 7–8). With the exceptions of India and Japan, public debt-to-GDP ratios were significantly lower in Asia than in many countries in other parts of the world. In particular, years of fiscal discipline had created a significant space to expand fiscal policy in Australia, the PRC, Indonesia, and the Republic of Korea; Singapore's large fiscal reserves provided ample scope to use fiscal policy to counter adverse external shocks without running a deficit. Japan and India, despite their limited fiscal space, nonetheless expanded fiscal policy substantially. Coinciding with the election-related increase in spending, and a surge in subsidies associated with the rise in international oil prices, the stimulus measures implemented in India in 2008 eliminated all the gains made in fiscal consolidation

Table 3.2 Fiscal policy in major Asian countries, 2009 and 2010 (in % of GDP, change with respect to precrisis year 2007). (Source: Estimates from IMF (2009b), Annex Table 3.2)

	2009		2010	
	Overall balance	Crisis-related discretionary fiscal measures	Overall balance	Crisis-related discretionary fiscal measures
Australia	−5.8	−2.9	−6.8	−2.0
PRC	−4.8	−3.1	−4.8	−2.7
India	−6.0	−0.6[a]	−5.6	−0.6
Indonesia	−1.4	−1.4	−0.9	−0.6
Japan	−7.4	−2.4	−7.5	−1.8
Republic of Korea	−6.2	−3.6	−6.2	−4.7

GDP gross domestic product, *PRC* People's Republic of China.

[a] IMF staff report for 2008 Article IV consultation (released to the public in June 2009) estimates that the size of the discretionary fiscal measures provided in the budget and the two supplementary budgets amounted to 3% of GDP

since 2004 (Kumar and Soumya 2010).[6] With the state budgets included, the general government deficit was estimated to be close to 10% of GDP in 2009. The Philippines was also somewhat constrained in its ability to expand fiscal policy with a debt-to-GDP ratio of 56% of GDP in 2008, but it still managed to go ahead with a stimulus package amounting to 4.1% of GDP.[7]

Doraisami (2011) notes that infrastructure spending used to account for 47% of stimulus packages in developing and emerging economies, while it used to be about 15% in developed countries. Tax cuts, on the other hand, used to account for 34% in developed countries, while they used to claim only 3% in developing and emerging economies. Focusing on the experience with fiscal policy during the global financial crisis, Horton (2010) estimated that a typical stimulus package adopted by the G20 developed countries in 2009 consisted of expenditures on public consumption and transfers (37% of total), public investment (35%), and tax cuts (32%). Among G20 developed economies, automatic stabilizers accounted for 1.7% of GDP in 2009, compared to 1.1% in G20 emerging economies; in Asia as a group, the overall effect of automatic stabilizers was smaller, at less than 1% of GDP. Horton further notes that, of the average deterioration of the fiscal position of 7 percentage points of GDP for G20 countries, fiscal stimulus accounted for 2 percentage points and automatic stabilizers another 2 percentage points, with the balance accounted for by underlying trends and financial sector support.

A closer look at individual stimulus packages adopted in Asia reveals that the share of capital spending on infrastructure was considerable (see Appendix 3.2 for

[6] India achieved a considerable fiscal consolidation, in part driven by strong revenue performance, between 2004 (when the Fiscal Responsibility and Budget Management Act came into effect) and early 2008.

[7] In 2004, the Philippine government adopted an aggressive agenda to bring down the fiscal deficit over the medium term and successfully reduced the debt-to-GDP ratio by more than 20 percentage points between 2004 and 2008.

a list of major fiscal policy actions adopted by some of the Asian economies). Such spending was particularly large in the PRC, the Republic of Korea, the Philippines, and Thailand, accounting for more than 60% of the fiscal packages (Doraisami 2011). In the PRC, for example, more than 85% of the CNY 4 trillion stimulus package announced in November 2008 (amounting to some 16% of GDP) was accounted for by investment spending. In contrast, the share of spending on health care and education was a mere CNY 150 billion or less than 4% of the total stimulus package. An important exception to this observation was Thailand's first fiscal package, a large portion of which consisted of transfers. Notable among these was a cash payment ("stimulus checks") to a large number of households, including B2,000 to those registered with the social security scheme and public servants who earned less than B15,000 a month. Such cash transfers were also included in the packages adopted by Australia; Japan; and Taipei,China. Japan's stimulus packages predominantly included public consumption and transfers; the Republic of Korea's packages were more balanced, with about 50% public consumption and transfers, the rest divided between investment and tax cuts (IMF 2009b). General and targeted transfers dominated Japan's stimulus packages, while government investment dominated those adopted by the governments of emerging Asia.

3.3.2 Fiscal Policy Implementation

Aside from the issue of effectiveness, an important drawback of fiscal policy as a countercyclical measure is the lag it typically involves in implementation. From this standpoint, some of the fiscal stimulus measures adopted in Asia failed to achieve full impact because they could not be implemented expeditiously. Most of these involved public spending on infrastructure, the size of which was too large for the absorptive capacity of the governments concerned. In Indonesia, for example, although infrastructure projects were set to start during the first half of 2009, delays in parliamentary approval and problems with disbursements held up implementation until the second half of 2009. At the end of September 2009, less than a quarter of the amount allocated for infrastructure projects had been spent (Park et al. 2010). In Malaysia, at the end of September 2009, only 60% of the first package (announced in November 2008, with 85% allocated to infrastructure) had been spent, while the rate of disbursement for the second package (announced in March 2009, with implementation over two years) was 26%. In the PRC, about a quarter of the CNY 7.62 trillion earmarked for 2009 was reported to remain unused at the end of November.[8] In contrast, implementation rates were higher for revenue measures and social transfers (IMF 2009b). For example, the implementation of tax cuts was quick in Indonesia;[9] likewise, the distribution of "stimulus checks" in Thailand was quick, with 90% of the targeted population paid within four months (Jitsuchon 2009).

[8] *South China Morning Post*, "2 Trillion Yuan Spree Looms on Mainland," 14 December 2009.

[9] IMF. Staff Report for the 2009 Article IV consultation with Indonesia, p. 13.

Infrastructure spending entails additional implementation problems since not all investment projects are profitable and some can even lead to corruption. Tanaka (2009) presented a detailed analysis of the PRC's fiscal stimulus package of CNY 4 trillion announced in November 2008, most of which involved investment outlays in infrastructure to be spent by the end of 2010. Of this total, central government investment was CNY 1.18 trillion, with the rest made up of local government and private sector investment. Subsequent to the announcement of the package by the central government, 24 PRC provinces announced investment plans worth almost CNY 16 trillion without specifying how the investment would be funded. Thus, the announcement of the economic stimulus package by the central government led to a resurgence of "blind investment and duplicate construction" under local government leadership that had long been recognized as a structural problem of the PRC economy. The prudent stance of fiscal policy established in 2008 was thus reversed.

Tanaka further argued that symmetrical application of countercyclical fiscal policy was difficult in the PRC because of interest groups who would benefit from fiscal spending, such as provincial officials and the State Development Planning Commission. Given stiff opposition, it took the PRC government more than six years to unwind the expansionary fiscal policy adopted in August 1998 in the aftermath of the Asian financial crisis. By the time a more neutral stance of fiscal policy was finally adopted in December 2004 (after two years of lobbying by the Ministry of Finance), the economy was already seriously overheated. In the PRC, perhaps as elsewhere, what was intended as a temporary measure became virtually permanent.

In the event the world economy remained weak and the government thus continued to maintain the expansionary stance. Tanaka identified three additional problems with fiscal policy implementation in the PRC. First, there was a shift toward increasing investment in the mainstream industrial areas, which further expanded already excessive production capacity. Second, there was a strong demand for investment in the rural areas, but not all investment projects were profitable. This would create insolvency concerns for provincial governments and non-performing loans for state-owned banks. Third, it was not clear if the investment funds were actually invested. According to Tanaka, the huge expenditure program would exacerbate the problem of corruption among senior local government officials.

3.3.3 Effectiveness

Theoretically, the impact of expansionary fiscal policy on aggregate demand is ambiguous. An IMF study (IMF 2009a), based on a duration analysis of some 140 recessions and recoveries in developed countries, concluded that expansionary fiscal policy was typically not associated with shorter recessions: whether fiscal policy is measured by changes in the primary balance or in government consumption, it was not found to have a significant impact on the duration of recessions. When

recessions were associated with financial crises, however, the study found that expansionary fiscal policy tended to shorten the duration of recessions: a 1% increase in government consumption was associated with an increase in the probability of exiting a recession of about 16%, suggesting that fiscal policy is effective when economic agents face liquidity constraints.

According to Spilimbergo et al. (2009), estimates of the fiscal multiplier are 0.3–0.6 for revenue measures, 0.5–1.8 for capital spending measures, and 0.3–1.0 for other spending measures. Estimated fiscal multipliers for developing countries tend to be smaller than for developed countries (ranging from negative to 0.5) possibly because fiscal expansion could quickly translate into fiscal sustainability concerns. They suggest a rule of thumb for policymakers: 1.5–1.0 for spending in large countries, 1.0–0.5 for medium-sized countries, and 0.5 or less for small open economies. Moreover, multipliers are likely smaller (about half) for revenue and transfer measures, and are slightly larger for investment spending. Spilimbergo et al. (2008) further argued that spending increases and targeted tax cuts and transfers have higher multipliers than general tax cuts or subsidies because the impact of the latter would depend on the uncertain response of households and firms to an increase in their income. Transfer and tax measures targeted at credit-constrained consumers (e.g., greater unemployment benefits and expansion of safety nets) should be particularly effective.

The relative effectiveness of different types of fiscal policy measures were estimated by Freedman et al. (2009), who used the IMF's Global Integrated Monetary and Fiscal Model to simulate the joint impact of monetary and fiscal policy measures.[10] Considering four types of measures (an increase in government investment, a lump-sum transfer to all households, a targeted transfer to liquidity-constrained households, and a tax cut on labor income), they came to the following conclusions (a stimulus measure is assumed to amount to 1% of precrisis GDP and to remain for two years):

- An increase in government investment leads to a 1.2% rise in GDP without monetary accommodation and a 1.8% increase with two years of monetary accommodation (the larger effect of government investment comes from its impact on aggregate supply and productivity).
- A lump-sum transfer to all households raises GDP by less than 0.2% without monetary accommodation.
- A targeted transfer to liquidity-constrained households increases the multiplier by four times (given the assumption that the share of liquidity-constrained households is 25%).
- The multiplier of a tax cut on labor income is slightly larger than that of a general lump-sum transfer (as it increases the supply of labor by households).

The experience of Asia during the global financial crisis clearly shows that general transfer measures do not work and are wasteful. Japan's Cabinet Office, based on a

[10] The model incorporates both liquidity-constrained households to allow for the short-term effect of fiscal policy and finite-horizon agents to generate long-run crowding out.

survey of households, concluded that only 33 % of the cash paid out by the government as part of the emergency fiscal measures was actually spent on consumption (Cabinet Office 2010).[11] Likewise, according to a survey conducted by the Thai National Statistical Office in May 2009, only 20 % of those who cashed the "stimulus checks" actually used the money for "extra" spending; moreover, a design problem allowed the program to reach only 10 % of the lowest income group (Jitsuchon 2009). Outside Asia, Sahm et al. (2009) used similar household surveys to estimate the effects on consumer spending of the US$ 96 billion stimulus payments that US households received in 2008, and concluded that only about one-third of the rebate income was spent during the year.

A weak response of aggregate demand to general transfers is also suggested by Eskesen (2009), who used the IMF's Global Integrated Monetary and Fiscal Model calibrated for the Republic of Korea to examine the relative effectiveness of investment and targeted transfers. The study shows that an increase in investment raises GDP by 0.8 %, while income transfers raise GDP only by 0.1 % because of leakage into imports and households with a low propensity to consume. On the other hand, if the transfer is targeted at liquidity-constrained households, the impact rises to 0.3 %. Likewise, a tax cut is shown to have a small impact on GDP (of 0.1–0.15 %).

Evidence has emerged from the recent crisis to show that a targeted tax cut stimulates demand effectively. As an example of such a measure, the waivers and reductions of real estate-related taxes introduced by Thailand appear to have supported the real estate sector, judging from the pickup in the sale of houses in the Bangkok metropolitan area in 2009 (Jitsuchon 2009). On the other hand, an injection of capital, as opposed to direct government purchases or tax cuts, does little to help liquidity-constrained firms. In a survey of small and medium-sized enterprises (SMEs) in Malaysia, respondents stated that a reduction in corporate tax and electricity tariffs would be more helpful in dealing with the impact of the crisis than the provision of government funds as working capital, as was done in the stimulus package of March 2009 (Doraisami 2011).

When the stimulus packages of Asia are taken as a whole, the aggressive use of countercyclical fiscal policy appears to have had a measure of success in pulling the economies out of the deepest recession in recent decades. Park et al. (2010) used a sample of 26 countries and regions to obtain some evidence that fiscal policy had a significant impact on aggregate demand in Asia, but not in other economies. While general government expenditure or revenue had no statistically significant effect, an interaction term between government expenditure and the dummy variable for developing Asia had a significant effect upon the gap between predicted GDP and actual GDP during the recent global financial crisis.[12]

[11] The second supplementary budget for fiscal 2008 distributed some ¥ 2 trillion between late May and late November 2009, with ¥ 20,000 for all persons over 65 and under 18, and ¥ 12,000 for all others.

[12] The sample consists of 18 G20 economies.

3.3.4 Building Frameworks and Institutions for Fiscal Policy

The conventional wisdom in modern macroeconomics is that debt-financed fiscal spending has a negative effect on capital formation and growth. This derives from the fact that when Ricardian equivalence does not hold, people consume out of government debt and cause the consumption-to-income ratio to rise. There is empirical support to the adverse impact of debt on long-term interest rates. Horton (2010) cites recent IMF work showing that an increase in the overall fiscal deficit of 1% of GDP raises bond yields by about 20 basis points over the medium-term, with a higher effect for emerging markets (about 30 basis points); countries with public debt above 80% of GDP and those with initial deficits above 2% of GDP experience sharper increases in interest rates on government bonds from a 1% of GDP increase in the overall fiscal deficit, by 5 basis points and 15 basis points, respectively. An increase in a country's fiscal deficit of 5% of GDP could lead to a rise in long-term interest rates of 100 basis points; with the combined effects of weak initial condition, poor governance, and elevated global risk aversion, this effect could increase up to 270 basis points.

The effectiveness of countercyclical fiscal policy seems to be related to the perception of debt sustainability. IMF (2009a) shows that fiscal stimulus in economies that have low levels of public debt has a higher impact on the strength of the recovery relative to economies that have higher levels of public debt. The point estimate for the impact becomes negative for debt levels that exceed about 60% of GDP. These findings point to the importance of a commitment to medium-term fiscal sustainability for any countercyclical fiscal policy to be effective. Doubts about debt sustainability can slow the recovery process through lower consumer spending and higher long-term real interest rates. The importance of fiscal institutions is indicated. Horton (2010) cites IMF research showing that countries with weaker institutions and higher political risks have more pronounced impacts on yields, by an additional 10 basis points, from an increase in the overall fiscal deficit.

Fortunately for most of Asia, debt sustainability does not appear to be a serious concern over the medium term, though the balance of public debt may be understated in some countries (including the PRC and the Philippines) if contingent liabilities are fully recognized (see Table 3.3 for debt projections in G20 Asian countries). Japan has an extremely high debt-to-GDP ratio of over 200%. The high debt level has constrained the flexibility of fiscal policy, especially as the country faces an aging population with an expected rise in social expenditures, and Japan must seriously confront the challenge of fiscal consolidation over the coming years. Even so, debt is denominated in yen and almost all of it is held by domestic residents; the country maintains a surplus in the current account. India is another country with a high debt-to-GDP ratio, especially for an emerging market. But India is expected to grow rapidly over the coming years and has already been pursuing a rule-based fiscal policy under the 2003 Fiscal Responsibility and Budget Management Act (FRBMA).

Table 3.3 Gross government debt in major Asian countries, 2007–2014 (% of GDP). (*Source*: International Monetary Fund, World Economic Outlook database, April 2012)

	2007	2009	2010	2014 (projection)
Australia	9.7	16.9	20.4	22.1
PRC	19.6	17.7	33.5	17.1
India	75.4	75.0	69.4	66.2
Indonesia	35.1	28.6	27.4	19.2
Japan	183.0	210.2	215.3	245.6
Republic of Korea	30.7	33.8	33.4	28.7

GDP gross domestic product, *PRC* People's Republic of China

Several other governments in Asia also have legal frameworks for fiscal policy, including Australia, Singapore, the Philippines, and Indonesia. The Australian government, under the Charter of Budget Honesty (enacted into law in 1998), is pursuing a medium-term policy to achieve budget surpluses on average, keep tax revenue as a share of GDP below the 2007–2008 level, and improve the government's net financial worth. Likewise, Indonesia has operated under a rule-based fiscal policy framework since 2003, which mandates capping the fiscal deficit to 2% and the balance of public debt to 60% of GDP.

These observations do not mean that Asia needs no vigilance with respect to the medium-term management of fiscal policy. To the contrary, binding legal frameworks may be necessary for some of the economies that do not have them at the present. The existing frameworks could be strengthened for others. India's FRBMA, for example, has a loophole that encouraged the increasing use of subsidy-related bonds to meet current spending needs, as the issuance of such special bonds is excluded from current spending and the authorities' definition of the deficit. The FRBMA framework could therefore benefit from strengthening by specifying the accounting definitions of fiscal targets, expenditure rules, and a debt target, and by introducing sanctions for noncompliance (Simone and Topalova 2009).

What is more urgent in terms of institution building is to improve the working of automatic stabilizers, especially on the expenditure side. What has proved particularly useful as a countercyclical measure during the global financial crisis are targeted transfers to credit-constrained individuals, which can easily be incorporated into the fiscal system as automatic stabilizers, for example, by enhancing the system of unemployment benefits. Another area of fiscal reform concerns the composition of expenditure. India would need to raise the share of public investment in the budget (which is currently only about 2% of GDP) by reducing consumption subsidies or targeting them more narrowly at the low-income population. On the other hand, the PRC and other significant surplus economies should increase the share of government consumption, especially on projects to strengthen social safety nets. These issues are discussed more fully in Chap. 5. To the extent that investment remains significant, it would also be useful to put in place procurement procedures for public works that minimize the scope for corruption.

3.4 Exchange Rate and Reserve Management Policy Issues

3.4.1 Exchange Rate Policies

Asian economies entered the onset of the financial crisis with considerable diversity in exchange rate arrangements. The Australian dollar and the Japanese yen were among the few bona fide free floating currencies. In the rest of the region, some currencies (such as the Korean won and the Indonesian rupiah) appeared to be floating with a large degree of flexibility, while others (such as the PRC yuan and the Vietnamese dong) remained tightly managed, especially with respect to the US dollar. This diversity (and the apparent greater flexibility of some major Asian currencies) masked the continued tendency of Asian monetary authorities to limit the fluctuations of their currencies against the US dollar. Patnaik and Shah (2012), identifying structural breaks in the parameters of the Frankel-Wei regression applied to 11 Asian currencies (where the US dollar, the euro, British pound sterling, and the Japanese yen entered the equation as explanatory variables) between January 1981 and May 2009,[13] found that the degree of exchange rate flexibility in Asia (measured by the mean and median of the R-squared values of the Frankel-Wei regression) was only marginally greater in the post-Asian financial crisis period than in the period prior to the crisis (the median value still remained around 0.9); even for the Korean won, they obtained the Frankel-Wei weight of 1.25 for the US dollar during the period 1995–2009.

Kim and Yang (2012) approached this issue from the point of view of monetary policy independence. If a country pursues a fully flexible exchange rate policy, it should be able to pursue a fully autonomous monetary policy, such that domestic interest rates should not be significantly affected by monetary developments abroad. Building on this line of reasoning, they obtained evidence that before the onset of the global financial crisis most Asian economies had in fact been limiting the flexibility of their currencies against the US dollar. In particular, their structural vector autoregression model shows that, during the period 1999–2007, domestic interest rates in all presumed free and managed floaters (the Republic of Korea; Singapore; Philippines; Thailand; and Taipei,China) responded strongly to US interest rate changes, while those in the PRC and Malaysia did not. They interpret this result to mean that the legal floaters actually gave up monetary autonomy by limiting exchange flexibility while the PRC and Malaysia (with actual US dollar pegs) restricted the capital account. In their sample, Japan was the only country for which the conventional exchange rate channel operated, such that a flexible exchange rate allowed the country to maintain monetary policy independence.

Divergence in exchange rate regimes during much of the post-Asian financial crisis period therefore characterized not the difference between floaters and

[13] The 11 economies are the PRC; Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; Thailand; and Viet Nam.

peggers, but the difference between Australia, Japan, and New Zealand on the one hand and the rest of Asia on the other. With the onset of the global financial crisis, the divergence became even more pronounced. The two presumed floating currencies (the Indonesian rupiah and Korean won) utilized their flexibility to depreciate sharply (along with the Australian dollar and New Zealand dollar), while the PRC and Singapore terminated the policy of allowing their currencies to appreciate gradually against the US dollar. Viet Nam, in late 2008, devalued the dong and widened the trading band against the US dollar. As most other currencies also softened against the US dollar, these developments meant that the Japanese yen, which remained flexible, became the only currency in the region that appreciated against the US dollar. These exchange rate movements placed a large negative burden of adjustment on the Japanese economy, while allowing the other Asian economies to benefit from depreciation. From the onset of the global financial crisis to its height, the divergence between the most appreciated currency in Asia (the Japanese yen) and the most depreciated currency (the Korean won) amounted to nearly 80%.

3.4.2 Benefits and Costs of Foreign Exchange Reserves

The propensity of Asian countries to manage exchange rates, especially when the currencies were under appreciation pressure, meant that they accumulated foreign exchange reserves following the Asian financial crisis. In fact, the rise in Asia's foreign exchange reserves was spectacular indeed: reserves for 10 major emerging economies (which include India) rose from a mere US$ 560 billion at the end of 1998 to over US$ 3 trillion at the end of 2007. Much of the increase was accounted for by the PRC whose reserves rose from less than US$ 150 billion to over US$ 1.5 trillion over the same period (and nearly US$ 2 trillion at the end of 2008). Among the Asian countries, the Republic of Korea's gains were noticeable, with reserves rising from US$ 52 billion to over US$ 260 billion (though this amount proved insufficient in late 2008). Taipei,China, another significant accumulator, saw their reserves increase from less than US$ 100 billion in 1998 to over US$ 270 billion in 2007. With Japan included, Asia's foreign exchange reserves amounted to over US$ 4 trillion in 2008.[14]

Aizenman et al. (2012) observed that, in terms of the configuration of what they called "trilemma indices" (measures indicating monetary independence, exchange rate stability, and capital mobility), Asian emerging economies during the 2000s achieved middle levels in all of the three measures, which they claim was made possible by holding large foreign exchange reserves (in other words, these economies at least partly achieved all of the three policy objectives, only two of which could normally be achieved simultaneously given the impossible trinity). Although

[14] Although the Japanese authorities in principle allowed the yen to be determined freely by market forces, they at times intervened in the foreign exchange market. The foreign exchange market intervention conducted during January 2003–March 2004 was especially large. As a result, foreign exchange reserves increased from US$ 450 billion at the end of 2002 to over US$ 820 billion at the end of 2004.

the reserve accumulation was an outcome of both precautionary motives and their mercantilist tendencies to keep the exchange rates depreciated in order to maintain export competitiveness, the findings of Aizenmanet et al. (2012) suggest that accumulating reserves also served as an insurance against a sudden reversal of capital inflows. This allowed these economies to open their capital account to some extent and to increase exchange rate flexibility somewhat while attempting to retain some monetary policy independence.

Reserves appear to bring about additional economic benefits. Economies holding large reserves appear less likely to experience large output losses during a crisis (defined as a period of significant economic underperformance). Likewise, an economy seems to be able to offset the volatility of investment and output that comes from keeping the exchange rate stable (by virtue of loss of monetary policy independence) by holding large foreign exchange reserves (of more than 12% of GDP). Reserves evidently allow economies to pursue exchange rate stability while also achieving some degree of financial openness. Thus, emerging market economies have been able to pursue both greater exchange rate stability and greater financial openness while retaining some monetary policy independence. An implication of this is that a country can free itself from the binding constraint of the impossible trinity to some extent if it holds large enough reserves.

At the same time, holding large foreign exchange reserves entails costs, including potential inflationary pressures, fiscal costs, potentially higher interest rates, valuation costs if the dollar were to depreciate, among others. Fukuda and Kon (2012) argue that holding reserves would reduce liquidity risk, namely, the costs associated with a sudden reversal of capital inflows, thus allowing a country to borrow from abroad by issuing lower-cost, more liquid (shorter maturity) debt. Once the government decides to accumulate foreign exchange reserves for whatever reason, however, private agents would act accordingly and bring about macroeconomic consequences. They consider a model in which a utility-maximizing representative agent decides consumption, capital stock, labor input, and the amounts of liquid and illiquid debt, subject to the amount of foreign exchange reserves. Comparing steady state values, they show that an increase in the amount of reserves leads to a permanent decline in consumption (to the extent that interest rates on reserves are lower) and a transfer of labor from the non-tradables to the tradables sector (in order to generate net exports). Growth may be higher if the tradables sector is more capital-intensive, but it comes at the expense of consumption. These predictions are broadly supported by data for some 130 countries during 1980–2004.

Whatever the benefits of holding large foreign exchange reserves may be from the point of view of individual economies, the outcome was costly from a more global standpoint. It allowed large US current account deficits to be financed at low cost and contributed to the global current account imbalance, the unwinding of which exacerbated adjustment costs during the global financial crisis. As Kim and Yang (2012) argue, as long as Asian countries restrict the flexibility of exchange rates, it might lead to the resurgence of another global imbalance problem. The choice of exchange rate policy by one economy could therefore have regional and global implications, making it a subject for useful cooperative discussion.

3.4.3 Policies to Facilitate Global Rebalancing

It is clear from these observations that a reform of the international monetary system is necessary over the medium term to allow economies in Asia to have insurance against a sudden reversal of capital flows and a buffer against macroeconomic volatility without accumulating large foreign exchange reserves, especially in the form of US government debt. A reform at the global level has been progressing since early 2009. The IMF augmented its resources in the aftermath of the global financial crisis through an increase in bilateral borrowing from its members. In 2010 it was agreed to double the size of the IMF quota, but this has yet to be implemented. Parallel to these developments has been a "modernization" of conditionality, designed to remove the "stigma" attached to IMF borrowing. The Flexible Credit Line, for pre-qualified "strong performing" economies, has done away with conditionality.[15] For other, existing lending facilities, the IMF now relies "more on pre-set qualification criteria (ex ante conditionality) rather than on traditional (ex post) conditionality." Structural reforms are monitored in the context of program reviews, and the use of structural performance criteria was discontinued in all arrangements.[16]

Despite these efforts to remove the stigma of IMF borrowing, the prognosis for Asia is not encouraging. Some regional economies lost reserves and many more experienced a decline in the pace of reserve accumulation during the height of the global financial crisis (Table 3.4). But this appears to have been a rather temporary phenomenon. In response to temporary pressure put on their reserves,[17] some countries, notably the Republic of Korea and Indonesia, appear to have resumed accumulating foreign exchange reserves again. This only represents a return to the pre-global financial crisis regime, the recent reforms of IMF lending notwithstanding. In this respect, a welcome development is the decision of ASEAN+3 Finance Ministers to multilateralize the Chiang Mai Initiative (CMI) and to create an independent surveillance unit, called the ASEAN+3 Macroeconomic Research Office (AMRO), to support decision-making in the management of the pooled regional reserves.[18] Asia's economies must make this scheme sufficiently large, user-friendly, and truly cooperative in nature, so that they may no longer have an incentive to hold an excessively large amount of reserves for insurance purposes.

Such a scheme is also desirable from the standpoint of global rebalancing, which requires that Asia should allow its currencies to appreciate against the US dollar. The flip side of reserve accumulation is a policy of limiting the appreciation of currencies. By providing an alternative insurance, the regional system of mutual fi-

[15] The Flexible Credit Line has already attracted Colombia, Mexico, and Poland as customers.

[16] See "modernizing conditionality," at www.imf.org.

[17] The Republic of Korea's foreign exchange reserves fell by almost US$ 40 billion during the last quarter of 2008.

[18] The Joint Media Statement of the 12th ASEAN+3 Finance Ministers' Meeting in Bali, Indonesia on 3 May 2009. ASEAN+3 comprises the 10 member states of the Association of Southeast Asian Nations (ASEAN) plus the PRC, Japan, and the Republic of Korea.

Table 3.4 Changes in the stock of foreign exchange reserves in selected Asian economies, June 2007–2010 (US$ billion). (Sources: International Monetary Fund, International Financial Statistics database, available at: http://www.imfstatistics.org/imf/; for Taipei,China only, Central Bank of Taipei,China, Financial Statistics, available at: http://www.cbc.gov.tw/mp2.html)

	June 2007–2008	June 2008–2009	June 2009–2010
Australia	−33.8	7.4	−10.5
PRC	476.2	322.8	322.7
India	96.2	−48.2	−4.5
Indonesia	7.8	−1.9	15.5
Japan	80.7	15.1	7.2
Rep. of Korea	7.4	−26.9	39.1
Malaysia	27.4	−34.5	0.4
Philippines	9.3	2.0	6.0
Singapore	32.5	−3.6	25.7
Taipei,China	25.4	26.2	44.8
Thailand	31.9	14.9	23.7

PRC People's Republic of China

nancial assistance, in the form of the CMI Multilateralization (CMIM), could potentially play a role in encouraging the region's economies to assume greater exchange rate flexibility. In this context, countries with a large holding of US dollar reserves may be reluctant to allow a significant appreciation of their currencies against the US dollar because it would entail a significant capital loss. This only strengthens the case for a globally and regionally cooperative solution, which ensures an orderly adjustment of exchange rates and the composition of reserve assets over time. In view of the economic recovery from the crisis, emerging Asia was among the first to exit from the extraordinarily easy stance of monetary policy. Such a course of action was necessary to prevent domestic inflationary pressure. Regional cooperation would be helpful for domestic reasons as well—to encourage countries to raise interest rates promptly when recovery takes hold and as a consequence to accept an appreciation of their currencies.

The role Asia can play in the global rebalancing of demand is significant. In terms of imbalances as a percentage of GDP, considerable policy adjustments are required of Singapore, Malaysia, and the PRC, whose current account surpluses equaled 10–30% of GDP in 2008 (Fig. 3.4). The large current account surpluses of Singapore and Malaysia reflect the high saving rates which to a considerable extent result from their government-directed compulsory saving schemes. In terms of absolute size, however, the PRC clearly leads the way. In 2008, the PRC's current account surplus of over US$ 400 billion was equivalent to more than half of the US deficit of over US$ 600 billion (Fig. 3.4). In contrast, the combined surpluses of Japan and other Asian economies were relatively small. The PRC must cut the share of net exports by raising the share of consumption, which stood only at 55%

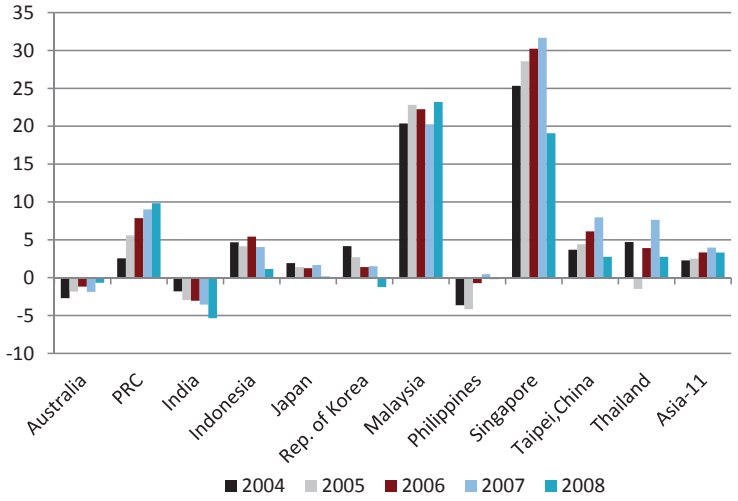

Fig. 3.4 Current account balances in selected Asian economies, 2004–2008 (in % of GDP). (Note: *GDP* gross domestic product, *PRC* People's Republic of China. Sources: International Monetary Fund, International Financial Statistics database, available at: http://www.imfstatistics.org/imf/; for Taipei,China only, Central Bank of Taipei,China, Financial Statistics, available at: http://www.cbc.gov.tw/mp2.html)

of GDP during 2003–2007.[19] Barnett and Brooks (2010) show that increasing government spending on health care (but not so much on education) is an effective way of promoting private consumption in the PRC by reducing precautionary savings.[20] The need to build better social safety nets as a way of promoting consumption applies equally well to other economies in much of emerging Asia.

3.4.4 Managing Capital Inflows

How to manage capital inflows is an important aspect of the strategy to ensure macroeconomic stability while facilitating the required global rebalancing. This is especially so because emerging Asia was among the first to recover from the crisis. As emerging Asia exited from easy monetary policy and raised interest rates, it began to receive an increasing volume of international capital flows. If the countries maintain the policy of stabilizing their exchange rates with respect to the US dollar in face of these inflows, they will experience an accumulation of foreign exchange reserves, which not only is contrary to the requirements of global rebalancing but,

[19] The PRC's consumption share is comparable to Singapore's. The share of consumption in India, the Republic of Korea, and Thailand was almost 70 % of GDP, while it was about 75 % in Japan.

[20] Using provincial data for 1994–2007, they showed that a 1 % of GDP increase in public health spending would boost private consumption by 2 %, thus yielding a total demand effect of 3 % for every 1 % increase in health spending.

Table 3.5 Net capital flows to developing and emerging Asia, 1990–2012 (US$ billion; annual averages). (Source: International Monetary Fund, World Economic Outlook database, available at: http://www.imf.org/external/pubs/ft/weo/2011/02/weodata/index.aspx. Accessed 15 June 2012)

	1990–1996	1997–2002	2003–2006	2007–2009	2010	2011	2012[a]
Current account balance	−23	40	154	368	313	363	412
Private financial flows, net	59	11	82	163	320	321	308
Direct investment, net	32	59	83	147	159	170	169
Private portfolio flows, net	17	−3	−23	49	93	77	77
Other private financial flows, net	11	−45	23	−33	67	74	62
Official flows, net	0	1	−19	5	21	18	14
Change in reserves	−37	−80	−309	−526	−593	−712	−745

Negative sign indicates increase in reserves
[a] projections

if unchecked, may lead to inflationary pressure. The policy of stabilizing nominal exchange rates in order to maintain international price competitiveness may then prove counterproductive as inflation will cause the real exchange rates to appreciate over the medium term. How best to manage capital inflows is an important policy issue for Asia.

Emerging Asia was a significant recipient of international capital flows in the mid-2000s until the onset of the global financial crisis, receiving around US$ 300 billion of net inflows in 2007 and 2008 (Table 3.5). As a percentage of GDP, Asia's gross private capital inflows and outflows were also significant (which peaked at 16% and 13%, respectively, in 2007), although they were smaller than the percentages recorded prior to the Asian financial crisis, as well as compared to some other regions of the world. The significant net private inflows, despite the large current account surplus Asia has recorded against the rest of the world since the Asian financial crisis, correspond to the accumulation of large foreign exchange reserves over the period.

Large capital inflows can pose various types of risks, including the macroeconomic risk of creating overheating and inflation and the financial stability risk of pushing up asset prices excessively and reducing the quality of assets (Kawai and Takagi 2010). Because capital inflows can reverse themselves quickly, they can also create a risk of currency crisis. Managing these risks is not easy, short of allowing exchange rates to appreciate. The empirical and policy literature generally suggests that there is no single solution to the problems posed by capital inflows, and that authorities need to use all the available instruments, including sterilized intervention,

prudential regulation, capital controls, and fiscal tightening. Over the medium term, there may also be scope for regional cooperation to mitigate the adverse impact of large capital inflows, to the extent that international investors have a regional focus and a region tends to experience a similar cycle of cross-border flows.

Sterilized intervention has been the favorite tool applied by many emerging Asian economies to prevent nominal and real exchange rate appreciation and economic overheating in the face of large capital inflows. As the supply of government debt is limited, a large number of central banks in the region, including in the PRC; Indonesia; the Republic of Korea; Malaysia; the Philippines; Taipei,China; and Thailand; have issued central bank securities for sterilization purposes; the RBI in 2004 introduced an innovation in the form of Market Stabilization Scheme for this purpose (Mohan and Kapur 2012). By and large, sterilization saw some success in Asia. For example, overnight market rates in these economies are said to have generally remained within the corridor set by the policy rates (Ho and McCauley 2008). Grenville (2010) notes that, with the exception of India, the central banks were able to insulate the growth of monetary aggregates from large purchases of foreign exchange, and Ho and McCauley (2008) find no evidence suggesting that the large reserve accumulation led to inflation. Sterilization has costs, however, the most important of which is the quasi-fiscal cost associated with the difference between the domestic interest rates paid on sterilization bonds and the foreign interest rates earned on international reserves. Sterilization is not a sustainable policy tool for large and persistent capital inflows.

Prudential regulation can mitigate the negative impacts of capital inflows in two ways. First, it can slow down the expansion of bank lending and also can minimize the deterioration of asset quality. Second, over the longer term, it can contribute to strengthening the financial system, making it less vulnerable to external shocks. India and the PRC raised cash reserve requirement (CRR) ratios to moderate the expansionary impact of large capital inflows on domestic monetary and credit aggregates between 2004 to around mid-2008 (Mohan 2008).[21] India also tightened prudential norms—risk weights and provisioning norms—during 2005–2007 in regard to real estate and stock markets where relatively high credit growth occurred (Mohan and Kapur 2012).[22]

Capital controls can be effective for countries that have not substantially liberalized the capital account. In fact, these countries, notably the PRC, India, and Viet Nam, fared better when they experienced a surge in capital inflows. In India, for example, access norms to external commercial borrowings were tightened in August 2007 in the wake of heavy inflows (which were relaxed in 2008); interest rate ceilings on non-resident deposits with the banking system were reduced during 2006–2007 to moderate the inflows (which were raised again in 2008). For countries with a more open capital account, however, capital controls can entail significant side effects.

[21] The increases in these ratios were rolled back in late 2008 and early 2009 as capital flows reversed.

[22] The prudential norms were rolled back in late 2008 in the aftermath of the global financial crisis.

When Thailand introduced unremunerated reserve requirements in December 2006, it met an immediate and extremely adverse equity market reaction and was forced to withdraw the measure with respect to equity flows. The unremunerated reserve requirements on fixed income flows, however, remained until March 2008 when capital inflows moderated. The Republic of Korea was another country to introduce a form of capital control in April 2007, when it advised foreign banks not to respond to strong arbitrage incentives to swap dollars for Korean won. Limits on lending in foreign currency to Korean firms were reimposed; the non-taxable amount that foreign bank branches can borrow from their parent companies was reduced from six times capital to three ("thin capitalization rule") in January 2008; and the use of foreign exchange loans by banks was limited to real demand (financing imports and real investment) in August 2007. Although the empirical literature on the temporary use of capital controls is generally skeptical of their effectiveness in view of substitutability between types of inflows and the scope for evasion, McCauley (2010) found that these restrictions on capital flows in Asia were effective.

Fiscal policy tightening may well be the only viable tool to mitigate the effect of large and sustained capital inflows, short of allowing the exchange rate to appreciate. In Asia, fiscal policy has not yet been explored thoroughly as an instrument for managing large capital inflows. Although there is no theoretical presumption on the impact of fiscal policy on capital flows, evidence from country experiences suggests that countries that use fiscal tightening tend to perform better than others in managing the adverse consequences of large capital inflows (Schadler 2010). Tightening fiscal policy in the face of a surge in capital inflows has often been found to help reduce the risk of an overheating economy and the appreciation pressure on the domestic currency. Although fiscal policy is not a flexible policy instrument, fiscal tightening is consistent with the region's need to exit from the significant fiscal easing of the crisis period and should receive serious consideration from the region's policymakers as they face a pickup in the pace of capital inflows.

Regional cooperation to manage capital inflows should be explored over the medium-term, to the extent that the reluctance of many economies to allow their currencies to appreciate lies at the heart of the capital inflow problem. Available measures, including sterilized intervention and capital controls, may be effective in the short run but many of them cannot be a permanent solution to large and sustained capital inflows. Some of the measures, such as fiscal tightening and prudential regulation, should be pursued in any case because they contribute to sound economic policymaking in the long run. Sooner or later, however, the economies in the region must address the issue of how much longer they should continue to limit the nominal appreciation of their currencies in the face of capital inflows and let foreign exchange reserves continue to rise. Regional cooperation, for example to coordinate a collective appreciation of their currencies against the US dollar, may be useful in helping these governments overcome the fear of losing export competitiveness through unilateral appreciation and avoid the consequence of dealing with the difficult challenge of managing large and sustained capital inflows. In order for

such a solution to work, there must be an effective mechanism of policy dialogue and cooperation. There is much to be expected from the planned enhancement of surveillance among the ASEAN+3 countries.

3.5 Conclusions and Policy Recommendations

The recent experience with the implementation of macroeconomic policies in Asia suggests two overarching lessons. First, countries must secure adequate monetary and fiscal policy space during good times by maintaining sufficiently high interest rates and by keeping public debt-to-GDP ratios sufficiently low. Second, with sufficient policy space, countries can pull themselves out of a global recession of a magnitude last seen almost 100 years ago by easing monetary policy and expanding fiscal policy aggressively. The experience of the Republic of Korea, Indonesia, Australia, and New Zealand also suggests that substantial currency depreciation is helpful in stimulating aggregate demand, but this cannot be a lesson to be learned from the recent crisis experience. Against each depreciating currency is an appreciating currency. As a country with the only currency that saw significant appreciation during the crisis, Japan assumed an exorbitant share of the burden of adjustment. Rather, the world and the region should strive to create a system in which exchange rate policy does not serve as an instrument of countercyclical policy, especially when the whole world finds itself in recession.

In addition, the recent crisis experience teaches more specific lessons about fiscal policy. For instance, fiscal policy must be targeted at economic agents who are liquidity-constrained to be effective; general spending measures and tax cuts are ineffective and wasteful. Likewise, public investment can entail serious implementation problems especially when it involves a large sum. In view of the long-term usefulness of productive investment in infrastructure, however, it would be difficult to argue that governments should have no investment spending in their stimulus programs. Rather, the lesson seems to be that investment should ideally involve an acceleration of projects that are already under way. Over the medium term, building sound fiscal institutions is the key to making fiscal policy effective. With a binding fiscal rule, governments are more likely to be able to use fiscal policy countercyclically without creating debt sustainability concerns, which could raise interest rates and offset any positive impact. In light of the effectiveness of targeted spending measures and tax cuts, enhancing automatic stabilizers (designed to benefit those likely to be adversely affected by an economic downturn) should receive high priority in Asia.

How to exit from the extraordinary stance of monetary and fiscal policies in the region is a challenge. In this context, some countries began the process of unwinding their easy monetary policies. Australia, benefiting from a pickup of global demand for commodities, became the first G20 country, and the first country in the region, to raise the policy interest rate in October 2009. The PRC and India followed in January 2010 by raising reserve requirements as they saw a moderate rise

in inflationary pressure. As long as the global economy remains weak, however, there is always the risk of withdrawing stimulus prematurely. Especially for other economies whose recovery from the crisis is not yet firm, there is a tendency to err on the side of caution. During and subsequent to the lost decade, Japan tightened policies twice only to see the weak recovery slip back. In April 1997, the Japanese government embarked on a program of fiscal consolidation by cutting investment spending and raising taxes (the consumption tax was raised from 3 to 5%), but the country was hit again by a negative shock (largely associated with the banking sector and the Asian crisis) in late 1997 and saw economic growth fall for four consecutive quarters. Again in August 2000, the BOJ terminated its zero interest rate policy by raising the uncollateralized overnight call rate, only to find the Japanese economy adversely affected by the collapse of the information technology bubble in the United States. The BOJ then returned to monetary easing in March 2001 with the adoption of quantitative easing. On the other hand, Japan's aggressive macroeconomic policy easing, adopted in the aftermath of the Plaza Agreement of September 1985, but sustained too long after the country's recovery from recession in late 1986, is largely credited as a major factor contributing to the development of the bubble economy of the late 1980s.The risk of being too late must be carefully weighed against the risk of being too early.

Regardless of the precise timing and mode of Asia's exit from easy macroeconomic policies, one thing is certain: it cannot repeat the mistakes of the past. Asian economies cannot go on keeping their exchange rates stable against the US dollar and piling up foreign exchange reserves. This would be the same recipe that led to unsustainable global imbalances, the unwinding of which exacerbated the severity of the global financial crisis. Global rebalancing and domestic macroeconomic stability require that the region's economies do two things: (i) allow their currencies to appreciate against the US dollar, and (ii) exit from easy monetary policy promptly when recovery takes hold even if it means raising interest rates ahead of other parts of the world.

Regional cooperation may help these governments overcome the fear of unilateral appreciation and loss of export competitiveness. In this respect, the CMIM, with a strengthened surveillance mechanism supported by AMRO, should press forward. Such a scheme should also be able to reduce the incentive to accumulate foreign exchange reserves for a precautionary reason. The ongoing governance reform of the IMF is another positive development. A closer framework of macroeconomic coordination would make the use of countercyclical fiscal policy more effective when an extraordinary shock calls for fiscal activism again (Kawai and Zhai 2010). Both theory and empirical work (e.g., Eskesen 2009) suggest that fiscal policy coordination would be the only way for small, highly open economies to benefit substantially from discretionary fiscal policy. Exchange rate cooperation can be made more permanent. At a minimum, there must be a mechanism of dialogue when the region's currencies diverge from each other abruptly and substantially (as they did during the recent crisis, as much as 80% in a few months). In view of the need for global rebalancing of demand, cooperation can foster a collective appreciation of

the region's currencies against the US dollar. The immediate focus of such cooperation is not necessarily on the stabilization of intra-regional exchange rates (though helpful in itself) but on increasing the currencies' collective flexibility against the US dollar.

Appendix 3.1 Global Finance Crisis: Major Monetary Policy Actions in Selected Economies, Fall 2008–Early 2010

Economy	Major actions
Australia	On 3 September 2008, the cash rate was cut by 25 basis points to 7%; on 8 October a further 100 basis point cut to 6% was made; from November to April 2009, the cash rate was cut four times by a total of 300 basis points to 3%
	On 24 September 2008, a US$ 10 billion swap was arranged with the US Federal Reserve to address the elevated pressures in US dollar short-term funding markets
	On 24 September 2008, a domestic term deposit facility was set up to enhance the flexibility of liquidity management operations
	On 8 October 2008, the Reserve Bank of Australia removed restrictions on using residential mortgage-backed securities and asset-backed commercial paper as collateral in repo operations
	On 7 October 2009, the cash rate was raised by 25 basis points to 3.25%, followed by similar adjustments on 4 November and 2 December (in early 2010 the rate stood at 3.75%)
People's Republic of China	On 16 September 2008, the one-year CNY benchmark lending rate was cut by 27 basis points, from 7.47 to 7.2%; the rate was cut further on four occasions by an additional 189 basis points (to 5.31%) through December 2008
	On 25 September 2008, CNY reserve requirements were lowered; reserve requirements were reduced further on three occasions through December 2008
	On 27 October 2008, conditions for housing loans were eased
	In November 2008, "moderately loose" monetary policy was announced
	On 27 November, the one-year central bank liquidity lending rate was lowered from 4.68 to 3.6%; the rediscounting rate was lowered from 4.32 to 2.97%; on 23 December these rates were further reduced to 3.33 and 2.80%, respectively
	On 10 January 2010, reserve requirements were raised in a reversal of easy monetary policy
India	On 11 October 2008, the cash reserve ratio was cut by 250 basis points from 9.0 to 6.5% of net demand and time liabilities; the cash reserve ratio was cut further by an additional 150 basis points (to 5.0% in January 2009)
	From 20 October 2008 to 21 April 2009, the repo rate was cut by 425 basis points to 4.75 %

Economy	Major actions
	From 8 December 2008 to 21 April 2009, the reverse repo rate was cut by 275 basis points to 3.25%
	On 8 November 2008, there was a one-time cut in the statutory liquidity requirements, by 100 basis points to 24% of net demand and time liabilities
	A scheme was introduced to repurchase market stabilization bonds
	A 14-day term repo facility was introduced to allow banks to on-lend to other institutions
	Foreign exchange (rupee-dollar) swaps with local banks were introduced
Indonesia	On 16 September 2008, the overnight repo rate was lowered in order to maintain liquidity
	On 23 September 2008, the term for fine tune operations was extended from 1–14 days to 1 day–3 months to secure greater flexibility for liquidity management
	On 7 October 2008, the Bank Indonesia (BI) rate was raised by 25 basis points to 9.5% in order to curb inflation and to stabilize the exchange rate
	On 14 October 2008, the maximum term for foreign exchange swaps was extended from 7 days to 1 month to provide dollar liquidity
	On 18 November 2008, the terms for access to the central bank's liquidity facility were relaxed
	On 4 December 2008, the BI rate was cut for the first time after the onset of the global financial crisis, from 9.5 to 9.25%; the BI rate was cut further 8 more times, by a total of 375 basis points, to reach 6.5% in August 2009
	On 5 December 2008, a scheme to purchase exporters' bankers' acceptances was introduced
	Banks' reserve requirements were lowered
	Liquidity was injected through repos
	The range of eligible collateral for short-term central bank financing was expanded
Japan	On 14 October 2008, the range of eligible Japanese government bonds for repo operations was expanded, and the minimum fee rate for the Security Lending Facility was reduced from 1.0 to 0.5%; it was announced that the frequency and size of commercial paper (CP) repo operations would be increased; the range of asset-backed CP acceptable as collateral was broadened; and US dollar funds-supplying operations were expanded
	On 31 October 2008, the uncollateralized overnight call rate was cut by 20 basis points, from 0.5 to 0.3%; the basic loan rate under the complementary lending facility was cut by 25 basis points, from 0.75 to 0.5%; and the Complementary Deposit Facility was introduced, under which the Bank of Japan pays interest on excess reserves, in order to supply liquidity
	On 2 December 2008, the range of corporate debt acceptable as collateral was expanded (from A- or above to BBB or above); and a scheme was introduced to provide liquidity against corporate debt as collateral at the average uncollateralized overnight call rate

Economy	Major actions
	On 19 December 2008, the uncollateralized call rate was cut further by 20 basis points (to 0.1%); the basic loan rate under the complementary lending facility was reduced further by 20 basis points (to 0.3%)
	In January 2009, outright purchases of Japanese government bonds were increased from ¥ 1.2 trillion per month to ¥ 1.4 trillion; outright purchases of CP and asset-backed CP were introduced, up to ¥ 3 trillion
	In February 2009, outright purchases of corporate bonds were introduced, up to ¥ 1 trillion
	In March 2009, outright purchases of Japanese government bonds were increased to ¥ 1.8 trillion yen per month
Republic of Korea	On 9 October 2008, the base rate was cut by 25 basis points from 5.25 to 5%; the base rate was cut five more times by a total of 200 basis points to 2% in February 2009
	On 3 December 2008, the Bank of Korea began to pay interest on banks' required reserves in order to provide incentives for lending
	Swap lines with foreign central banks totaling US$ 90 billion were arranged, including a US$ 30 billion swap with the Federal Reserve in October 2008 (about US$ 16 billion was drawn at the peak), a CNY 180 billion/W38 trillion swap with the People's Bank of China in December 2008, and an expansion of the existing swap arrangement with the Bank of Japan in December 2008, from US$ 3 billion to US$ 20 billion
	In November and December 2008, the range of eligible securities and eligible financial institution counterparties was expanded for open market operations and repurchase operations
	In November 2008, a scheme was introduced to provide up to W5 trillion to financial institutions subscribing to the Bond Markets Stabilization Fund
Malaysia	On 16 October 2008, the scope of eligible institutions was expanded for the central bank's liquidity facility
	On 24 November 2008, the overnight policy rate was cut to 3.25%, from 3.5%; the policy rate was further cut in January and February to reach 2%. In December 2008, statutory reserve requirements were reduced, from 4 to 3.5%
	A bilateral swap arrangement was agreed with the People's Bank of China for CNY 80 billion and RM40 billion
Philippines	On 17 October 2008, a repo facility was introduced to provide US dollar funds; the range of eligible collateral was expanded for the standing peso repo facility
	On 6 November 2008, the amount of available funding was increased under the peso rediscounting facility, from P20 to P40 billion
	On 14 November 2008, reserve requirements on bank deposits were reduced by 2 percentage points
	On 18 December 2008, the reverse repurchase rate was reduced from 6.0 to 5.5%, and the repurchase rate from 8.0 to 7.5%; these key policy rates were lowered four more times by a total of 1.25% to reach 4% and 6%, respectively, in July 2009

Economy	Major actions
Singapore	On 10 October 2008, the appreciating trend was removed from the nominal effective exchange rate (NEER) band (policy shifted to a zero percent appreciation of the NEER)
	On 30 October 2008, a US$ 30 billion swap was agreed with the US Federal Reserve
	On 14 April 2009, the NEER band was re-centered around the prevailing level of the exchange rate (indicating an effective devaluation of the Singapore dollar)
Taipei,China	On 18 September 2008, required reserve requirements were lowered on bank deposits; the list of securities acceptable as collateral for central bank lending was expanded
	On 25 September 2008, the key policy rates were cut by 12.5 basis points each (the discount rate from 3.625 to 3.5%; the collateralized accommodation rate from 4.0 to 3.875%, and the uncollateralized accommodation rate from 5.875 to 5.75%): the policy rates were cut six more times by a total of 225 basis points to reach 1.25%, 1.625%, and 3.5%, respectively, in February 2009
	On 25 September 2008, the scope of repo facility operations was broadened, by expanding the list of eligible counterparties
	In October 2008, the credit lines were raised for lending to securities firms
Thailand	On 3 December 2008, the policy interest rate (the overnight repo rate) was cut by 100 basis points, from 3.75 to 2.75%; the policy rate was cut two more times by an additional 125 basis points to reach 1.5% in February 2009

Sources: Authors' summary from national central banks

Appendix 3.2 Global Finance Crisis: Major Fiscal Policy Actions in Selected Economies, Fall 2008– Early 2010

Economy	Major actions
Australia	Discretionary fiscal measures, amounting to 0.8% of gross domestic product (GDP) in 2008, 2.9% in 2009, and 2% in 2010, centered on temporary transfers to almost 40% of the population (of up to A$900 each) and temporary increases in infrastructure spending
People's Republic of China (PRC)	In November 2008, a CNY 4 trillion stimulus package (equivalent to 13% of GDP) for 2009–2010 was announced, including CNY 908 billion annual central government outlays for public investment in housing, transportation infrastructure, public utilities, rural development and others
	In January 2009, additional expenditure measures of CNY 1.45 trillion were announced, including support to health-care reforms and investment spending on scientific and technical innovation

Economy	Major actions
India	In December 2008, January 2009, and February 2009, three fiscal stimulus packages were introduced, totaling Rs1.86 trillion or 3.5% of GDP. The measures included a 4 percentage point cut in excise duty, additional spending, authorization for state governments to borrow, and an interest subsidy on export finance. The India Infrastructure Finance Company was authorized to raise Rs400 billion (0.8% of GDP) over the next 18 months. States were allowed to exceed the 3% fiscal deficit target in the next fiscal year
	The revised FY2009/10 budget contained additional measures, including Rs391 billion for labor market initiatives for the rural sector
Indonesia	A stimulus package of Rp73 trillion amounting to 1.5% of GDP was announced for 2009 (against the background of election-related spending), including public investment on infrastructure; 60% of the measures involved tax cuts and exemptions, and another 25% for subsidies, with only about 17% allocated to infrastructure
	A stimulus package of Rp61 trillion was announced as part of the 2010 state budget, including a much larger share of spending on infrastructure than the 2009 package
Japan	Four packages (one main budget and three supplementary budgets) were announced, totaling roughly ¥ 26 trillion in fiscal measures and ¥ 130 trillion in projects. The stimulus measures, amounting to 2.6% of GDP in 2009 and 2.2% of GDP in 2010, included cash payments, public works, subsidies for energy-efficient purchases, a higher gift tax exemption to support spending, and vocational training
	With a change in government in September 2009, a new stimulus package was prepared, totaling ¥ 7.2 trillion in fiscal measures and ¥ 24.7 trillion in projects.
	The main budget for fiscal 2010 represents a 4.2% increase from the previous year
Republic of Korea	In November 2009, the first stimulus package was announced, totaling about W14 trillion (equivalent to 1.4% of GDP), including W4.6 trillion for infrastructure spending, W1 trillion as transfers to low income households, and W3 trillion in tax cuts
	In December 2009, the second package of W35.6 trillion (equivalent to 3.5% of GDP) was approved, including W25 trillion to social overhead capital projects and W5 trillion for labor market measures
	In January 2009, another stimulus plan was announced, providing W50 trillion of investment in environmental-friendly projects over 2009–2012 (with W38 trillion to be financed out of the national budget)
	In March 2009, a supplementary budget (W28.9 trillion or 2.8% of GDP) was approved, including W17.7 trillion in fiscal expenditures (e.g., labor market measures and support to SMEs) and the remaining W11.2 trillion to cover the expected revenue shortfall
	In August 2009, further tax cuts were announced for low income groups, self-employed entrepreneurs, and small and medium-sized enterprises (SMEs)

Economy	Major actions
Malaysia	In November 2008 and March 2009, two stimulus packages were announced, totaling about 10% of GDP. The first package amounted to 1% of GDP, with 85% directed toward improving infrastructure. The March 2009 package involved RM60 billion or approximately 9% of GDP, but was to be spent over two years, including funding and consumption subsidies to support certain sectors, the creation of funds to assist small to medium-sized enterprises (SMEs), corporate investment through the government fund (Khazanah) in strategic sectors, and infrastructure spending
Philippines	In February 2009, a stimulus package was announced, totaling 330 billion pesos or 4.1% of GDP, of which P100 billion was earmarked to large infrastructure spending, P160 trillion to community-level infrastructure projects, and P40 billion to income tax cuts
	The target year for fiscal consolidation was postponed to 2011
Singapore	In January 2009, a stimulus package was prepared, totaling about 8% of GDP. The package included incentives for companies to maintain or increase their workforce through grants, the assumption of 80% of loan loss risk in bank lending, public investment on infrastructure, and spending on welfare
Taipei,China	From September 2008 to February 2009, a series of fiscal stimulus measures was announced, totaling about NT$350 billion. The packages included tax breaks for new business investment, discounted sales of industrial land, increased financial support for SMEs, and public investment; cash transfers to low-income families, subsidies for consumers to buy energy saving products; shopping vouchers (NT$3,600) given to all citizens
	NT$500 billion for infrastructure spending would be spent over 4 years, 2009–2012
Thailand	Fiscal stimulus measures for 2008–2009 were announced, amounting to 2.4% of GDP. The package included transfers and subsidies to the vulnerable and credit-constrained households (about 1% of GDP, approved in January 2009), tax measures (0.7%), and increased public investment (0.5%)
	In March 2009, a medium-term stimulus package of about B1.5 trillion, equivalent to 15% of GDP, was approved; over 70% of the measures relate to infrastructure investment, to be spent over the next three years, 2010–2012

Sources: Kang (2010); Kumar and Soumya (2010); Jitsuchon (2009); Patunru and Zetha (2009); Doraisami (2011); Park et al. (2010); and International Monetary Fund, various staff reports for Article IV consultations, latest issues

References*

Aizenman, J., M. D. Chinn, and H. Ito. 2012. The financial crisis, rethinking of the global financial architecture, and the trilemma. In *Monetary and currency policy management in Asia,* eds. M. Kawai, P. J. Morgan, and S. Takagi. Cheltenham, UK: Edward Elgar Publishing Ltd.

* The Asian Development Bank refers to China by the name People's Republic of China.

Barnett, S., and R. Brooks. 2010. China: Does government health and education spending boost consumption? International Monetary Fund Working Paper 10/16. Washington, DC: IMF.

Cabinet Office of the Government of Japan. 2010. *Teigaku kyufukin ni kanrenshita shohito ni kansuru chosa no kekka ni tsuite* (in Japanese).

Doraisami, A. 2011. *The global financial crisis: Countercyclical fiscal policy issues and challenges in Malaysia, Indonesia, the Philippines, and Singapore*. ADBI Working Paper 288. Tokyo: ADBI.

Eskesen, L. L. 2009. Countering the cycle: The effectiveness of fiscal policy in Korea. International Monetary Fund Working Paper 09/249. Washington, DC: IMF.

Evans, C. L. 2009. Should monetary policy prevent bubbles? Federal Reserve Bank of Chicago. www.chicagofed.org/webpages/publications/speeches/2009/11.13_BoF_speech.cfm. (accessed 10 October 2011)

Filardo, A., and H. Genberg. 2012. Monetary policy strategies in the Asia and Pacific region: Which way forward? In *Monetary and currency policy management in Asia,* eds. M. Kawai, P. J. Morgan, and S. Takagi. Cheltenham, UK: Edward Elgar Publishing Ltd.

Freedman, C., M. Kumhof, D. Laxton, D. Muir, and S. Mursula. 2009. *Fiscal stimulus to the rescue? Short-run benefits and potential long-run costs of fiscal deficits*. International Monetary Fund Working Paper 09/255. Washington, DC: IMF.

Fukuda, S., and Y. Kon. 2012. Macroeconomic impacts of foreign exchange reserve accumulation: Theory and international evidence. In *Monetary and currency policy management in Asia,* eds. M. Kawai, P. J. Morgan, and S. Takagi. Cheltenham, UK: Edward Elgar Publishing Ltd.

Grenville, S. 2010. Central banks and capital flows. In *Managing capital flows: The search for a framework*, eds. M. Kawai and M. B. Lamberte. Cheltenham, UK: Edward Elgar Publishing Ltd.

Ho, C., and R. N. McCauley. 2010. The domestic financial consequences of reserve accumulation: Some evidence from Asia. In *Exchange rate, monetary and financial issues and policies in Asia,* ed. R. S. Rajan, S. Thangavelu, and R. A. Pariduri. Singapore: World Scientific.

Horton, M. 2010. Fiscal policy after the crisis. Paper presented at the ADBI conference on global financial and economic crisis: fiscal policy issues after the crisis, Tokyo, 19 January.

IMF. 2009a. *World Economic Outlook: Crisis and recovery*. Washington, DC: IMF.

IMF. 2009b. *The state of public finances cross-country fiscal monitor: November 2009*. International Monetary Fund Staff Position Note SPN/09/25. Washington, DC: IMF.

Jitsuchon, S. 2009. Fiscal policy issues in Thailand after the current economic crisis. Paper presented at the ADBI conference on global financial and economic crisis: fiscal policy issues after the crisis, Tokyo, 19 January.

Kang, J. 2010. Meeting the challenges of financial crisis—China's practice: From developing countries' perspective. Paper presented at the ADBI conference on global financial and economic crisis: fiscal policy issues after the crisis, Tokyo, 19 January.

Kawai, M., and S. Takagi. 2010. A survey of the literature on managing capital inflows. In *Managing capital flows: The search for a framework*, eds. M. Kawai and M. B. Lamberte. Cheltenham, UK: Edward Elgar Publishing Ltd.

Kawai, M., and F. Zhai. 2010. Asia's post-global financial crisis adjustment to the global financial crisis: A model-based scenario analysis. *Asian Development Review 27*(2):122–151.

Kim, S., and D. Y. Yang. 2012. International monetary transmission and exchange rate regimes: Floaters vs. non-floaters in East Asia. In *Monetary and currency policy management in Asia,* eds. M. Kawai, P. J. Morgan, and S. Takagi. Cheltenham, UK: Edward Elgar Publishing Ltd.

Kumar, R., and A. Soumya. 2010. Fiscal policy issues for India after the current crisis. Paper presented at the ADBI conference on global financial and economic crisis: fiscal policy issues after the crisis, Tokyo, 19 January.

McCauley, R. N. 2010. Managing recent hot money inflows in Asia. In *Managing capital flows: The search for a framework*, eds. M. Kawai and M. B. Lamberte. Cheltenham, UK: Edward Elgar Publishing Ltd.

Mohan, R. 2008. Capital flows to India. *Reserve Bank of India Bulletin,* December, 2047–2079.

Mohan, R., and M. Kapur. 2012. Liberalization and regulation of capital flows: Lessons for emerging market economies. In *Implications of the global financial crisis for financial reform and regulation in Asia,* eds. M. Kawai, D. G. Mayes, and P. J. Morgan. Cheltenham, UK: Edward Elgar Publishing Ltd.

Mohanty, D. 2009. Global financial crisis and monetary policy response in India. Speech delivered at the Third ICRIER-InWEnt Annual Conference. New Delhi. 12 November.

Morgan, P. J. 2012. The role and effectiveness of unconventional monetary policy. In *Monetary and currency policy management in Asia,* eds. M. Kawai, P. J. Morgan, and S. Takagi. Cheltenham, UK: Edward Elgar Publishing Ltd.

Park, D., S. Hur, S. Jha, and P. Quising. 2010. *Did fiscal stimulus lift developing Asia out of the global crisis? A preliminary empirical investigation*. Economics and Research Department. Manila: ADB.

Patnaik, I., and A. Shah. 2012. Asia confronts the impossible trinity. In *Monetary and currency policy management in Asia,* eds. M. Kawai, P. J. Morgan, and S. Takagi. Cheltenham, UK: Edward Elgar Publishing Ltd.

Patunru, A. A., and E. Zetha. 2009. Indonesia's savior: fiscal, monetary, trade, or luck? Paper presented at the ADBI conference on global financial and economic crisis: fiscal policy issues after the crisis, Tokyo, 19 January.

Sahm, C. R., M. D. Shapiro, and J. Slemrod. 2009. Household response to the 2008 tax rebates: Survey Evidence and aggregate implications. Federal Reserve Board Working Paper 2009-45. Washington, DC: Federal Reserve Board.

Schadler, S. 2010. Managing large capital inflows: Taking stock of international experiences. In *Managing capital flows: The search for a framework*, eds. M. Kawai and M. B. Lamberte. Cheltenham, UK: Edward Elgar Publishing Ltd.

Simone, A. S., and P. Topalova. 2009. India's experience with fiscal rules: An evaluation and the way forward. International Monetary Fund Working Paper 09/175. Washington, DC: IMF.

Smaghi, L. B. 2009. Exit strategies: The international dimension. European Central Bank. www.ecb.int/press/key/date/2009/html/sp091120_1.en.html

Spilimbergo, A., S. Symansky, O. Blanchard, and C. Cottarelli. 2008. Fiscal policy for the crisis. International Monetary Fund Staff Position Note SPN/08/01. Washington DC: IMF.

Spilimbergo, A., S. Symansky, and M. Schindler. 2009. Fiscal multipliers. International monetary Fund Staff Position Note SPN/09/11. Washington, DC: IMF.

Tanaka, O. 2009. Chinese fiscal policy implementation. Paper presented at the ADBI conference on global financial and economic crisis: macroeconomic policy issues, Tokyo, 28–29 July.

Chapter 4
Rebalancing Production

Willem Thorbecke, Biswa Nath Bhattacharyay, Hank Lim, Gloria O. Pasadilla, and Venkatachalam Anbumozhi

Abstract This chapter argues that Asian economies should move away from growth strategies driven by exports to developed economies. Rebalancing should take place on both the demand side and on the supply side. Well-targeted policies that increase the productivity on the supply side and by targeting regional consumers on the demand side are necessary. To increase productivity, developing Asian countries should leverage production networks to graduate to higher value-added and knowledge-intensive activities. This can be accomplished by investing in human capital to provide workers with marketable skills, implementing appropriate R&D policies to enhance the capacity of firms, and maintaining FDI friendly environments. A region-wide FTA should include full cumulation of rules of origin in order to overcome noodle bowl effects. Infrastructure investment can be facilitated if governments, multilateral development banks, and bilateral financial institutions work together. More open and competitive services sectors would be promoted if policymakers removed distortions that favor manufacturing over services. SMEs could be strengthened if Asian governments were to establish high-level coordinating agencies like SPRING Singapore and develop long-term holistic plans to nurture SMEs. To ensure that the resulting growth is sustainable, new growth patterns should be made more environmentally-friendly.

W. Thorbecke (✉)
Research Institute of Economy, Trade and Industry, Tokyo, Japan
e-mail: willem-thorbecke@rieti.go.jp

B. N. Bhattacharyay
Desautels School of Management, McGill University Montreal, Montreal, Canada
e-mail: dr_biswa@yahoo.com

H. Lim
Singapore Institute of International Affairs, Singapore, Singapore
e-mail: hank.lim@siiaonline.org

G. O. Pasadilla
APEC Policy Support Unit, Singapore, Singapore
e-mail: g.pasadilla@gmail.com

V. Anbumozhi
Economic Research Institute for ASEAN and East Asia (ERIA), Jakarta, Indonesia
e-mail: v.anbumozhi@eria.org

M. Kawai and J.-W. Lee (eds), *Rebalancing for Sustainable Growth,* Economics, Law, and Institutions in Asia Pacific, DOI 10.1007/978-4-431-55321-2_4

Keywords Rebalancing growth · Industrial upgrading · Technology transfer · Regional trade agreement

JEL Codes F16 · F18 · L5 · L8

4.1 Introduction

In the late 1950s and early 1960s, Japan, the Republic of Korea, and Taipei,China adopted export-oriented strategies to promote economic growth. The Association of Southeast Asian Nations (ASEAN) countries[1] and the People's Republic of China (PRC) later adopted similar approaches. These strategies helped to raise living standards and reduce poverty to such an extent that economists refer to the episode as the "East Asian Miracle."

In recent years, the region's exports have been produced within intricate production and distribution relationships. Japan, the Republic of Korea, Taipei,China, and multinational corporations (MNCs) located in ASEAN produce sophisticated technology-intensive intermediate goods and capital goods and ship them to the PRC and ASEAN for assembly by lower-skilled workers. The finished products are then exported to the United States (US), Japan, Europe, and other countries. The volume of exports produced within these value-added chains has increased rapidly and this has led to growing trade imbalances between East Asia and the rest of the world. The region's global current account surplus equaled US$ 747 billion in 2007 and US$ 710 billion in 2008. In spite of the onset of the global financial crisis, the IMF (2011) estimates a surplus of US$ 623 billion in 2009 and US$ 601 billion in 2010.

There are a number of reasons why Asian economies should rebalance away from relying too much on exports to developed economies. As net exports from Asia have multiplied and growth abroad has stagnated, the ability of the rest of the world to absorb Asia's exports has decreased. Furthermore, export production in some countries has been subsidized by artificially low prices for labor, land, and energy, and by the lack of rigorous enforcement of environmental regulations (Huang 2009). This state of affairs is not in the long-term interests of the producing countries. Finally, the trade composition in many countries is dominated by low value-added assembled goods produced through East Asian supply chains.

Rebalancing should take place on both the supply side and the demand side. On the supply side, the best way to rebalance growth is to increase productivity (Jitsuchon and Sussangkarn 2009) which would raise wage rates and living standards. On the demand side, producers in the region should look more to Asian consumers as an engine of growth. As the Ministry of Economy, Trade and Industry (METI)

[1] Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam.

(2009) reports, Asia has 930 million people who are in the middle class and above. Thus, there exists huge potential for rising demand in Asia to offset shrinking demand in the West.

To increase productivity, firms in developing Asia should leverage production networks to graduate to higher value-added, knowledge-intensive activities. This can be accomplished by maintaining foreign direct investment (FDI)-friendly environments capable of nurturing industrial agglomeration and facilitating technology transfer. One key way to attract FDI is to lower the service link costs between geographically separated production blocks. These could be lowered by implementing a region-wide free trade agreement (FTA), improving intra-regional infrastructure, and developing competitive services sectors and small and medium-sized enterprises (SMEs).

Many of these steps would also help Asian firms to connect with new sources of demand. For instance, improving infrastructure and implementing a region-wide FTA would give firms better access to consumers in Asia. In addition, raising worker productivity would increase labor income, raising the long-run purchasing power of consumers in the region. There is also the possibility of a virtuous cycle emerging.[2] Developing competitive SMEs and services sectors and investing in infrastructure would attract FDI. Once countries receive a critical mass of FDI, industrial agglomeration would start to take place. Local SMEs and services sector firms would then have more opportunities to develop and increase their competitiveness and governments would have more revenue to invest in infrastructure. This would in turn attract more FDI.

Increasing productivity could increase the current account surplus in Asia by increasing output and thus output minus spending (i.e., the current account balance). An increase in productivity in the non-tradables sector, which we discuss in Section 4.5, would not have this impact. Even in the manufacturing sector, an increase in labor productivity would be helpful for developing Asia by increasing workers' permanent income. This in turn would increase their marginal propensity to consume and thus help to sustain production directed toward regional markets.

The next section considers how developing Asian countries could leverage production networks to facilitate technology transfer to domestic firms. Section 4.3 considers a regional FTA and the role it could play in bringing Asian producers and consumers together. Section 4.4 considers how infrastructure investment could help to rebalance growth. Section 4.5 argues that Asian countries should use deregulation and increased competition to develop more competitive services sectors. Section 4.6 considers how to nurture SMEs, Section 4.7 takes up issues related to green growth, and Section 4.8 concludes.

[2] We are indebted to Professor Shujiro Urata for this suggestion.

4.2 Promoting Technology Transfer and Industrial Upgrading in Developing Asia[3]

Many of Asia's exports are produced within regional production networks. One benefit of processing trade for developing Asia is that MNCs play a large role in production and distribution processes. Furthermore, they bring expertise in finding new sources of demand and in tailoring production to the needs of the marketplace. Even if American and European demand remain low, MNCs should be able to find new markets to exploit. Thus, processed exports should continue to play a role in developing Asia.

Processing trade also offers the potential to promote technology transfer and industrial upgrading. This can increase the productivity of local firms. Jitsuchon and Sussangkarn (2009) noted that the best way to rebalance growth is by increasing productivity. This raises wage rates and labor income over time, increasing the long run purchasing power of consumers. In addition, Jitsuchon and Sussangkarn (2009) argued that growth rebalancing should be accompanied by national efforts to increase the domestic content of the goods produced. Developing Asian countries would benefit if more of the value-added in the production chain could be produced domestically.

How can developing Asian countries increase the domestic content of exports? To do this they need to advance from simple to complex production activities—from assembling imported parts and components to participating in the engineering and design aspects of production. As Lim and Kimura (2009) discussed, it is crucial for local firms and entrepreneurs to obtain technology transfers and positive spillovers from the operation of MNCs in their countries. For this to happen, the absorptive capacity of the country must develop:

> Policymakers in [least developed countries] LDCs must be patient until they are hosting a critical mass of FDI, rather than hastily introducing performance requirements for technology transfers. Once the seed of industrial agglomeration has been planted, local firms and entrepreneurs will have ample opportunities for penetrating into production networks, which will eventually accelerate technology transfers and spillovers. (Lim and Kimura 2009, p. 12)

The extensive benefits arising from FDI make it important for Asian countries to understand how they can attract FDI flows. As stated, one important step is to lower the service link costs between geographically separated production blocks. These costs can be lowered along two axes; distance and controllability (Kimura and Ando 2005). Costs along the distance axis include transport, telecommunications, and intra-firm coordination costs, while costs along the controllability axis include the costs of imperfect information, lack of credibility, and loss of stable contracts. To lower service link costs on the distance axis, Asian policymakers should focus on strengthening physical infrastructure such as (i) networks of highways, ports, and airports; (ii) information and communication technology (ICT) infrastructure; and

[3] This section and the next draw on Thorbecke and Yoshitomi (2006).

(iii) container yards. To lower costs on the controllability axis, policymakers should focus on strengthening market-supportive institutional infrastructure such as (i) legal system enforcement mechanisms, (ii) access to vendor information, (iii) private contract enforcement mechanisms, (iv) improved corporate governance, and (v) legal remedies against violations of intellectual property rights agreements. The topic of strengthening regional infrastructure will be further discussed in Section 4.4.

Service link costs can fall when many firms locate in one area, and the resulting agglomeration can lead to economies of scale. Service link costs are reduced because the large number of firms in close proximity makes it easier for firms to procure parts and components and to handle frequent specification changes. In addition, the close proximity of many business partners with different skills and technologies helps to reduce the costs associated with uncontrollability.

In countries like Singapore, Malaysia, and Thailand, SMEs play an important role in production chains and as subcontractors to the big companies. Section 4.6 considers how to nurture SMEs so that they can become more productive and more involved in regional production networks.

For firms in developing countries to be able to reap the full benefits of these trade-FDI-technology networks, it is necessary for their economies to move up the value chain and not to remain engaged only in labor-intensive assembling activities. Technology transfer and upgrading is an essential element of this process. The intrafirm transfer of managerial technology from foreign affiliates to indigenous workers can be expedited if workers in the host country are better educated (Urata et al. 2006). Accordingly, the development of human capital is a prerequisite for effective technology transfer. However, it is not enough to simply provide more education. Rather the focus should be on the sciences and engineering, disciplines that equip students with the marketable skills that businesses need. Section 4.5 considers how the government and the private sector can cooperate in this process.

It is important to note that firms in developing Asia are not simply passive recipients of technology. Rather, their technological capabilities have a strong positive effect on their performance. Wignaraja's (2008) analysis of the behavior of exporting firms in the PRC, the Philippines, and Thailand revealed that the technological capabilities of firms—covering firms' competencies in (i) upgrading equipment, (ii) licensing technology, (iii) certifying International Organization for Standardization quality, (iv) improving processes, (v) adapting products, (vi) introducing new products, (vii) research and development (R&D) activity, (viii) sub-contracting, and (ix) linking technologies—strongly affected firms' abilities to export. The results indicated that firms' efforts to learn, adopt, and employ imported technologies had positive effects on their ability to export.

R&D policy can also play an important role. Because imported technology is expensive, selections must be made judiciously. Public research institutions can help in assessing and indicating the best technologies to import. For their part, governments can provide the necessary support to coordinate firms' R&D efforts with public research institutions and thereby promote relevant and efficient outcomes. The focus should not only be on the types of technologies to employ, but also on identifying the most appropriate partners. This linking up with other institutions or

firms from abroad, whether done on a formal or informal basis, is critical to enhancing productive capacities in developing Asia.

Developing Asian economies receive technology spillovers when foreign affiliates increase local procurement in the host countries. As MNCs increase their tenure in developing Asia, they increase their procurement from local firms. This leads to the formation of industrial clusters, and local engineers and skilled workers begin to migrate between firms and sectors. In doing so, they bring their accumulated human capital with them and disperse it across the economy, promoting technological assimilation and productivity growth. For example, Kraemer and Dedrick (2006) have documented how the lion's share of the international production of notebook personal computers (PCs) is produced in the Yangtze River Delta by Original Design Manufacturers from Taipei,China. These manufacturers form part of a network that includes branded firms such as Hewlett Packard, Apple, and Toshiba, as well as suppliers of key parts and components, producers of basic industrial materials, and makers of operating systems and central processing units. Local Chinese firms supply connectors, batteries, switches, and displays and are also active in molding, casting, forging, plating, and module-assembling. These digital and human networks allow PC producers to react efficiently in real time to changes in consumer preferences and technology. Firms assembling the notebook PCs have also kept inventories lean by processing 98% of orders within three days of receipt. Productivity growth within this value chain has been phenomenal.

To summarize, in order to increase the tenure of foreign affiliates and reap the associated benefits as outlined above, it is necessary to create FDI-friendly environments characterized by the consistent and coherent enforcement of laws and regulations at all governmental levels, as well as stable macroeconomic fundamentals. Free trade agreements covering both trade and investment liberalization and facilitation, as well as high quality investment treaties, assume great importance here. It is to the topic of FTAs that the next section turns.

4.3 Implementing a Region-Wide FTA

A basic message of economics is that a country can reap the gains from trade by liberalizing unilaterally. Economies in the region can thus experience efficiency gains by reducing their MFN tariff rates, even if their trading partners do not. Partly because of the influence of special interests, this basic message is often forgotten in trade negotiations. Global liberalization would produce even greater gains by leading to a more efficient allocation of resources in the international economy along the lines of comparative advantage. FTAs between a limited number of countries, on the other hand, would be a second best solution because it would have trade diverting effects that would offset some of the trade creating effects. Amid the stalled Doha Round trade talks, FTAs offer a means to liberalize trade and sustain economic recovery in Asia. Recent trend shows that FTA numbers have spread rapidly, particularly in East Asia. Regional FTAs have increased from 3 to 44 between 2000 and

2010 and that there are another 85 agreements at various stages of preparation. This FTA surge is due to dissatisfaction with the slow progress in global trade talks, the need to support sophisticated production networks through continued trade and investment liberalization, and a defensive response to the spread of FTAs elsewhere.

The benefits and costs of these FTAs deals are the subject of polarizing debates. Advocates point out that agreements strengthen the policies that underpin regional trade integration, laying the building blocks toward multilateral liberalization. Furthermore, market integration in Asia through FTAs can help promote greater intra-regional trade and investment, and create opportunities for greater production and spending in the region. There are, however, losers thanks to liberalization in particular sectors. It is therefore necessary to facilitate labor mobility and the movement of firms from losing sectors to gaining sectors by providing retraining and upgrading for workers displaced through trade liberalization and by reducing entry barriers to new firms and facilitating exit through structural reform. Sector-specific protectionist policies should be abandoned as much as possible, while competition policy should be strengthened.

FTAs between developing and developed economies affect sectors differently depending on the level of development. Hertel (2000) examined the impacts of liberalization of agriculture, manufacturing, and services on global trade volumes and welfare.[4] He found that full liberalization across these sectors would increase world trade by 20%. Three-fourths of these gains would come from liberalization in the manufacturing sector, a little less than a fourth from liberalization in the agriculture sector, and the remainder from the services liberalization. Welfare gains would be largest for agricultural liberalization, followed by manufacturing liberalization and then services liberalization. The developing countries mainly benefit from manufacturing tariff cuts; while the developed countries gain more from agriculture and service liberalization. In addition, Hertel et al. (2008) simulated the impact of agricultural liberalization and found that it will hurt poor people working in agriculture due to reduced real after-tax factor earnings. However, the revenue replacement effects can be largely offset by poverty-reducing impacts of lower prices of agricultural products if all developing and developed countries reduce their agricultural tariffs together. Thus, to enhance the benefits and the quality of agreements, it is important to reduce the scope of these sensitive items in both types of economies and to enlarge the coverage of countries.

Critics also worry that this wave of agreements erodes the multilateral process and fosters an alarming "noodle bowl" of overlapping rules of origin (ROOs) requirements—which may be costly to businesses. The noodle bowl effect refers to the possibility that multiple trade agreements can cause the trading system to become chaotic. Baldwin and Kawai (2008) argued that the noodle bowl can cause problems when:

[4] Hertel et al. (2008) simulated the across-the-board abolition of estimated 2005 protection tariffs in agriculture; business, finance, and construction services; extractive industries; and manufacturing. He also considered liberalization of all sectors simultaneously. His model contained 22 sectors in 19 regions around the world.

> Agreements are overlapping, complex, and different—with different liberalization standards, exclusion lists, rules of origin, standards, etc. This carries the risk of becoming unwieldy and makes doing business cumbersome. (Baldwin and Kawai 2008, p. 1)

In the past, the lack of empirical evidence on the business impact of FTAs has made it difficult to resolve this debate and explore policy implications. Recently, a survey on the region's 841 export-oriented manufacturing firms based in the PRC, Japan, Singapore, the Republic of Korea, Thailand, and the Philippines offers new evidence (Kawai and Wignaraja 2011). The study finds that multiple ROOs impose a limited burden on firms in East Asia. The survey finds that Asian businesses—particularly the larger, more established firms—view FTAs positively and that wider export market access and lower costs of imported intermediate inputs exceed the costs associated with FTA use. Around 28 % of responding firms use FTA preferences and nearly double or 53 % use or plan to use FTA preferences. This suggests that FTAs are indeed bolstering trade among firms—particularly as economic recovery takes hold—in the wake of declining trade volumes and the nascent protectionism triggered by the global economic crisis. Nevertheless, as more FTAs under negotiation take effect and the complexity of the Asian noodle bowl increases, the negative business impact is likely to intensify.

To optimize the use of the region's multitude of FTAs, firms need to plan trade businesses more efficiently and effectively under a regime anchored by the region's FTAs. Meanwhile, policymakers should seek to minimize transaction and administrative costs associated with an array of multiple, overlapping FTAs, while maximizing benefits offered by preferential tariffs and increased market access. Kawai and Wignaraja (2011). offer several short-run remedial measures including: (i) reducing MFN tariffs as much as political constraints will allow, which could eventually support the conclusion of the Doha Round; (ii) rationalization of ROOs (e.g., using international best practice guidelines of simplicity and transparency) and upgrading origin administration (e.g., electronic systems and self-certification for issuing origin certificates); (iii) making available wider alternative options of ROOs to choose from; (iv) intensifying awareness programs of FTAs among potential beneficiaries including availability of information on ROOs, phase-out tariff schedules and comparison with MFN rates; (v) getting business more involved in FTA negotiations; and (vi) improving public and private sector institutional support, especially for SMEs.

To the extent that the noodle bowl is a problem, Chia (2009) noted that it can be overcome through an FTA between many countries in the region. Kawai and Wignaraja (2009) argued that a region-wide FTA would also spur the growth of Asian trade and investment through: (i) a larger regional market with increased market access to goods, services, skills, and technology; (ii) increased market size to permit specialization and realization of economies of scale; (iii) facilitation of the FDI activities and technology transfer of MNCs; and (iv) simplification of tariff schedules and adoption of compatible ROOs and product and technical standards.

In particular, the region-wide FTA would make it possible to harmonize procedures for issuing certificates of origin, use of self certification, and achieve full cumulation of ROOs. Furthermore, it would cause transaction costs to fall if an electronic customs clearance method was employed.

The above-mentioned merits in forming a region-wide FTA as a means to consolidate the plethora of bilateral and plurilateral agreements is increasingly recognized in East Asia. ASEAN—as the region's oldest FTA—is emerging as an integration hub for FTAs in East Asia and with key ASEAN+1 agreements underway, the policy discussion in East Asia is focusing on competing region-wide FTA proposals—an East Asia Free Trade Area (EAFTA) among ASEAN+3 countries and a Comprehensive Economic Partnership for East Asia (CEPEA) among ASEAN+6 countries—that will guide future policy-led integration in the region.

The simulation approach embodied in computable general equilibrium model (CGE) models sheds light on the effects of alternative FTA policy scenarios. Such scenarios tend to focus on the removal of price distortions against imports that arise from existing trade barriers and other sources. The results of CGE studies provide insights into the numerical magnitude of gains and losses from trade liberalization and the distribution across regions, countries, and sectors. Accordingly, CGE studies can help in framing negotiation positions with FTA partners, indicate implementation schedules for trade liberalization and suggest the need for appropriate structural reforms to mitigate adverse impacts.

The CGE analysis in Kawai and Wignaraja (2009) suggests that a region-wide agreement in East Asia provides welfare gains over the present wave of bilateralism. More specifically, (i) a region-wide FTA, whether an EAFTA or CEPEA, offers larger gains to world income than the current wave of bilateral and plurilateral FTAs; (ii) the CEPEA scenario, which is broader in terms of country coverage, offers larger gains to the world as a whole in terms of income (US$ 260 billion, measured in constant 2001 prices) than the EAFTA scenario; and (iii) third parties outside either an EAFTA or CEPEA (e.g., the US or the European Union) lose little from being excluded from a region-wide agreement.

The formation of a comprehensive, World Trade Organization-consistent, region-wide FTA in East Asia may make it easier to achieve a deep Doha trade deal as many of the concessions on agricultural and industrial goods may already be incorporated into the region-wide agreement. Furthermore, it offers an insurance against rising protectionist sentiments that pose a risk to Asia's trade and economic recovery. Nonetheless, it is not obvious how such a region-wide FTA can be created given political economy considerations. A 2009 Joint Experts Group Study Report on an East Asia Free Trade Agreement advocated consolidating existing FTAs in the region rather than beginning negotiations again from scratch. Political rivalry over FTA leadership in East Asia may, however, hinder any such joint venture. There are currently no bilateral or plurilateral FTAs between the PRC, the Republic of Korea, and Japan; these countries would have to negotiate among themselves and would also have to exercise leadership to help the region achieve a comprehensive FTA. Also, the role of the US in Asia as a security anchor for many countries and

the rising importance of European markets for many Asian economies suggests that involving the US and Europe may also make sense.

Governments should aim for high quality agreements. This will also give some insurance against rising protectionist sentiments that pose a risk to Asia's trade and economic recovery. The 2009 Joint Export Group Study Report on an East Asia Free Trade Agreement advocates an agreement between the ASEAN + 3 countries that would include:[5]

1. A high quality agreement in the region for market access for both goods and services;
2. a global standards investment agreement;
3. satisfactory trade and investment facilitation measures;
4. full cumulation of ROOs;
5. special attention to the needs of less developed countries; and
6. a dispute settlement mechanism.

For poorer Asian nations, a region-wide FTA would offer both possibilities and dangers. The possibilities include greater market access and greater participation in regional production networks. The dangers include increased competition from more efficient firms in other countries. Providing safeguards for poorer countries and capacity building assistance are crucial to improving supply-side competitiveness in less developed ASEAN countries.

In the context of investments, investment treaties should ideally provide three substantive clauses and one procedural component.[6] The three substantive clauses are investment protection, investment facilitation, and investment liberalization and the procedural component is dispute settlement. Investment protection provides compensation in the case of expropriation and mandates fair and equitable treatment of foreign investment to avoid wrongful termination of government contracts. Investment facilitation requires transparency (i.e., that all relevant laws be publicly proclaimed). Investment liberalization emphasizes freer market access of investment (i.e., no restrictions on ownership). Along this line, national treatment, that is, that foreign firms should receive the same treatment as domestic firms, should be mandated. Dispute settlement involves state parties providing a "standing" offer to arbitrate with individuals or states in the case of a disagreement. High quality investment agreements would promote the flow of FDI in the region and thus contribute to technological upgrading in developing Asia.

In the case of ASEAN, the ASEAN Economic Community Blueprint set out initiatives to liberalize and facilitate investments in the ASEAN region. Investment cooperation in ASEAN was implemented through the 1998 Framework Agreement on the ASEAN Investment Area (AIA) and investment protection was implemented through the 1987 ASEAN Agreement for the Promotion and Protection of Investment or the ASEAN Investment Guarantee Agreement (IGA). In February 2009, the

[5] An Asia-wide FTA could be formed initially by the ASEAN+3 or the ASEAN+6 countries. Discussion of an ASEAN+3 versus an ASEAN+6 FTA is contained in Chapter 7.

[6] This paragraph draws on Kotera (2006).

AIA was replaced by the ASEAN Comprehensive Investment Agreement (ACIA), which takes into account international best practices based on four pillars—liberalization, protection, facilitation, and promotion—and includes new provisions to enhance AIA/IGA provisions. Under the ACIA, all industries under manufacturing, agriculture, fishery, forestry, and mining and quarrying sectors and services incidental to these five sectors will be liberalized.

4.4 The Need for and Benefits of Infrastructure Investment

Current infrastructure in the region reflects the fact that most Asian countries have prioritized exports to the US and Europe. To adjust to the West's shrinking consumption, Asia now needs to increase intraregional infrastructure connectivity in order to promote expanded regional economic integration, enhanced intraregional trade, and sustainable and inclusive growth. Asian investment in infrastructure connectivity could enhance competitiveness and productivity, speed up economic recovery, and help in achieving balanced, sustainable, and inclusive growth in the medium- to long-term. In addition, connectivity could promote environmental sustainability through the development of cross-border green energy and transport networks. The coordinated financing by Asian countries of regional infrastructure networks and enhanced regional connectivity would maximize the efficient use and application of resources and lead to a sustainable and inclusive, high-growth path in the long run.[7] This effort would require concentrated efforts to develop both "hard" and "soft" infrastructure: physical infrastructure such as transport, energy, water, and telecommunications networks, and facilitating infrastructure such as appropriate policies, regulations, systems and procedures, trade facilitation measures, and the institutions necessary to make hard infrastructure work properly.

This section examines the role of national and regional infrastructure investment in (i) rebalancing Asia's growth; (ii) acting as new engines of growth; (iii) promoting balanced, sustainable, green, and inclusive growth; and (iv) improving national and regional competitiveness and productivity.

4.4.1 Rebalancing for Sustainable Growth

Trade and FDI have been crucial ingredients in the rapid growth and integration witnessed in Asia. Investments in infrastructure and logistics in the region have reduced trade costs, increased access to markets and suppliers, and improved international competitiveness. Asia, particularly East Asia, has fairly strong trade integration, primarily through trade in parts and components, and Asian economies

[7] For a full definition of regional infrastructure, see Bhattacharyay (2008).

have become key links in global production networks and supply chains with many countries in the region involved in different stages of assembly processes. As noted by Brooks and Hummels (2009), countries that are able to involve themselves more deeply in global production networks and that invest in trade-supporting infrastructure stand to benefit more from trade relationships and diversification of development opportunities. However, until now, the emphasis has been on integrating the production of intermediate goods within global production networks, rather than facilitating the meeting of final demand from within the region. To achieve more sustainable growth, infrastructure investment now need to focus more on the latter. The development of economic corridors, to be discussed below, is an example of one strategy aimed toward this goal.

While Asian infrastructure has expanded relatively quickly to support the region's rapid trade growth and economic integration, there is still significant need for the superior infrastructure and logistics required to facilitate successful production and trade networks. Trade centers, such as the PRC; Hong Kong, China; Malaysia; the Republic of Korea; Singapore; Taipei,China; and Thailand, have all developed logistics systems to facilitate intraregional and international trade. However, these systems are still evolving and will come under increasing pressure as concentrations of economic activity expand inland. Several country-specific studies suggest that inland locations imply large logistics burdens. For example, almost 63 % of the cost of transporting goods from Chongqing in the PRC to the West Coast of the US is incurred before the goods arrive at the PRC port for export (Carruthers and Bajpai 2003). The deficiencies of Central Asian transport systems—high costs coupled with low quality transport and logistics services—have meant that close to 20 % of the value of traded goods is accounted for by transport costs. Carruthers and Bajpai's multi-country study (2003) demonstrated that a 20 % reduction in logistics costs would increase the trade to gross domestic product (GDP) ratio by more than 10 % in the PRC, Cambodia, and the Lao People's Democratic Republic; by more than 15 % in Mongolia; and by more than 20 % in Papua New Guinea.

Regional infrastructure can bring greater physical connectivity, helping to expand markets and accelerate growth and business through greater efficiency, agglomeration economies, and economic corridors. The development of economic corridors is a good example of the dynamic aspect of regional infrastructure networks and demonstrates how good transport corridors can generate and attract more business and industries that in turn attract further infrastructure investment to support the increase in economic activity. The development of economic corridors across borders and within countries has been on the rise in Asia. Economic corridors require a robust transport infrastructure network and an effective logistics system to efficiently link economic activities within and across corridors. As such, they are effective tools to accelerate regional and subregional economic integration within Asia. Physical connectivity has improved across most parts of the Asia and Pacific region through land, sea, and air-based transportation networks, largely in order to support economic development programs at both the national and regional levels. However, much still needs to be done and extensive investments in infrastructure are required to address and reduce poverty levels in the region.

4.4.2 Large Infrastructure Projects as New Engines of Growth

Large national and regional infrastructure projects involving many Asian economies have great potential to act as new engines for promoting growth. Such projects inherently include expanded employment opportunities and increased investment, not only in the project itself, but also in secondary and supporting industries and supply chains. Bringing forward and implementing high-priority national and regional pipeline projects could further boost Asia's growth and competitiveness in the global economy. Asian Development Bank (ADB) and Asian Development Bank Institute (ADBI) (2009) include a list of major regional infrastructure projects for roads, rail, and energy networks totaling US$ 133 billion.

Physical infrastructure and its quality can also influence location choices for efficiency-seeking or export-oriented FDI flows (Kumar and De 2008). Ang (2007), while examining determinants of FDI inflows to Malaysia, concluded that the provision of an adequate infrastructure base is an effective tool for stimulating FDI inflows. According to Indian Finance Minister Palaniappan Chidambaram, a lack of adequate infrastructure has impeded India's economic growth by 1.5–2% per year (World Economic Forum 2007). Esfahani and Ramírez (2003) estimated that if Africa had East Asia's growth rates in telephones per capita (10% vs. 5%) and in electricity generation (6% vs. 2%), its GDP per capita growth rate would have been at least 0.9% higher.[8] The efficiency and productivity of infrastructure services as an input to other sectors can improve the productivity of those sectors and enhance economic growth.

4.4.3 Connectivity for Environmentally Sustainable Development and Inclusive Growth

Enhanced energy and transport connectivity could also help Asia to address problems of environmental degradation, energy security, and input supply. Properly designed infrastructure projects, such as greener transport systems (urban metro systems and regional railways) and sustainable energy grids (renewable energy generative capacities and smart, cross-border electrical grids), across the region would help to efficiently facilitate the flow of goods and energy from areas where renewable sources are abundant to those where more are needed. This promotes the development of green economies, environmental sustainability, greater technological innovation and application, and the more efficient use of scarce regional resources.

Most developing countries in the region face barriers to reaching non-income Millennium Development Goals targets in health, agriculture, and education. These targets are closely associated with infrastructure needs. The lack of adequate infrastructure limits competition and this can lead to monopolistic pricing, particularly in rural areas. It can also affect both the market participation and educational

[8] See Calderon and Serven (2004) and Rickards (2008) for other examples.

opportunities available to the poor and can create obstacles to adequate health care, thus reinforcing the poverty cycle. Conversely, appropriate infrastructure investment can lead to poverty reduction, service provision, and growth, in a reinforcing cycle. It supports the process of growth on which poverty reduction depends and helps the poor access the basic services that improve lives and provide income opportunities. There is substantial evidence of the positive impact of national infrastructure on poverty reduction as attested to by the fact that quality road, transport, electricity, gas, water supply, and communications facilities have significant positive effects on economic growth (ADB and ADBI 2009). An examination of subregional transport and energy infrastructure projects in Central Asia, the Greater Mekong Subregion area, and South Asia has shown that these projects have had significant impacts on growth as well as on the welfare on poor households (ADB and ADBI 2009). Further, regional infrastructure investment for economic corridors can accelerate regional and subregional economic integration within Asia by redistributing goods and services and more effectively reducing poverty across the region.

Achieving inclusive growth through connectivity is also a primary challenge for landlocked, small, or less developed countries, whose rural or remote populations are often left behind. In total, there are 12 landlocked developing countries (LLDCs) in Asia[9] and they are among the most disadvantaged countries in the region. These countries face severe challenges to growth and development due to a wide range of factors, including poor physical infrastructure, small domestic markets, remoteness from world markets, and high vulnerability to external shocks. The necessity for imported goods to transit through the territory of at least one neighboring state, and the frequent change of transport modes, results in higher transaction costs. Inefficiencies in areas such as customs and transport can also be a stumbling block to the integration of LLDCs into the global economy and may impair export competitiveness and the inflow of FDI.

To respond to the transit problems in the borders that hinder LLDCs, a multidimensional approach is needed (United Nations Conference on Trade and Development [UNCTAD] 2008), most notably to develop adequate national transport networks and efficient transit systems, to promote regional and/or subregional economic integration, and to encourage FDI in economic activities that are not distance-sensitive. By way of example, the "Global Framework for Transit Transport Cooperation between Land-locked and Transit Developing Countries and the Donor Community" (United Nations 1995) was endorsed by the United Nations General Assembly with a view to enhancing transit systems and enabling LLDCs to reduce their marginalization from world markets. Additionally, many archipelagic Southeast Asian and Pacific countries face transport connectivity problems linked to low volume shipping and low value-added trade. Physical connectivity is crucial for landlocked, island, and small countries and the appropriate regional infrastructure

[9] Afghanistan, Armenia, Azerbaijan, Bhutan, Kazakhstan, Kyrgyz Republic, Lao People's Democratic Republic, Mongolia, Nepal, Tajikistan, Turkmenistan, and Uzbekistan.

is required to connect isolated groups to business activity centers and thereby contribute to the reduction of regional development gaps.

4.4.4 Infrastructure, Competitiveness, and Productivity

The global competitiveness of Asian economies depends on their infrastructure quality, as shown in Table 4.1. Increased infrastructure investment can promote competitiveness and productivity by reducing the trade costs associated with transport and logistics. Additionally, infrastructure services like transport, electricity, and telecommunications are essential inputs for any production activity. Therefore, high quality and cost-effective infrastructure services can contribute to the improvement of productivity in any sector of an economy. National and regional infrastructure, both physical and institutional, is playing an evident role in facilitating the creation and expansion of economic corridors. Enhanced transport and information technologies have allowed cities in the region to specialize based on their comparative advantages, thereby creating a broad range of new activities.

The ADB/ADBI 2009 flagship study on infrastructure and regional integration showed the cost of the total connective infrastructure needs (including electricity, transport, and telecommunications) of the Asia and Pacific region for the period 2010–2020 to be an estimated US$ 7.6 trillion. This figure includes both replacements for aging national infrastructure and the building of new infrastructure to support fast economic growth. In addition, throughout the same period Asia will require a further US$ 380 billion for water and sanitation projects and around US$ 300 billion for the more than 1,000 regional pipeline infrastructure projects needed for pan-Asian connectivity.[10] On average, the total infrastructure investment needed for Asia over 2010–2020 is around US$ 750 billion per year.

Infrastructure played a key role in fiscal stimulus packages during the global financial crisis (see Table 4.2). The infrastructure portions of the region's fiscal stimulus measures were applied to key sectors, including transportation, energy, information technology and communications, and water, in both rural and urban projects. The PRC in particular sought to support both rural and urban development by investing nationally in railways, airports, electrical transmission technology, expressways, and telecommunications technology, as well as locally in rural roads, electricity, gas, water, and irrigation projects. Taipei,China and the Republic of Korea focused their infrastructure spending on advanced technological upgrades and systems. Taipei,China continued its work on projects that advance the transportation network, industrial development, urban and rural development, and environmental protection. The Republic of Korea invested heavily in transportation improvements (e.g., port upgrades, high-speed railways, and expressways) and in green technology, including projects for solar, wind, and hydrogen fuel cell energy,

[10] See Bhattacharyay (2009) for further details.

Table 4.1 Global competitiveness and infrastructure quality index. (Source: World Economic Forum 2001, 2009b, 2010, 2011, 2012)

Country	2001–2002		2008–2009		2010–2011				2011–2012			
	GCI	Infra-structure	GCI	Infra-structure	GCI		Infrastructure		GCI		Infrastructure	
	Rank	Rank	Rank	Rank	Rank	Score	Rank	Score	Rank	Score	Rank	Score
PRC	47	61	30	47	27	4.84	72	4.10	26	4.90	69	4.20
India	36	66	50	72	51	4.33	91	3.60	56	4.30	86	3.80
Indonesia	55	59	55	86	44	4.43	90	3.70	46	4.38	82	3.90
Japan	15	15	9	11	6	5.37	15	6.00	9	5.40	13	6.00
Rep. of Korea	28	27	13	15	22	4.93	12	6.00	24	5.02	18	5.90
Malaysia	37	20	21	23	26	4.88	27	5.50	21	5.08	23	5.70
Philippines	54	68	71	92	85	3.96	113	3.20	75	4.08	113	3.40
Singapore	10	2	5	4	3	5.48	3	6.60	2	5.63	2	6.60
Thailand	38	30	34	29	38	4.51	46	4.90	39	4.52	47	4.70
Viet Nam	62	71	70	93	59	4.27	123	3.00	65	4.24	123	3.10

Total number of surveyed countries in the world: 75 (2001–2002), 134 (2008–2009) and 133 (2009–2010)
Score: 1 = poorly developed and inefficient; 7 = among the best in the world
GCI score of 2001–2002 was not available
GCI Global Competitiveness Index, *PRC* People's Republic of China

Table 4.2 Infrastructure investment in the stimulus packages of major Asian economies. (Source: Author's calculations from data in: Kang 2010; Sugimoto 2010; Kumar and Soumya 2010; Patunru and Zetha 2010; Nguyen et al. 2010; Jitsuchon 2010; World Bank 2009b; FAITC 2009; Alibaba.com 2008; International Federation of Consulting Engineers 2009; and ADB 2009b)

	Total fiscal stimulus (US$ billion)	As % of 2008 GDP (%)	Infrastructure component (US$ billion)	Infrastructure as % of total stimulus (%)
Australia	9.7	1.0	2.3	23.7
PRC	600.0	13.9	275.0	45.8
India	60.0	4.9	33.5	55.8
Indonesia	7.7	1.5	1.3	16.9
Japan	130.0	2.6	1.5a	1.2
Republic of Korea	11.0	1.2	7.8	70.9
Malaysia	2.0	1.0	0.17	8.5
Singapore	14.6	8.0	3.1	21.2
Taipei,China	20.4	5.3	16.6	81.4
Thailand	46.7	17.9	30.6	65.5
Viet Nam	8.0	8.8	4.8	60.0

Exchange rates on 28 January 2010 used when needed (http://www.oanda.com/currency/converter/)

GDP gross domestic product, *PRC* People's Republic of China

[a] Amount estimated from reports in FAITC (2009) and Sugimoto (2010)

as well as carbon capture and storage (Foreign Affairs and International Trade Canada [FAITC] 2009; Kang 2010).

In Southeast Asia, both Thailand and Indonesia also announced significant investments in both rural and urban infrastructure. Indonesia planned to devote its US$ 1.3 billion infrastructure component to infrastructure acceleration and development programs across the board, by distributing funds to all of the rural and urban infrastructure-related ministries (Patunru and Zetha 2010). Thailand planned for water resource development and road construction in villages and rural areas, along with national improvements in transport and logistics, energy, and telecommunications through its two stimulus packages (Jitsuchon 2010).

More than 50 % of India's US$ 60 billion fiscal stimulus package was designated with an infrastructure focus, though India is expected to use those funds primarily to support public–private partnership projects in progress and in the pipeline. The Government of India has also authorized its India Infrastructure Financing Company Limited and non-bank infrastructure finance companies to raise increased funds through bond issuances and from multilateral and regional institutions (FAITC 2009; Kumar and Soumya 2010). As many Asian countries have accelerated domestic infrastructure investment for enhancing national connectivity, the coordination of this spending in the direction of regional infrastructure development, such as airports, seaports, and roads, is essential for realizing regional connectivity.

4.5 Promoting Services Sector Production in Asia

This section considers how Asian countries can change their supply-side structure to reduce regulatory distortions that are overly favorable to exports, and rebalance regulations to promote greater development of the non-tradables sectors. Park (2009) has argued that while export-led growth may be good for Asia, an export-led growth strategy is not. An export-led growth strategy implies that the incentive structure is biased in favor of exports, for instance through subsidies to exporters or an undervalued exchange rate. Export-led growth, on the other hand, occurs when a country's exports grow despite a neutral incentive scheme. An export-led growth strategy implies a misallocation of resources to the tradable goods sector.

In the case of the PRC, for example, Huang (2009) noted that these subsidies include a yuan that is undervalued, artificially low land prices and real interest rates, administered prices for fuel and electricity, and environmental laws that are not rigorously enforced. Huang (2009) estimated that these factor market distortions provided a subsidy to producers of almost two trillion yuan (7% of GDP) in 2008. These subsidies transferred resources to the corporate sector and increased their profitability. If these subsidies were removed and PRC enterprises faced higher prices for resources, land, electricity, and other items, then their global competitiveness would decline and this would lead naturally to a reduction in the PRC's production of tradables.

To rebalance growth, it is therefore necessary to remove the policy distortions that have favored the tradables over the non-tradables sector, or manufacturing over services. Removing regulatory distortions in the services sectors in Asia would also create a more open, efficient, and competitive environment for services provision. This would lower the cost of consuming these services, thereby increasing domestic demand. Moreover, because services like transportation or telecommunications are inputs into industrial production, productivity growth in services will attract FDI, enhance productivity growth in other sectors of the economy, and contribute to long-term economic growth.

Table 4.3 shows average labor productivity growth by sector for selected Asian economies. Columns (1)–(2) show labor productivity growth in the agriculture sector, columns (3)–(4) show labor productivity growth in the manufacturing sector, and columns (5)–(6) show labor productivity growth in the services sector. The data indicate that since 2000 labor productivity growth in the services sector in Japan; the Republic of Korea; Taipei,China; Thailand; and Viet Nam has been slower than both the earlier period, and the other major sectors. Only the PRC, India, and the Philippines saw productivity grow more quickly in services than in manufacturing since 2000. Therefore, increasing services sector productivity should be an important priority for Asian countries. Removing regulatory distortions in services in Asia would create a more open, efficient, and competitive environment for services provision. This would not only raise productivity in the services sector but also in other sectors, because services such as transportation or telecommunications are inputs into the production process.

Table 4.3 Average annual labor productivity growth by industry (average % change). (Source: APO Productivity Databook 2012)

	Agriculture		Manufacturing		Services	
	1971–1999	2000–2008	1971–1999	2000–2008	1971–1999	2000–2008
	(1)	(2)	(3)	(4)	(5)	(6)
Cambodia	2.2	4.1	1.2	3.5	1.8	−0.6
PRC	4.1	6.6	9.8	6.7	4.6	7.5
India	0.8	1.7	1.5	1.3	2.3	2.4
Indonesia	2.1	2.9	6.3	3.7	0.9	1.2
Japan	3.3	2.4	3.7	3.5	2.1	0.5
Rep. of Korea	5	5.4	7.6	6.8	1.7	−0.8
Malaysia	2	3.8	4.5	5.5	5.3	4.6
Philippines	0.5	1.6	1.2	3.6	−0.6	3.7
Singapore	4.7	− 5.5	4.6	0.9	4	−0.5
Taipei,China	4.2	3.4	4.7	4.5	4.4	0.1
Thailand	4.3	1.6	3.7	3.6	0.9	3
Viet Nam	2.7	3.8	7.1	3.4	2.4	−2.5

The initial observation period is 1971 except for the following countries (with the initial observation period listed in parentheses): Cambodia (1994); Indonesia (1977); Malaysia (1988); PRC (1979); Taipei,China (1979); Thailand (1981); and Viet Nam (1991)
PRC People's Republic of China

Services have long been considered non-tradable because, unlike goods that can be packaged and shipped anywhere, services used to be supplied and consumed only via face-to-face transactions. For example, haircuts or massages or obtaining bank loans require proximity between consumers and suppliers. However, advances in ICT have made many previously non-tradable services now tradable across borders. Today, many so-called "modern impersonal progressive services," which include communications, banking, insurance, and business-related services, are conducted online. In addition, many other services are being transformed into this category. For example, some aspects of legal services can now be outsourced offshore. Medical check-ups may still be done face-to-face, but X-ray results may now be read by a radiologist located in a different country. Accounting services can likewise be performed by accountants located in another country. Indeed, the globalization and digitization of many processes has expanded: from completing tax returns to more sophisticated financial research and analysis; from answering and making calls to the remote management and maintenance of information technology (IT) networks.[11] Nevertheless, although there is a trend toward more "impersonal" services, at this point in time the services sector as a whole remains dominated by "traditional personal services" including wholesale and retail trade, hotels and restaurants, beauty shops, transport, and even utility services (i.e., electricity, water,

[11] See World Bank (2009a) for an in-depth discussion of the services revolution.

and energy). Though in theory these services can also be traded across borders, in practice, significant barriers exist that prevent them from being freely exchanged. Thus, to the extent that these sectors constitute a huge part of the services sector, it is still correct to regard these kinds of services generally as non-tradables.

Interestingly, for the services sector as a whole and especially for traditional personal services, trade means that service providers have to either move to where demand is located (e.g., barbers going to another country to provide haircut services, or a company establishing a subsidiary in a foreign country) or the demanders of the services have to move to the suppliers (customers go to another country to get their hair cut). In General Agreement on Trade in Services (GATS) parlance, these are the so-called modes of service supply. The movement of natural persons to supply a service is mode 4, the establishment of a commercial presence to supply a service is mode 3, the movement of consumers to another country to buy a service is mode 2, and the cross-border trade in services that usually take place via telecommunications networks is mode 1.

For each of these modes of supply, there are many regulatory issues that act as barriers to services trade.[12] For example, mode 4 is saddled by a myriad of migration issues that prevent, say, an IT engineer from being able to provide service for foreign clients in person. Mode 3 is hindered by equity restrictions on foreign investments. Even mode 1, cross-border trade, can be restricted by, say, consumer protection rules. This is not to say that these regulations are necessarily bad. Some are clearly necessary, such as regulations to protect consumers or to monitor bank risks. However, many regulations tend to protect incumbents in the sector, prevent new entrees (particularly foreign entrants), create monopoly rents for the incumbents, and deprive consumers of the choice of more efficient services. For instance, the maritime industry is still characterized by imperfect competition, manifested in exemptions for liner conferences from antitrust laws, cargo reservation schemes, restrictions on foreign ownership of ports, and bans on foreign participation in cabotage.[13] This limits the possible gains from trade liberalization in goods as shippers take advantage of their market power to extract higher prices (François and Wooton 2006). Similar effects have been found in Organisation for Economic Cooperation and Development countries for the distribution sectors, where policies regulating operating conditions (e.g., employment, operating size, etc.) have generated increased business costs and inefficiencies (Kalirajan 2000). Because of costs

[12] In general, barriers to services trade are classified in terms of whether they restrict market access (e.g., policy that limits the number of service providers) or whether they specifically discriminate against foreign service suppliers by not offering "national treatment" to all providers (e.g., policy that limits foreign equity ownership). Restrictions may also apply to establishment (i.e. the ability of service suppliers to establish a physical outlet in a country and supply services through those outlets). Or, they may apply to ongoing operations (i.e., the activities of the service suppliers who are already in the market). Many regulatory restrictions can reduce competition and efficiency in the services sector.

[13] Cabotage is the transport of goods or passengers between two points in the same country.

Table 4.4 Effects of partial liberalization of services on world real income[a] (US$ billion). (Source: Dee and Hanslow 2001)

	Remove restrictions on market access	Remove restrictions on national treatment	Both[b]
Remove restriction on establishment	56.8	3.7	64.2
Remove restriction on ongoing operation	25.6	12.9	39.3
Both[b]	98.8	19.3	133.4

[a] Projected gains in real income about 10 years after the liberalization had occurred and the associated resource adjustments had taken place

[b] Because of interaction effects between types of partial liberalization, the figures for "Both" are not additive.

and inefficiencies associated with regulatory restrictions, Dee and Hanslow (2001) found significant gains in world real incomes from liberalization of services (see Table 4.4). Of the liberalization measures, greater impact is found for easing restrictions in market access than in national treatment, that is, removing restrictions that promote greater competition has far greater benefits than removing discriminatory measures. Similarly, removing restrictions on establishment provides greater benefits than easing regulations on ongoing operations.

If services sector development is important for growth rebalancing, what are the broad policy suggestions that can support this end?

4.5.1 Increased Attention to Education

The services sector is, generally, more skill-intensive than manufacturing or agriculture and, therefore, has higher educational requirements than other sectors. On average, service workers have attended school for many more years than workers in other sectors (Bosworth and Maertens 2009). Particularly in "modern service" industries, workers need high levels of education. Undoubtedly, India's success in ICT-enabled services would not have occurred without the presence of educated engineers who also speak English well. Other Asian countries can replicate India's success, which derived primarily from its program of graduating trained engineers from the Indian Institutes of Technology. Skilled Indian professionals were then able to establish connections with foreign companies and convince them to locate operations in India. The presence of a critical mass of trained engineers was undoubtedly an important factor in foreign companies' decisions to invest in India, and from there to export ICT services to their headquarters in their home countries and elsewhere.

Since education, training, and human capital formation are long-gestation projects, it is important for Asian governments to assign high priority to these tasks in

order to ensure competitiveness in the global market. Government investments are necessary to improve access to education, especially at the elementary and secondary levels. In the PRC, for instance, many families are so poor that they cannot afford to send their children to school. Providing educational opportunities for rural children and for the children of migrants would pay high returns over time. Government investments to enhance the quality of tertiary education would also yield large dividends. The private sector can also play an important role by partnering with governments in designing curriculums and formulating standards, especially in the IT and engineering fields. India, where the ICT industry and government have cooperated in designing curriculums and establishing standards for university and post-graduate training and education, again provides a model for other countries in the region.

Governments should review any regulations relating to educational services that bar the entry of education service providers, particularly from the private sector. To the extent that the entry of foreign education service providers could also improve standards and introduce competition in the sector, the government should consider more openings in education services either through FDI or through distance education. While the movement of Asian students abroad to obtain higher education has allowed them to bring human capital back to their countries, one can still ask whether more postgraduate studies should now be offered in the home countries so as to increase the number of individuals with specialized skills instead of relying on the few who have the luck, resources, and talent to go to universities in developed countries to obtain higher degrees. More Asian universities should aim to provide world class postgraduate education. Removing restrictions on FDI in educational services, and becoming more open to collaborative or jointly delivered programs with good universities abroad, would help Asian universities produce more professionals who can compete in the global economy.

4.5.2 Modernizing Infrastructure Services

Another lesson from India is that it is crucial to lower communication costs in order to succeed in the ICT industries. To this end, Asian countries should review telecommunication regulations. In particular, competition policy reforms should be enacted to make this and other markets more contestable and efficient and better able to deliver low-cost services. This, in turn, would increase ICT penetration and raise productivity, not only in the services sector but also in the manufacturing and agriculture sectors.

As discussed in Section 4.4, a government program of infrastructure investment on constrained areas such as power, ports, roads, and mass transit should be formulated to help boost private sector investment and strengthen the foundations of long-term productivity. These logistics services industries have high linkage effects on other economic sectors so the economic and social returns on infrastructure investment will undoubtedly be high.

4.5.3 Upgrading Health Services

Improving the quality of health services can also increase productivity. In addition, providing the population as a whole with good, reliable, and affordable health care promotes social equity. Furthermore, by improving hospital facilities and health-care services, Asia can attract foreign patients to undertake specific medical procedures at much lower prices though at comparable levels of quality as those found in advanced economies. Health services, then, could be an export industry of Asian countries (through mode 2 service supply whereby foreign customers come to the host country for medical treatment). Many Asian countries have already tapped into medical tourism as a way to attract foreign patients. Because treatments can be five or ten times more expensive in the patients' home countries, medical tourism has developed. However, hospital services in many Asian countries need to improve. Encouraging both domestic and foreign investments in this important sector will not only help countries in the region to attract more foreign patients but will also improve the quality of services available to domestic patients. This may also result in some of the richer citizens of Asian countries seeking treatment in their home countries rather than seeking treatment abroad.

In sum, domestic regulations and discriminatory policies can create unnecessary costs in the supply of services. Given the extent of restrictiveness of services policies and regulations, there are substantial potential gains to be made from services deregulation and liberalization. Liberalization policy in the services sector (from wholesale and retail trade to power to telecommunications and transport) would precisely take the form of improved regulation, removal of unnecessary discriminatory and non-discriminatory restrictions to market access in various services sectors, as well as improved governance (i.e., a correct regulatory framework and institutional capacity). The improved business environment that this will generate will attract more foreign investments and increase productivity in the services sector, as well as in the industrial sectors that use these services inputs.

4.6 Nurturing SMEs as a Strategy to Rebalance Growth in Asia

4.6.1 The Importance of SMEs in the Economy

Promoting SMEs in Asia is important. The rationales for supporting them include the claims that: (i) SMEs are more labor-intensive than large enterprises, and hence their expansion creates more jobs; (ii) SMEs often make up the bulk of employment in any economy; (iii) SMEs can raise competition and entrepreneurship, and hence boost the economy; and (iv) SMEs, if assisted to overcome credit constraints, can be as productive as larger firms (Becket al. 2005). Moreover, SMEs play an important role in production clusters, production chains, and as subcontractors to larger

companies. Developing competitive SMEs could help attract FDI in a virtuous cycle and once countries receive a critical mass of FDI, industrial agglomeration starts taking place, and local SMEs receive further opportunities to develop and become more competitive. This, in turn, attracts more FDI. Because of the important role that SMEs can play in rebalancing growth, this section considers issues related to the SME sector.

4.6.2 The Potential Contribution of SMEs to Domestic Demand and Economic Resilience

SMEs can stimulate domestic consumption through at least two channels. First, many argue that SME expansion would boost employment to a greater extent than large firm expansion because SMEs are more labor-intensive (Organisation for Economic Co-operation and Development 2004). This would theoretically raise disposable incomes and, consequently, consumption. The beneficial effects of SME expansion on incomes and consumption requires, however, that their productivity also increase. This is because SMEs' capacity to generate earnings for their owners and workers is ultimately tied to their productivity. Second, entrepreneurs and SMEs are sometimes thought of as one of the main channels through which new technologies develop. This is because of their ability to exploit new technologies and respond quickly to changing market needs. Consequently, there exists considerable scope for governments, as part of their efforts to diversify industrial structures, to intervene to help SMEs adopt new technologies and innovate. While the lowering of production costs and improvement of product competitiveness may be important motivators, regulations can also play a critical role in influencing the incentives to adopt new technologies. For example, the Standards, Productivity and Innovation Board (SPRING) Singapore, the government enterprise development agency, has introduced a range of measures to boost SME innovation, such as funding support for capacity building, and one-stop centers offering technology consultancy and practical, downstream technology platforms.

Countries with stronger SME sectors have generally been hypothesized to be better at coping with business cycle swings or external shocks because of their reputations for rapid adaptability in the face of changing circumstances. Some evidence has been found to support the view of SMEs as economic shock absorbers. In Indonesia, the data suggests that SMEs weathered the 1997 Asian financial crisis better than large enterprises (Berry et al. 2002; The Asia Foundation 2001). A study by Wengel and Rodriguez (2006) found that over the period 1996–2000, exports by small firms (those with fewer than 100 workers) grew by 83 %, while those of the largest enterprises fell by 10 %. The important contribution of SMEs to the Indonesian economy is illustrated by the fact that the sector's share of total industrial exports increased from 28.4 % in 1996 to 34.4 % in 2000.

All in all, SMEs possess inherent advantages that allow them to be more adaptable than large enterprises. Further, crises present short-term opportunities for structural adjustments by tearing down barriers. SMEs would be better able to seize these opportunities if there were incentives to exit from low-opportunity areas without incurring significant costs. Hence, the key is to focus on building productive and entrepreneurial capacities and a supporting environment, rather than on expanding the SME sector per se.

4.6.3 The Current Situation Regarding Government Policy toward SMEs

Almost all Asian countries have explicit policies aimed at creating a business environment conducive to the development of SMEs. However, while a discussion of the effectiveness of crisis response measures for SMEs is beyond the scope of this chapter, it is important to point out here that virtually none of the countries have conceptualized the measures implemented to assist SMEs in terms of longer-term aims, such as the building of a viable post-crisis economic model. A more qualified assessment, however, must not view the measures on their own, but as part of the countries' broader, longer-term SME promotion policies. The main policy areas have encompassed: (i) access to and cost of finance; (ii) training and consultancy; (iii) access to information such as market research, government policies, and technical information; and (iv) assistance in technology adoption. Issues related to finance are discussed in Chapter 6.

Although these policies have been envisaged with both short and long-term goals in mind, a sort of goal displacement seems to have occurred. While short-term goals, such as raising employment, have generally been constantly emphasized, longer-term goals, such as creating a more competitive and entrepreneurial economy, have often been forgotten, as nurturing the SME sector has increasingly come to be seen as an end in itself rather than as a means of building a stronger economy. This can, at least partially, explain the lack of cohesiveness among policies. A 2007 study on SME policies in East Asia by the Economic Research Institute for ASEAN and East Asia (ERIA) found that, in many cases, policies had contradictory objectives, such as the simultaneous protection and promotion of SMEs. Another recent work pointed to existing conflicts between social and economic objectives. Because of these conflicts, many programs have suffered from a lack of focus in identifying key sectors and relaxing constraints to business, including financing constraints (ADB 2009a). Furthermore, many of these policies were crafted within an export-led growth framework, which will be less relevant in the post-crisis world. In the future, Asian economies need to rebalance growth toward other demand sources. This will inevitably require a shift in SME policies. Thus, there is much scope for SME policies in the region to be re-conceptualized on the basis of new long-term goals.

A comparison of the SME sectors in the Republic of Korea and Taipei,China after the 1997 Asian crisis demonstrates the importance of government policies. Although Korean firms were subject to more extensive external impacts and turbulence than their counterparts from Taipei,China, they seem to have performed better in the period immediately following the crisis (Hall and Harvie 2003). This can be partly attributed to the Korean government's heightened commitment to SMEs in mid-1998, and the concomitant creation of a policy framework aimed at helping SMEs overcome barriers such as inadequate access to finance and supporting structural reforms and technology development (Gregory et al. 2002). Another key factor that contributed to the ability of the Republic of Korea's SME sector to cope with the crisis was the government's efforts to restructure the financial system in the 1990s (Hall and Harvie 2003). Examples of some of the SME-friendly reforms that were undertaken include the easing of regulations that restricted business entry and activity; allowing foreigners to purchase long-term non-guaranteed bonds issued by SMEs; and introducing measures to increase the availability of credit (Oh and Park 1998).

4.6.4 Proposals for Re-Conceptualizing SME Policies

Asian governments can harness the potential of the SME sector by reforming their SME policies. Specifically, policies should be conceptualized within a strategic, broad vision to increase productivity and entrepreneurship and to diversify the industrial structure. Such a re-conceptualization would have significant implications for policy, from planning to implementation to evaluation. Governments should consider enacting a holistic and long-term plan to nurture SMEs. Such a plan would set a clear direction for the promotion of SMEs, and hence help to maintain coherence between policies. The plan should state goals and guiding principles, define the role of the SME sector in society, and include a blueprint identifying implementation mechanisms such as oversight, monitoring, and coordinating bodies. The plan should also be supported by a commitment of resources over a substantial period of time. Governments should set up over-arching high-level planning and coordinating bureaus or agencies like SPRING Singapore, with a view to drawing up long-term plans and balancing short- and long-term measures.

To improve their effectiveness, SME policies should be planned with other complementary policies in mind. To achieve substantial progress in rebalancing growth, SME policies should go hand-in-hand with other policies. Institutional support has already been mentioned. For instance, to create a more innovative and entrepreneurial SME sector and to attract investment, steps should be taken to reduce barriers to investment and to improve the investment climate. Investment would not only bring in new technology and resources to SMEs, it would also raise aggregate demand in the longer term.

4.7 Green Growth

4.7.1 The Need for and Benefits of Green Growth

Asia's exports have benefited from artificially low energy prices and from environmental regulations that have not been rigorously enforced (Huang 2009). As a result, environmental degradation and ecological dangers have multiplied. Because the economy and the environment are closely linked, inaction on key environmental challenges, such as climate change, greenhouse gas emission reductions, as well as unsustainable consumption and production patterns, could lead to severe economic consequences for Asia in the future. Economic growth has been the overreaching goal of most Asian countries for the past several decades. The emergence of climate change as a global concern has added to and revitalized the urgency of finding a sustainable growth strategy, especially in relation to the way fossil fuels underpin and are closely coupled with economic growth. Table 4.5 shows the carbon intensity of growth in comparison with other regions. To mitigate the consequences of global warming, the region's share of greenhouse gas emissions (GHG) must be reduced substantially in the short and medium term. Mitigating the emissions and pollutions can be seen as another dimension of balanced growth, and low-carbon green growth

Table 4.5 Carbon dependency of global and regional economies. (Source: Anbumozhi and Kawai 2009)

	2005			2050			Total growth (2005–2050)	
	CO_2 emission (Gt)	World share (%)	Carbon intensity (kg/US$)	CO_2 (Gt)	World share (%)	Carbon intensity (kg/US$)	CO_2 (%)	Carbon intensity (%)
US	6.40	17.8	0.60	8.15	14.6	0.24	27.34	−60.0
EU	4.72	13.1	0.50	6.10	10.9	0.26	29.23	−48.0
Japan	1.40	3.9	0.35	1.56	2.8	0.26	11.42	−25.7
PRC	6.12	17.1	2.76	10.95	19.7	0.78	78.92	−71.7
South Asia	2.16	6.0	2.6	5.68	10.2	0.96	162.96	−63.1
World	35.88	100.0	1.01	55.67	100.0	0.49	55.16	−51.48

(i) EU includes all 27 economies comprising the European Union. In 2005, the top three emitters in the EU were Germany (9,777.4 million t of CO_2 equivalent), the United Kingdom (639.8 million t), and Italy (565.7 million t)

(ii) South Asia includes five economies of Bangladesh, India, Pakistan, Nepal, and Sri Lanka. In 2005, India tops with 1,147 million t

(iii) Data from International Energy Agency (IEA) projections for CO_2 from energy sources, which exclude land use as a source of greenhouse gas (GHG) emissions. In 2005, CO_2 consisted of 73.6% of total GHG emissions

CO_2 carbon dioxide, *EU* European Union, *Gt* gigaton, *kg* kilogram, *PRC* People's Republic of China, *US* United States

offers the promise of providing a mutually reinforcing synergy for reaching a balanced growth path.

A low-carbon green-growth path offers three main benefits. First, such a move can strengthen national economies. Decarbonizing economic growth could help to create jobs, raise skills, and boost Asia's competitiveness. A decarbonized Asia could be a world leader in green technology, innovation, and growth. Second, low-carbon green growth can help to guarantee energy security. If emerging Asian economies such as the PRC, India, and ASEAN countries continue to rely on imported fossil fuels from the Middle East, Africa, and the Russian Federation, then SMEs and households will be increasingly at risk of losing their energy supplies or paying widely fluctuating prices. Future economic development requires energy from a wider range of more dependable sources, and a green-growth path provides the potential for the development and dissemination of technology for such sources. Finally, green growth will help us to protect our natural resources for future generations. The reckless exhaustion of resources and accumulation of pollution could impose enormous social costs on future generations.

4.7.2 Policies to Support Green Industry Growth

The concerns outlined above justify government action to support investment in low-carbon green-growth measures. Many countries recognize this: a small but significant share of additional public spending in the short-term economic stimulus packages announced to date has been directed toward either direct investment in energy efficiency and a clean environment, or fiscal incentives for the uptake of low-carbon technologies and adaptation of green services (Thampapillai 2009). While these moves are a step in the right direction, much more needs to be done.

The investment needed to put economies on low-carbon green-growth pathways far exceeds the additional investments that are expected to occur as a result of these stimulus packages (Barbier 2009). For example, elements of a green recovery program proposed for the Republic of Korea were incorporated into its US$ 86 billion fiscal stimulus plan. Yet the full green economic recovery program calls for a US$ 100 billion initiative over the next several years. Relative to their recent announcements, governments should be looking to exploit the opportunity that the recent financial and economic crisis has presented to improve social conditions by both increasing the level of new funds and committing to their maintenance over a period of decades (Pollin et al. 2008). The expenditures could be paid for with the proceeds from carbon pricing, the elimination of fossil fuel subsidies, and tax breaks for investments in cleaner production. This will also produce a permanent shift to a greener development trajectory. Hence, a long-term commitment that extends well beyond the limited time horizon of the economic stimulus packages is needed. Strong coherent policies promoting both more radical innovation and the widespread application of existing green technologies and services to support the

eco-restructuring of high impact sectors are needed. To achieve this transformation, Asian governments should:

1. Scale up fiscal support for investment in renewable energy technologies

According to the United Nations Environment Programme (2009), renewable energy generates more jobs than employment in fossil fuels. Globally, projected investments of US$ 630 billion by 2030 would translate into at least 20 million additional jobs[14] in the renewable energy sector—i.e., 2.1 million in wind energy, 6.3 million in solar photovoltaic energy, and 12 million in biofuel-related agriculture and industry. In comparison, total employment in the oil and gas, and oil refining industries in 1999 was just over 2 million jobs (Anbumozhi 2009).

Governments should ensure that the green energy business and energy service companies, as well as the wider environmental sectors concerned with activities such as pollution control and waste management, will have secured access to finance. In addition, governments should provide fiscal incentives for the renewable energy sector, including direct spending on R&D, in order to accelerate rapid growth in the coming years. To correct the long-standing bias against the development of renewable energy, governments should reform the massive subsidies provided for the production and consumption of fossil fuels, which amount to a considerable portion of GDP.

2. Promote investment in energy efficiency improvements for innovation and job creation

In Asia, nearly half of the population is directly employed in the manufacturing and construction sectors. In times of economic crisis, economic stimulus measures are frequently focused on construction investment, which is constantly in demand due to population growth and the increased standards of living being enjoyed by middle income groups (Tourk 2004). At the same time, buildings and factories are responsible for about 33% of greenhouse gas emissions globally (Shrestha et al. 2008; International Energy Agency 2008), 40% of resource use, 30% of solid waste generation, and 20% of water consumption (Worldwatch Institute 2009).

The job market potential of emission reduction potentials are often underestimated. However, recent reports point to the fact that the Asian market for green jobs is forecasted to grow by around 40% in energy, resource use, pollution abatement, and waste recycling. The green job potentials of selected economies are presented in Figure 4.1. In terms of green job policies, other Asian economies lag behind Japan and the Republic of Korea. But the PRC and India have room for improvement in terms of green job enablers relative to the demand. Technologies and material to

[14] There are several studies quantifying, estimating, and projecting potential employments around the world. Inevitably, there are substantial data gaps at the regional level. Governments should commission in-depth modeling and econometric efforts to analyze not only direct employment related to renewable energy generation but also the accompanying indirect employment in related services sectors. Attention also needs to be given to disaggregating data on the basis of the subregional level so as to reflect the varying potentials.

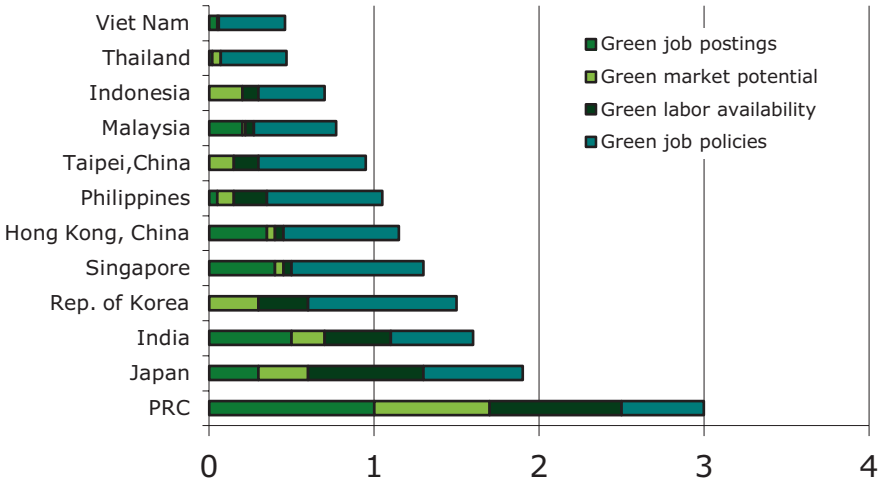

Fig. 4.1 Green job index of selected Asian economies. Note: *PRC* People's Republic of China. (Source: ABC 2009)

improve energy efficiency are commercially available at competitive prices across the economies. To achieve a wider use of these technologies and green services, there is a need for investment in skills development and local capacity building in order to increase the supply of and access to such technologies, materials, and new business models (Stoughton and Anbumozhi 2009). In addition, there is a need for appropriate institutions to support the implementation of appropriate building practices and standards and skills development.

3. Promote a shift toward green transport

The vehicle ownership pattern and carbon emissions from transport sector is rapidly growing in many Asian countries (Fig. 4.2).

One way to promote green growth in the transport sector is to foster a drastic reduction in automobile fuel consumption and a shift from fossil fuels to green sources of energy. Public policies can facilitate this shift by scaling up fiscal incentives, such as tax credits, for consumers to switch to fuel-efficient and non-polluting two wheelers and cars (World Economic Forum 2009a). Governments can also apply regulatory measures to encourage industries to speed up this shift. In Japan, the US, and Europe there are over 1 million jobs located in green auto-related sectors (Iino and Lim 2009).

In addition to investing in green vehicles, there are large-scale opportunities to improve public transportation in large cities. Policies should foster alliances among vehicle manufacturers, urban commuters, energy service companies, and railway operators to assess current public transportation systems, determine the cost of system changes or improvements, and identify alternative management options.

4. Launch an eco-efficiency revolution in production networks

Global production networks have expanded rapidly in Asia, but in many cases they comprise SMEs whose main strength is low labor costs. Effective assistance for

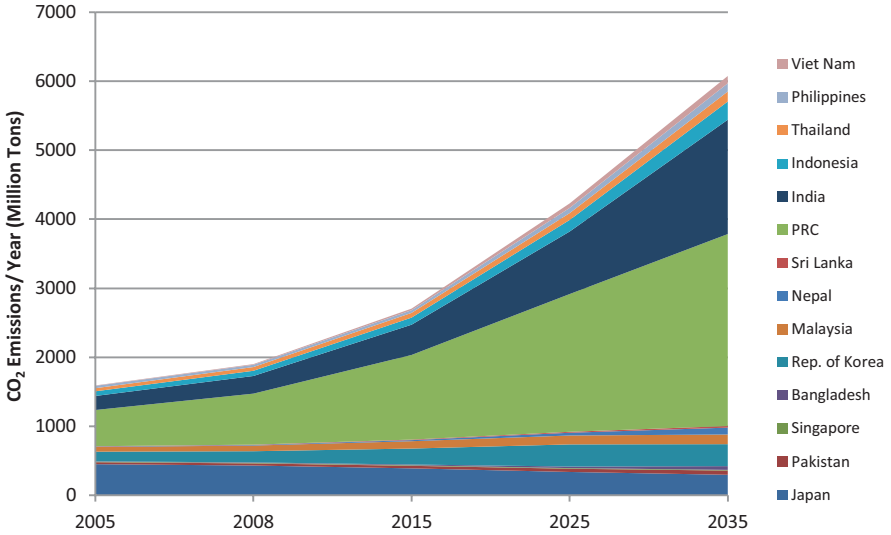

Fig. 4.2 Projected carbon emissions from the transport sector. Note: CO_2 carbon dioxide, *PRC* People's Republic of China. (Source: ADB 2008)

SMEs to move toward improved eco-effectiveness will depend on the provision of technical assistance to suppliers by large customer firms at the national or international level. This assistance should focus on identifying process or product improvement opportunities with both environmental and economic benefits. The new assistance for supply chain eco-efficiency would differ from a typical pollution prevention or cleaner production audit in that it would seek to identify opportunities of benefit to both the supplier and the customer, as both parties commit to evaluating changes in supplier specifications and the customer commits to providing assistance for the implementation of change.

Poor access to credit, support, and technology are cited as problems for the growth and development of green production networks (Sturgeon 2002). Policy initiatives involving flexible or mandatory credit subsidies by lending institutions, guarantees of technology transfer by international buyers, performance-based general permits or licensing schemes, and social commitments, would facilitate production networks becoming more environment friendly (Anbumozhi and Kanda 2005). An enabling proactive policy framework is of paramount importance if environmentally friendly activities are to become institutionalized and incorporated into routine industrial operations. A proactive policy framework does not mean simply making a few alterations to the existing system, for example, in the form of tax rebates. Nor does it mean enacting brand new stand-alone, market-based acts—incentives for a particular approach and/or regulatory acts—that mandate specific corporate behaviors. It rather requires interweaving in order to make policies both uniformly supportive and favorable to the eco-restructuring of high impact sectors.

4.7.3 Policies to Attain Environmentally Sustainable Growth

A region predicated on continual expansion of debt driven energy and material consumption is unsustainable environmentally, unstable economically and problematic socially. Thus there is an urgent need to develop the capabilities required to build a new macro-economics for environmental sustainability. Particular steps include: (i) Defining targets for emissions and pollutions that are comprehensive and equitable; (ii) implementing fiscal reforms and setting right price for major pollutants; (iii) development and dissemination of environmental technology, goods, and services; and (iv) regional cooperation for effective implementation.

1. Defining targets for emissions and pollutions that are comprehensive and equitable

Table 4.6 shows the voluntary pledges made by major economies as a part of the Copenhagen Accord. It indicates that developing countries are making efforts to reduce major pollutants such as carbon dioxide. However, this should also be seen in relation to potential emissions after taking into account their energy demands and growth needs and should not be calculated from current levels. So as far as reducing the carbon intensity of growth is concerned, the developing countries are making the same degree of effort as the developed countries. Intensity targets are more flexible because they are relative rather than absolute targets. However, changes of carbon intensity emissions are not easy to predict or to curb, as they are directly related to the industrial structure of economies. If energy-intensive heavy industries such as steel, cement, and chemicals are subject to acceptable sectoral targets and allowed to grow competitively, the intensity would increase. Another alternative target could be stabilization of carbon emissions at 2000 levels by 2050, with a possible target of 50 % reduction. This will mean a reduction in per capita emissions of developed countries by about 80 %, which will allow the developing countries an increase per

Table 4.6 Copenhagen pledges made by countries for emission reduction. (Source: USCAN 2010)

Country/Region	Pledges of emissions reduction
EU (27)	20–30 % below 1990 levels by 2020, then progress to 50 % by 2050
US	17 % below 2005 levels by 2020
Japan	25 % below 1990 levels by 2020
Norway	30–40 % below 1990 levels by 2020
Russian Federation	15–25 % below 1990 levels by 2020, conditional upon an appropriate allowance for forestry carbon offset
PRC	Cut in carbon emissions/GDP by 40–45 % below 2005 levels by 2020
India	Cut in emission intensity by 20–25 % below 2005 levels by 2020
Indonesia	26–41 % below BAU projection for 2020
Rep. of Korea	30 % below BAU projection for 2020

BAU business as usual, *EU* European Union, *GDP* gross domestic product, *PRC* People's Republic of China, *US* United States

capita emissions. If it is a more realistic target, it will mean a greater focus on other environmental related issues such as pollution abatement and adaptation. Common but differentiated responsibilities must be the guiding principles in determining the different actions for tackling global environmental issues such as climate change (Anbumozhi and Kawai 2009). Within the efficiency targets, developing economies will be helped to maximize their green growth performance, while the developed countries which are at a mature stage of development will constrain their growth targets within the allowable carbon emissions. For developing countries, these targets will be conditional on receiving transfers of funds and technology from the developed countries, in recognition of the limited capabilities of developing countries and the environmental debt owed by the developed countries for their historical emissions.

2. Fiscal reforms and pricing for environmental sustainability

National or sectoral targets could be determined by administrative/political process. But to fulfill the targets it is necessary to articulate market based instruments such a true carbon pricing. Fiscal reforms should encompass a wide range of taxation or pricing instruments, such as charges in air and water pollution, taxes on the over-exploitation of natural resources and unsustainable material consumption, and the reform of perverse subsidies. The basic idea is to internalize the externalities associated with pollution and resource waste, so that producers face the full social costs of their activities. For a generalized impact on carbon use with minimum bureaucratic intervention, the first step is to get the carbon prices right. This in turn would have two steps. The first step in this direction is raising the energy prices which will not only curb consumption but also provide the much needed incentives for research, development, and deployment in clean green technologies in the countries where such advanced research is really possible (OECD 2007; Sharma et al 2008). If a tax is not possible, a cap and trade scheme should be considered. This requires a further strengthening of institutions. For attaining low-carbon green growth, it is essential to understand that high energy prices are perhaps what mitigate against greater consumption. For many countries, phasing out subsidies and putting a price on fuel is often politically challenging as they have negative impacts on low income households (White 2007; Kerr 2001; Anbumozhi and Bauer 2010; Kim 2009). Hence, it is important to create tested social safety net programs to allow many more of the poor to gain access to modern energy resources. The funds raised from environmental taxes can then be channeled to fund other environment-friendly social development initiatives, such as incentives for the sustainable use of natural resources and materials, pollution reduction, and investment in clean technologies and practices, as well as the expansion of safety nets for the poor.

The potential benefits of these reforms have not been exploited, partly due to a concern about loss of competitiveness. Recent studies (Shrestha et al. 2001; Bustamante et al. 2009; Aghion et al. 2009), however, have demonstrated that losses in competitiveness have been relatively small and that, in fact, competitiveness can be improved through cost internalization and the consequent increases in efficiency and reductions in emissions and pollution.

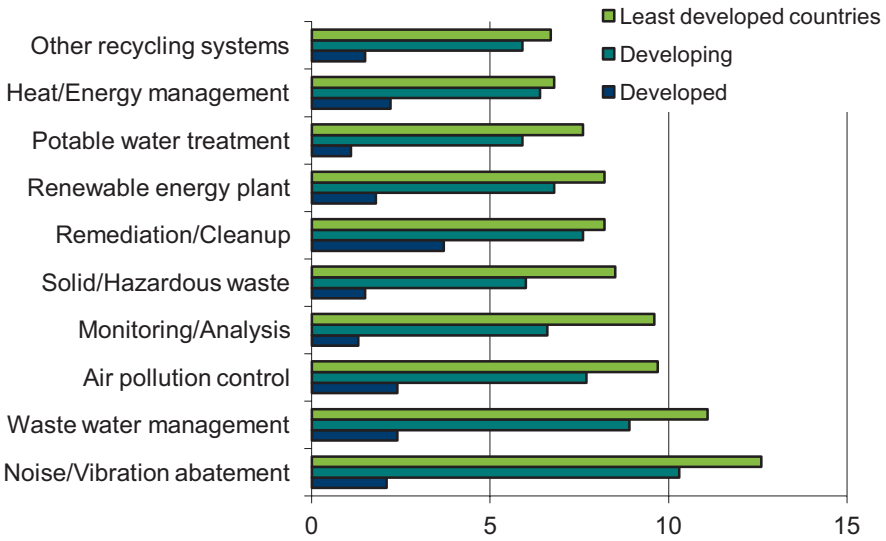

Fig. 4.3 Average tariffs as applied for different categories of environmental services and goods (%). (Source: Bora and Tech 2004)

3. Development and dissemination of environmental technology, goods, and services

Supporting technology development should be reflected in the allocation of resources for development. The latest analysis (OECD 2009) shows that technological breakthroughs could halve the cost of climate change mitigation by 2050, create new business opportunities and make more ambitious climate policies affordable. Asia should aim to create green lead markets. Lead markets are markets which set technological and regulatory standards that are subsequently adapted in other countries. Asia is in an excellent position to become a world leader on energy technologies, chemicals, waste cycling, transport, housing, and agriculture. Asian countries should find new ways to disseminate existing environmental technology, goods, and services (Kalirajan et al. 2010). While the reduction of tariff barriers for environmental services and goods (ESG) is often mentioned as the main sticking point for technology transfer (Fig. 4.3), the real barrier also lies with intellectual propriety rights. Strengthened IPR regimes will complement various multilateral and bilateral initiatives of trade in EGS in the context of rebalancing growth. The development and transfer of technologies can also be stimulated through many measures including patent buy outs for important technologies, global ventures to commercialize clean energy technologies, transfer of publicly funded technologies to the international domain, implementing licensing schemes rights, etc.

4. Regional cooperation for effective implementation of green growth measures

Global environmental issues such as climate change are now widely recognized as perfect examples of negative public goods and market failure. Just as the provision

of national public goods requires national government intervention, provision of public goods requires a breakthrough in global governance structure and market creation for environmentally sustainable growth. Asia needs a new generation of environmental regulation with dynamic regional standards that provide a strong market pull for innovation (Singh 2008). For certain products with high environmental impact, like energy-consuming appliances and hybrid vehicles, continuous competition for the best performance should be set up by regularly reviewing and honoring regional standards that are best in terms of energy and resource efficiency (OECD 2008). Deepening carbon markets and making them regional will create the scope for substantial transfer of private funds from advanced countries to developing Asian countries that facilitate technology transfer. The main channel for technology and economic cooperation is the Clean Development Mechanism (CDM). However, there are serious concerns about the effectiveness and complexity of the current CDM which is largely project-based but further scaling up to sectoral credit approaches (Anbumozhi 2010). Moreover, the primary responsibility for helping to meet the challenge of a truly public good such as coping with climate change should have the shared responsibility of the UN systems to facilitate negotiated agreements and the Bretton Woods system wherein the IMF could be an ideal agency for reviewing the issue of subsidies and carbon tax at the regional level and the World Bank and the Asian Development Bank for supporting regional programs for carbon reduction.

4.8 Conclusion

This chapter has considered real sector issues related to economic rebalancing in Asia. It has argued that Asian economies should move away from growth strategies driven by excessive exports to developed economies. Rebalancing should take place on both the demand side and on the supply side. On the demand side, producers in the region should exploit the capacity of the 930 million middle class consumers in Asia to function as an engine of growth (METI 2009). On the supply side, the best way to rebalance growth is to increase productivity. This would increase the long-term income of Asian consumers and, consequently, their ability to sustain production directed toward regional markets.

To increase productivity, developing Asian countries should leverage production networks to graduate to higher value-added, knowledge-intensive activities. This can be accomplished by investing in human capital to provide workers with marketable skills, implementing appropriate R&D policies to enhance the technological capabilities of firms, and maintaining FDI-friendly environments to nurture industrial agglomeration and facilitate technology transfer. An FDI-friendly environment would include both the consistent and coherent enforcement of laws and regulations at all governmental levels and the maintenance of stable macroeconomic fundamentals. In addition, a key way to attract FDI is to lower the service link costs between geographically separated production blocks. These could be lowered by

implementing a region-wide FTA, improving intraregional infrastructure, and developing competitive services sectors and SMEs.

A region-wide FTA should include full cumulation of ROOs in order to overcome noodle bowl effects. Infrastructure investment can be facilitated if governments, multilateral development banks, and bilateral financial institutions work together. More open and competitive services sectors would be promoted if policymakers removed distortions that favor manufacturing over services. SMEs could be strengthened if Asian governments were to establish high-level coordinating agencies like SPRING Singapore and develop long-term holistic plans to nurture SMEs.

Many of these steps would also help Asian firms to connect to new sources of demand. For instance, improving infrastructure and implementing a region-wide FTA would give firms better access to consumers in Asia. In addition, raising worker productivity would increase labor income, thereby raising the long-run purchasing power of consumers in the region.

There is also the possibility of a virtuous cycle developing. Nurturing competitive SMEs and services sectors and investing in infrastructure would attract FDI. Once countries receive a critical mass of FDI, industrial agglomeration could start taking place. This would give local SMEs and services sector firms more opportunities to develop and increase their competitiveness, while at the same time providing governments with more revenue to invest in infrastructure. This would in turn lead to greater FDI inflows and increased technology transfer to local firms.

To ensure that the resulting growth is sustainable, new growth patterns should be made more environmentally-friendly than it is now. Environmental and carbon performance will play an increasingly important role when it comes to future competitiveness of Asian industries. The demand for low-carbon resource-efficient goods will be fast growing. Developing a growth strategy that maximizes the environmental, economic and social benefits is a policy challenge and many policy areas have the potential to contribute for environmentally sustainable growth. Contributions are required not just from environmental policy but also from energy, trade, finance, research, and regional cooperation areas. Asia has to face up to this challenge and develop ambitious, joined up, and long-term policies.

This chapter has considered how Asian countries can rebalance their economies by increasing productivity on the supply side and by targeting regional consumers on the demand side. Although these changes would be difficult initially, in the long run they would allow workers and consumers in the region to increase their incomes and to enjoy more of the fruits of their labor.

References*

Asian Development Bank (ADB). 2008. *Improving energy security and reducing carbon intensity in Asia and the Pacific.* Manila: ADB.

ABC (Asia Business Council). 2009. Addressing Asia's new green jobs challenge. Hong Kong, China: ABC.

ADB (Asian Development Bank). 2009a. *Asian Development Outlook*. Manila: ADB.

* The Asian Development Bank refers to China by the name People's Republic of China.

ADB (Asian Development Bank). 2009b. ADB president urges new development paradigm for Asia. ADB News Release. 4 May. http://www.adb.org/Media/Articles/2009/12884-adb-annual-meetings/. Accessed 21 June 2009.

ADB and ADBI (Asian Development Bank and Asian Development Bank Institute). 2009. *Infrastructure for a seamless Asia*. Tokyo: ADBI.

Aghion, P., D. Hemous, and R. Veugelers. 2009. *No green growth without innovation*. Bruegel Policy Brief 2009/07 November. Brussels: Bruegel.

Alibaba.com. 2008. FACTBOX-Asian economies get billions in fiscal stimulus. 11 September 2008. http://news.alibaba.com/article/detail/economy/100004213-1-factbox-asian-economies-get-billions-fiscal.html. Accessed 28 Jan 2010.

Ang, J. B. 2007. Determinants of foreign direct investment in Malaysia. *Journal of Policy Modeling* 30 (1): 185–189.

Anbumozhi, V. 2009. Unlocking the potentials of green jobs in low carbon Asia. International conference on employment in the post-crisis context, ADBI, Tokyo, 15–17 December.

Anbumozhi, V. 2010. Low carbon Asia: Bridging the gap between environment necessity and economic opportunity. Proceedings of the international conference on public policy for sustainable development, pp. 278–284.

Anbumozhi, V., and A. Bauer. 2010. Impact of the global recession on sustainable development and poverty linkages. In *Poverty and sustainable development in Asia, impacts and responses to the global economic crisis*, eds. A. Bauer and M. Thant. 453–470. Manila: Asian Development Bank.

Anbumozhi, V., and M. Kawai. 2009. Towards a low carbon society in Asia: Challenges of economic development. Paper presented at the OECD conference on measuring the progress of societies: Key issues for the Asia and Pacific regions, Kyoto University, 23–24 March.

Anbumozhi, V., and Y. Kanda. 2005. Greening the production and supply chains in Asia: Is there a role for voluntary initiatives? Institute for Global Environmental Strategies (IGES) Kansai Research Centre Discussion Paper KRC-2005-No.6E. Hyogo: IGES.

Asian Productivity Organization. 2009. *APO productivity databook 2009*. Tokyo: Asian Productivity Organization.

Baldwin, R., and M. Kawai. 2008. Multilateralizing Asian regionalism. Paper presented at the ADBI conference on multilateralizing Asian regionalism, Tokyo, 18–19 September.

Barbier, E. 2009. *A global green new deal*. Geneva: United Nations Environment Programme.

Beck, T., A. Demirguc-Kunt, and R. Levine. 2005. SMEs, growth, and poverty: Cross-country evidence. *Journal of Economic Growth* 3 (9): 199–229.

Berry, A., E. Rodriguez, and H. Sandee. 2002. Firm and group dynamics in the small and medium enterprise sector in Indonesia. *Small Business Economics* 18 (1–3): 141–161.

Bhattacharyay, B. N. 2008. Demand for regional infrastructure in Asia and the Pacific: 2010–2020. Background paper prepared for ADB/ADBI flagship study, Infrastructure for a Seamless Asia. Tokyo: ADBI.

Bhattacharyay, B. N. 2009. An institutional framework for Pan-Asian connectivity. Paper presented at ADBI/ADB workshop on Asian architecture and global governance, Manila, 29 October.

Bora, B., and R. Tech. 2004. Tariffs and trade in environmental goods. WTO workshop on environmental goods, Geneva, 11 October.

Bosworth, B., and A. Maertens. 2009. The role of the service sector in economic growth and employment in South Asia. In *Service-led growth in South-Asia,* eds. E. Ghani and H. Kharas. Washington, DC: World Bank.

Brooks D. H., and D. Hummels. 2009. *Infrastructure's role in lowering Asia's trade costs*. Tokyo: Edward Elgar.

Bustamante, J. P., M Charpe, and R. Torres. 2009. Green policies and jobs: A double dividend? In *World of work report*, ed. Raymond Torres. Geneva: International Institute for Labour Studies.

Calderon, C. A., and L. Serven. 2004. The effects of infrastructure development on growth and income distribution. World Bank Policy Research Working Paper WPS 3400. Washington, DC: World Bank.

Carruthers, R., and J. N. Bajpai. 2003. Trends in trade and logistics: An East Asian perspective. World Bank Working Paper 2. Washington, DC: World Bank.

Chia, S. Y. 2009. Trade and investment policies and regional economic integration in East Asia. Paper presented at the ADBI/ADB workshop on Asian architecture and global governance, Manila, 29 October.

Dee, P. and K. Hanslow, 2001. Multilateral liberalisation of services trade. In *Services in the international economy*, ed. R. Stern. Ann Arbor: University of Michigan Press.

Esfahani, H. S., and M. T. Ramirez. 2003. Institutions, infrastructure and economic growth. *Journal of Development Economics* 70 (2): 443–477.

Foreign Affairs and International Trade Canada (FAITC). 2009. Worldwide inventory of infrastructure spending plans. 21 January 2009. http://www.international.gc.ca/canadexport/articles/90121h.aspx. Accessed 28 Jan 2010.

François, J., and I. Wooton. 2006. Market structure and market access. Mimeo.

Gregory, G., C. Harvie, and H. H. Lee. 2002. Korean SMEs in the wake of the financial crisis: Strategies, constraints, and performance in a global economy. Economics Working Paper 02-12. Wollongong: University of Wollongong.

Hall, C., and C. Harvie. 2003. A comparison of the performance of SMEs: Policy implications for turbulent times. Economics Working Paper 03-05. Wollongong: University of Wollongong.

Hertel, T. 2000. Potential gains from reducing trade barriers in manufacturing, services and agriculture. *Review* 82 (4): 77–100. St. Louis, Missouri: Federal Reserve Bank of St. Louis.

Hertel, T., M. Ivanic, and L. A. Winters. 2008. Why isn't the Doha development agenda more poverty friendly? Global Trade Analysis Project (GTAP) Working Paper 37. West Lafayette: Center for Global Trade Analysis, Purdue University.

Huang, Y. 2009. The future of the international currency system: A Chinese economist's perspective. Paper presented at the ADBI/ADB workshop on Asian architecture and global governance, Manila, 29 October.

Iino F., and A. Lim. 2009. Developing Asia's competitive advantage in green products: Learning from Japanese Experiences. Proceedings of the conference on the impacts of global economic slowdown on poverty and sustainable development in Asia and the Pacific, Ha Noi, Viet Nam, 28–30 September.

International Energy Agency. 2008. *World Energy Outlook*. Paris: International Energy Agency.

International Federation of Consulting Engineers. 2009. Fiscal stimulus package survey 2009. http://www1.fidic.org/about/infra09/. Accessed 28 Jan 2010.

International Monetary Fund. 2011. World Economic Outlook database. http://www.imf.org/external/pubs/ft/weo/2009/02/weodata/weoselgr.aspx.

Jitsuchon, S. 2010. Fiscal policy issues in Thailand after the current economic crisis. Paper presented at the ADBI conference on global financial and economic crisis: fiscal policy issues after the crisis, Tokyo, 19 January.

Jitsuchon, S., and S. Sussangkarn. 2009. Thailand's growth rebalancing. Paper presented at the ADBI conference on global financial crisis: impacts, lessons, and growth rebalancing, Tokyo, 22–23 April.

Kalirajan, K. 2000. *Restrictions on trade in distribution services*. Productivity commission staff research paper. Canberra: Australian Government (AusInfo).

Kalirajan K., V. Anbumozhi, and K. Singh. 2010. Measuring the environmental impacts of changing trade patterns on the poor. In *Poverty and sustainable development in Asia, impacts and responses to the global economic crisis,* eds. A. Bauer and M. Thant. 491–505. Manila: Asian Development Bank.

Kang, J. 2010. Meeting the challenges of financial crisis—China's practice: From developing countries' prospective. Paper presented at the ADBI conference on global financial and economic crisis: fiscal policy issues after the crisis, Tokyo, 19 January.

Kawai, M., and Wignaraja, G. 2009. The Asian "noodle bowl": Is it serious? ADBI Working Paper 136. Tokyo: ADBI.

Kawai, M., and Wignaraja, G. 2011. *Asia's free trade agreements: How is business responding?* Cheltenham, UK: Edward Elgar Publishing Ltd.

Kerr S. 2001. Ecological tax reform. Report prepared for the Ministry of Environment, New Zealand.

Kim, T. H. 2009. Differential effect of green tax reform over economies: A case of Korean economy. Korea Energy Economics Research Institute.
Kimura, F., and M. Ando. 2005. Two-dimensional fragmentation in East Asia: Conceptual framework and empirics. *International Review of Economics and Finance* 14 (3): 317–348.
Kotera, A. 2006. *Enhancing the quality of investment treaties (BITs)*. Tokyo: Research Institute of Economy, Trade and Industry (RIETI). Mimeo.
Kraemer, K., and J. Dedrick. 2006. ICTs in intercorporate production networks: Global IT and local guanxi in the PC industry. Paper prepared for the PAFTAD 31 conference on multinational corporations and the rise of a network economy in the Pacific rim, University of Guadalajara, 12–15 June.
Kumar, N., and P. De. 2008. *East Asian infrastructure development in a comparative global perspective: An analysis of RIS infrastructure index*. Research and Information System for Developing Countries (RIS) Discussion Paper 135. New Delhi: RIS.
Kumar, R., and A. Soumya. 2010. Fiscal policy issues for India after the current crisis. Paper presented at the ADBI conference on global financial and economic crisis: fiscal policy issues after the crisis, Tokyo, 19 January.
Lim, H., and F. Kimura. 2009. The internationalization of SMEs in regional and global value chains. Paper presented at the Latin America/Caribbean and Asia/Pacific Economics and Business Association (LAEBA) Fifth Annual Conference, Singapore, 15 July.
METI. 2009. *White paper on international economy and trade*. Tokyo: METI.
Nguyen, N. A., D. N. Nguyen, and T. Nguyen. 2010. Current global crisis, fiscal stimulus package and implication for Vietnam. Paper presented at the ADBI conference on global financial and economic crisis: fiscal policy issues after the crisis, Tokyo, 19 January.
OECD (Organisation for Economic Co-operation and Development). 2004. *Promoting entrepreneurship and innovative SMEs in a global economy: Towards a more responsible and inclusive globalization*. Paris: OECD.
OECD (Organisation for Economic Co-operation and Development). 2007. *Business and the environment: Policy incentives and corporate responses*. Paris: OECD.
OECD (Organisation for Economic Co-operation and Development). 2008. *Mobilizing investments in low emission energy technologies on the scale needed to reduce the risks of climate change*. Paris: OECD.
OECD (Organisation for Economic Co-operation and Development). 2009. *Environmental outlook to 2030.* Paris: OECD.
Oh, J., and D. Park. 1998. *Financial reform and financial crisis in Korea. School of Accountancy and Business Research Centre (SABRE)*. Working Paper 08-98. Singapore: Nanyang Technological University.
Park, Y. 2009. The global economic crisis and rebalancing growth in East Asia. Paper presented at the ADBI conference on the global financial and economic crisis: impacts, lessons and growth rebalancing, Tokyo, 22–23 April.
Patunru, A. A., and E. Zetha. 2010. Indonesia's savior: Fiscal, monetary, trade, or luck? Paper presented at the ADBI conference on global financial and economic crisis: fiscal policy issues after the crisis, Tokyo, 19 January.
Pollin, R., H. G. Petlier, J. Heintz, and H. Scharber. 2008. *Green recovery: A program to create good jobs and start building a low carbon economy*. Washington, DC: Center for American Progress.
Rickards, D. 2008. Global infrastructure—A growth story. In *Infrastructure finance: Trends and techniques*, ed. H. A. Davis. London: Euromoney Books.
Sharma, A., G. R. Iyer, A. Mahotra, and R. Krishnan, 2008. Sustainability and business-to-business marketing: A framework and implications. *Industrial Marketing Management* 39 (2): 330–341.
Singh, R. 2008. Potential of a carbon finance fund. *Economic and Political Weekly*, November.
Shrestha, R. M., S. Pradhan, and M. H. Liyanage. 2008. Effects of carbon tax on greenhouse gas mitigation in Thailand. *Climate Policy* 8:17–24.
Stoughton, M., and V. Anbumozhi. 2009. Green services and emergence and recovery from the global economic slow down in developing Asian economies. Proceedings of the conference on

the impacts of global economic slowdown on poverty and sustainable development in Asia and the Pacific, Ha Noi, Viet Nam, 28–30 September.
Sturgeon, T. J. 2002. Modular production networks: A new American model of industrial organization. *Industrial and Corporate Change* 11 (3): 451–496.
Sugimoto, K. 2010. A study on fiscal policy challenges in Japan. Paper presented at the ADBI conference on global financial and economic crisis: fiscal policy issues after the crisis, Tokyo, 19 January.
Thampapillai, D. J. 2009. Financial crisis—Climate risks—Rescue packages. Lee Kuan Yew School of Public Policy Working Paper SPP09-06. Singapore: National University of Singapore.
The Asia Foundation. 2001. The determinants of export performance: A firm level study of Italian manufacturing. *Weltwirtschaftliches Archiv* 137 (3): 450–472.
Thorbecke, W., and M. Yoshitomi. 2006. Trade-FDI technology linkages in East Asia. Prepared for the Network of East Asian Think-tanks (NEAT) Working Group Meeting in Tokyo, 7 July. http://www.rieti.go.jp/users/neat/en/pdf/finalreport.pdf. Accessed 1 Oct 2009.
Tourk, K. 2004. The political economy of East Asian economic integration. *Journal of Asian Economics* 15 (5): 843–888.
USCAN-Climate Action Network. 2010. http://www.usclimatenetwork.org/policy/copenhagen-accord-commitments. Accessed 17 Jan 2011.
UNCTAD. 2008. *Review of maritime transport*. Geneva: UNCTAD.
UNEP (United Nations Environment Programme). 2009. *Green jobs: Towards decent work in a sustainable, low carbon world*. Geneva: UNEP.
United Nations. 1995. *Global framework for transit transport cooperation between land-locked and transit developing countries and the donor community*. New York: United Nations.
Urata, S., T. Matsuura, and Y. Wei. 2006. *International intrafirm transfer of management technology by Japanese multinational corporations*. RIETI Discussion Paper 06-E-006. Tokyo: RIETI.
Wengel, J., and E. Rodriguez. 2006. SME export performance in Indonesia after the crisis. *Small Business Economics* 26 (1): 25–37.
White, A. J. 2007. Decentralized environmental taxation in Indonesia: A proposed double dividend for revenue allocation and environmental regulation. *Journal of Environmental Law* 19 (1): 43–69.
Wignaraja, G. 2008. *FDI and innovation as drivers of export behaviour: Firm-level evidence from East Asia. United Nations University-Maastricht Economic and Social Research Institute on Innovation and Technology (UNU-MERIT)*. Working Paper 2008-061. Maastricht: UNU–MERIT.
World Bank. 2009a. The services revolution in South Asia. Mimeo.
World Bank. 2009b. *World Development Indicators 2009*. Washington, DC: World Bank.
World Economic Forum (WEF). 2001. *The Global Competitiveness Report 2000–2001*. Geneva: WEF.
World Economic Forum (WEF). 2007. Infrastructure development. Press release from India Economic Forum, New Delhi, 2–4 December. http://www.weforum.org/pdf/summitreports/india2007/print_infrastructure_development.htm. Accessed 8 Feb 2009.
World Economic Forum (WEF). 2009a. *Towards a low carbon travel & tourism sector*. Geneva: WEF.
World Economic Forum (WEF). 2009b. *The Global Competitiveness Report 2008–2009*. Geneva: WEF.
World Economic Forum (WEF). 2010. *The Global Competitiveness Report 2009–2010*. Geneva: WEF.
World Economic Forum (WEF). 2011. *Low-carbon development.* Davos: WEF.
World Economic Forum (WEF). 2012. *Unlocking the potentials for private finance for green growth*. Davos: WEF.
Worldwatch Institute. 2009. *State of the world: Into a warming world*. Washington, DC: Worldwatch Institute.

Chapter 5
Enhancing Social Protection

Gloria O. Pasadilla and Bart W. Édes

Abstract While Asian governments have for some time pursued high rates of growth as their primary economic goal, provision of social protection tended to be viewed as an expensive luxury that only rich economies can afford. Most Asian governments, while maintaining a few social programs to assist very poor and disadvantaged groups, have generally considered social protection as the responsibility of one's self, family, and close community. The chapter examines the status and trends of social protection policies in Asia and the Pacific. It also links social protection and social policy discussion with post-global financial crisis concerns over growth rebalancing. The chapter also discusses long-term policy challenges in this area and provides conclusion and recommendations. The authors argue that Asian countries should capitalize on the opportunity presented by the recent global financial crisis to reform and build up their social protection systems in a financially sustainable manner. In the case of pensions, governments should take actions to ensure the sustainability and adequacy of benefits for the elderly. In low-income countries, governments should concentrate limited resources on social assistance programs that address extreme poverty and basic health and nutrition needs, giving special attention to pregnant women, new mothers, and young children.

Keywords Social protection · Inclusive growth · Global financial crisis · Growth rebalancing

JEL Codes H53 · H55 · F68

G. O. Pasadilla (✉)
APEC Policy Support Unit, Singapore, Singapore
e-mail: g.pasadilla@gmail.com

B. W. Édes
Asian Development Bank, Manila, Philippines
e-mail: bedes@adb.org

M. Kawai and J.-W. Lee (eds), *Rebalancing for Sustainable Growth,* Economics, Law, and Institutions in Asia Pacific, DOI 10.1007/978-4-431-55321-2_5

5.1 Introduction

Asian governments have for some time pursued high rates of growth as their primary economic goal. The government provision of comprehensive social protection, however, has been viewed as an expensive luxury that only rich economies can afford. Most Asian governments, while maintaining a few social programs to assist very poor and disadvantaged groups, have generally considered social protection as the responsibility of one's self, family, and close community.

In recent years, however, this mindset has begun to evolve. Two major economic and financial crises, combined with underlying societal changes, have made policymakers take a more nuanced approach to social spending. Indeed, many officials now see social protection as an integral part of a responsible long-term economic policy. Demographic changes brought about by urban migration and lower birthrates have also put pressure on family support mechanisms. The extended family system that used to act as an informal social protection system is fraying, compelling the state to assume a greater share of the burden of old-age support. This has forced a reexamination of the funding, coverage, and sustainability of pension systems, as well as a reexamination of the social assistance programs providing direct subsidies to the elderly.

Social considerations have increasingly become a key element of economic policymaking, rather than being isolated and of secondary concern. For example, recognition has grown that improved health care and education can steer economies to a higher growth path because a fit, educated, and economically secure labor force is more productive than one that is poorly trained or malnourished. More decision makers now recognize that public spending that targets the well-being and development of children is an investment in human capital, a key ingredient of a competitive economy in a globalized world. By directly assisting poor and vulnerable individuals and groups, spending on social programs promotes both pro-poor growth and, more broadly, inclusive growth.

The recent global economic and financial crisis has also stimulated much discussion about another positive effect of social expenditures, i.e., their contribution to the rebalancing of the economy. Where domestic demand is lacking, and where households maintain a high rate of precautionary savings (for high education costs and potentially large out-of-pocket health expenses), good social programs that enjoy the trust of targeted populations can encourage the population to spend more, thereby stimulating domestic demand. During economic downturns, spending on social programs can serve as an automatic countercyclical measure.

This chapter makes the case that Asian countries should capitalize on the opportunity presented by the recent global financial crisis to reform and build up their social protection systems in ways that expand coverage, provide adequate benefits, and operate in a financially sustainable manner. This chapter also explores the status of, and trends in, social protection policies in Asia and the Pacific. Section 5.2 discusses the link between social protection and inclusive growth strategies and assesses the current social protection policies in the region. Section 5.3 links so-

cial protection and social policy discussion with post-global financial crisis concern over growth rebalancing. The policy responses to the global financial crisis adopted by governments in the region are highlighted in Section 5.4. Section 5.5 explores long-term policy challenges. The chapter's conclusion and recommendations appear in Section 5.6.

5.2 Social Protection, Social Policy, and Inclusive Growth

What is social protection? International organizations use different definitions of social protection but, in essence, it has come to be described, particularly in developing countries, as a policy framework for addressing poverty and "vulnerability" (see, for instance, Ortiz 2001; Holzmann and Jorgensen 2000). Traditionally, social protection includes labor market interventions, social insurance, and social safety net. *Active labor market programs* are aimed at increasing the skills, employment, and long-term earning potential of beneficiaries. Such programs include on-the-job training, job search assistance, subsidized job placement, as well as wage subsidies to compensate for reduced work-hours and public work schemes which are particularly useful during down-cycles. *Social insurance* refers to contributory programs that help households and individuals insure themselves against reduction or loss of income. This usually refers to publicly provided or mandated insurance against old age, disability, sickness, and, in some countries, unemployment. *Social assistance*, also known as *social safety net* programs, refers to non-contributory transfer programs that assist the poor, "near poor," and vulnerable populations to cope with shocks. Examples include feeding programs and transfers (either cash or in-kind, conditional or unconditional). Some social assistance programs are developmental interventions intended to support very basic needs, especially of the chronically poor; others are stop-gap measures designed to address the impact of economic shocks and natural disasters. Besides these three traditional components, ADB also includes other programs such as micro- and area-based schemes to protect communities, and child protection.

Social policy, in contrast, covers a wider array of public intervention including public expenditures on education, pension, and health. There are areas of overlap between social protection and social policy. For example, education can form part of a conditional cash transfer program (a social protection program), but expenditure on school buildings (education expenditure) would be part of social policy, not of social protection.

5.2.1 How Social Protection Supports Inclusive Growth

By addressing poverty and vulnerability, social protection programs have a direct relation to inclusive growth. Particularly when programs are focused on averting the

intergenerational transmission of chronic poverty, social protection helps in providing the poor access to opportunities and empowers them to participate in, and contribute to, the growth process. Examples of these types of social protection programs are health and education policies that uplift the human capital of the poor. "Initial conditions" derived from poverty like malnutrition or poor school performance automatically set back the possibilities of the poor for productive employment and further advancement. Health policies that prevent malnutrition or education policies that foil dropping out of school help improve these ''initial conditions'' that disadvantage many poor people in a competitive world right at the outset. Thus, social protection programs geared toward human capital development increase the poor's chance—or at least the next generation's—to take advantage of expanding opportunities from economic growth and to escape from a perpetual cycle of poverty.

Moreover, social protection programs that focus on risk and vulnerability, particularly those that arrest or minimize the detrimental responses by the vulnerable—for example, responding to income shock by withdrawing children out of school or economizing on food nourishment—are an important developmental linkage to growth. Income transfers (whether conditional or unconditional) and social insurance policies are examples of social protection programs that help the vulnerable from making those dire decisions that, ultimately, constrain their children's prospects.

However, while compensatory mechanisms that help smooth consumption and other transfer programs directed at human capital development address the demand side, inclusive growth also requires solving supply side constraints, such as basic services provision, i.e., infrastructure, water, sanitation, and others. In many Asian economies, the lack of these basic services impose time burden, particularly on women, and constrain their ability to care for their families and engage in gainful employment. While the provision of these services is not part of social protection policies, as currently understood, it highlights the interconnectedness of inclusive growth and social protection policies.

5.2.2 Social Protection across the Region

This section provides an overview of the current status of social protection in Asia and Pacific countries, drawing heavily from an ADB study on social protection. ADB has developed a social protection index (SPI), which summarizes the overall level of social protection activities in the region. The SPI provides a measure of the extent to which a country provides welfare, labor market, social security, health insurance, microcredit, child protection, and targeted education and health support programs to its citizens, especially those living below the poverty line. It is a composite of four measures:

1. Social protection expenditure (as a percentage of GDP)
2. Coverage or total number of beneficiaries as a percentage of the target population
3. Percentage share of poor beneficiaries to total beneficiaries

4. Social protection expenditure going to poor people (share of social protection expenditure multiplied by percentage share of poor beneficiaries).

Excluded from the SPI are activities/programs associated with rural development (e.g., rural credit programs), basic infrastructure, and health and education.[1] Also excluded are social protection activities whose costs and impact are not amenable to quantification, like legislation relating to labor standards, consciousness raising, and empowerment projects. Table 5.1 shows the various social protection programs that countries generally adopt and that are included in the SPI calculation.

Figure 5.1 ranks the SPI values of 31 countries in the Asia and Pacific region, with 0 the lowest value and 1.0 the highest. All the countries included have low-to-medium income economies except for Japan, the Republic of Korea, and the Cook Islands. Several republics that were part of the former Soviet Union, as well as Mongolia, appear in the top one-third of the rankings due to their relatively high level of social protection, a legacy of the communist era. The SPI average for Asia is 0.36. ASEAN countries, except Viet Nam, are below this average; while Sri Lanka, India, and the PRC, which are situated very close together (places 9–11 respectively), are slightly above it. Several Pacific and low-income countries in different parts of the region appear toward the bottom of the index.

It is worth highlighting that social protection activities do not increase in parallel with a country's income level. Some poorer economies, such as Sri Lanka and Viet Nam, have a higher SPI ranking than other relatively higher income economies, such as Malaysia. However, there is high and statistically significant correlation between SPI and GDP (ADB 2008), which suggests that greater wealth generally leads to higher levels of social protection provision.

One of the four components of the SPI is social protection expenditure. ADB has calculated that the region-wide average for social protection expenditure as a share of GDP is 4.8% (median 4.0%). Japan spends by far the most on social expenditure (16.0%), followed by the Marshall Islands (13.5%), Uzbekistan (11.1%), the Kyrgyz Republic (11.0%), Mongolia (9.8%), and the Republic of Korea (7.5%). The highest figure for a South Asian country is Sri Lanka (5.7%), followed by Bangladesh (5.3%). In Southeast Asia, Viet Nam spends the most on social protection as a percentage of its GDP (4.1%). The PRC's social protection expenditure is 4.6% of its GDP, while India records 4.0%. Countries spending 1.5% or less include (from the most to the least) the Maldives, Bhutan, Cambodia, the Lao People's Democratic Republic (Lao PDR), Tonga, Vanuatu, Tajikistan, and Papua New Guinea (only 0.3%).

Social protection expenditure is dominated by expenditure on social insurance schemes, which are confined to the public and formal sectors and thus exclude most people living in the region, especially the poor. Japan, the Republic of Korea, and the Central Asian republics are exceptions because of the high coverage of their social insurance systems. The average share of social insurances in total social protection expenditure is 55%, while social assistance and microfinance schemes are

[1] Directly funded health and education expenditures (e.g., school infrastructures and hospital facilities) are excluded, but health costs financed through social insurance are included in the SPI.

Table 5.1 Social protection programs. (Source: Wood et al. 2009)

Social protection component/program	Comments
Labor market programs	
Direct employment generation through public works programs	Including food for work programs
Direct employment generation through loan based programs	Included if loans are subsidized or job creation is an explicit objective of the program
Labor exchanges/Job placement services	
Unemployment benefits	If distinct from social insurance and including retrenchment programs
Skills development and training	Included if targeted at particular groups, e.g., disadvantaged children or the unemployed. General vocational training programs are excluded
Social insurance programs	
Programs to cover the risks associated with unemployment, sickness, maternity, disability, industrial injury, and old age	
Social assistance and welfare programs[a]	
Welfare and social services targeted at the sick, the poor, orphans, the disabled, and other vulnerable groups	
Subsidized health treatment costs	
Cash/in-kind transfers (e.g., food stamps, food aid)	
Targeted subsidies for utilities and staple foods	Only if imposed in times of crisis and if targeted at particular vulnerable groups. General subsidies are excluded
Fee exemptions	When targeted at the poor and vulnerable persons, e.g., land tax
Micro- and area-based schemes	
Microcredit/finance schemes	Included only if targeted at poor households. Mainstream rural credit schemes are excluded
Microinsurance schemes	Excluding programs only providing life insurance and savings schemes
Agricultural insurance	
Child protection	
Family allowances (e.g., cash or in-kind transfers to assist families with young children to meet part of their basic needs)	Excluding any transfers through the tax system
Educational assistance (e.g., scholarships, fee waivers)	Including school feeding programs, free/subsidized textbooks or uniforms
Health assistance (e.g., reduced fees for vulnerable groups)	Usually included under social assistance and welfare programs unless targeted specifically at children
Street-children initiatives and youth programs	

[a] The social protection index (SPI) calculation does not include disaster relief, at least as a separate category. However, it is likely that the index already captures disaster-related social assistance programs like food aid and medical assistance, or even agricultural/farm assistance (under micro- and area-based schemes)

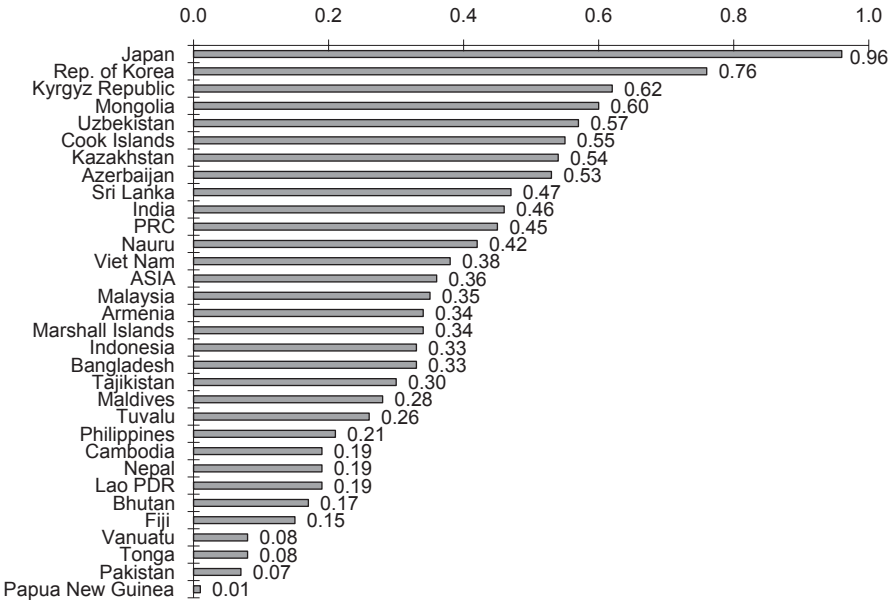

Fig. 5.1 Social protection index values for Asian countries. *PRC* People's Republic of China; *Lao PDR* Lao People's Democratic Republic. (Source: ADB 2008)

Table 5.2 Social protection expenditures. (Source: ADB (2008), Table 4.5 and Fig. 4.2)

Regional group	Number of countries	Social protection expenditures (% GDP)	% of social protection expenditures					
			Labor market programs	Social insurance	Social assistance	Micro-credit/ finance schemes	Child protection	All
Central Asia	7	6.8	2	58	24	6	9	100
South Asia	7	3.1	7	44	13	26	9	100
East Asia	9	2.8	6	64	13	13	4	100
Pacific	8	4.5	12	53	20	8	8	100
All Asia	31	4.8	7	55	17	13	7	100

GDP gross domestic product

30%, and labor market programs 7% (Table 5.2). South Asia commits more than one-quarter of its social expenditures to microfinance schemes, while Pacific and central Asian countries direct, respectively, about one-fifth and one-quarter of their social protection expenditures to social assistance schemes.

In terms of coverage of targeted beneficiaries, Central Asia has the highest coverage rate across the different beneficiaries. For old-age pensions, for example, it

has almost 100% coverage of the elderly, a legacy of the Soviet era, while the other regions have less than 50% coverage, reflecting the coverage of mostly formal sector labor in most countries. Social assistance coverage of the poor ranges between 30 and 80%.

5.2.3 Specific Social Protection Programs

5.2.3.1 Social Insurance

Virtually every country in the Asia and Pacific region has a formal social insurance system. In the great majority of cases, however, these schemes are limited to the government and formal employment sectors. These sectors, therefore, have little relevance to the informal and rural sectors where most people live and work, especially poor people. However, Japan, the Republic of Korea, and some central Asian republics maintain more comprehensive systems. The PRC has a comprehensive system for its "legal" urban population, but is extending this system to its large rural population (ADB 2008).

Pension coverage in developing Asian and Pacific countries is significantly lower than the OECD average. Within the OECD countries, which include Japan and the Republic of Korea, the average share of the labor force covered by mandatory pension schemes is 83.3% (95.3% in Japan). This compares to 35.6% in Sri Lanka, 20.5% in the PRC, 9.1% in India, and 6.4% in Pakistan, to cite a few countries (ADB 2008).

The region is characterized by considerable heterogeneity in the institutional nature of the national social security systems—including social insurance programs, national provident funds, tax-financed programs, mandatory occupational schemes—as well as in the scope of benefits and breadth of coverage provided (Table 5.3). Although most countries provide coverage for old age, disability, and

Table 5.3 Pension systems in Asia. (Source: Van der Auwera (2007)

Provident funds; defined contribution (DC) schemes	Defined benefit (DB) schemes in market economies	Pension schemes in transition economies
Indonesia	India (partial)	Azerbaijan (DB)
India (partial)	Japan	PRC (DB and DC-funded)
Malaysia	Republic of Korea	Kazakhstan (DC-funded)
Nepal	Pakistan	Kyrgyz Republic (notional DC)
Pacific Island	Philippines	Lao PDR (DB)
Singapore		Mongolia (DB)
Sri Lanka		Uzbekistan (DB) Viet Nam (DB)

Lao PDR Lao People's Democratic Republic, *PRC* People's Republic of China

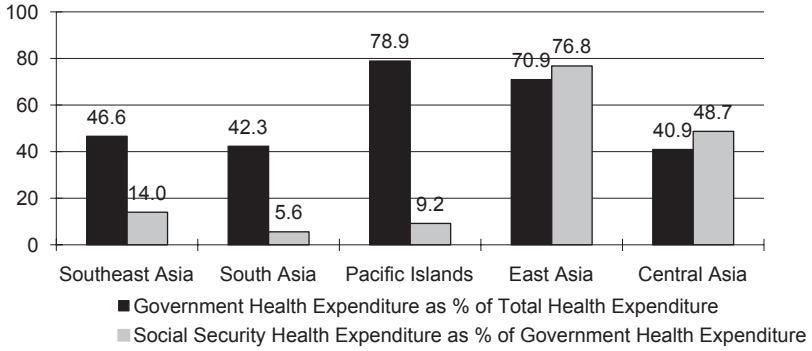

Fig. 5.2 Health insurance share of government health expenditures. (Source: Health expenditure series, World Health Organization, Geneva, February 2009 (latest updates are available at: http://www.who.int.nha/country/en/index.html))

survivorship, and the majority provides coverage for work injury, the development of programs for sickness and maternity benefits, family allowance, and unemployment benefits is less comprehensive (International Social Security Association 2009).

Not all countries in the region have a public health insurance system. In those countries that do, health insurance accounts for an average of 33 % of government expenditures on health (Fig. 5.2). In Japan and the Republic of Korea, public health insurance accounts for more than 80 % of government health expenditures. In the PRC, the social insurance contribution to government expenditures on health totals 53 %, while in the other countries with a public health insurance system, the share ranges between 4 % (India) and 53 % (Pakistan) (not shown in Fig. 5.2).

5.2.3.2 Unemployment Programs

Table 5.4 describes the current unemployment programs in Asia. According to the ILO, social insurance programs are the most common type of unemployment program. In economies where the unemployment program is in the form of social assistance, means-testing is employed. Funding sources for the unemployment programs vary. In no developing economy does the government cover the whole cost. Coverage is broad in many economies, but in India it is limited to private sector employees. Where unemployment benefits are provided, the duration is typically between 13 and 26 weeks. In Armenia, however, the duration of benefits extends up to 1 year, and in the PRC, up to 2 years. Some countries—Nepal, Pakistan, and Turkmenistan—provide lump sum payments.

Other unemployment programs come in the form of public workfare. In India, for example, the government guarantees 100 days of employment every year to adult members of rural households who are willing to do unskilled manual work at the statutory minimum wage. Typical work includes public work projects like

Table 5.4 Unemployment programs in Asia and the Pacific. (Source: International Labour Organization, Social security database–Programmes and mechanisms, available at: http://www.ilo.org/dyn/sesame/ifpses.socialdatabase. Accessed 12 February 2010; last update of database: 11 June 2008)

	Economy	Number of program(s)—Unemployment	Types of program (1)—Unemployment	Financing from government	Means-tested conditions for benefits—Unemployment	Coverage—Unemployment	Social insurance exclusion—Unemployment	Duration of benefit (weeks) with the maximum calculation rate of benefits
1	Armenia	1	Social insurance	Discretionary/irregular contribution	No	All working population	No exclusion mentioned	52
2	Azerbaijan	1	Social insurance	Discretionary/irregular contribution	No	All residents	No exclusion mentioned	26
3	Bangladesh	Limited provision (e.g., labor code only)	Employer-liability	No contribution	No	Private sector employees		17
4	China, People's Rep. of	1	Social insurance	Discretionary/irregular contribution	No	All salaried workers and assimilated categories	No exclusion mentioned	104
5	Fiji	None						
6	Georgia	1	Social insurance	Whole cost	No	All residents	No exclusion mentioned	
7	Hong Kong, China	1	Social assistance	Whole cost	Yes	All residents		Unlimited
8	India	1	Social insurance	Global contribution, under Sickness	No	Private sector employees	Small enterprises (Companies with less than a certain number of employees)	26

Table 5.4 (continued)

	Economy	Number of program(s)—Unemployment	Types of program (1)—Unemployment	Financing from government	Means-tested conditions for benefits—Unemployment	Coverage—Unemployment	Social insurance exclusion—Unemployment	Duration of benefit (weeks) with the maximum calculation rate of benefits
9	Indonesia	None						
10	Japan	1	Social insurance	Discretionary/irregular contribution	No	All salaried workers and assimilated categories	Temporary/casual workers	21
11	Kazakhstan	1	Social insurance	Global contribution, under Old-age	No	All working population	No exclusion mentioned.	According to the length of the covered period
12	Kiribati	None						
13	Korea, Rep. of	1	Social insurance	No contribution	No	All salaried workers and assimilated categories	Self-employed	13
14	Kyrgyz Republic	1	Social insurance	Discretionary/irregular contribution	No	Private sector employees	Young age basis	26
15	Lao People's Dem. Rep.	None						
16	Malaysia	None						
17	Nepal	Limited provision (e.g., labor code only)		No contribution				One lump sum

Table 5.4 (continued)

	Economy	Number of program(s)—Unemployment	Types of program (1)—Unemployment	Financing from government	Means-tested conditions for benefits—Unemployment	Coverage—Unemployment	Social insurance exclusion—Unemployment	Duration of benefit (weeks) with the maximum calculation rate of benefits
18	Pakistan	Limited provision (e.g., labor code only)						One lump sum
19	Papua New Guinea	None						
20	Philippines	None						
21	Singapore	None						
22	Sri Lanka	None						
23	Taipei,China	1	Social insurance	0.1	No	All salaried workers and assimilated categories	Self-employed	26
24	Thailand	1	Social insurance	0.25	No	All salaried workers and assimilated categories	Temporary/casual workers	26
25	Turkmenistan	1	Social insurance	Discretionary/irregular contribution	No	All working population	No exclusion mentioned	One lump sum
26	Uzbekistan	1	Social insurance	Discretionary/irregular contribution	No	All working population	Young age basis	26
27	Viet Nam	None						

irrigation, infrastructure, and land development. During the global financial crisis, other countries implemented similar public workfare to support the unemployed.

5.2.3.3 Social Assistance Measures

Most developing Asian and Pacific countries have put in place social assistance programs that provide cash or in-kind transfers to vulnerable and very poor groups such as those with minimal incomes, the elderly, the disabled, and widows. Beneficiaries tend to be limited, at least by objective, to the very poorest (ADB 2008).

Cash transfer program (whether conditional or unconditional) is one of the most effective ways to support the purchasing power of vulnerable populations. The overall effectiveness of these schemes, however, depends largely on their ability to reach poor people, i.e. on proper ‘‘targeting’’ of beneficiaries. One increasingly popular social assistance tool is the conditional cash transfer (CCT), which is a grant provided only if the targeted recipient carries out a specified action. Such actions can include enrolling children into public schools, going to the doctor for check-ups, or getting vaccinations. See Box 5.1 for examples of conditional cash transfer programs.

Another example of social assistance is the social pension, generally defined as state-provided, non-contributory regular cash transfers to older citizens, given at specific ages in different countries. Social pensions help to reduce the poverty of older people and their dependents, while increasing older people’s status, material security, and access to services. Few countries in the region maintain social pensions to provide safety-net retirement incomes for people who are not members of formal schemes (HelpAge 2006).

Box 5.1. Conditional Cash Transfer (CCT) Programs

CCTs aim to reduce poverty, provide social services, and lower the prospects of future poverty by conditioning benefits to the fulfillment of specific actions, e.g., children attending school, receiving clinic check-ups, etc. CCTs originated in Latin America in the 1990s and have since been adopted by some Asian governments. For example in 2007, Indonesia launched Program Keluarga Harapan—PKH (the Hopeful Family Program). The program, partially financed by savings from the removal of a universal fuel subsidy, targeted more than 15 million households, and was later expanded to more than 19 million households, representing 35 % of the country’s population. Implemented by the Ministry of Social Affairs, PKH families can receive up to the equivalent of about US$ 220 per year (depending on their size and composition) on the condition that specific health- and education-related obligations (e.g. minimum attendance of 85 % of school days or monthly growth monitoring for children that are less than one-year old) are met. The Indonesian Post Office’s extensive network is used for the payment of benefits.

In Pakistan, the World Bank-financed Punjab Education Sector Reform Program, to ensure that daughters attend school, provides families PRs200 (about US$ 2.50) a month per girl after official verification of their attendance. Net enrollment in primary schools in Punjab increased from 45 to 62 % between 2001 and 2007. Female primary net enrollment during the same period increased from 43 to 59 % and for rural females from 38 to 55 %. Over 350,000 eligible girls receive monthly stipends pegged to school attendance.

5.3 Social Policy, Savings, and Growth Rebalancing

The recent global financial crisis has stimulated thinking about the role of social expenditures in boosting aggregate demand. As discussed in Chapter 3, the export dependency of many Asian countries has led to imbalanced growth, where excess surplus has accumulated in some regions of the world with deficits accumulating like a mirror image in other regions. The crisis has highlighted the importance of developing robust domestic demand to make economies less vulnerable to fluctuations of the global economy.

5.3.1 Consumption and Household Savings

One important component of domestic demand is consumption. In some countries, like the PRC, domestic consumption is comparatively low at 37 % of its GDP (compared to a world average of around 50 %). Despite strong economic growth, the PRC's consumption expenditures have not grown apace with GDP. While the consumption ratio of other Asian countries either increased or remained relatively constant, the PRC's declined by more than 20 percentage points from 55 % in 1981 (Baldacci et al. 2010).

The PRC's low consumption figure can be attributed in part to excess household savings and the deterioration in household income as a share of GDP.[2] Some have explained the excess household savings with factors such as culture (thriftiness as an East Asian characteristic), demographics, the life-cycle hypothesis, and the target saving hypothesis. Yet none of these explanations were found to have strong and robust empirical support. Instead, precautionary motive—the risk of large health

[2] The foregoing discussion focuses on the PRC because of its striking excess surplus. Developing countries in ASEAN do not tend to enjoy substantial trade surpluses, nor are their consumption ratios particularly low. In fact, in some ASEAN countries, consumption ratios are fairly high and comparable to those of developed countries (Pasadilla and Wiradisuria 2009). The concept of growth rebalancing holds less significance for these countries.

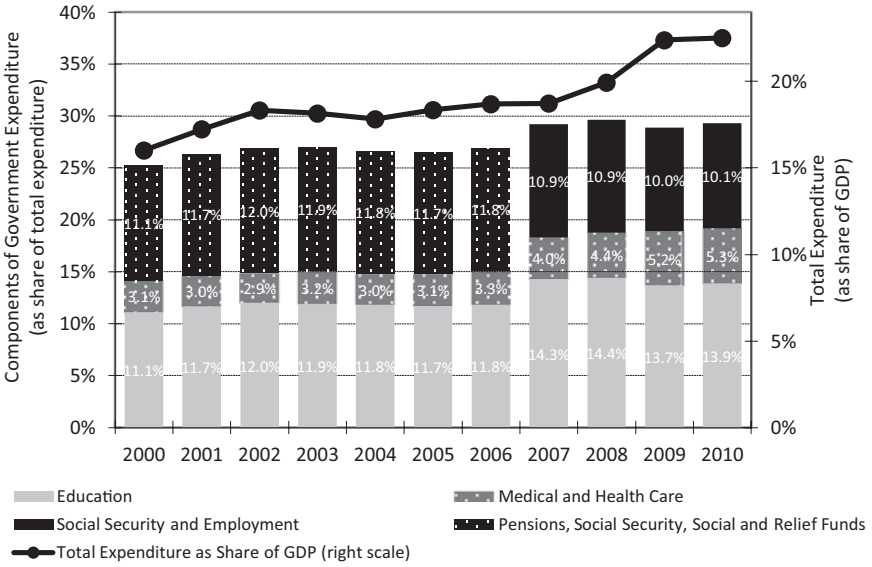

Fig. 5.3 Government expenditures: People's Republic of China. Notes: *GDP* gross domestic product. Pensions, social security, social and relief funds data are absent in 2007 and 2008. Social security and employment data started in 2007. (Sources: Authors' calculation and CEIC Data, available at: http://www.ceicdata.com. Accessed 26 February 2011; authors' calculation)

expenditures, expectation of huge education spending, and expenditures on housing—seems to best explain why households save a lot (Chamon and Prasad 2008).

A McKinsey Global Institute (MGI) survey of consumer spending corroborates this result. In the consumer survey, the cost of education was reported as being uppermost in the consumers' consideration when they save. Other high-ranked considerations for saving were the risk of illness; the expenses associated with caring for elderly parents; the need for investments, such as for home or business purchases; and the need for money during retirement and times of unexpected unemployment. Four of the major reasons cited in the MGI survey were related to social protection or to providing a safety net—illness, old-age, retirement, and unemployment risk. This reflects how social welfare benefits that were once provided by state-owned enterprises have become a burden on the household sector and have played an important role in the burgeoning of household savings.

The steady development of a more market-oriented economic system in the PRC has drastically reversed formerly high social transfers. Figures 5.3 and 5.4 show the budget allocation for health, education, and other social security expenditures in the PRC and in 12 ADB member economies. In the PRC, the total spending allotted for health and education combined is 19% of total government expenditure in 2010, while the average of the 12 ADB members examined (a mix of developing and developed countries) exceeds 20% (Figs. 5.3 and 5.4).

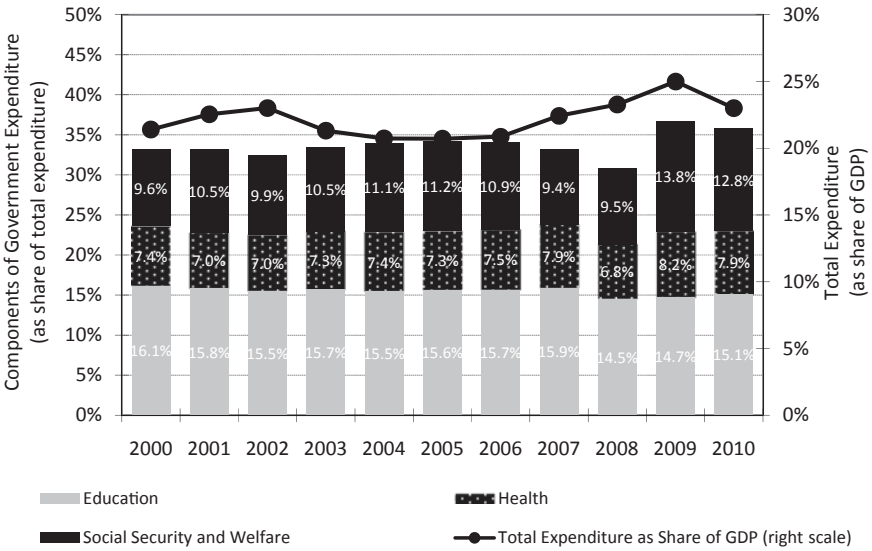

Fig. 5.4 Government expenditures: average of 12 ADB members. Notes: *GDP* gross domestic product. Countries included Armenia, Australia, Bangladesh, India, Malaysia, Mongolia, Nepal, the Philippines, Samoa, Sri Lanka, Tajikistan, and Thailand. Depending upon countries, government expenditures may be considered as expenditures by central government or consolidated government. (Source: ADB Statistical Database System, available at: https://sdbs.adb.org. Accessed March 2012; authors' calculation)

5.3.2 Savings and Social Security

To boost domestic consumption, a policy that assuages the precautionary motive for household savings is touted as one solution. Increased public provision of health insurance, more generous retirees' benefits, or a larger number of scholarships, especially for university education, can reduce precautionary savings and help increase household consumption spending.

Admittedly, the empirical literature on the relationship between savings and social security[3] is ambiguous. Some results show a negative effect of social security on savings, while others show a positive effect. This ambiguity comes about because of the different effects of wealth replacement (the expectation of old-age income reduces the incentive to save more) and induced retirement (early retirement encouraged by social security systems induces higher savings to account for longevity). In different countries and in different time periods, the relative influence of the wealth replacement effect or induced retirement effect may differ, thus the ambiguous relationship between social security and savings.

In the PRC, however, the evidence appears to support a negative relationship between social security and savings. In a study of the savings behavior of urban

[3] Studies are mostly on old-age pensions, not the entire array of social policy programs.

Table 5.5 Impact of a 1% increase in government social policy expenditures on consumption in the People's Republic of China. (Source: Baldacci et al. 2010)

	Pension	Health	Education
(Percentage of GDP)			
Total	1.42	0.77	0.51
Urban	0.92	0.46	0.24
Rural	0.50	0.32	0.27
Rural/Urban unit impact	67%	56%	55%

GDP gross domestic product

households with and without social security coverage, the savings of the latter are higher across various quintile groups (Wang 2009). Similarly, urban consumer surveys suggest that those without health insurance save approximately 1.5 times more of their disposable income than those with insurance (MGI 2009). Such evidence suggests that increased coverage of social security or health insurance by the government can help reduce savings and increase domestic consumption.

5.3.3 Social Spending and Consumption

To estimate the impact of social spending on consumption, Baldacci et al. (2010) applied generational accounting framework analysis to the data from a PRC household survey. The study simulated the income effect of a 1% GDP increase in each of the social areas (pension, health, and education) on consumption. Table 5.5 shows part of their results. An increase in government pension spending equivalent to 1% of GDP would boost consumption by 1.42% of GDP. For health, a 1% GDP increase would raise consumption spending by 0.8% of GDP. In the case of education spending, a 1% GDP increase would raise consumption spending by 0.5%.

While the results seem to show a bigger impact on urban households, when adjusted for the distribution of government spending between urban and rural areas,[4] the impact of a unit of government social spending is actually substantially higher in rural areas. For example, the rural income effect of pension expenditures is 67% higher than that for urban areas; for health and education, rural income effects are 56 and 55% higher, respectively, than the effect in urban areas.[5]

[4] The Baldacci et al. (2010) simulation assumed that 75% of government pension spending was for urban areas and 25% for rural areas; in health: 69% urban, 31% rural; and in education: 58% urban, 42% rural.

[5] Other studies find slightly higher effects of government social spending on consumption. For example, Barnet and Brooks (2010) report a 2% of GDP increase in consumption resulting from 1% government health spending, but little evidence for an effect on education spending. The MGI study, however, is roughly in line with the above projections by Baldacci and others.

In summary, a 3% GDP increase in social sector spending would increase consumption in the PRC by US$ 115 billion,[6] or approximately 1% of the US$ 10 trillion consumption expenditures in the US.[7] Though relatively modest, the additional consumption boost would be a step forward for reasons beyond demand growth. In particular, it would improve living standards and ensure that many more would benefit from the PRC's economic growth. Furthermore, if complemented by other structural reforms that increase the wage share in national income, the total impact on domestic demand would be far greater.

One caveat to the above impact estimates is the assumption that there is an excess surplus (either from government or state-owned enterprise savings) from which to draw funds. Tax-financed social sector spending will likely have a mitigating effect on consumption. Another caveat is the transfer of this policy recommendation to other developing East Asian countries that do not enjoy the same level of public savings and current account surplus as the PRC. While there, too, social protection policies are in need of a boost because the current starting conditions are relatively low as shown by the SPI, a prudent macroeconomic policy remains an important imperative. For countries that enjoy less fiscal space, fiscal policy activism should be approached with caution (Park 2009). Poorly designed social security systems, likewise, can have potentially adverse incentive effects on labor supply, retirement decisions, and economic growth.[8]

A mere increase in government spending, say on health, will not lead to a decrease in precautionary savings for health expenditures if the supply-side constraints—such as the availability of good public health-care facilities, adequate numbers of trained personnel, and stronger public health systems—are not addressed. Unless the quality of the system improves, consumers will continue to spend their own money and continue to save for health expenditures (MGI 2009).

5.4 Policy Responses to the Global Crisis

The global economic and financial crisis has had a major negative impact on Asia and the Pacific, exacerbating already serious social problems. A sharp drop in exports to developed country markets has triggered a surge of plant closures and

[6] Starting with the PRC's 2008 GDP of CNY30 trillion (approximately US$ 4.4 trillion at an exchange rate of CNY6.835 to the US dollar), an increase in consumption equivalent to 1.42% of GDP would result in additional consumption of about CNY426 billion (or US$ 62 billion). Government health spending will generate approximately US$ 31 billion in additional consumption and US$ 22 billion in education spending. Thus, an increase in consumption equivalent to 3% of GDP would yield additional consumption of US$ 115 billion.

[7] Baldacci et al. (2010) discussed the additional effect of the increase in social sector spending via the precautionary savings channel. A rough estimate through this channel is too rudimentary, however, to be compared to the above income effect on consumption.

[8] Pasadilla and Wiradisuria (2009) surveyed a range of literature that shows various relationships of social security with savings, consumption, labor supply, welfare, and growth.

layoffs in industries that manufacture electronics, apparel, and a variety of other goods for foreign markets.

The result, as discussed in Chapter 2, has been a rise in poverty spurred by job losses, fewer working hours, and downward pressure on remuneration, with differential implications for men and women. Many overseas workers have been laid off, but some opted not to go back to their home countries, choosing instead to work for less pay and await economic recovery (see Box 5.2). Within the PRC, rural migrant workers, who have supplied export industries with cheap labor and who have been one of the important drivers of the PRC's economic growth, experienced mass layoffs, along with urban workers, as a result of weak export demand. In contrast to the response of many overseas workers of not returning back to their home countries, in the PRC, many migrant workers returned to their villages following the crisis. But, two years after the crisis, the situation is the opposite: companies are experiencing labor shortages and the rural migrant workers have not returned in droves. Some of the factors that explain the non-returning migrant workers are discussed in Box 5.3

Box 5.2. Philippine Overseas Workers

The Philippine economy has been buoyed, for some years now, by large foreign remittances by Filipinos working abroad. Since 2000, remittances more than tripled to US$ 16.8 billion (in 2008), representing an average annual growth rate of 13.3 %. While the global crisis has set back the scale of foreign remittances in other countries, in the Philippines, it has merely slowed its rapid growth. From July 2008 to July 2009, foreign remittance grew by 2.9 %, even as other countries experienced a decline.

Nevertheless, Filipino workers have not been immune from the unemployment impact of the global economic and financial crisis. The Philippines reports that close to 7,000 workers have been displaced, the majority of whom are in Taipei,China (64 %), followed by the United Arab Emirates (20 %). The displaced workers mostly work in export sectors like electronic, semi-conductors, or in construction and services-related industries. But not all displaced workers returned to the Philippines. Table 5.6 shows that only 65 %, or 4,495, chose to return home, while the rest opted to remain where they were. Many migrant workers usually opt to continue working even with worse working conditions and poorer terms just to maintain their working visa status.

Table 5.6 Displaced Filipino workers. (Source: Philippines Overseas Employment Administration as cited by Songco (2009))

	No. of displaced workers		Industry	Reasons
	Total	Returned to the Philippines		
Total	6,931	4,495		
Taipei,China	4,428	4,251	Electronics, metal works, semi-conductor	Bankruptcy and retrenchment
United Arab Emirates	1,357	No returnee	Service, construction, advertising, architecture, engineering	Operation slowdown, redundancy
Brunei Darussalam	245	No returnee	Garments	Restructuring
Rep. of Korea	227	6	Electronics	Laid-off, decided to go home
Canada	180	No returnee	Oil and gas	Retrenchment
Macau, China	169	126	Construction, hotel	Suspension of construction projects, cost cutting in operational cost
Australia	81	50	Shipping, construction	Redundancy
Saudi Arabia	74	2	Construction	Workforce reduction
Greece	47	No returnee	Service, cruise vessel	Retrenchment
Malaysia	32	25	Garments	Retrenchment
United Kingdom	20	16	Electrical/telecom	Reduction in workloads
Russian Federation	19	No returnee	Building construction	Suspension of construction projects
Singapore	19	19	Metal works	Retrenchment
Japan	14	No returnee	Information technology	Retrenchment
Poland	11	No returnee	Metal works	Retrenchment
Qatar	8	No returnee	Various (e.g. construction, engineering, etc.)	Retrenchment

Box 5.3. Fiscal Stimulus and the People's Republic of China's Migrant Workers

While developed countries are struggling to eke out modest growth two years after the financial crisis, the PRC's factories are humming again. But unlike in the past when rural migrants workers were ready with rolled sleeves, now the labor pool is considerably drier. The dearth of returning migrants is caus-

ing labor shortages in coastal provinces like Guangdong Province where many export enterprises are located. A clear indicator of the labor shortage is the rise in wages. For example, in Guangzhou, temp agencies raised their hourly rate by US$ 0.22 cents, from 95 cents before the new year holiday to US$ 1.17. Workers over 40 years old who, before the labor shortage, were no longer considered employable by personnel managers, are back again in the factory floor.

What happened to the much touted labor surplus of the PRC? Several powerful trends are contributing to the decline in the PRC's migrant labor and to snatch young workers away from factories. First, the government's expansion of postsecondary education has led to an increase in enrollment of close to 1 million students from 2007 to 2009. This is a government social policy that is drawing young workers away from the labor pool. Second, government infrastructure projects in the interior parts of the PRC as well as in cities like Beijing have also absorbed millions of workers. Third, government consumption subsidies, e.g. for electronic purchases, particularly in the interior areas, spurred consumption spending, creating many jobs in retail businesses, restaurants, hotels, and other inland businesses. Hence, the stimulus fiscal packages have the unintended consequence of crowding out the private sector in competing for labor. Fourth, the PRC's one-child policy has brought about a slide in the PRC's birth rate.

Source: "China's Industrial Heart Facing Acute Shortage of Factory Workers," *New York Times,* February 27, 2010.

The increase in joblessness stimulated adoption of substantial fiscal stimulus packages all over the world. These stimulus packages included social protection components. Zhang et al. (2009)[9] calculated the overall social protection component of the fiscal stimulus packages across the globe to be on average 23.5% of the fiscal stimulus expenditures, or 1.44% of GDP (Table 5.7). The definition of social protection employed in the analysis was broad, including "all public interventions that assist individuals, households, and communities to better manage risk and to provide for the critically poor" (Holzmann and Jorgensen 2000).[10] From among the Asian and Pacific economies, the PRC, Singapore, and Thailand recorded the highest social protection spending as a percentage of GDP. In terms of percentage of fiscal stimulus measures, Malaysia, Singapore, and Taipei,China dedicated the largest share to social protection.

Table 5.8 shows the wide array of social protection programs planned as a response to the global economic and financial crisis. Many economies increased their

[9] The study was based on announced fiscal stimulus measures, without further verification of actual legislative passage of the measure.

[10] The definition of social protection employed in the study includes infrastructure spending like social housing (in the case of Australia) or public housing (in the case of the PRC), as well as spending on health and education. Tax cuts were also included.

Table 5.7 Summary of stimulus plans and social protection components. (Source: Zhang et al. (2009) based on official government documents and IMF 2009)

	Stimulus package announced		Converted US$ (billion)	Calculated % of 2008 GDP (%)	Social protection components			
	Currency	Total size (billion, LCU)			LCU, billions	US$, billions	Calculated % of stimulus package (%)	Calculated % of GDP (%)
Australia	A$	67.90	47.04	5.75	15.10	10.46	22.24	1.28
Bangladesh	Tk	79.24	1.15	1.38	3.74	0.05	12.81	0.18
Canada	Can$	51.61	42.15	3.22	13.50	11.02	26.16	0.84
Chile	CLP	2,516.44	4.00	2.84	68.00	0.11	2.70	0.08
PRC	CNY	4,000.00	585.26	13.30	920.00	134.61	23.00	3.06
Honduras	HNL	19.40	1.03	7.24	7.24	0.38	37.30	2.70
Indonesia	Rp	69,300.00	6.33	1.40	6,077.00	0.55	8.77	0.12
Japan	¥	27,000.00	297.52	5.32	7,500.00	82.64	27.78	1.48
Rep. of Korea	W	67,200.00	53.35	6.56	7,700.00	6.11	11.46	0.75
Malaysia	RM	42.00	12.12	5.67	14.40	4.16	34.29	1.94
Mexico	MXN	180.30	13.32	1.49	10.00	0.74	5.55	0.08
Peru	PEN	10.03	3.20	2.69	0.75	0.24	7.48	0.20
Philippines	P	330.00	6.95	4.40	50.00	1.05	15.15	0.67
Russian Federation	RUR	1,576.00	53.64	3.78	525.13	17.87	33.32	1.26
Singapore	S$	14.70	10.21	5.71	7.70	5.35	52.38	2.99
Taipei,China	NT$	500.00	15.26	4.04	234.00	7.15	46.82	1.89
Thailand	B	1,567.60	44.92	17.22	367.57	10.53	23.45	4.04
United States	US$	787.00	787.00	5.52	310.44	310.44	39.45	2.18
Viet Nam	D	143,000.00	8.42	9.68	24,009.80	1.41	16.79	1.63

GDP gross domestic product, *LCU* local currency unit, *PRC* People's Republic of China

Table 5.8 Nature of policy responses (selected economies). (Source: Author's own based on Annex 4 of Zhang et al. (2009))

	Infrastructure	Income support	Micro-credit	Direct subsidy	Social security	Skills Training	Employment insurance	Health/ education spending	Employment support	Tax reduction	Freezing of social security contribution
Australia	√	√			√						
Bangladesh					√						
Canada							√			√	√
PRC	√							√			
Indonesia				√							
Japan					√			√	√		
Rep. of Korea		√							√		
Malaysia	√		√			√		√	√		
Philippines					√					√	
Singapore		√							√		
Taipei,China	√							√			
Thailand		√		√	√	√		√			
Viet Nam	√				√						

PRC People's Republic of China

spending for social security because of the higher number of unemployed or early retirees who had been laid off due to the crisis and who came to claim their benefits. Some have planned for more spending on health and education, as well as for income support and employment maintenance. Other economies have frozen or temporarily suspended the contribution of either individuals or enterprises to social security, while others have provided wage subsidies to encourage partial employment (reduced work hours) and prevent unemployment. Box 5.4 presents a few of the social assistance programs that have recently been adopted in Asian countries, providing income support through cash or in-kind transfers to targeted beneficiaries.

Many social protection responses have been one-off spending increases or temporary new programs. A few countries, however, are using the current downturn to undertake major social policy reforms to, for example, expand the breadth of social protection, embrace vulnerable groups not already covered, improve targeting, and introduce innovations. Others are still considering changes or the introduction of new social protection programs like unemployment insurance. One example is Mongolia, where ADB is helping the government to reduce out-of-pocket expenditures of poor households for health care and increase micronutrient consumption to combat malnutrition. Mongolia will also implement a medicard program that will enable poor people to obtain free health services. In addition, policy measures adopted with the program's support will improve the sustainability of social expenditures through better targeting and rationalization of social transfers in the education and health sectors (see Box 5.5).

The PRC, too, is embarking on a major expansion of social programs. It had already made significant changes both in its contributory social security programs and non-contributory programs. Though the changes had taken place because of other pressures arising before the recent global financial crisis, like rapid aging of the population and rural-to-urban migration, the economic slowdown has provided a further stimulus for reform. Box 5.6 discusses some of the progress made in the PRC. Malaysia and the Philippines are exploring the introduction of unemployment insurance schemes.

Box 5.4. Response to the Crisis: Social Assistance Programs

Pakistan: Benazir Income Support Program me

Among the major social programs launched during the global financial crisis is Pakistan's Benazir Income Support Program me (BISP). Initially funded with PRs34 billion, (US$ 418 million) for the period 2008–2009, the BISP represents the third largest allocation in the central government budget (0.3 % of GDP). The program was initiated in part to offset the impact of inflation on the purchasing power of the poorer sections of society. BISP aims to cover almost 15 % of the country's population (40 % of the population live below the poverty line). A cash assistance of PRs1,000 (US$ 12) per family is paid to beneficiaries monthly. The BISP is expanding its current coverage of 3.5 million families to 5 million families in 2010, with the aim of reaching 7 million families by 2011.

Philippines: Pantawid Pamilyang Pilipino Program and others
The Philippines has expanded key social protection programs such as the Pantawid Pamilyang Pilipino Program, which provides conditional cash grants to poor households while at the same time encouraging them to increase their investment in the education and health of their children. It consists of a monthly grant per child, provided that the child attends school at least 85 % of the time. Some 700,000 households have been targeted in 2009. However, the program has had little impact on school attendance because of the limited number of target beneficiaries (Manasan 2009). Another recent project is the Pantawid Kuryente Project, initiated in 2008 to soften the impact of the rising cost of electricity on poor households. It consists of a one-time cash grant equal to P500 to lifeline electricity consumers. Some 6.8 million households are targeted as beneficiaries, who are not necessarily the chronic poor.

Viet Nam: Poverty Reduction Scheme
In Viet Nam, the government has increased its budgetary allocation for existing social assistance programs, such as Program 135, a poverty reduction scheme targeting ethnic minorities and people living in mountainous areas, as well as for the health insurance program for those in poverty or just above the poverty line.

Source: Édes (2009), Manasan (2009).

Box 5.5. Mongolia—Using the Crisis as Opportunity

The steep rise in mineral prices in the mid-2000s helped Mongolia fund 40 % of its budgets from mineral exports. Between 2003 and 2007, the country's current account balance turned from a deficit of US$ 102 million to a surplus of US$ 265 million. The government used this to fund generous social programs. For example, the Child Money Program, about 5.6 % of total fiscal expenditure, was sourced from a special fund generated from mining revenue. The budget for the Ministry of Social Welfare and Labor and its agencies increased by 7.6 times from 2004 to 2007 due to the introduction and expansion of benefits that fulfilled electoral promises. The benefits were aimed at achieving pro-natal objectives, and benefited large numbers without means-testing requirements. Despite the substantial increase in spending, the proportion of poor households remained stubbornly high at 35 %.

The collapse of the commodity prices—especially copper—in 2008–2009, aggravated by reduced remittances and tourism incomes, plunged the country into a serious economic and social crisis. The government, as part of its across-the-board budget cuts, reduced spending by the social welfare ministry by 33 %.

The government, with the help of multilateral and bilateral institutions, used the opportunity of the crisis to implement major reforms in the social protection system. It rationalized social expenditures, improved targeting,

and made administration of the various programs leaner. Through ADB's Social Sectors Support Program (US$ 60 million), the government initiated longer-term reforms to improve the targeting of social assistance and the living conditions of the poor, especially around Ulaanbaatar. Future education and health projects will include a new medicard program for the poor and the expansion of a household micronutrients scheme, among others. Another initiative, the Education for the Poor—Financial Crisis Response Project (US$ 17 million), assures that about 100,000 children from poor families receive free textbooks to reduce high dropout rates, and 150,000 poor preschool children are provided with school meals.

Mongolia has shown how the fiscal crisis can be used as an opportunity to introduce much-needed reforms to a social welfare system, when there is strong commitment and consensus among politicians and the public[11].

Box 5.6. People's Republic of China—Social Protection Programs

In the PRC, social protection programs include pension, health care, and unemployment benefits funded through employer and employee contributions. Initially limited to a minority in formal employment, options are being created for self-employed and migrant workers to pay into such schemes. Basic social insurance and government-funded schemes, particularly for health care, are being expanded: the urban basic medical scheme now covers all workers and dependents. Table 5.9 shows the dramatic expansion of social security coverage in the PRC since 2003.

After the number of workers laid off from bankrupt state-owned enterprises soared into the millions, the PRC established the Minimum Living Standard Guarantee (*dibao*) program. Rolled out nationally in 1999, the scheme provides a basic cash transfer to households whose per capita income falls below a locally-determined minimum level. Funded through central and local government revenues, this has since been expanded to cover those living in rural areas. As of 2008, about 23 million urban residents and 39 million people living in rural areas had received support from the program.

More recently, the PRC has expanded its basic medical coverage scheme in rural areas (the New Cooperative Medical Scheme), funded through a mixture of individual, local, and central government funding. For the poorest, though, this does not provide sufficient support in the event of catastrophic

[11] Reforming Social Protection Systems When Commodity Prices Collapse: The Experience of Mongolia. http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/WG1D-commodity-exports-Mon-Hall-Walker-paper.pdf.

Table 5.9 Social security coverage in the People's Republic of China. (Source: International Social Security Association (2009))

Social security branch	Coverage in 2003 (million people)	Coverage in 2008 (million people)	Increase in coverage from 2003–2008 (%)
Pensions	155	165	41
Health care	189	1123	494
Unemployment	103	124	20
Work injury	46	138	200
Maternity	37	93	151

health events. It is supplemented by a newly introduced medical assistance program to support the poorest with the high costs of care, while the PRC has now set itself the goal of providing universal basic health coverage to all by 2020.

Source: Édes (2010), Yan (2010)

5.5 Social Protection after the Crisis

The global economic and financial crisis has generated political momentum for changes to social protection programs. It also stimulated further thinking about what kind of system improvements need to be made to make social protection more effective and efficient in addressing the needs of targeted beneficiaries and at the same time be financially sustainable. The slowdown has highlighted the fact that certain social protection measures can quickly help those most affected by economic crisis, for example workfare programs, while others require stronger institutional support and administrative infrastructure to adequately achieve the target outcomes.

It is worth reiterating some commonly accepted criteria in terms of policy objectives of a country's social protection system (O'Keefe 2009). First, it must protect the vulnerable, for example, not only the chronically poor but also the near poor who can slide down the poverty scale in a crisis. Second, it should seek to prevent irreversible effects. For example, childhood malnutrition has an irreversible impact on human capital, and laid-off workers would find reemployment difficult without retraining even after the economy had improved. Third, programs should respond to the type of shock. If the shock is deemed temporary, then the social protection response should correspondingly be for a short crisis scenario (Inter-American Development Bank [IADB] 2009). For example, wage subsidies or shortened work hours with government support may be appropriate in a short crisis, but may not be best for a long crisis scenario. In the latter case, enterprise restructuring may be required, which can include significant downsizing to improve competitiveness. Other types

of social protection programs may not necessarily be a response to any shock but are meant to provide support in "normal times" such as to support structural shifts or demographic transitions.

What follows are some of the challenges for different categories of social protection and social sectors.

5.5.1 Social Assistance

A major challenge for social assistance programs is the proper targeting of beneficiaries and the avoidance of significant leakages in benefits. For example, on average, only 23 % of social protection expenditures in Asia reach their target beneficiaries (ADB 2008), which means that a significant portion of public resources goes instead to those not targeted by the program.

Another challenge is improving the delivery system of public services. This implies that in choosing new programs or extending existing programs, institutional and administrative capacity, as well as the country's fiscal capacity, has to be taken into consideration. It is usually best to keep programs simple and suited to capacity (O'Keefe 2009). For example, conditional cash transfers require a certain degree of administrative sophistication that not all countries can manage well. Likewise, while cash transfers may be appropriate for some types of shock, such as sudden loss of income and sharp price increases, it is not the best response for others, like employment shock.

Finally, providing effective and timely social protection during crises requires preparation, such as having in place programs that can be adapted to different types of shock. One of the greatest difficulties in responding to a crisis is the time it takes to implement reforms and the difficulty of creating interim strategies to address the impact of crises as they evolve. Another difficulty is the conceptualization of appropriate social welfare for normal and emergency times. Although crisis response may be imperfect at times, depending on the target beneficiaries and the type of shock, it is usually better than having to start programs from scratch—international experience suggests that it takes at least 6 months to start a social assistance program from scratch. The capacity to introduce new programs is also enhanced by prior program experience (O'Keefe 2009).

In the PRC, while the low labor cost fueled by rural-to-urban migration helped the country vault to middle-income status, the scale of urban migration also highlighted the structural bottleneck in its labor structure. Migrant workers do not enjoy the same social protection as urban dwellers because of a complicated *hukou* system in the PRC[12] which, essentially, excludes them from many social protection benefits that the local government provides its registered urban residents. Thus, many education and health expenditures of migrant workers are, often, out-of-pocket; or else, they refrain from obtaining the necessary medical services or rely instead on

[12] *Hukou* is a system of strict household registration that restrict mass mobility of workers from the land (agriculture) to the cities.

informal medical treatment. Once the migrants return to their own village, the social protection for which they contributed part of their wages is not portable. The social security system is essentially comprised of local pools with no mechanisms for inter-regional transfers (Watson 2009). While gradual reforms are being introduced, such as portability of social security, the PRC still faces the daunting challenge of having a universal, integrated, social security system because of the complicated fiscal relationships between national, subregional, and local governments.

5.5.2 Social Insurance

In social insurance systems, shaping an effective policy design is a challenge for developing countries in the region. Clearly, there is a need to broaden the source of income support during emergencies and after retirement, thus the need for a multi-pillar social security system, consisting of mandatory contributions to a pooled fund where risks can be efficiently shared, and contributions, both mandatory and voluntary, can be made to individual savings accounts (World Bank 2009).

Another important design issue is how to adjust social security to accommodate the mobility of the labor force. In some countries where the pension system of government employees is distinct from those in the private sector, moving from government to private or vice versa can create undue complications in terms of pension benefits. In countries that do not have an integrated national security system, moving from one state or province to another can entail the loss of a significant amount of social security benefits. In the PRC, for example, rural migrant workers do not enjoy full social security cover in the city where they work.

The low level of social security coverage in most countries in Asia and the Pacific is a problem that needs to be addressed. Particularly in a rapidly aging society, lack of coverage would imply widespread poverty among the elderly. In developing countries with a large informal sector, extending coverage of social security to informal sector workers is a tricky proposition. The experience of countries like Bangladesh, where social security coverage is being extended through linkage with microfinance, provides an example of an innovative solution to the lack of social protection (Box 5.7).

Box 5.7. Approaches to Pension Reform

Several countries have adopted various parametric and systemic reforms to their social security system. Below are examples:

- Singapore introduced a deferred annuity scheme, called CPF Life, to help address longevity risk. The scheme changes the timing of withdrawals.
- New Zealand introduced a portable, defined contribution scheme, called KiwiSaver, to help manage additional resources needed to address longevity risks.

- India shifted its civil service pension scheme from defined benefit to defined contribution, which applies to new government hires.
- Bangladesh, India, and Indonesia are encouraging links between pensions and microfinance to enhance financial inclusion and strengthen social cohesion.
- The Republic of Korea and Singapore are experimenting with reverse-mortgage schemes to use housing equity for financing retirement.

Source: Asher (2009).

In countries with defined benefit schemes, the long-term challenge is ensuring fiscal sustainability. There are various options that policymakers can consider. One option is to improve financial risk management to protect the members' contribution. Another option is to strengthen the benefits-contribution link which, in turn, can mean implementing various modifications, like increasing the contribution rate, raising the existing retirement age, or introducing various parametric changes in the level of benefits (e.g., choosing the salary to use as a basis for pension benefits, the required minimum number of years of contribution, the level of salary caps, etc.). A third option is to improve compliance by business enterprises and increase collection of contributions.

For defined contribution or funded systems, a careful investment policy is crucial to ensure a high rate of returns while minimizing the risks to the fund. Depending on investments, the retiree may be highly vulnerable to the performance of capital markets. One approach is to provide a minimum pension based on an assumed minimum rate of return, with the minimum guaranteed by the State (Diop 2009). The economic and financial crisis also highlighted the risks of over-reliance on the capital market for social security, particularly for defined contribution systems, and the need to improve the management of financial risk. It is important to rethink the system to shield retirees from the impact of account fluctuations immediately before retirement. But policymakers are also cautioned against sudden changes in social security design, such as massively shifting from a defined contribution scheme to a defined benefit scheme, when targeted changes may be done to protect only a small proportion of retirees (World Bank 2009).

A key task for many pension systems is improving governance and improving management. Government behests can lead social security administrations to put funds into low-yield investments, or into politically motivated government programs. Greater efficiency in delivering services is also important, as the administrative costs of some social security institutions remain relatively high.

5.5.3 Labor Market Policies

As discussed in Chapter 2, plant closings and layoffs in manufacturing export sectors like electronics, apparel, and others, resulted in job losses and shortened work-

hours, though less in scale compared to the unemployment effect from the Asian crisis of 1997–1998. Presumably, some of those who would have been in the ranks of the unemployed joined the informal sector or took on vulnerable employment. ILO (2010), for example, reports that, in Southeast Asia and the Pacific, vulnerable employment share in total employment could rise to 64%, while in East Asia to 57%. In response to surge in unemployment, several countries all over the world have introduced or expanded active labor market programs to address the impact of the economic and financial crisis. These include comprehensive youth programs; integrated training to improve human capital formation, particularly technical education; capacity building of training providers; and improvements to labor market information systems (IADB 2009).

Labor market programs should be designed with a timeframe in mind[13]. Measures that are for a short crisis scenario should include time limits or triggers for expiration. Some measures are not ideally suited to a short-term response, such as increasing public sector employment and wages, boosting the minimum wage, or allowing early retirement. Increasing the size of the public sector has little pro-poor impact, and is hard to reverse. Increasing minimum wages may discourage employment of youth and low-skill workers, thereby promoting slow economic recovery[14]. Early retirement, on the other hand, can be fiscally expensive and runs counter to demographic trends. Like other social protection measures such as transfers and social assistance, some labor market programs can be good countercyclical measures and automatic stabilizer, increasing during a downcycle and decreasing during an upcycle (ADB 2010). For example, temporary wage subsidies to preclude layoffs, or increased retraining and human capital development programs offer advantages because of their clearly temporary nature and do not threaten fiscal resources over the long term.

Some countries may wish to give special attention to unemployment insurance. The experience of the Republic of Korea shows that its existing unemployment insurance scheme, improved by the experience of the Asian crisis, helped to cushion the impact of the recent global financial crisis on the unemployed. For other countries, however, unemployment insurance may not be a priority. One reason is the lack of administrative capacity to monitor the employment status and job search behavior that can help prevent inefficiencies in providing jobless benefits and encourage dependency. The immediate fiscal costs of addressing high rates of vulnerable unemployment and under-employment have to be considered in weighing the adoption of unemployment insurance schemes. In the context of alleviating poverty, unemployment insurance may not be the best instrument because the scheme targets formal sector workers who are often not among the poorest.

[13] See Inter-American Development Bank (2009) for labor market programs for short and long crisis scenarios.

[14] However, it should be noted that, particularly in countries where wages have not kept pace with the rise in productivity, increasing minimum wages may actually help domestic consumption and assist in recovery and rebalancing. In the PRC's Jiangsu Province, minimum wages have been raised by 13%.

5.5.4 Sustainability Issues

The key question for all of the above social protection challenges is whether Asian governments can afford the cost. After all, even as social policy takes on greater importance in the eyes of policymakers, macroeconomic prudence remains an important consideration for the sustainability of the social policies themselves.

Developed economies have reached the level of social protection they have now over many years, starting with basic social protection that has gradually expanded over time. Developing Asian and Pacific countries may follow a similar trajectory. Prioritization of the social reform challenges needs to be undertaken, taking into account the fiscal and institutional capacity of each country[15].

At the same time, even as social policies contribute to growth, growth is important for social policy because it generates the resources to afford social programs. Without it, no generous social policy can be sustained. Governments must time the introduction and expansion of social protection so as not to overburden the public sector budget or raise taxes so much that they hinder business activity.

For basic social protection, the ILO calculates the cost to be about 5 % of GDP (ILO 2008). Bauer et al. (2009) suggest that there is scope for countries that maintain a fiscal deficit of less than 3 % of their GDP and tax revenue bases below 20 %, to afford a basic social protection package. An improved effort at revenue collection can help generate extra resources to fund social protection. In addition, rationalization and improved targeting and delivery of existing programs can also increase coverage and impact[16].

5.6 Conclusions and Recommendations

While all the countries of the Asia and Pacific region maintain formal social protection systems, these vary substantially from country to country in terms of benefits, coverage, and efficacy. The systems in place in the region's low-to-middle income countries are, in general, substantially less extensive than in the wealthier states.

[15] While it is outside the scope of the chapter to suggest in detail the ways to prioritize social reforms, a good start would be to assess the cost efficiency of the different social programs vis-à-vis their target outcomes. Programs that are too costly and ineffective can be terminated or combined with others to free up more funds for the more necessary and effective ones.

[16] The issue of targeting is a big challenge by itself. Ideally, if countries have detailed data on family incomes and expenditures, then we can assess the poverty situation by comparing their income or expenditure against a predetermined poverty line. However, such detailed data and administrative ability to use them are not present in many developing countries. In the absence of such capacity, the targeting issue rests on how programs should be designed so that the poorest and the most vulnerable members of society receive the maximum benefits.

Wide swathes of the population, such as migrant workers, itinerant farmers, and those working in the informal sector, benefit from little to no social protection in many developing countries.

Yet major changes are afoot, particularly in countries that have moved further up the economic ladder. The recent economic and financial crisis has led to large increases in public social spending to address the most immediate effects of the economic downturn. At the same time, the crisis also provided greater momentum to ongoing actions and emerging plans to reform and expand social insurance schemes and social assistance programs in the medium-to-long term.

There is growing awareness among policymakers that increased spending on education, health, and job creation will contribute to a post-crisis rebalancing of economies. Directing more of the state budget to these areas can help to reduce sharp inequalities that can weaken social cohesion and cause civil unrest. Meanwhile, falling birth rates, urbanization, and changing cultural traditions are slowly shifting greater social protection responsibilities to the state.

In this context, several recommendations emerge for the Asian and Pacific governments now taking a closer look at social protection in their countries. These recommendations include the following:

- To expand coverage and benefits, improve coordination and complementarity among existing programs, and strengthen program administration, governance, and targeting to boost performance and impact.
- In the case of pensions, take actions to ensure the sustainability and adequacy of benefits for the elderly. Depending on the country, this may mean increasing the retirement age, providing pension entitlements on the basis of lifetime average earnings, and curtailing early withdrawal from pension accounts prior to retirement.
- Undertake reforms of public sector programs while taking into account the important role and contributions that can be made by actions in the private and nonprofit sectors (e.g., provision of micro-insurance and the serving of remote and marginalized communities).
- In low-income countries, concentrate limited resources on social assistance programs that address extreme poverty and basic health and nutrition needs, giving special attention to pregnant women, new mothers, and young children.

Once viewed either as a luxury or a burden on the public purse, social protection is now increasingly considered as something that countries cannot live without—a basic social protection system is now an integral part of a modern economy in a globalized world. By limiting social risks and vulnerabilities and addressing chronic poverty, social protection helps to guard individual dignity through difficult times, prevents squandering of human capital, and ultimately makes a direct contribution to inclusive growth. As such, one can expect that, in this new decade, the region will witness a gradual expansion of government measures to protect people from crisis.

References*

ADB (Asian Development Bank). 2008. *Social protection index for committed poverty reduction—Volume 2: Asia*. Manila: ADB.

ADB (Asian Development Bank). 2010. *Asian Development Outlook: Macroeconomic management beyond the crisis*. Manila: ADB.

Asher, M. 2009. The global economic crisis: An opportunity for strengthening Asia's social protection systems? Paper prepared for the Asia-wide regional high-level meeting on the impact of the global economic slowdown on poverty and sustainable development in Asia and the Pacific, Ha Noi, Viet Nam, 28–30 September.

Baldacci, E., G. Callegari, D. Coady, D. Ding, M. Kumar, P. Tommasino, and J. Woo. 2010. Public expenditures on social programs and household consumption in China. In *Effects of social policy on domestic demand,* eds. M. Kawai and G. O. Pasadilla. Tokyo: Asian Development Bank Institute.

Barnett, S., and R. Brooks. 2010. China: Does government health and education spending boost consumption. Working Paper WP/10/16. Washington, DC: International Monetary Fund.

Bauer, A., D. Bloom, J. Finlay, and J. Sevilla. 2009. Global crisis and fiscal space for social protection. Paper prepared for the Asia-wide regional high-level meeting on the impact of the global economic slowdown on poverty and sustainable development in Asia and the Pacific, Ha Noi, Viet Nam, 28–30 September.

Chamon, M., and E. Prasad. 2008. Why are saving rates of urban households in China rising? NBER Working Paper 14546. Cambridge, Massachusetts: National Bureau of Economic Research.

Diop, A. 2009. The need for solidarity: Social security systems in times of crisis. Keynote speech at the International Social Security Association seminar on social security in times of crisis: impact, challenges and responses, Geneva, Switzerland, 24–25 April.

Édes, B. 2010. The state of social protection in developing Asia and the Pacific. In *Effects of social policy on domestic demand,* eds. M. Kawai and G. O. Pasadilla. Tokyo: Asian Development Bank Institute.

HelpAge International. 2006. Why social pensions are needed now. www.helpage.org/Researchandpolicy/Socialprotection/PensionWatch/Feasibility. Accessed 10 Nov 2010.

Holzmann, R. and S. Jorgensen. 2000. Social risk management: A new conceptual framework for social protection and beyond. Social Protection Discussion Paper Series 0006. Washington, DC: World Bank.

Inter-American Development Bank (IADB). 2009. Social and labor market policies for tumultuous times: Confronting the global crisis in Latin America and the Caribbean. Washington, DC: Inter-American Development Bank.

International Labour Organization (ILO). 2008. Can low-income countries afford basic social security? Geneva: International Labour Organization. http://www.ilo.org/public/english/protection/secsoc/downloads/policy/policy3e.pdf. Accessed 1 Dec 2010.

International Labour Organization (ILO). 2010. *Global employment trends*. Geneva: International Labour Organization.

International Monetary Fund (IMF). 2009. Update on fiscal stimulus and financial sector measures. Washington, DC: International Monetary Fund. http://imf.org/external/np/fad/2009/042609.pdf. Accessed 17 Nov 2010.

International Social Security Association. 2009. *Dynamic social security for Asia and the Pacific*. Geneva: International Social Security Association.

Manasan, R. 2009. Reforming social protection policy: Responding to the global financial crisis and beyond. Discussion Paper No. 2009-22. Manila: Philippine Institute for Development Studies.

* The Asian Development Bank refers to China by the name People's Republic of China.

McKinsey Global Institute (MGI). 2009. If you've got it, spend it: Unleashing the Chinese consumer. McKinsey Global Institute. http://www.mckinsey.com/mgi/reports/pdfs/unleashing_chinese_consumer/MGI_Unleashing_Chinese_Consumer_full_report.pdf. Accessed 5 Oct 2010.

O'Keefe, P. 2009. Social protection and crisis response: Some lessons from international experience. Presentation at the Asia-wide regional high-level meeting on the impact of the global economic slowdown on poverty and sustainable development in Asia and the Pacific, Ha Noi, Viet Nam, 28–30 September.

Ortiz, I., ed. 2001. *Social protection in Asia and the Pacific*. Manila: ADB.

Park, D. 2009. Ageing Asia's looming pension crisis. ADB Economics Working Paper Series No. 165. Manila: ADB.

Pasadilla, G., and P. Wiradisuria. 2010. Social policy reforms in ASEAN: Some considerations. In *Effects of social policy on domestic demand,* eds. M. Kawai and G. O. Pasadilla. Tokyo: Asian Development Bank Institute.

Songco, M. 2009. International labor migration and remittances in the Philippines. Paper prepared for the Asia-wide regional high-level meeting on the impact of the global economic slowdown on poverty and sustainable development in Asia and the Pacific, Ha Noi, Viet Nam, 28–30 September.

Van der Auwera, M. 2007. Pension systems in Asia-Pacific. Main issues and diagnosis. Presentation at the conference on constructing old-age security system in Asia-Pacific region, Shanghai, People's Republic of China, 16–17 October.

Wang, D. 2009. Can social security boost China's domestic consumption. Paper prepared for the ADBI conference on labor market in the PRC and its adjustment to global financial crisis, Tokyo, 18–19 June.

Watson, A. 2009. Social security for China's migrant workers—Providing for old age. *Journal of Current Chinese Affairs* 38 (4): 85–118.

Wood, J., R. Baulch, and A. Weber. 2009. A social protection index for Asia. Paper prepared for the conference on Asian social protection in comparative perspective, National University of Singapore, 7–9 January.

World Bank. 2009. *World development report 2010: Development and climate change*. Washington, DC: World Bank.

Yan, Ming. 2010. Impact of social policies on household income and savings: China case. In *Effects of social policy on domestic demand,* eds. M. Kawai and G. O. Pasadilla. Tokyo: Asian Development Bank Institute.

Zhang, Y., N. Thelen, and A. Rao. 2009. Social protection in fiscal stimulus packages: Some evidence. UNDP/ODS Working Paper. New York: United Nations Development Programme.

Chapter 6
Deepening the Financial System

David G. Mayes, Peter J. Morgan, and Hank Lim

Abstract Asian countries have done a great deal to improve their resilience to financial shocks and have come through the global financial crisis relatively unscathed, following the lessons of the 1997–1998 Asian financial crisis. However, Asian economies need to study carefully the lessons of the global financial crisis to identify what financial reforms can significantly help to reduce the likelihood and impact of future financial shocks (both external and internal) and enhance the ability of Asian economies to develop sources of domestic demand. This chapter reviews the lessons of the crisis, and how these might best be applied in Asia. It examines measures to improve Asian economies' ability to prevent shocks from turning into crises and explores strategies to improve crisis management. Crisis prevention requires strengthening of both microprudential and macroprudential supervision, while crisis management requires effective preplanning of coordination and authorities. The chapter also examines ways to deepen regional financial integration, and considers issues related to financing SMEs which are critical to financially vulnerable sectors in most Asian economies.

Keywords Financial deepening and integration · Financial soundness · Financial regulatory structure and governance · Small and medium enterprises

JEL Codes G18 · G28 · G38 · F36

D. G. Mayes (✉)
University of Auckland, Auckland, New Zealand
e-mail: d.mayes@auckland.nz.ac

P. J. Morgan
Asian Development Bank Institute, Tokyo, Japan
e-mail: pmorgan@adbi.org

H. Lim
Singapore Institute of International Affairs, Singapore, Singapore
e-mail: hank.lim@siiaonline.org

M. Kawai and J.-W. Lee (eds), *Rebalancing for Sustainable Growth,* Economics, Law, and Institutions in Asia Pacific, DOI 10.1007/978-4-431-55321-2_6

6.1 Introduction

Asian countries have done a great deal to improve their resilience to financial shocks and have come through the global financial crisis relatively unscathed, following the lessons of the 1997–1998 Asian financial crisis. During the 1997–1998 crisis, many countries experienced foreign exchange losses as well as financial sector meltdowns. This time around, Asian economies in general, have larger reserves, sounder balance sheets, better regulatory and monetary policy frameworks, as well as more flexible exchange rate regimes, allowing them to absorb shocks more readily. Financial authorities also had an activist approach to managing lending activity, i.e., they were practicing macroprudential regulation before the word was coined. Nevertheless, the economic consequences of the global financial crisis have been severe, especially in countries such as the Republic of Korea and Japan that are significant exporters of capital and durable consumer goods. In general, however, Asian countries have been fortunate compared to other, more developed countries, which thought they had excellent crisis management systems but found themselves in severe difficulty once the crisis hit.

The global financial crisis has created new challenges and consequently raised the benchmark for international best practice. This chapter reflects on the lessons of the crisis, and how these might best be applied in Asia.

The crisis had its immediate origin in the US market for high risk borrowers (mainly subprime mortgages). However, this does not explain why a global crisis has emerged. While losses in that sector have been large, these would have been manageable on their own, and the resulting problems could have been largely confined to the US. The losses would have probably slowed the growth of world trade and global GDP, but they would not necessarily have led to disaster.

The crisis has revealed a comprehensive set of failures in the financial system and its regulation and supervision: insufficient capital, poor risk management, inadequate liquidity, excessive leverage, and an inability to recognize and promptly address system-wide problems, such as asset price bubbles. New products were inadequately understood by regulators and financial firms alike, and were hence poorly priced; incentive structures for monitoring were not merely weak, but in some cases, perverse. Worse still, capital regulations—with their strong emphasis on ratings—turned out to be more procyclical than expected. As a result, the financial system magnified the shock rather than absorbing it.

Sustained growth coupled with the absence of recent financial failures led to hubris: overconfidence among both market participants and supervisory authorities. In many respects, these problems were not new; they were simply manifested in a different manner. Material Loss Reviews in the US have revealed that, in cases where the deposit insurance system has been exposed to significant losses, insurers and management alike did not act on well-known signals: weak management, excessive risk-taking, overconcentration in real estate assets, deceptive accounting and reporting, and volatile sources of short-term financing for long-term assets (Garcia 2010). Indeed, a defining feature of the crisis is that individual and system-wide danger signals were ignored, and the incipient problems were allowed to develop rapidly.

While Asia may have largely escaped these problems thus far, the lesson of the global financial crisis is that financial risks can increase as markets and products in the region become more sophisticated. Despite the positive factors mentioned above, Asian economies managed to avoid the worst of the crisis to some extent because their financial systems were relatively less developed, and the experience of the 1997–1998 crisis made the real and financial sectors and regulators more cautious. For various reasons, Asian investors were less attracted to sophisticated structured financial products. Therefore, as they continue to develop, Asian economies need to study carefully the lessons of the global financial crisis to identify what financial reforms can significantly help to reduce the likelihood and impact of future financial shocks (both external and internal) and enhance the ability of Asian economies to develop sources of domestic demand.

Section 6.2 reviews how much progress in financial development has been made since the 1997–1998 Asian crisis, to determine which areas are lagging. Section 6.3 reviews measures to improve Asian countries' ability to prevent shocks from turning into crises. Section 6.4 considers measures to improve crisis management, so that losses can be minimized and countries swiftly returned to healthy economic growth. Section 6.5 examines ways to deepen regional bond markets, which can help increase both the ability to absorb shocks and the capacity to finance regional investment and consumption. Section 6.6 considers issues related to financing small and medium-sized enterprises, which are a critical but financially vulnerable sector in most Asian economies. Section 6.7 offers some conclusions and recommendations for action.

6.2 Progress in Financial Deepening and Integration in Asia

The 1997–1998 Asian financial crisis highlighted several shortcomings in Asian financial markets, most notably underdevelopment of domestic bond markets and deficiencies in corporate governance, transparency, and financial regulation. Since then, there has been considerable progress made in both financial market development and regulation. Asian markets are now reaching levels of development common in other countries with similar income levels. Markets are also becoming more integrated, although nothing like the levels prevailing in Europe. Some of these changes have been the result of important initiatives undertaken to remedy deficiencies brought to the fore by the 1997–1998 crisis, including the Asian Bond Markets Initiative (ABMI) and the Asian Bond Funds (ABF). However, the global financial crisis may discourage Asian countries from pursuing further financial reform, leading them to reject helpful developments along with those that have proven harmful.

The nature and progress of Asian financial market deepening in the past decade can be analyzed using a methodology similar to that of the World Bank's Financial Development and Structure Database (Lee 2008; Capannelli et al. 2009). Asia's progress in financial deepening can be compared with other countries' using the

Table 6.1 Measures of financial sector size (ratio to GDP). (Sources: Beck and Demirguc-Kunt (2009) and CEIC Data, available at: http://www.ceicdata.com. Accessed April 2012)

	Median ratio by income class 2007				Asia ex Japan[a]	
	High	Upper middle	Lower middle	Low	2000	2010
Central bank assets	0.01	0.01	0.04	0.02	0.06	0.02
Bank deposits	0.87	0.43	0.39	0.20	0.92	1.22
Deposit money bank assets	1.14	0.55	0.31	0.15	0.97	1.24
Liquid liabilities	0.90	0.45	0.43	0.27	1.06	1.42
Private credit by deposit money banks	1.01	0.47	0.31	0.14	0.82	0.93
Stock market capitalization	1.05	0.42	0.30	0.26	1.04	2.04
Private bond market capitalization	0.36	0.16	0.03	0.00	0.16	0.20

GDP gross domestic product
[a] Simple average

indicators provided in Beck and Demirguc-Kunt (2009) for four income levels: high, upper middle, lower middle, and low. Indicators of financial size, efficiency, and internationalization present a clear picture of progress in Asia.

6.2.1 Financial Size

Available indicators of financial size all suggest steady progress in Asia (Table 6.1). These indicators are central bank assets, bank deposits, deposit money bank assets, liquid liabilities (cash plus demand deposits and interest-bearing liabilities of banks and other financial institutions), private credit by deposit money banks, stock market capitalization, and private bond market capitalization (all computed as a ratio to nominal GDP). Typically, the ratio of central bank assets to GDP falls as income rises, while the all other measures rise. Private bond market capitalization is used because it is highly correlated with income levels, while public bond market capitalization shows almost no correlation with income levels.

Table 6.1 compares the values for Asia (excluding Japan) in 2000 and 2010 with the median values by income group of the worldwide sample for 2007 (Beck and Demirguc-Kunt 2009). Data for Asia (excluding Japan) are simple averages of the ratios for the PRC; Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; Thailand; and Viet Nam. Except for central bank assets, all of the indicators rise significantly and monotonically with regard to income level.

Table 6.1 shows that Asian economies are, if anything, over-endowed relative to high income economies in terms of liquidity and banking sector size, and in line with high income economies in terms of stock market capitalization. However, they

are still lagging in terms of private bond market capitalization. Although central bank asset ratios have fallen as expected, they are still consistent with the level of lower middle income countries. In contrast, bank deposits, deposit money bank assets, and liquid liabilities rose significantly over the period—matching, if not exceeding, the level for high income countries. This is rather remarkable, given the diversity of financial conditions in Asia. Private credit extended by deposit money banks is somewhat lower than the high income median, mainly due to low values for India, Indonesia, and the Philippines.

Data on financial markets are mixed. Stock market capitalization is in line with high income economies. It rose from 1.04 times GDP in 2000 to 2.04 times in 2010. On the other hand, private bond market capitalization clearly lags behind with a ratio of only 0.20 of GDP, just slightly above the median for upper middle income economies. Asia has well-developed banking sectors and stock markets, but bond markets, especially private sector bonds, are less developed by comparison.

Table 6.2 shows, as a ratio to GDP, the three main categories of private sector liabilities and total private liabilities for individual economies in 1996 and 2010. The pattern has been quite mixed. Substantial increases in total private liabilities have occurred in the PRC; Hong Kong, China; India; the Republic of Korea; and Viet Nam, while large declines have been seen in Indonesia, Japan, Malaysia, the Philippines, and Thailand. In most cases, the declines have been mainly in loans and stock market capitalization, the former primarily reflecting deleveraging after the 1997–1998 Asian financial crisis. Private bond market capitalization is high in only three countries—Japan, the Republic of Korea, and Malaysia, which underlines the scope for further development of this sector.

6.2.2 Financial Efficiency

The measures of financial sector efficiency shown in Table 6.3 (net interest margin, cost to income ratio, loan to deposit ratio, return on assets, and return on equity) are not as closely correlated with income levels as the size measures in Table 6.1. As in Table 6.1, Table 6.3 shows the median values for the four income groups in 2007, and the comparable average data for Asia (excluding Japan) in 2001 and 2010.[1] While the first three measures generally rise with income, there is little or no change in the net interest margin or cost-to-income ratios. The ratios for returns on assets and equity are actually highest in low income countries; the increased competition and capital deepening that accompany higher income presumably helps to drive them down.

Asian performance in this category is decidedly mixed. The net interest margin changed little over the period, and is still close to the low income level. The cost-to-income and loan-to-deposit ratios actually fell in 2010, close to the low income level. Of course, the latter proved to be a good thing during the financial crisis, as

[1] Data for 2000 are not available.

Table 6.2 Sources of private sector funding (% of GDP). (Source: CEIC Data, available at: http://www.ceicdata.com. Accessed April 2012)

	Private credit by deposit money banks		Stock market capitalization		Private bond market capitalization		Total	
	1996	2010	1996	2010	1996	2010	1996	2010
PRC	77.2	120.0	13.3	81.0	2.8	21.3	93.4	222.4
Hong Kong, China	146.7	168.1	282.7	1207.9	11.9	14.4	441.3	1390.4
India	21.7	49.7	31.6	93.5	1.6	5.7	54.9	148.8
Indonesia	50.5	24.1	40.0	51.0	1.6	1.5	92.2	76.6
Japan	179.7	102.8	66.5	74.6	45.7	36.3	291.9	213.6
Rep. of Korea	49.2	98.4	24.9	107.4	38.0	63.0	112.2	268.7
Malaysia	123.6	109.3	304.6	172.6	35.4	43.5	463.6	325.4
Philippines	41.0	29.4	97.4	78.8	0.2	1.1	138.6	109.3
Singapore	90.9	96.1	162.3	166.2	10.3	11.4	263.4	273.7
Taipei,China	121.0	124.5	95.2	175.0	22.4	21.8	238.6	321.4
Thailand	137.1	91.7	54.9	87.1	8.0	17.9	199.9	196.7
Viet Nam	17.1	109.7	–	19.7	–	–	17.1	129.3

– data not available, *GDP* gross domestic product, *PRC* People's Republic of China

it meant minimal dependence on wholesale sources of funding in most countries. Returns on assets and equity improved markedly between 2001 and 2010, but are still quite low compared with global levels. The generally low level of financial efficiency in 2010 points to the need for further financial reform, despite improvements between 2001 and 2010.

6.2.3 Internationalization and Integration

Some authors have tried to quantify the degree of financial globalization and integration. Beck and Demirguc-Kunt (2009) examined a number of variables in the same framework for size and efficiency, including, compared to GDP, international debt securities outstanding; net issuance of international debt securities, loans from non-resident banks, and remittances; and the ratio of offshore deposits to bank deposits. However, only the level of outstanding international debt securities showed a clear and consistent correlation with income levels. As shown in the bottom line of Table 6.3, the Asian level remained unchanged between 2001 and 2010. This was just slightly above the average for lower middle income countries, and only one quarter of the level for high income countries.

This assessment of the degree of regional financial integration can be supplemented from other sources. Some results seem the opposite of what one might expect. Lee (2008) examined the levels of portfolio holdings of Asian countries to determine whether there was a tendency for Asian countries to hold each other's financial assets disproportionately. Using data from the IMF's Coordinated Portfolio Investment Survey (CPIS) 2003, he estimated a gravity model of portfolio investment that included regional dummy variables.[2] He found that, after controlling

Table 6.3 Measures of financial sector efficiency and integration. (Source: Beck and Demirguc-Kunt (2009) and Bankscope database, available at: www.bankscope.com. Accessed April 2012)

	Median ratio by income class 2007				Asia ex Japan[a]	
	High	Upper middle	Lower middle	Low	2001	2010
Net interest margin	0.06	0.06	0.06	0.02	0.03	0.03
Cost to income ratio	0.60	0.58	0.57	0.50	0.62	0.52
Loan to deposit ratio	1.00	0.80	0.85	0.60	0.84	0.77
Return on assets (%)	1.50	1.90	1.60	2.00	0.19	1.07
Return on equity (%)	16.00	15.00	15.00	21.00	4.65	12.22
International bonds/GDP	0.41	0.19	0.07	0.03	0.11	0.12

GDP gross domestic product
[a] Simple average

[2] Gravity models assume that the main drivers of flows between countries relate to their economic size and proximity. If, after taking these and any other unusual features such as a common language into account, a pair shows a larger than expected flow, some abnormal level of integration is presumed.

Table 6.4 Intra-regional portfolio investment. (Source: Capannelli et al. (2009) and ADBI estimates based on IMF Coordinated Portfolio Investment Survey 2010, available: http://elibrary-data.imf.org/Report.aspx?Report=9492645. Accessed 4 April 2012)

Share of total investment, %	Assets		Liabilities	
	2001	2010	2001	2010
Integrating Asia-16	5.6	12.6	10.1	16.7
IA-15 (IA-16 less Japan)	15.0	30.8	13.7	20.2
ASEAN	11.0	12.3	11.8	11.5
ASEAN+3	3.1	6.2	5.9	8.8
East Asia Summit	5.7	30.4	9.1	27.1
EU-15	60.0	60.8	57.1	60.5
MERCOSUR	5.6	3.4	1.0	0.4
NAFTA	16.2	15.8	11.8	12.3

ASEAN = Association of Southeast Asian Nations; *ASEAN*+3 = 10 ASEAN member states plus the People's Republic of China, Japan, and the Republic of Korea; *Integrating Asia-16* (IA-16) = ASEAN+3 plus Hong Kong, China; India; and Taipei,China; *EU* = European Union; *MERCOSUR* = Mercado Común del Sur (Southern Common Market); *NAFTA* = North American Free Trade Agreement

for the effect of regional trade integration, intra-Asian holdings were lower than the average of what was predicted by the model, and even lower if Singapore and Hong Kong, China were excluded.

Nonetheless, Asian cross-holdings of financial assets have been rising over time—an indication of increased financial integration, albeit from a relatively low base. Table 6.4 shows the shares of cross-border holdings of total international portfolio assets and liabilities in major world regions. In 2010, the share of financial assets (liabilities) held intra-regionally by the 16 Integrating Asia (IA) economies[3] was only 12.6% (16.7%). Excluding Japan, this share was much higher at 30.8% (20.2%), although this is very much affected by high ratios for Singapore and Hong Kong, China. Although these ratios are not particularly high, especially when Japan is included, they have increased significantly since 2001. The share of intra-regional assets (liabilities) within IA was only 5.6% (10.1%) in 2001, or 15.0% (13.7%) when Japan is excluded. Although IA is far from matching financial integration in the European Union (EU),[4] the intraregional shares of international financial assets in IA are higher than those in Latin America, and comparable to those in the North American Free Trade Agreement area.

[3] The 16 Integrating Asia economies are Brunei Darussalam; Cambodia; the PRC; Hong Kong, China; India; Indonesia; Japan; the Republic of Korea; Lao People's Democratic Republic; Malaysia; Myanmar; the Philippines; Singapore; Taipei,China; Thailand; and Viet Nam.

[4] The ratio for intra-EU assets (liabilities) holdings was 61.7% (62.3%) in 2006.

Table 6.5 Measures of financial stability and governance. (Sources: IMF (2009); CEIC Data, available at: http://www.ceicdata.com/; Bankscope database, available at: www.bankscope.com; World Bank Worldwide Governance Indicators (WGI), available at: http://info.worldbank.org/governance/wgi/index.asp. Accessed April 2012)

	1998	2003	2010	2010 ex. Japan
Non-performing loans (% of total)	19.38	9.79	2.53	2.48
Capital adequacy ratio	10.38	12.91	21.17	15.57
Regulatory quality	0.53	0.51	0.47	0.38
Rule of law	0.51	0.40	0.40	0.25

6.2.4 Financial Soundness and Governance Measures

Great strides have been made in improving financial soundness since the 1997–1998 Asian crisis. Non-performing loans (NPLs) in the region fell dramatically from an unweighted average of 19.4% of total loans in 1998 to only 2.5% in 2010 (Table 6.5), with all countries showing marked improvement. Capital adequacy generally improved as well, with average capital ratios rising from 10.4% in 1998 to 15.6% in 2010. Dramatic improvements were seen in Indonesia, the Republic of Korea, and Malaysia. While much of this improvement could be attributed to sustained economic expansion since 2000, structural improvements played a role as well.

Qualitative measures of governance and regulatory efficiency have shown much more subtle signs of progress. For example, for Asia as a whole, the World Bank's index for Regulatory Quality (from its survey of World Governance Indicators) has improved only modestly since 1998. Improvements in some countries were partly offset by deterioration in Malaysia and the Philippines. Similarly, the index for the Rule of Law has remained unchanged over the same period.

6.3 Crisis Avoidance

It is impossible to avoid crises altogether, and indeed there is likely to be a trade-off between reducing the chance of crises and lowering the overall rate of economic growth, to some extent there is a trade-off between financial stability and financial innovation. Calvo (2009) set out the conditions under which occasional crises may actually be therapeutic, bringing about much needed structural change. As such, there needs to be a balance between crisis avoidance and crisis management, although the global financial crisis has shown a need to do more in both areas. These two areas are related. Crisis management and the structure of safety nets in particular can positively or negatively affect the probability of future crises. In some countries, the public's strong aversion to bank failures will itself encourage banks and their stakeholders to take more risks—it is merely assumed that government will intervene in the event of massive failures. While Asian countries have avoided this temptation thus far, their resolve has not been substantially tested on this occasion. Banks might well infer

that, despite official pronouncements, authorities will still eventually step in to avoid failures. Moral hazard is therefore something that can also spill over borders.

This section deals with six aspects of strengthening crisis avoidance within individual Asian countries, namely:

- improving the institutional structure;
- improving microprudential monitoring;
- expanding the number of macroprudential tools and procedures;
- implementing counter-cyclical measures;
- extending regulation to cover other nonbanks and product areas; and
- improving resilience to shocks.

All of these aspects seek to match the incentives for market participants and regulators alike with the goals of macroeconomic stability. Box 6.1 describes some of the macroprudential issues for the PRC.

Box 6.1: Regulatory Issues for the People's Republic of China

The PRC launched one of the biggest economic stimulus packages in response to the global financial crisis—estimated officially at around CNY4 trillion (US$ 550 billion, or about 15% of GDP) over two years. Much of this was implemented via increased bank lending to regional governments and state-owned enterprises. As a result, bank lending soared by 32% in 2009, the biggest increase in nearly 20 years. Just over half of the lending was directed at infrastructure projects, followed by leasing business (14%), real estate (11%), and manufacturing. An expansion in bank lending of this magnitude imposes severe strains on the ability of banks to manage risk properly, and on the regulatory authorities to monitor it closely. Although the ratio of NPLs to total loans fell steadily to only 1.6% by the end of 2009, much of this was due to the sharp increase in the denominator. If the economy weakens in the future, there is a risk of a substantial increase in NPLs and a consequent deterioration in the capital adequacy of the banking sector; this, in turn, would require a large-scale injection of public funds to recapitalize the banking sector. Thus, although the direct increase in government debt has been limited, there may be a huge increase in contingent liabilities, depending on how well the loans are managed.

Much effort has been expended on improving the risk management capacity of the banking sector, but the results of this have not yet been tested. The People's Bank of China and the China Banking Regulatory Commission will be monitoring these loans closely over the next few years, but this will be a mammoth task.

Moreover, now that the economy has begun to recover, financial authorities need to take timely measures to cool down bank lending growth. Otherwise, inflation could become a significant problem. Private sector demand is also increasing rapidly, with mortgage loans posting growth of over 40%

year-on-year in December 2009. The People's Bank of China has already recognized this, and has begun to implement tightening measures such as raising the reserve ratio and interest rates. It has tightened restrictions on real estate lending in areas such as Shanghai and Beijing, and is also encouraging steady increases in the NPL coverage rate (the ratio of bank operating profits to NPLs).

6.3.1 Rationalization/Unification of Regulatory Structure

In many countries, regulatory structure is as much a function of history as it is of a careful allocation of objectives and tasks to individual institutions, to ensure that (i) all aspects of the problem are covered (Kawai and Pomerleano 2009); (ii) there are no confusing overlaps; and (iii) the incentives of all those involved are clearly aligned with the task of preserving financial stability. In the US, a plethora of institutions contributed to the emergence of the financial crisis, yet a large number of problem banks were dealt with swiftly and smoothly, with no threat to stability, no recourse to public money, and limited losses to the private sector (Wall 2012). The major costs related to freeing up wholesale markets and providing support to large banks and other financial institutions, all done outside the traditional framework. The financial regulatory structures of the major Asian economies are summarized in Appendix 6.1.

Perhaps the greatest lesson of the crisis is that, even with the benefit of experience, countries are slow to implement change. For instance, Sweden had developed proposals for handling problem banks in 2000, driven in part by its own crisis in 1992; yet these recommendations were not implemented until the authorities were unable to handle distress in one of the country's smallest banks in 2006.

There are six main aspects of financial stability that have to be covered effectively:

- prudential regulation and supervision of individual financial institutions;
- monitoring of systemic risks and pursuing actions to maintain macro-prudential stability;
- providing short-term liquidity assistance to solvent banks;
- swift handling of problems in troubled banks, at limited cost to both creditors and society at large;
- limiting the losses to people who cannot protect themselves; and
- coordinating the activities of the various parties involved, to ensure coherence and avoid gaps in the system.

It is accepted that the central bank should provide liquidity assistance to the market and solvent individual institutions; to do so, however, it needs adequate information on banks' performance from the supervisory authority, so that it can avoid lending to insolvent institutions. Similarly, it is largely accepted that central banks should

be an essential part of macroprudential policy, with other supervisors actively involved and playing a collaborative role. Clearly, there are several ways of providing the necessary information: the central bank itself could function as the supervisor, or separate organizations could be mandated to exchange information. These different configurations can be seen in the PRC; Singapore; Hong Kong, China; and Taipei,China (Hsu and Liao 2009). All of these models appear to be successful, although they have yet to be severely tested.

Drawing on the experiences of a much wider sample of 84 countries, where the majority (48) have financial supervision resting with the central bank, Lamberte (2009) noted that small countries may find it difficult to put together two organizations with enough intellectual and political clout to counter vested interests, particularly when there are strong financial institutions. However, concentrating so much power in a single institution could be a challenge for a democratic system. Conflicts of interest may arise. For example, if a central bank lacks independence, it may be pressured by the ministry of finance to postpone taking necessary macroeconomic measures in order to support the financial sector. Having different sectoral regulators may both affect and reflect the structure of the financial industry. If financial conglomerates or universal banks are common, the argument for a universal regulator becomes stronger, as supervision of the institution as a whole does not simply represent the sum of its parts (Wall 2012).

The question to be answered is whether it is easier to resolve conflicts of interest internally within an individual institution, or externally among institutions. If the former is followed, then it is important to make sure that conflicts are resolved transparently by the top decision-making body, and not inconsistently at a variety of lower levels. However, as the global financial crisis has demonstrated, the basic incentive for regulators to undertake their task effectively is also required.

There is also the problem of whether the same institution should be responsible for ex ante systemic stability and ex post crisis management. Adams (2012) argued in favor of a single organization doing both, but the tendency in some countries has been to separate these functions so that the latter is not tainted by the mistakes of the former (whether actual or supposed), and the opportunity for denying the problem is reduced. The question of whether one institution or multiple institutions with a coordinating body is more efficient depends on the context and leadership.

6.3.2 Ways of Improving Microprudential Monitoring

The global financial crisis has highlighted the importance of improving microprudential regulation and supervision. The failure of microprudential monitoring to detect and address problems swiftly helped stoke the crisis in the first place, by creating perverse incentives for banks. The normal range of indicators of difficulty, as illustrated by the ratings based on capital, assets, management, earnings, liquidity, and sensitivity to market risk (CAMELS) in the US, help but do not cover all aspects; CAMELS, as applied in the US, for example, did not consider the upstream

and downstream management of the risks by counterparties, and had a narrow, within-institution focus.[5] There was also too much emphasis on conventional measures of risk such as value-at-risk (VAR) models, and insufficient emphasis on stress testing, strategic risk assessment, and liquidity risk. For any such range of indicators to be effective, they must err on the side of caution, sometimes indicating problems when there are none, to ensure that all potential crises are caught early. The possibility of averting a major crisis is worth the cost of a few investigations that turn out to be unnecessary. Box 6.2 describes some of the difficulties of implementing such microprudential regulation in Indonesia.

Box 6.2: The Need to Improve Financial Sector and Regulatory Capacity in Indonesia

For a number of reasons, major reform and considerable time will be required for an emerging economy like Indonesia to (i) have a well-developed supervisory system; and (ii) adopt the Basel Committee recommendation for increased reliance on the evaluation and testing of banks' own risk-management systems. More specifically, these will necessitate improvements in market infrastructure; reform of the corporate sector, including both public and private companies; and strengthening of financial-sector regulatory and supervisory agencies. Such a shift in the regulatory and supervisory system will also require the retraining of bankers, supervisors, and regulators in banking industry risk management.

The Indonesian economy may be described as mixed, because of the important role played by state-owned enterprises and heavy government intervention in the economy. In terms of assets and branch networks, the banking industry constitutes the core of the Indonesian financial system. Within this industry, a group of public-sector banks controls about half of the domestic banking market. Their activities include quasi-fiscal operations to promote government policies, which render them outside market discipline. During the country's long history of financial repression, the government not only set bank lending guidelines, but also exercised control over both deposit and lending rates, thereby segmenting the financial markets.

In the past, all domestic privately-owned banks in Indonesia belonged to business groups or conglomerates that were politically well-connected. Following the 1997–1998 Asian financial crisis, market competition from foreign banks was allowed. There has been a lack of incentive for bank managers to monitor and manage risks, upgrade transparency in corporate reporting, or provide economically relevant information. The basic ingredients of a market infrastructure are still lacking, including protection of property rights at least cost and availability of high quality information to minimize market

[5] Given their comprehensiveness, however, the CAMELS ratings still offer the best chance of detecting a problem, provided that they are regularly updated and reviewed.

asymmetries. The legal system remains underdeveloped, particularly with regard to contract enforcement and bankruptcy resolution.

The market infrastructure has not improved significantly, and weaknesses persist in the supervisory and regulatory system. Relevant, accurate, comprehensive, and timely information is frequently unavailable. In some cases, banking supervisors continue to be disinclined to take prompt corrective action. Technical knowledge and personal integrity are still inadequate, and there is also a lack of technical expertise and interagency coordination to promptly address problem banks.

Source: This box is based on Nasution (2009).

Much weight has been given to capital buffers, both in the Basel Committee advice and its implementation under the Capital Requirements Directive of the EU. However, the use of capital triggers alone for early intervention is not helpful as they cut in far too late, especially if liabilities are off balance sheet. Capital triggers work well as a backstop for prompt corrective action, ensuring that the authorities swiftly implement solutions for problem banks. The incentives for forbearance are strong; thus, while considerable discretion in the choice of techniques is desirable, clear rules are needed on how rapidly they should be implemented, since resolutions take several weeks to put in place. Thus, specific requirements for both action and the powers to act thereon are required. Having recapitalization tools, such as debt to equity conversions, that are automatically triggered can be a help.

Since capital buffers in many economies have proved inadequate, banks need to hold more effective capital buffers and have liquidity buffers that would allow them to withstand a downturn in financial markets. They should also refrain from becoming too leveraged, so as to lessen the need for drastic asset sales when prices are artificially depressed in a crisis. Central banks will always be there as the lender of last resort, to ensure that confidence is maintained in the event of a major market upheaval. However, buffers will reduce the fragility of the system and buy time for solutions to be worked out. Capital buffers in Asian economies were not necessarily inadequate, but prudence argues that they should be reviewed against global benchmarks. All of these issues have been addressed in the Basel III reforms, including higher capital requirements, the introduction of the "countercyclical capital buffer," and the introduction of the leverage ratio and stable funding ratio (BCBS 2010), although it remains to be seen how they will function in practice.

The earlier Basel rules encouraged banks to shift problems off their balance sheets, but in practice there was still exposure to risk (especially to reputation risk). We can therefore expect that authorities will be keen to ensure that this does not happen again in the future (Plummer 2012). Although these concerns are already being addressed by the Basel Committee on Banking Supervision, countries can introduce such measures on an interim basis as soon as markets become strong enough to support them. One way of doing this is to reverse the procyclical nature of current capital requirement for banks, and replace it with requirements for banks

to hold more capital as the economy and their balance sheets expand rapidly. This will enable the use of capital to meet the losses that occur in contractions (discussed in greater detail below). The crisis has encouraged overreliance on central bank funding, especially since this has been provided at below-market costs, rather than at the traditional premium. Hence, escalating moral hazard has been rewarded. What the central banks and regulators need to do is make the banks "stand alone" in terms of capital and liquidity, and independent of state guarantees and funding.

The impact of the global financial crisis in Europe highlighted problems associated with supervision of foreign banks when responsibility is divided between home and host countries. Foreign banks can also contribute to financial instability if they repatriate their capital quickly to their home markets or even just freeze new lending. The international financial community has lagged in finding solutions to these issues, which tie in closely with those involved in the resolution of large international financial institutions discussed in Section 6.4. FSB (2011) presents a good summary of desirable attributes of a resolution system, but implementation remains the major stumbling block.

6.3.3 Macroprudential Surveillance/Regulation

The key facet of macroprudential regulation is that it draws attention to aggregate movements in the market that can be a threat to systemic stability, even though at the individual institutional level the problem might not be evident. The global financial crisis has not only revealed that macroprudential supervision has been weak in many countries, but that the relationship between macroprudential and microprudential supervision has not worked well. Many of those responsible for macroeconomic stability have claimed that they can do little more than warn the government and the financial system of emerging dangers (King 2009). However, there are indicators such as asset prices that could enable a greater influence, even through monetary policy.

There are two major areas for action. First, the structure of the financial system itself needs to be such that it can withstand major shocks, both by discouraging the development of the kind of institutions that disrupt the system, and compelling institutions to adopt plans for handling the failure of core suppliers in a nondisruptive manner. Second, monetary authorities must have discretionary tools that can be used to supplement automatic counter-cyclical stabilizers. Such tools can take the form of standards for loan to value ratios for lending, reserve requirements, or increased margins and collateral calls (Mohan and Kapur 2012). Macroprudential tools can also be applied to manage capital flows, as described in Chapter 3. It should be noted that many Asian economies have long intervened actively in the economy in a macroprudential way, e.g., to maintain prudent lending standards or reduce risks of volatile capital inflows. Therefore, the main challenges are to systematize these practices and to have a comprehensive structure for managing them.

One important step that can be taken is to assign specific responsibility for handling systemic risk. Adams (2012) advocated the use of a high-level Systemic Risk

Council that would be responsible not only for monitoring and coordination, but also for undertaking both preemptive and corrective macroprudential measures by the responsible agencies. (Pomerleano and Kawai (2009) use the terminology "systemic stability regulator" for the same concept.) Other possible institutional arrangements include the National Economic Action Council in Malaysia (Pomerleano and Kawai 2009), and the emergency Economic Policy Coordination Meeting in the Republic of Korea (Cho 2012).[6] One key question is the extent to which the central bank should have responsibility for financial stability. Some have argued that this could interfere with the central bank's mandate for price stability, but this apparent conflict arises only if the central bank's time frame is too short. In the medium- to longer-term, it is not possible to have price stability without financial stability.

One shortcoming revealed by the global financial crisis was the failure of the authorities to identify where the ultimate risks lay, because use of various risk-shifting instruments made it difficult to track such risks. Hence, they were unable to assess accurately the system's ability to withstand a large adverse shock. In hindsight, it is evident that the authorities should have looked beyond the financial sector and examined corporate and household behavior.[7] Subsequently, they should have set limits on leverage and associated tax incentives for corporates, loan-to-value ratios for mortgages, and debt-to-income ratios for credit. Rules are only useful if they are enforced, and part of the problem appears to have been regulatory capture, which weakened adherence to traditional prudential norms.

What one hopes to get from both micro and macroprudential monitoring is some form of early warning. Ideally, this warning enables the authorities and supervised entities to avoid problems by alerting them to the need for preemptive action; even if this were not possible, the ability to activate corrective systems in advance would be of considerable benefit. For a system to predict most crises, it has to be oversensitive and predict even those crises that fail to materialize.

6.3.4 Ways of Reducing Procyclicality

It has become clear that capital adequacy regulation, particularly under Basel II, can amplify business cycle fluctuations. In upswings, capital values increase, and minimal effort is required to meet capital requirements that are constant throughout the cycle. In downturns, however, new capital is required to cover losses, but capital values themselves fall and the cost of raising capital increases. Banks may

[6] The Economic Policy Coordination Meeting in the Republic of Korea is chaired by the President; the Financial Supervisory Commission is mandated to implement the Meeting's recommendations. Kawai and Pomerleano (2009) describe the Indonesian, Japanese, Korean, and Malaysian schemes. Indonesia has introduced a Financial System Stability Forum, along lines similar to the Republic of Korea's arrangements.

[7] Information on the structure of household finance is particularly critical, to gain a clear idea of the problems in the sector and how these might best be tackled.

well have to decrease lending in order to preserve capital adequacy, thereby adding pressure on the real economy. Under Basel II, ratings (whether internally or externally generated) also played a central role in determining capital requirements; but ratings also tend to follow a cyclical path, partly because track record is important in their determination. Taken together, these factors will tend to amplify the cycle. To be sure, issues of procyclicality were less important for Asia during the global financial crisis, because the impairment of bank assets was limited. Nonetheless, such an approach needs to be considered as part of measures to minimize the likelihood of future crises.

There are other reasons why the financial system tends to exacerbate business cycle fluctuations (Fernandez de Lis and Garcia-Herrero 2012); these reasons are well-known, and should have prompted regulatory authorities to adopt countercyclical measures. For instance, authorities should have realized that "good times" are likely to relax attitudes toward risk; that upswings are likely to be longer, and that memories of previous downturns will fade; that herd behavior exacerbates upswings and encourages over-lending; and that incentive systems will tend to encourage risk taking in the upswing, as people provide for the possibility that they will lose their jobs in the next contraction.[8]

The simplest response to such over enthusiasm is to introduce a countercyclical element into the determination of capital ratios: raising them when growth picks up, and lowering them when growth slows down. This would increase capital when it is cheap, and decrease capital when it is scarce. Such changes can probably be made without the need for new legislation in many countries.

Fernandez de Lis and Garcia-Herrero (2012) describe a different approach, currently employed in Spain and more recently introduced in Peru and Colombia, whereby provisioning for bad loans is procyclical. Whenever lending increases rapidly, provisioning increases disproportionately, on the grounds that rapid increases are likely to be accompanied by a decrease in the quality of lending. In a downturn, such provisions can be used to cover defaults, without the need to increase capital.

The Basel III reforms addressed this issue by introducing the countercyclical capital buffer and the conservation buffer, the former of which could be as high as 2.5% of risk-weighted assets (BCBS 2010). However, there is no clear or agreed-on methodology for determining when the countercyclical buffer should be invoked or rescinded. Such determination is particularly difficult in the case of emerging economies where substantial financial deepening is a normal development, so that historical averages of, e.g., debt-to-GDP ratios, may not provide reliable guides to when substantial systemic risk is building up in the economy.

Asian economies have made some use of such counter-cyclical provisions in the past. Hong Kong, China for example has used loan-to-value ratio limits that become more conservative the faster the increase in the asset price underpinning the loan. Andtrizky et al. (2009) suggested a wide range of counter-cyclical measures that

[8] Incentives have been particularly perverse in many financial institutions with remuneration slanted toward short-run performance and upfront fees with little regard for the longer-term risks and return, thereby exacerbating and mis-pricing the risk.

could be applied, particularly in response to asymmetric problems of liquidity that accompany downturns, and doubts about loan quality that lead to a withdrawal from markets and the freezing out of marginal participants. This can most readily be addressed by ensuring a substantial liquidity cushion and matching funding sources to cash-flow needs, as introduced in New Zealand (Reserve Bank of New Zealand 2009). More realistic stress tests that take account of the freezing of markets will help determine the necessary level of preparedness. Leverage ratios will also tend to limit procyclicality.

A further concern relates to accounting methods. The use of fair value accounting can be highly procyclical if values are derived from impaired markets during a downturn. Just as there tends to be overvaluation in the upswing, there also tends to be an artificially low valuation in the downturn. It would be highly counterproductive to return to the use of historic values or other systems that ignore market realities. Valuation methods that operate through the cycle make far more sense. However, accounting rules tend to make it more difficult to introduce provisioning in excess of losses known at the time (Fernandez de Lis and Garcia-Herrero 2012).

Some areas that are procyclical are more difficult to handle. Abetted by very low transaction costs, international capital flows tend to be procyclical, increasing not only when the economy is doing well but also when interest rates are relatively high, due to the monetary authority attempting to slow demand. A sudden reversal in these flows forms part of the sharp downturn; this is compounded when the monetary authority cuts interest rates in order to encourage domestic lending and hasten economic recovery.

6.3.5 Regulation of Innovative Financial Products and Specific Investor Groups

Asian economies have not rushed to adopt derivative instruments such as collateralized debt obligations and CDS that played a key role in the US subprime crisis (Fujii 2012). As such, there are few immediate concerns regarding how they should be handled (Morgan 2009). However, many of these instruments are valuable means of hedging and spreading risk, and their eventual adoption in the region could help deepen the markets and facilitate risk management. Nevertheless, some derivative instruments such as CDS will remain inherently unstable if the insured does not actually have a stake in the risk that is being covered (Soros 2009).

Such instruments are not necessarily destabilizing. The idea of nonrecourse mortgages in the US makes them much more prone to default than elsewhere, where the residual liability is not covered by the remaining collateral. Most countries that securitize mortgage loan portfolios have not strayed into the subprime area, a concept largely peculiar to the US; neither have they moved such loan portfolios off the balance sheet. In the wake of the crisis, there has been a reconsideration of those aspects of securitization that have led to instability. Prior to the crisis, many of those involved—including agents, originators, and rating agencies—collected their

fees up front and were therefore not exposed to any subsequent deterioration in asset quality. One of the lessons of the crisis is that everyone involved should retain proportionate exposure until the principal underlying the security has been paid back. Agents, originators, and rating agencies should receive their remuneration according to the performance of the portfolio (Joint Shadow Financial Regulatory Committees 2009).

Apart from realigning incentives, the standardization of risky derivative products should go a long way toward ensuring asset quality (Fujii 2012). For instance, an arrangement could be put in place requiring CDS to be actual insurance and not purely speculative instruments. Standardizing products would make them more transparent and easier to price. Indeed, they could become more readily traded on exchanges and gain stability from the existence of central counterparties.

More generally, there should be an end to the Basel regime's anomalous accounting treatment and procedures, which encouraged banks to move such assets off their balance sheets in the first place. While some agents were able to collect their remuneration upfront, many banks discovered that reputation risk exposed them to losses in special investment vehicles, which they had set up to take mortgage-backed securities off the balance sheet.

If these straightforward measures are taken, such derivative instruments could be developed to make them advantageous and beneficial to financial development across the region, assisting in the finance of standardized loans and reducing the dependence on banks without introducing any financial instability.

Authorities around the world have expressed concern over the potentially destabilizing impact of speculative entities such as hedge funds. These organizations are not well understood, and their activities are largely unregulated. However, as the crisis developed, it became clear that hedge funds presented few problems; indeed, insofar as they were holding some of the impaired assets, they have actually been a stabilizing influence.

Hedge funds tend to attract large and relatively sophisticated investors, and therefore matter little for protecting less-sophisticated and small-scale investors. In this respect, the challenge facing Asian countries is two-fold. On the one hand, they must refrain from discouraging such funds, as these provide a useful vehicle for mobilizing investment in more illiquid and high risk/return areas—a particular need in emerging markets. On the other hand, they must also prevent such funds from becoming unregulated vehicles for retail investments, since the realization of downside risks and the risks of mis-selling could have considerable social consequences. Some hedging activities may be destabilizing, and one that has got a lot of attention is short-selling. In the present crisis it was temporarily banned in a number of jurisdictions, particularly with respect to bank shares. In liquid markets short-selling may actually help in price discovery, but in less liquid markets it could result in serious problems.[9]

[9] There are different types of short-selling and it is "naked" short-selling without any cover that has attracted the most criticism.

In Asia, the main ratings agencies have been far less active than one might expect, given the level of financial development in the region. Regional ratings agencies have also been slow to emerge. While this may have spared Asia from the misrating of securities that contributed to the crisis, it has also made asset valuation more difficult. Moving forward, Asian countries will want to see rating agencies develop, but in a framework of confidence that eliminates conflicts of interest arising from agencies acting both as advisors and raters (Plummer 2012). Confidence could be increased by promoting greater transparency and tying remuneration to asset performance. The independence of raters also needs to be demonstrated.

Instead of simply trying to increase financial services regulation, the authorities should devote more effort to investor education and financial literacy. Admittedly, trying to increase financial literacy is a difficult task, one that is challenging even the more advanced financial markets. Nonetheless, such education could play an important role in both managing risk and channeling funds toward productive uses.

6.3.6 Improving Resilience against Shocks

While individual countries can do much to improve their resilience to crises, many Asian countries are relatively small and will therefore always be vulnerable to external shocks. This underscores the importance of increasing regional cooperation and pursuing joint action. Apart from preventing and managing crises, regional cooperation through increased financial interdependence can be mutually beneficial to countries in the region. For instance, the development of bond markets can help develop sources for financing investment within the region (see Section 6.5).

The strains in Europe during the financial crisis are instructive with severe economic crises in Greece, Hungary, Iceland, Ireland, Latvia, Portugal, and Spain and major problems in Italy as well. However, the euro remained relatively stable in the early parts of the crisis, so that countries could avoid currency-induced instability that would have otherwise added to their problems. Closer economic relations in the EU and beyond have offered clear benefits (Winkler 2012), not only in terms of improving economic growth but also in terms of withstanding economic shocks. However, events in 2010 with pressure first on Greece and then spreading to Spain and Portugal illustrate that even the largest currency areas will see exchange rate movements if countries do not follow what lenders perceive to be fiscal prudence. The eurozone has faced specific problems from a lack of effective control over some countries' fiscal policy in a regime that does not have a federal or area-wide fiscal system to fall back on.

At best, Asia has the same level of economic and financial integration that Europe had 20 years ago. Europe's earlier successes show that closer regional relationships could also be beneficial to Asia (ADB 2004), but its recent experience underlines the risks as well. However, it is important not to exaggerate the role of regional cooperation and integration. Some countries that have either adopted the euro (e.g., Ireland), or have euro-backed currency boards (e.g., the Baltic States), have been hit

hard by the global financial crisis, as they have not been able to depreciate their currencies in response to larger-than-average adverse shocks and have hence experienced substantial losses in the real economy. Furthermore, European countries have realized that, as a region, their macroprudential preparedness has been weak, and that their plans for handling cross-border problems—particularly where banks operate across borders—has been seriously deficient (de Larosière 2009). As a result, they have set up a European Systemic Risk Council led by the European Central Bank, and developed an enhanced European System of Financial Supervision—a regional variant of the proposed national Systemic Stability Regulators—with the establishment of the three Europe-wide supervisory agencies, as well as the establishment of the banking union.

One of the most important aspects of regional cooperation is better information and analysis, to understand the extent of financial interdependencies in the region as well as assess and address the challenges they pose. Europe has one key advantage over Asia in this regard. Right from the signing of the Treaty of Rome in 1957, the European Community set up the European Commission, a central organization tasked with promoting the process of integration. Other institutions have since been added, including the European Central Bank. The corresponding Asian institutions, insofar as they exist, are small and have little power in comparison. To make significant progress in improving regional financial stability, there clearly needs to be a suitable institution to drive the process.

The idea of an Asian Financial Stability Dialogue (AFSD) (Kuroda 2008; Hsu and Liao 2009; Plummer 2012) could serve as such a driver. In the early stages, it could focus on common areas of interest that have already been identified but are being dealt with under separate initiatives, such as the management of volatile short-term capital flows. Plummer (2012) sees it focusing initially on improving early warning systems, assisting in negotiations on common exchange rate changes, and perhaps helping in crisis management. In some ways, he sees it as being akin to the Open Method of Coordination in the EU, whereby countries agree on common objectives for the medium-term. Each country can determine how far it is willing to go in implementing these common objectives, and the role of the secretariat is to monitor progress and publish implementation outcomes. The problem with this arrangement is that it makes it easy for countries to implement relatively undemanding measures and then claim that they have undertaken the necessary actions; whether these measures actually work in practice and produce the desired results is another matter altogether. The main issue is how far the AFSD could go beyond simply monitoring developments, diagnosing potential threats, and suggesting remedies, particularly since organizations such as the Bank of International Settlements (BIS), did diagnose various sources of fragility before the crisis but had no powers to act upon them.

There are divergent views regarding the role that AFSD could play. Kuroda (2008), on the one hand, argues that the AFSD is not aimed at achieving the kind of financial market harmonization prevailing in Europe and accelerated under the Lamfalussy process, Hsu and Liao (2009), on the other hand, suggest that this is exactly the road the AFSD should take. Some harmonization will be appropriate in activities that relate to the flow of capital, both in the taxation of proceeds and the

common design of instruments. The AFSD can thus be seen as a first step toward achieving greater financial stability in the region. It makes more sense to have an organization with a limited mandate that makes significant progress, than try to hasten closer cooperation without the necessary political and popular support.

In recent years, the Executives' Meeting of the East Asia and Pacific Central Banks (EMEAP) has been playing a greater role in helping the Asian countries work together. While it may be overambitious to suggest that this might develop into an Asian BIS (Plummer 2012), it nevertheless presents a possible organizational basis for increasing cooperation. As yet, the organization lacks a developed secretariat, although participating central banks serve in its subcommittees and working groups. In some respects, the problem in Asia is that there are a number of different forums for cooperation involving different groups of countries, instead of one overarching forum that has the resources and mandate to make a major impact. The Chiang Mai Initiative Multilateralization (discussed in detail in Chapter 7) also can develop as a significant forum for monitoring regional economic and financial stability.

6.4 Crisis Management

Crisis management is the second line of defense to minimize losses, when the first measure, crisis avoidance, fails. It is clear that the state has an important role to play in resolution, and that the private sector is both unwilling and unable to perform much of this function efficiently. However, this role is very different from the state bailing out financial institutions with taxpayers' money. On the whole, bailouts occur because the authorities have no reasonable alternative, either because of inadequate powers or inadequate prepositioning. To maximize the chances of maintaining financial stability, governments need to strike a balance between effective crisis avoidance measures and well-formed crisis management regimes.

At the minimum, authorities need to be able to intervene early before the losses mount, and ensure that losses are recognized to reduce the uncertainty that causes markets to freeze up. They need a wide range of tools for early intervention, to allow them to take over failing banks before all value is lost. Delay and indecision tend to make crises much worse than if dealt with promptly.

Consistency is important. A typical response is to have policy reversals: initially, authorities may be prepared to bail out the first institutions that get into difficulty, despite prior assurances that this would not happen; but when the crisis turns out to be worse than expected, a switch back to a harsh policy may be required to prevent funds from running out. Such reversals can have a disastrous effect on risk-taking, and the willingness to achieve private sector solutions and confidence (Calvo 2009).

Sheng's (1996) four phases of crisis management—diagnosis, damage control, loss allocation, and changing the incentives—form a useful classification along a time line. Initially, the authorities will seek to buy time: they are unsure about the magnitude of the problem, but wish to make it very clear that it will be handled without any major disruptions, so that confidence is maintained. This is difficult,

as the situation is characterized by uncertainty. The global financial crisis has seen a rash of new measures that countries will want to add to their toolkit, ready to be deployed in future occasions. Being able to write down creditor claims or convert debt into equity without stopping the operation of the bank is a particular case in point (Mayes et al., 2001, chs 8 and 9). In general, it has proved possible to handle liquidity problems. The crisis has also underscored the usual problem of employing drastic measures early to reverse the situation and finding that options were used up prematurely.

It is not possible to suggest a single, fail-proof recipe for handling crises; not only do crises differ in character, the institutional structures of countries also differ considerably. Many policy options remain controversial, with some favoring asset management companies to handle impaired assets, and others preferring impaired assets to remain on the originators' balance sheets so as to give better incentives and opportunities for restructuring. As with crisis avoidance, it is essential that the authorities collaborate in their efforts to bring the crisis under control and resolve problems rapidly. Moreover, given the absence of crises in Asian economies during the global financial crisis, it is difficult to find directly applicable experience.

6.4.1 Coordination Issues

In a crisis, an organization needs to be in charge of actions to ensure that these are rapid, clear, and effective. This organization will need to work closely with all the parties involved: the central bank, the supervisory agency, the deposit insurer, and the ministry of finance. In place of such an organization, separate entities could also work under a coordinating committee responsible for ensuring that all the issues are addressed in a coherent manner. This type of governance by committee is likely to be difficult, although it has been practiced successfully in the case of the Republic of Korea (Cho 2012). In order to overcome time inconsistency, as much as possible of the resolution process should be subject to rules that have been laid down before the crisis. The existence of such arrangements in itself pushes back the frontier of where panic and crisis start. This is related to trying to abolish the idea of "too big, too complex, or too interconnected to fail," as is developed in the next section.

6.4.2 Bank Recapitalization/Disposal Issues

Perhaps what is most worrying about the crisis in developed economies is the degree to which market discipline failed. In part, this was due to the concentrated structure of many banking systems, which made it difficult to find suitable purchasers of their assets. But the bigger problem lay in the lack of incentives, and the fact that many of the larger banks had become too complex for them to be resolved. Regulatory capture, political pressure for forbearance, and lack of enforcement all contributed to weakening market discipline.

These circumstances need to change, and the authorities need to institute a plan for dealing with problem banks under its jurisdiction. In many respects, the onus is on the banks themselves to adopt structures that can be managed. The Bank of England has suggested that banks should prepare a "living will," setting out how they could be resolved in a manner that keeps their vital functions intact, so that markets are not disrupted and confidence in the system is maintained.[10] Similarly, regulators could adopt a living will promising that they will act rather than wait for more data. For confidence and stability to prevail, depositors must believe that distress in the banking sector will not put their deposits at risk and out of reach.

Much of the problem of bank resolution revolves around the difficulty of assigning losses. It should be possible to write down the shareholders according to a valuation—to zero if necessary. The bank would also need to be recapitalized. In some countries subordinated debt can be written down automatically, but an approach that has considerable merit would be to require that a sufficient amount of the banks' debt be hybrid capital, which can be converted from debt to equity in the event of a resolution, without any need for obtaining the agreement of those involved (Wall 2012). Such a debt-for-equity swap appears more feasible than requiring contingent capital, whereby an insurer provides the necessary capital should the bank get into a certain degree of difficulty.[11] The problem in this case is that in a systemic crisis, the burden on the insurers may become too great because of the simultaneous demands from several banks. If either of these approaches can be implemented, then the need to rely on the taxpayer could be greatly reduced, and nationalization can more easily be taken as the last resort.

There is a clear link to improvements in microprudential regulation discussed in Section 6.3. The global financial crisis underscored that there are important differences in the sources of banks' capital that affect government's ability to stabilize banks in the event of a shock. It is really only equity that can be used while the bank is still running. As such, there has been a move to increase equity requirements. However, if more of Tier 1 and Tier 2 capital could be converted to equity in the event of severe distress, it could be possible for a bank to continue operating, much in same the way that a nonfinancial company can reorganize its debt obligations in the face of difficulty. Preferred stock could be converted into common equity, should the equity ratio fall below a particular threshold (Wall 2012). Both book and market value triggers are required to ensure that losses are recognized. For the capital cushion to be usable, such a conversion needs to occur without the bank ceasing to operate. In some countries such as the US this can be done through the special resolution regime, although ownership is removed from the original shareholders.

It is usually very difficult to proceed with recapitalization without thoroughly addressing the valuation of impaired assets (Adams 2012). Two techniques are

[10] They are also referred to as "funeral plans" or "shelf insolvency" (Wall 2012).

[11] The Squam Lake Working Group (2009) has suggested that such a debt for equity swap should be triggered only when there is a general crisis. If the problem is not system-wide, the individual institution could be subjected to the normal special resolution regime, as there will be other well-capitalized institutions in the market that could take on the troubled bank before or after failure.

normally employed: one is to support existing organizations, so that the assets are kept on the balance sheet but subject to some loss sharing agreement; the other is to altogether strip them out of problem banks and place them in asset management companies (AMCs) or "bad banks." The former route stands a better chance of avoiding overpaying for assets that cannot be valued rapidly, and increases the chance that the assets will be well managed. Otherwise, banks will try to offload all their worst assets at inflated prices, which may impede lending needed to get the economy restarted, as AMCs are less likely to roll over loans and may be unable to offer new lending. On the other hand, maintaining the problems in the existing banks may keep them under pressure and sustain the dangerous cycle of expected losses leading to the need to sell assets, which subsequently depresses their price, requiring further sales. The key step is to identify rapidly which banks do not need assistance, which have problems that can be addressed, and which simply require intervention and resolution.

6.4.3 Issues Related to Deposit Insurance

Deposit insurance is increasingly being used in Asia, with Malaysia leading in the implementation of standards and principles governing its use. In Europe, the present crisis exposed five main failings of deposit insurance systems:

- people were not given continuous access to their accounts to prevent a run;
- coverage was inadequate, necessitating an increase in deposit insurance levels;
- some funds were unable to cope with the demands placed on them;
- some countries needed to offer wider guarantees to other creditors; and
- there were serious problems for depositors in cross-border banks.

Asian countries therefore need to check their arrangements against current standards as set out by the International Association of Deposit Insurers (2009).

As in the past, many countries resorted to the use of blanket guarantees to stabilize the market. Such guarantees were initially introduced by Hong Kong, China and spread rapidly throughout the region.[12] In a crisis, such measures to shore up confidence and protect the public from losses have an important effect on both domestic and foreign capital flows. While such guarantees are largely costless and very effective if the crisis does not deepen, they can become very expensive and indeed lose credibility if the crisis worsens (Adams 2012). Despite the moral hazard involved, countries may find it difficult to resist the call for such guarantees if their use in other countries becomes widespread. As such, some degree of prior regional coordination, perhaps as part of the AFSD, might be required, but such commitments can often prove useless in the midst of a crisis. Ultimately, the extent to which blanket guarantees work will depend on the fiscal solvency of the country and the foreign exchange liquidity of the central bank.

[12] There is a difference between retail deposit guarantees and a blanket (sovereign) guarantee. The former is meant to stop local bank runs, the latter to prevent a currency run.

6.4.4 Cross-Border Arrangements

The issue of crisis avoidance has an important international dimension, not only because many of the largest banks operate across borders, but also because many macroprudential issues require international action. Unfortunately, the actions that have been undertaken thus far by the international community have been insufficient. While the new Financial Stability Board (FSB) is an improvement over its predecessor, the Financial Stability Forum, it is unlikely to have the staff necessary to undertake action on the scale required. The FSB also lacks enforcement capacity. It is not clear that it even has the mandate to name and shame. The FSB allows national authorities to retain sovereignty, making it difficult to get them to act without effective forms of compulsion. International attempts to handle cross-border banks, such as those by the Basel Committee, have been successful in identifying problems but not solutions. Even in the EU, where the internationalization of the financial system is an explicit objective, they have not been able to address the problem[13]. The de Larosière Report (2009), which addresses macroprudential stability and the ability of national supervisors to work together and harmonize their tools and procedures, only identified the need for action on the resolution of cross-border financial institutions. Handling institutions such as Lehman Brothers does not lie within the purview of such regional authorities, and therefore remains unaddressed.

Kawai and Pomerleano (2009) envision the AFSD as forming part of a concerted FSB effort to improve international stability, as well as serving as a vehicle for the Asian countries to address their own problems, irrespective of the global response. They argue, along with Winkler (2012), that there is a role for a regional lender of last resort, which they label the Asian Monetary Fund. They see this very much as an alternative to giving the IMF wider powers. In part, this reflects the region's continuing discomfort with the conditionalities imposed by the IMF during the 1997–1998 crisis. At present, each country has tried to provide its own foreign exchange cushion against future shocks in order to avoid IMF assistance, but this has helped maintain some of the global imbalances that have led to destabilizing activities outside Asia. Box 6.3 describes the case of the Republic of Korea during the global financial crisis, where cross-border cooperation was a key factor in resolving the situation.

Box 6.3: The Need to Reduce Financial Vulnerability in the Republic of Korea

The direct financial impacts of the global financial crisis in Asia have been greatest in the Republic of Korea, due to a number of circumstances: an open capital market; Korean banks' high dependence on wholesale funding, especially in foreign currency; a relatively small current account surplus; and

[13] The European Commission's recent proposal for a pan-EU resolution framework (EC 2012) probably marks the most significant progress to date on this issue.

difficulties in monitoring foreign currency liabilities in relation to foreign exchange reserves. The Republic of Korea faced a severe shortage of US dollars which raised domestic interbank rates and caused the Korean won to depreciate dramatically. In order to stabilize the situation, the Bank of Korea eventually had to obtain a swap agreement of up to US$ 30 billion from the US Federal Reserve.

The key vulnerability was the dependence of Korean banks on wholesale funding. The loan-to-deposit ratio for Korean banks was about 1.2, which is higher than one for most Asian banks. Much of the shortfall of deposits was therefore covered by the wholesale market. Due partly to the important role of foreign banks in the Republic of Korea (a legacy of the 1997–1998 Asian financial crisis), many of these funds were customarily obtained in US dollars from the headquarters of those foreign banks. However, once the crisis erupted, these funds were withdrawn rapidly.

A second major issue involved the level of foreign exchange liabilities related to foreign exchange reserves. Prior to the crisis, the Republic of Korea held about US$ 200 billion in foreign exchange reserves. This was comfortably higher than the level of short-term foreign loans, i.e., those with less than one-year maturity. However, the market reacted dramatically when it was revealed that a large amount of longer-term loans were due to be rolled over within the coming year, effectively making them short-term loans, too. It also became apparent that the outflow of equity holdings could prove to be a drain on foreign exchange reserves as well.

Two broad lessons can be derived from the Republic of Korea's experience. First, the degree of dependence on short-term foreign currency funding should have raised macroprudential red flags. Second, providing a secure source of foreign liquidity is essential, either by holding adequate amounts of foreign exchange reserves or by having external sources of liquidity readily available, whether through regional swap agreements or agreements with the US Federal Reserve or the IMF.

6.5 Deepening Asian Bond Markets

In the decade since the 1997–1998 Asian financial crisis, Asian bond markets have substantially expanded in size. This is partly because of initiatives such as the ABMI and the ABFs, but also because of special factors such as widespread issuance of sterilization bonds by governments, and the general search for yield during a period of low global interest rates and declining perception of risk. Nevertheless, these markets are still relatively undeveloped compared to the region's share of the world economy, especially for private sector bonds. Further deepening could contribute to enhancing financial stability and promoting a rebalancing of growth toward domestic demand, by helping to channel the high level of regional savings to investment projects (both public and private) and consumption within the region. This section

describes the rationale for developing Asian bond markets, the progress that has made so far, factors hindering further progress, and measures to promote further development. (This section is based largely on Batten et al. 2012 and Spiegel 2012).

6.5.1 The Rationale for Developing Asian Bond Markets

It is not clear how effective bond markets are in providing alternative sources of finance in the face of difficulties in the banking sector. This channel clearly benefited US companies during the global financial crisis, but the impact on Asian companies is less obvious. However, where regional financial markets are vulnerable to the effects of financial crises in developed economies, any alternative financing routes should help. Nevertheless, increased size and openness of financial markets can amplify risks and volatility as well. Fixed income capital flows can be particularly volatile during crises. This points to the need for a cautious approach to developing these markets.

There is substantial evidence that increasing the size of bond markets tends to reduce issuance costs and increase market efficiency. Increased size has the following benefits:

- increased transaction volumes can raise the level of coverage by global rating agencies;
- development of bond markets tends to reduce yield curve anomalies, thereby increasing the information content of the market; and
- larger markets tend to be more liquid, thereby attracting more investors.

Analysis of the development of bond markets in the eurozone shows that the primary path to removing bond market inefficiencies may be achieving the optimal scale necessary for ensured liquidity, as well as deeper analyst coverage. Asian markets still have substantial limitations with regard to all three factors. However, these factors can be self-reinforcing, leading to a virtuous circle of bond market development.

6.5.2 Problems of Asian Bond Markets

Aside from problems of scale, Eichengreen and Luengnaruemitchai (2006) highlighted several obstacles to the development of bond markets in Asia and the Pacific including the need to make other reforms simultaneously to support aspects financial markets, such as improve bankruptcy legislation; reduce the degree of corruption; strengthen securities market regulation, remove of capital controls; and, finally, adopt international accounting standards. The very presence of capital controls, by keeping bond markets underdeveloped, reduces the apparent incentive to end those controls. In addition, there are necessary regulatory reforms to improve corporate governance (Nestor and Thompson 1999; Thompson 1999; Thompson and Poon 2000) and various blueprints for financial market development to be made (Jiang and McCauley 2004; Park and Park 2003).

Due to small market size, many bond issuers in Asia are still not covered by the major global credit rating agencies. This reduces the investor base, as many large Western institutional investors, such as pension funds, require that the bonds included in their portfolios be rated by international credit rating agencies.

In addition, the presence of a significant government sector may crowd out corporate issuers. This is clearly linked to the underdevelopment of some private bond markets (e.g., India, New Zealand, and Pakistan, Batten et al. 2012). Some authors (Lardy 2008) have argued that increased issuance of sterilization bonds has had a negative impact on the development of the PRC bond market: the need to continue issuing these bonds to pursue exchange rate goals, and the desire to keep funding costs low, give the PRC government an incentive to discourage the development of the rest of the bond market.

All these factors inhibit the size of the market, which in turn discourages market participants, leading to a kind of low-level equilibrium trap. Even in countries where the government actively sought to develop markets, success was hindered by the lack of proactive involvement of market participants. For example, see the Republic of Korea's failure to develop a viable foreign bond trading and issuance market despite the best efforts of policymakers (Batten et al. 2012).

6.5.3 Development Efforts to Date

The literature on ways to develop bond markets generally focuses on facilitating the demand and supply of bond issues, and then overcoming structural impediments such as the absence of financial market technology that may impede the development agenda (Walter 1993; Schinasi and Todd-Smith 1998; Kim 1999; Rhee 2000; Lejot et al. 2006; Rhee 2004; Park and Park 2003; Arner et al. 2006). Increasing the demand for bonds was the main impetus for regional initiatives such as the ABMI and ABFs, which were introduced after the 1997–1998 Asian financial crisis. The ASEAN+3 has also endorsed the introduction of a credit guarantee and investment facility (CGIF) to reduce structural impediments for private corporate bonds, although further measures are still being worked out.

Asian Bond Funds In June 2003, the EMEAP announced the creation of the first Asia Bond Fund (ABF1), which would be managed by the BIS (BIS 2003). The ABF1 consisted of US-dollar-denominated sovereign and quasi-sovereign Asian bonds of approximately US$ 1 billion, issued by the EMEAP countries (excluding Australia, Japan, and New Zealand). The ABF1 was designed to encourage the development of Asian bond markets and reduce the region's perceived excessive reliance on bank financing (Kawai 2007). From the beginning, the ABF1 was aimed at retaining some of the region's reserves within the region to support the development of local capital markets (Spiegel 2012).

The second Asia Bond Fund (ABF2), launched in 2004, differs from the ABF1 in that it invests in instruments denominated in local Asian currencies—specifically, local currency issues by EMEAP countries other than Australia, Japan, and New Zealand. The ABF2 has two components: the Pan-Asia Index Fund (PAIF), which

invests in sovereign and quasi-sovereign issues from eight EMEAP countries; and the Fund of Bond Funds (FOBF), which invests in eight single market funds that hold sovereign and quasi-sovereign local currency bonds. Both the PAIF and the FOBF have initial allocations of US$ 1 billion (Jang and Hyun 2009). The ABF2 was established to help alleviate fears that excessive holdings of local currency issues by foreign speculators could "… erode control over monetary policy and expose them to currency speculation" (Park and Park 2003, p. 4).

These initiatives have helped increase the demand for Asian bonds, but their effect has been limited, given the relatively small size of the funds. The impact of the ABF1 is likely to have been particularly small, given that it only buys dollar-denominated bonds. The size of the ABFs needs to be increased substantially. Moreover, there needs to be more focus on private sector bonds rather than on sovereign issues.

Asian Bond Markets Initiative In August 2003, the ASEAN+3 Finance Ministers' Meeting in Manila announced the ABMI in a bid to improve regional medium and long-term financial conditions in the region. Bonds guaranteed by the Japan Bank for International Cooperation and backed by these Pan-Asian bonds were issued on the Singapore exchange, which promoted the creation of a regional collateralized debt obligation CDO market. At the same time, the Asian Development Bank (ADB) and the International Finance Corporation issued ringgit-denominated Malaysian bonds. There were expectations that the ABMI would help to "uncover" creditworthy private borrowers in the region (Park and Park 2003).

In May 2008, efforts in this direction were increased with the release of the second ABMI roadmap creating task forces for the promotion of issuance and demand for local currency bonds, and improvements in regulatory frameworks and institutional structures. In addition, member countries were asked to develop references for self-assessment to serve as their benchmarks (ASEAN+3 Finance Ministers' Meeting 2008). However, the effectiveness of these measures remains to be seen.

Credit Guarantee and Investment Facility (CGIF) The ASEAN+3 Finance Ministers' Meeting also endorsed the establishment of a CGIF as a trust fund of ADB, with an initial capital outlay of US$ 750 million to support private local currency bond issuance in the region. This could potentially have a greater impact than the earlier initiatives to encourage demand for private corporate bonds.

6.5.4 How to Develop Bond Markets Further

Despite these efforts and the progress made in developing markets, there is substantial potential to expand Asian bond markets further. This section identifies further actions that should be effective in expanding Asian bond markets, including:

- encouraging foreign participation;
- improving government debt management to enhance liquidity;
- improving market infrastructure;
- encouraging rating agencies;

- improving regulation; and
- promoting regional harmonization.

Encourage Foreign Participation Encouraging foreign bond issuance in local markets is likely to bring regional markets closer to global standards. Supranational corporations such as the World Bank can play a key role in developing the corporate bond market, as this market is almost entirely high credit quality, comprising sovereign, supra-national, and major international bank issuers (Batten et al. 2012).

This recommendation follows the historical pattern of bond market development in other countries, which appears to require a certain sequence of issuance. Generally, the highest credit quality issuers issue first, followed by high-quality banks and some multinationals. This order seems to have been developed by intermediaries to assist pricing—such as the need for benchmark bonds at long maturities—and related issues (Batten et al. 2012). Moreover, encouraging foreign borrowers to issue domestically in the local currency would allow countries to improve domestic financial depth. As noted by Hoschka (2005), the presence of highly-rated multinational corporations in the domestic local currency bond market may actually "crowd in" local issuance, because they are likely to be experienced in raising capital through this channel and can deepen the markets for their domestic counterparts (Spiegel 2012). In addition, foreign firms that raise funds in Asian markets, with the intent of swapping these funds into other currencies, can contribute to the development of cross-currency swap markets. This is desirable for local issuers that issue abroad and wish to hedge these issues to avoid exposure to currency mismatches (Spiegel 2012). Of course, it must be recognized that entry by foreign corporations or supranational issuers cannot be taken for granted.

Improve Government Debt Management Risk-free benchmarks are an integral and necessary requirement for pricing and hedging in the corporate bond market. Ultimately, the risk-free government bond provides the benchmark for credit spreads. Thus, it is critical to recognize that adequate liquidity must be maintained, irrespective of fiscal requirements. If the supply of such securities is lacking, an alternative would be to treat high quality foreign bonds formally as credit substitutes—as has occurred in Australia and New Zealand (Batten et al. 2012).

Improve Financial Infrastructure Globally, the great majority of bonds (88.2%) are fixed rate with simple pricing features (Batten et al. 2012). Such issuers will normally require the means to hedge the currency risk associated with local currency bond issuance. The long-term viability of this segment is thus closely linked to the presence of (i) highly liquid foreign exchange and derivatives markets that facilitate risk management and transformation; (ii) enabling regulation to facilitate cooperation with market participants; and (iii) benchmark issues and competitive pricing between markets (Batten et al. 2012).

Encourage Rating Agencies It is crucial to expand credit rating agencies' coverage of private issues, by encouraging regional ratings agencies and promoting activities by global ratings agencies (Spiegel 2012). Global and regional rating agencies have their strengths and weaknesses, but the best strategy is likely to be one that

encourages additional coverage by both. The key point is that requiring transparency at levels that facilitate rating agency coverage is likely to facilitate additional coverage by both forms of agencies. In any event, the conflicts of interest that have compromised the independence and impartiality of ratings must be addressed.

Improve and Liberalize Further Financial Regulation It is also important to develop a robust, stable, and secure domestic financial system to encourage both issuers and investors. Such a system would allow firms to issue offshore, as well as in foreign currencies. Many market imperfections in Asian markets are self-induced. For example, withholding taxes and legal constraints combine to segment markets from global capital (Jiang and McCauley 2004) and appear to be a major deterrent to investors. Reluctance by some currency authorities to permit overseas transactions in their currency is another barrier. Again, however, financial deregulation entails risks, and needs to be implemented judiciously.

Cooperate Regionally to Harmonize Markets For many Asian countries, increases in bond market size as a share of GDP are unlikely to be sufficient to obtain the scale economies necessary to achieve cost reductions that are adequate to successfully compete with offshore bond markets. Instead, achievement of adequate scale economies is likely to require cooperation at the regional level. Their best prospect would be some kind of regional currency basket that would mitigate the currency exposure of issuers, although not eliminate it entirely (Spiegel 2012).

The example of European bond markets is instructive. Hale and Spiegel (2009) found that, subsequent to the launch of the monetary union, among nonfinancial firms in international bond markets, there was a 35.3 % increase in the probability of issuing in euro relative to pre-union national currencies. Even before the adoption of the euro, the development of the European currency unit (ECU) led to a rapid expansion of ECU-denominated bond issues in Europe. The adoption of an Asian Currency Unit might increase issuance within the region as well.

In addition, Asian countries will have to sustain progress in the regional harmonization of regulatory standards. This is the motivation for the promotion of "Asian Bond Standards" within the region (Spiegel 2012).

6.6 Supporting Financing for Small and Medium-Sized Enterprises

The global economic crisis provides a strategic opportunity for Asian governments to initiate policy measures not only to address short-term challenges facing trade financing for SMEs, but also to facilitate long-term financial sector reform and regulation. SMEs have been rather neglected because Asian banks have focused more on consumer lending, which is less complicated than the SME business. In this respect, policy measures should be directed at creating an enabling environment for SMEs, by (i) developing a corporate credit information database and credit guarantee system at both the national and regional levels; and (ii) nurturing entrepreneurship

and technological and human resource development. Stimulus packages and crisis management strategies have included assistance to SMEs as part of efforts to rebalance growth and provide employment safety nets.[14] However, stimulus packages directed at SMEs have focused mainly on achieving short-term goals, such as boosting trade finance and domestic demand. Governments need to conceptualize a broader and longer-term blueprint for financial sector reform, and align current policy measures to this long-term plan. A better balance between enhancing SME lending and ensuring stability (prudential) can be achieved through a holistic approach that strengthens supervision and capabilities.

6.6.1 Government Support Measures During the Global Financial Crisis

The stimulus packages that have been adopted in response to the crisis contain measures to address the financing problems of SMEs that can be classified into three different groups:

1. measures supporting sales and SMEs' working capital, such as export credit and insurance, tax reductions and deferrals;
2. measures to enhance SMEs' access to liquidity, mainly to credit, through bank recapitalization and expansion of existing loan and credit guarantee schemes; and
3. measures to help SMEs maintain their investment levels, and more generally their capacity to respond to a possible surge in demand in the near future, through investment grants and credits; accelerated depreciation; and financing for research and development.

The most widely adopted measure has been the extension of, and enhancement to, existing credit guarantee schemes. This is neither a long-term nor sustainable solution to SME trade financing; improvements in the capital base, level of technology, and human resources are far more crucial to the long-term development of SMEs.

More generally, commercial banks have difficulty in finding credit-worthy SMEs. Indeed, one important lesson learned from the measures taken in the aftermath of the 1997–1998 Asian crisis is that forcing state banks to provide cheap and easy credit to SMEs without careful assessment is likely to result in resource misallocation. Mere provision of credit cannot ensure that SMEs will be successful. A key constraint for SMEs relates to technology and skills. The focus of assistance should be on long-term, sustainable solutions—not just helping SMEs survive the crisis, but rather supporting their capacity for long-term survival and growth through entrepreneurship and productivity (ADB 2009).

[14] See Chapter 3 for a discussion of the role of SMEs.

6.6.2 Role of Government in Facilitating SMEs' Access to Credit

The rationale for government's role in facilitating SMEs' access to credit is generally drawn from research showing SMEs' contribution to economic performance, and research showing the link between credit flow and economic performance. It is widely believed that SMEs play a crucial role in developing countries, by helping to alleviate poverty and being an important contributor to innovation and sustainable growth. Empirical studies have also shown that credit to the private sector plays a key role in economic growth (Beck et al. 2000; Khan and Senhadji 2000). This growth may be due to SME performance, as suggested by studies that explore the link between credit flow and SME performance. Utilizing cross-industry and cross-country data, Beck et al. (2000) found that improvements in financial development (as measured by the ratio of private credit to GDP) help accelerate the growth of SMEs. It is therefore not surprising that many governments have intervened in the financial sector to boost credit flow to SMEs. This section examines the experience of countries, particularly Singapore, in identifying the lessons learned and determine the role that governments can play in this respect.

Market failures related to information gaps, the need for coordinated and collective action, and concentration of power imply that governments have an extensive role in supporting, regulating, and sometimes directly intervening in the provision of financial services, particularly in the wake of severe financial and economic crises. Governments should conceptualize a broader and longer term blueprint for financial sector reform, and align current stimulus measures to this long-term plan. In this context, government intervention is necessary to correct market failures related to information gaps and the need for coordinated and collective action. However, government actions in most countries are often ineffective, and measures that are effective in environments that already have strong institutions may fail elsewhere. At the same time, a well-functioning financial system in and of itself is likely to help strengthen financial governance. Financial sector policy reforms that explicitly recognize the importance of access can also help ensure that financial systems become more inclusive.

6.6.3 Recommended Measures to Support SME Finance

While market failures present a compelling rationale for governments to intervene in finance, governments should work with market forces to correct, rather than exacerbate, existing market failures. The most important role of government is not to provide finance, but to strengthen the institutional underpinnings of financial transactions (ADB 2009). This requires improvements in legal, regulatory, and information infrastructure that underpins the efficient operation of financial systems.

The transition to a new and more stable financial market structure will require careful planning and greater international cooperation, in order to avoid market distortions and revive financial markets at a reasonable level of systemic risk. Measures in response to the crisis should be aligned accordingly. For example, governments

should consider reforming their subsidy programs to differentiate between the financing needs of SMEs due to structural market failure and the normal economic cycle. Loan guarantees also need to be reconsidered, and designed in a way that minimizes moral hazard and avoids market distortions. A clear exit strategy would also be needed to allow authorities to withdraw their support systematically.

All this requires a deep understanding of how various policies in different contexts and with different purposes relate to one another. For example, raising SME lending with loan guarantees might contradict efforts to strengthen bank supervision. Such an understanding would help improve the coherence of policies.

Other measures to improve SME financing include building banks' capacity in transaction technologies, and encouraging innovation so that banks can try out technologies that have a comparative advantage in certain institutional environments. The entry of foreign-owned banks could be encouraged, as they are more able to use transaction technologies suited to SMEs effectively. Finally, a consistent and accessible SME financial database should be established.

6.7 Conclusions and Recommendations

The global financial crisis sounded an alarm for all countries. Fortunately, most countries in the Asian region have only been subject to a relatively mild economic shock, although one that has taken its toll on investment. The humbling experience of other, more developed countries—particularly those that thought they had good systems for crisis prevention and management—shows that it is critical for Asian countries to take this opportunity to review their own systems. Many of the challenges highlighted by the crisis can be dealt with at the national level, but some issues will require action at the regional level.

There is a range of measures that can be implemented to improve both the ability to prevent crises and withstand shocks. However, such measures will need to be coordinated with the ongoing work of international institutions, particularly the Basel Committee, in improving not just macroprudential and microprudential stability but also providing cross-border insulation and action. The development of the Basel III standards for capital adequacy and liquidity management represents an important step forward, but greater progress is needed in other areas, such as cross-border surveillance and reservation frameworks.

Action across a broad front is required to prevent crises where possible, and implement effective crisis management systems when crises occur. There is also a need to deepen and broaden Asian financial markets, at both the national and regional levels.

Crisis prevention can be improved by:

- having a comprehensive structure of institutions, with clear and non-overlapping objectives;
- improving microprudential monitoring through "smarter" rather than more regulation, to ensure that financial institutions strive to be prudent on their own;

- establishing a mechanism with clear lines of responsibility for effective macroeconomic surveillance and action such as a high-level systemic stability regulator, with monetary tools separate from monetary policy;
- reducing procyclicality of capital adequacy rules, capital buffers, and accounting rules;
- ensuring a prudent approach to the regulation of innovative financial products and strengthening influence over non-bank financial institutions; and
- changing incentives, especially management compensation, and incentives for regulators to act decisively to head off problems.

Crisis management can be improved by:

- having a coordinated and effective set of institutions that can comprehensively cover all phases of the crisis;
- ensuring that there are ex ante credible means of handling failures in all financial institutions, particularly those that operate across borders;
- implementing an effective deposit insurance system; and
- improving resilience against shocks by substantial enhancement of regional mechanisms, inter alia through an Asian Financial Stability Dialogue.

Promoting bond market development can be achieved by: encouraging foreign participation, especially by multinational institutions and corporations; improving government debt management; improving market infrastructure to allow issuers to hedge maturity and currency risk; expanding credit rating agencies' coverage of private issues; and cooperating at the regional level to achieve adequate scale economies, including the development of a regional currency basket (the Asian Currency Unit) that would mitigate the currency exposure of issuers and investors.

The following assistance to SMEs would be beneficial: building banks' capacity in transaction technologies; encouraging innovation for banks to use technologies that have a comparative advantage in certain institutional environments; and encouraging the entry of foreign-owned banks, as they have been shown to be more able to effectively use transaction technologies suited to SMEs. Related reforms should also be encouraged, including: raising accounting standards and services; promoting SME training in areas such as financial reporting and proposal writing; strengthening the legal system; promoting public and private partnership to facilitate financing of SMEs; and setting up a consistent and accessible SME credit database.

6.8 Appendix 6.1: Financial Regulatory Supervision in Selected Asian Economies

	Status of financial sector surveillance and regulation			
	Entity with regulatory oversight			Macro-prudential responsibility
	Banks	Securities and markets	Insurance	
Australia	Australian Prudential Regulation Authority (APRA)	Australian Securities and Investments Commission (ASIC)	Australian Prudential Regulation Authority (APRA)	APRA, collaborates with ASIC and RBA
People's Republic of China	People's Bank of China (PBoC); China Banking Regulatory Commission (CBRC)	PBoC; China Securities Regulatory Commission (CSRC)	PBoC; China Insurance Regulatory Commission (CIRC)	PBoC Financial Stability Bureau; cooperation with CBRC
Hong Kong, China	Hong Kong Monetary Authority (HKMA)	Securities and Futures Commission (SFC)	Office of the Commissioner of Insurance (OCI)	Hong Kong Monetary Authority (HKMA)
India	Reserve Bank of India (RBI): Board of Financial Supervision (BFS)	Securities and Exchange Board of India (SEBI)	Insurance Regulatory and Development Authority (IRDA)	RBI Financial Stability Unit
Indonesia	Bank Indonesia (BI)	Indonesian Financial Services Authority (OJK)	Indonesian Financial Services Authority (OJK)	Financial System Stability Forum
Japan	Financial Services Agency (FSA)	Financial Services Agency (FSA)	Financial Services Agency (FSA)	Not clear
Republic of Korea	Financial Supervisory Service (FSS)	Financial Supervisory Service (FSS)	Financial Supervisory Service (FSS)	Bank of Korea (BOK) and FSS
Malaysia	Bank Negara Malaysia (BNM)	Securities Commission	Bank Negara Malaysia (BNM)	Bank Negara Malaysia (BNM)
Philippines	Bangko Sentral ng Pilipinas (BSP)	Securities and Exchange Commission (SEC)	Insurance Commission (IC)	Financial Sector Forum (FSF): BSP, SEC, IC and Philippine Deposit Insurance Corporation

	Status of financial sector surveillance and regulation			
	Entity with regulatory oversight			Macro-prudential responsibility
	Banks	Securities and markets	Insurance	
Singapore	Monetary Authority of Singapore (MAS)	Monetary Authority of Singapore (MAS)	Monetary Authority of Singapore (MAS)	Monetary Authority of Singapore (MAS)
Taipei,China	Financial Supervisory Commission (FSC)	Financial Supervisory Commission (FSC)	Financial Supervisory Commission (FSC)	Financial Supervisory Commission (FSC)

Source: Authors' summary of websites of regulatory agencies

References*

Adams, C. 2012. The role of the state in managing and forestalling systemic financial crises: Some issues and perspectives. In *Implications of the global financial crisis for financial reform and regulation in Asia,* eds. M. Kawai, D. Mayes and P. Morgan. Cheltenham, UK: Edward Elgar Publishing Ltd.

ADB. 2004. *Monetary and financial integration in East Asia*. Basingstoke: Macmillan.

ADB. 2009. Enterprises in Asia: Fostering dynamism in SMEs. In *Key indicators for Asia and the Pacific 2009*. Manila: ADB.

Andtrizky, J., J. Kiff, L. Kodres, P. Madrid, A. Maechler, A. Narain, N. Sacasa, and J. Scarlata. 2009. Policies to mitigate procyclicality. Paper presented at the ADBI conference on financial sector reforms and regulations, Tokyo, 21–23 July.

Arner, D, P. LeJot, and G. Rhee. 2006. Developing regional market: Essential national changes in law and regulation. In *Asia's debt capital markets: Prospects and strategies for development,* eds. D. Arner, J. Park, and P. LeJot. New York: Springer.

Bank for International Settlements (BIS). 2003. Launch of the Asian Bond Fund. BIS press release. http://www.bis.org/press/p030602b.htm. Accessed 2 June.

Basel Committee on Banking Supervision. 2010. Press release: Group of Governors and Heads of Supervision announces higher global minimum capital standards. Basel, Switzerland: Bank for International Settlements. 12 Sept.

Batten, J., W. P. Hogan, and P. Szilagyi. 2012. Foreign bond markets and financial market development: International perspectives. In *Implications of the global financial crisis for financial reform and regulation in Asia,* eds. M. Kawai, D. Mayes and P. Morgan. Cheltenham, UK: Edward Elgar Publishing Ltd.

Beck, T., and A. Demirguc-Kunt. 2009. Financial institutions and markets across countries and over time—Data and analysis. Policy Research Working Paper. Working Paper WPS4943. Washington, DC: World Bank.

Beck, T., R. Levine, and N. V. Loayza. 2000. Finance and the sources of growth. *Journal of Financial Economics* 58 (1–2): 261–300.

Calvo, G. 2009. Financial crises: Tales for central bankers and financial regulators. Keynote speech at the Banco Central de Chile Conference on Financial Regulation: Lessons from the Recent Global Crisis, Santiago, 17 August.

* The Asian Development Bank refers to China by the name People's Republic of China.

Capannelli, G., J. W. Lee, and P. Petri. 2009. Developing indicators for regional economic integration and cooperation. ADB Working Paper Series on Regional Economic Integration No. 33. Manila: ADB.

Cho, Y. J. 2012. State intervention in crisis resolution in the financial sector: Case study of the Republic of Korea. In *Implications of the global financial crisis for financial reform and regulation in Asia,* eds. M. Kawai, D. Mayes and P. Morgan. Cheltenham, UK: Edward Elgar Publishing Ltd.

de Larosière, J. 2009. The high level group on the financial crisis: Report. Brussels: European Commission. http://ec.europa.eu/internal_market/finances/docs/de_larosiere_report_en.pdf. Accessed 15 August 2010.

Eichengreen, B., and P. Luengnaruemitchai. 2006. Why doesn't Asia have bigger bond markets? Asian Bond Markets: Issues and Prospects, BIS Papers No. 30 (Nov): 40–77. Basel: BIS.

European Commission. 2012. Proposal for a directive of the European Parliament and of the Council establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directives 77/91/EEC and 82/891/EC, Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC and 2011/35/EC and Regulation (EU) No 1093/2010. Brussels: European Commission. http://ec.europa.eu/internal_market/bank/docs/crisis-management/2012_eu_framework/COM_2012_280_en.pdf. Accessed 2 July 2012.

Fernandez de Lis, S., and A. Garcia-Herrero. 2012. Dynamic provisioning as countercyclical regulation: An assessment of experiences. In *Implications of the global financial crisis for financial reform and regulation in Asia,* eds. M. Kawai, D. Mayes and P. Morgan. Cheltenham, UK: Edward Elgar Publishing Ltd.

Financial Stability Board. 2011. Key attributes of effective resolution regimes for financial institutions. Basel: Bank for International Settlements. http://www.financialstabilityboard.org/publications/r_111104cc.pdf. Accessed 3 April 2012.

Fujii, M. 2012. Need for regulation of innovative financial products and specific investor groups. In *Implications of the global financial crisis for financial reform and regulation in Asia,* eds. M. Kawai, D. Mayes and P. Morgan. Cheltenham, UK: Edward Elgar Publishing Ltd.

Garcia, G. 2010. Failing prompt corrective action. Revised version of a paper given at the International Business, Economics, and Finance Association/Western Economics Association meetings in Vancouver, Canada, July 2009.

Hale, G. B., and M. M. Spiegel. 2009. Who drove the boom in euro-denominated bond issues? Federal Reserve Bank of San Francisco Working Paper No. 2009–20. San Francisco, CA: Federal Reserve Bank of San Francisco.

Hoschka, T. C. 2005. Local currency financing: The next frontier for MDBs? ADB Economics and Research Department Working Paper No. 68. Manila: ADB.

Hsu, C.-M., and C.-F., Liao. 2009. Bank supervision and bank performance: The Great China area in financial turmoil and the Asian Lamfalussy process. Paper presented at the ADBI conference on financial sector reforms and regulations, Tokyo, 21–23 July.

IMF. 2009. *Global Financial Stability Report*. Washington, DC: IMF.

International Association of Deposit Insurers. 2009. *Core principles for deposit insurance*. Basel: International Association of Deposit Insurers.

Jang, H.-B., and S. Hyun. 2009. A way forward for Asian Bond Fund development. Bank of Korea Institute for Monetary and Economic Research Working Paper No. 383. Seoul: Bank of Korea.

Jiang, G., and R. McCauley. 2004. Asian local currency bond markets. BIS Quarterly Review (June). Basel, Switzerland: BIS.

Joint Shadow Financial Regulatory Committees. 2009. Making securitization work for financial stability and economic growth. Joint statement by shadow financial regulatory committees of Asia, Australia-New Zealand, Europe, Japan, Latin America, and the United States; Santiago de Chile. 17 Aug.

Kawai, M. 2007. Evolving economic architecture in East Asia. ADBI Discussion Paper No. 84. Tokyo: ADBI.

Kawai, M., and M. Pomerleano. 2009. Containing a systemic crisis: Is there a playbook? Paper presented at the Federal Reserve Bank of Chicago and the World Bank Conference, The International Financial Crisis: Have the Rules of Finance Changed?, Chicago, 24–25 September.

Khan, M. S., and A. Senhadji. 2000. Financial development and economic growth: an overview. International Monetary Fund Working Paper 00/209. Washington, DC: IMF.

Kim, K. H. 1999. Creating long-term mortgage-backed bond markets in Asian developing economies—A post crisis agenda. Manila: ADB.

King, M. 2009. Mansion House speech. Presented at the Lord Mayor's Banquet for Bankers and Merchants of the City of London at the Mansion House. London. 18 June.

Kuroda, H. 2008. Asia's contribution to global economic development and stability. Closing remarks at the ADBI Annual Conference, Tokyo, December.

Lamberte, M. 2009. Comments on Larry Wall. Presented at the ADBI conference on financial sector reforms and regulations, Tokyo, 21–23 July.

Lardy, N. R. 2008. Financial repression in China. Peterson Institute for International Economics Policy Brief, PB08-8. Washington, DC: Peterson Institute for International Economics.

Lee, J. 2008. Patterns and determinants of cross-border financial asset holdings in East Asia. Asian Development Bank Working Paper Series on Regional Economic Integration No. 13. Manila: ADB.

Lejot, P., D. Arner, and L. Qiao. 2004. Making markets: Reforms to strengthen Asia's debt capital markets. Hong Kong Institute for Monetary Research Working Paper 13. Hong Kong, China: Hong Kong Institute for Monetary Research.

Mayes, D.G., L. Halme, and A. Liuksila. 2001. *Improving banking supervision*. Basingstoke: Palgrave.

Mohan, R., and M. Kapur. 2012. Liberalization and regulation of capital flows: Lessons for emerging market economies, In *Implications of the global financial crisis for financial reform and regulation in Asia,* eds. M. Kawai, D. Mayes and P. Morgan. Cheltenham, UK: Edward Elgar Publishing Ltd.

Morgan, P. 2009. Unregulated entities, products, and markets: Challenges for monitoring and regulation. ADBI Research Policy Brief No. 30. Tokyo: ADBI.

Nasution, A. 2009. Banking supervision in Indonesia. Paper presented at the ADBI-Brookings conference on financial sector regulation and reform in emerging markets, Washington, DC, 22–23 Oct.

Nestor, S., and J. Thompson. 1999. Corporate governance patterns in OECD economies: Is convergence under way? Conference on Corporate Governance in Asia: A Comparative Perspective, Seoul, 3–5 March.

Park, Y.-C., and D. Park. 2003. Creating regional bond markets in East Asia: Rationale and strategy. Second Annual Conference of the PECC Financial Forum, Hua Hin, Thailand, 7–10 July.

Plummer, M. 2012. Regional monitoring of capital flows and coordination of financial regulation: Stakes and options for Asia. In *Implications of the global financial crisis for financial reform and regulation in Asia,* eds. M. Kawai, D. Mayes and P. Morgan. Cheltenham, UK: Edward Elgar Publishing Ltd.

Pomerleano, M., and M. Kawai. 2009. A comprehensive strategy for containing systemic risk. Paper presented at the ADBI conference on financial sector reforms and regulations, Tokyo, 21–23 July.

Reserve Bank of New Zealand. 2009. Liquidity policy. The banking supervision handbook—Banking supervision policy documents and regulations. Prudential Supervision Department. Document BS13. http://www.rbnz.govt.nz/finstab/banking/Regulation/0094291.html. Accessed 3 Oct 2010.

Rhee, S. G. 2000. Rising to Asia's challenge: Enhanced role of capital markets. In *Rising to the challenge in Asia: A study of financial markets*. vol. 1. Manila: ADB.

Rhee, S. G. 2004. The structure and characteristics of East Asian bond markets. In *Developing regional bond markets in East Asia,* eds. Y. C. Park and T. Ito. Canberra: Australian National University Pacific Asia Press.

Schinasi, G. J., and R. Todd-Smith. 1998. Fixed income markets in the United States, Europe, and Japan: Some lessons for emerging markets. International Monetary Fund Working Paper 98/173. Washington, DC: IMF.

Sheng, A. 1996. The framework for financial supervision: Macro and micro. In *Issues in bank restructuring: Lessons from the 1980s*. Oxford: Oxford University Press.

Soros, G. 2009. Three steps to financial reform. *Financial Times,* 16 June.

Spiegel, M. 2012. Developing Asian local currency bond markets: Why and how? In *Implications of the global financial crisis for financial reform and regulation in Asia,* eds. M. Kawai, D. Mayes and P. Morgan. Cheltenham, UK: Edward Elgar Publishing Ltd.

Squam Lake Working Group. 2009. An expedited resolution mechanism for distressed financial firms: Regulatory hybrid securities. www.cfr.org/content/publications/attachments/Squam_Lake_Working_Paper3.pdf

Thompson, E. R. 1999. Alternative systems of corporate governance in OECD countries: Strengths and weaknesses. Paper presented at the ADB-ADBI capacity building workshop on corporate governance in Asia, Tokyo, 22–26 November.

Thompson, E. R., and J. P. Poon. 2000. ASEAN after the financial crisis: Links between foreign direct investment and regulatory change. *ASEAN Economic Bulletin* 17:1–15.

Wall, L. 2012. Prudential discipline for financial firms: Micro, macro and market regimes. In *Implications of the global financial crisis for financial reform and regulation in Asia,* eds. M. Kawai, D. Mayes and P. Morgan. Cheltenham, UK: Edward Elgar Publishing Ltd.

Walter, I. 1993. *High performance financial systems: blueprint for development,* ISEAS Current Economic Affairs Series. Singapore: Institute of Southeast Asian Studies.

Winkler, A. 2012. The financial crisis—A wake-up call for strengthening regional monitoring of financial markets and regional coordination of financial sector policies. In *Implications of the global financial crisis for financial reform and regulation in Asia,* eds. M. Kawai, D. Mayes and P. Morgan. Cheltenham, UK: Edward Elgar Publishing Ltd.

Chapter 7
Forging Regional Cooperation

Chalongphob Sussangkarn

Abstract This chapter discusses regional cooperation and architecture issues important for supporting the rebalancing of growth in Asia toward domestic and regional demand. The main topics covered in this chapter are: (i) the provision of foreign exchange liquidity; (ii) implementation of a regional FTA; (iii) cooperation to develop and finance infrastructure investment; (iv) regional monetary and financial institution-building to support regional surveillance, financial cooperation, and integration; and (v) cooperation on exchange rates to help address global imbalances and support the longer-term economic and financial integration of the region. The chapter also argues that Asian economies should play a much bigger role in the global financial architecture, especially the G20.

Keywords Global financial crisis · Financial cooperation and integration · Foreign exchange liquidity · Regional surveillance

JEL Codes E44 · E52 · F31 · F36

7.1 Introduction

In just over a decade, East Asia has suffered two major economic crises: the first crisis in 1997–1998 emanated from within the region, and the current global financial crisis that started in the US. While these crises have created broad negative impacts, both economically and socially, they have encouraged countries in the region to work more closely together. The 1997–1998 crisis led to the formation of the ASEAN+3 group, which has now been expanded to the ASEAN+6[1] group known as the East Asia Summit. The region has launched many important economic cooperation initiatives, starting with the bilateral swap arrangements of the Chiang Mai Initiative (CMI). These initiatives have expanded to other areas such as Asian bond

[1] ASEAN plus Australia, the PRC, India, Japan, the Republic of Korea, and New Zealand.

C. Sussangkarn (✉)
Thailand Development Research Institute, Bangkok, Thailand
e-mail: chalongp@tdri.or.th

M. Kawai and J.-W. Lee (eds), *Rebalancing for Sustainable Growth,* Economics, Law, and Institutions in Asia Pacific, DOI 10.1007/978-4-431-55321-2_7

market development and numerous subregional and bilateral agreements on trade, investment, and other economic issues, including labor movement in some cases.

The global financial crisis has shown that Asian economies still have many vulnerabilities and weaknesses, in spite of many reforms and regional cooperation initiatives that were developed in response to the 1997–1998 crisis. Moreover, in the post-global financial crisis world, Asia will need to develop a more balanced growth path based more on domestic and regional demand.

This chapter will discuss regional cooperation and architecture issues important for supporting the rebalancing of growth in the region. Section 7.2 discusses impacts and challenges for Asia arising from the global financial crisis. Section 7.3 reviews global responses to the financial crisis and their implications for Asia. Section 7.4 reviews developments in regional cooperation and architecture since the Asian crisis. Section 7.5 discusses proposals for furthering regional cooperation and architecture after the global crisis. Section 7.6 summarizes conclusions and recommendations. The main topics covered in this chapter are: (i) the provision of foreign exchange liquidity; (ii) implementation of a regional FTA; (iii) cooperation to develop and finance infrastructure investment; (iv) regional monetary and financial institution-building to support regional surveillance, financial cooperation, and integration; and (v) cooperation on exchange rates to help address global imbalances and support the longer-term economic and financial integration of the region.

7.2 Impacts and Challenges to the Region Arising from the Global Financial Crisis

As described earlier in this book, the East Asian region has been severely affected by the global financial crisis. The impacts on the region raised challenges to the region's future development directions. Meeting these challenges should shape the future direction of economic cooperation and architecture of the region. In this section, some of the major impacts and challenges that should be particularly important in influencing future regional economic cooperation and architecture will be highlighted.

7.2.1 The Context of Post-1997–1998 Economic Adjustments

The East Asian region was severely harmed by the financial crisis in 1997–1998. The adjustment of the region from that crisis sets the context of the economic situation of the region prior to the outbreak of the global financial crisis and influenced how the region was affected by the global financial crisis. While experiences of the affected countries during the 1997–1998 crisis were very painful, the economic adjustment to recovery was actually relatively straightforward. The most seriously affected countries, Thailand, Indonesia, and the Republic of Korea, saw major

depreciations of their currencies. This also had contagion effects on other countries in the region that were closely linked through trade and investment to these three countries, and the currencies of most economies in the region also depreciated.[2] This depreciation boosted exports in most countries of the region, which were generally export-led economies. This, together with the economic downturn brought on by the crisis, generated current account surpluses for most countries, and the foreign exchange position of the crisis-affected countries turned around fairly quickly.

As described in Chapter 1, the East Asian export engine generated large current account surpluses and became an important part of the so-called global imbalance. With these large surpluses, it is not surprising that the foreign reserves held in the region have increased substantially. By the end of 2008, the combined foreign reserves of East Asia reached about US$ 4.16 trillion, or almost six times the amount prior to the 1997–1998 crisis. From around 2005 to 2008, East Asia was holding about 58 % of the world's foreign reserves (IMF 2010).

Another important area of post-crisis adjustment has to do with lessons that were learned as a result of the crisis and major financial reforms that were carried out after the crisis.[3] These led to improvements in prudential supervision and regulations, reforms in corporate governance, and generally a more risk-adverse financial system. This was particularly important in explaining why the region's financial systems mostly avoided exposures to the toxic global financial assets. If the region had been exposed to these assets as the more advanced economies were, the overall impacts of the global financial crisis on the region would have been much greater.

7.2.2 Problem of Foreign Exchange Liquidity Shortages

The problem of countries facing foreign exchange liquidity shortages during the global financial crisis was the same one as that arising during the 1997–1998 East Asian financial crisis. It may be surprising that this issue is still important, given the lessons learned from the 1997–1998 crisis about the dangers of short-term foreign debt and the large accumulation of reserves in the region from the post-crisis economic adjustments.

However, when the recent global financial crisis hit, some countries in the region faced severe US dollar liquidity problems, notably the Republic of Korea, India, and Indonesia. Unfortunately, the CMI, the regional liquidity support facility that was developed after the 1997–1998 crisis, was not yet attractive enough. It was still relatively small and also closely linked to an International Monetary Fund (IMF) program, something that countries in the region wanted to avoid, given the painful experiences many economies had with IMF programs during the 1997–1998 crisis.[4]

[2] An important exception was the PRC, which did not depreciate its exchange rate, and this provided stability to the post-crisis adjustments.

[3] For discussions of the lessons and reforms in Thailand, see Sussangkarn and Vichyanond (2007).

[4] Post-1997–1998 regional cooperation initiatives will be discussed in Section 7.4.

Thus, in the end, the Republic of Korea arranged a swap with the United States (US) Federal Reserve for US$ 30 billion, while Indonesia received swap lines from the PRC and Japan.

Foreign reserve liquidity will likely remain an important issue after the global financial crisis. With the linking of financial markets globally, capital flows can become very large and volatile. During certain periods, if large inflows cause problems, then there can easily be a large reversal arising from some shock (like the global financial crisis). Countries need to be very diligent in managing these volatilities, supported by appropriate liquidity facilities.[5] In fact, the reason why the Republic of Korea was most affected by the capital flow reversal was because it did not have enough reserves to back up all of its short-term foreign currency obligations, including short-term foreign debt and foreign holdings of stocks and bonds which can be quickly liquidated.

After the 1997–1998 financial crisis, the CMI was developed to be a regional liquidity support mechanism. This was still very much a work in progress, however. The CMI has evolved into the Chiang Mai Initiative Multilateralization (CMIM), which began operation in 2010. Proposals to strengthen the CMIM are elaborated in Section 7.5.

7.2.3 Capital Flows and Exchange Rate Volatility in East Asia[6]

Although Asian economies did not face the type of currency crisis several East European countries and the Baltic states experienced in the wake of the global financial crisis, they have seen large exchange rate fluctuations since the 1997–1998 Asian crisis. These episodes include the mini-crisis of the Indonesian rupiah in the summer and fall of 2005; the rapid Thai baht appreciation that triggered capital control measures leading to sharp declines in stock prices in December 2006; and the depreciation pressure on the Vietnamese dong in the face of high and rising inflation and widening current account deficits in the spring of 2008. Finally the global financial crisis led to a sharp fall of the Korean won. This section discusses some of these episodes.

7.2.4 Episodes in Indonesia and Thailand

Indonesia encountered a mini currency crisis in August 2005, when worsened investor confidence generated a sharp reversal of portfolio flows and caused a sharp decline in the stock market index. Investors were concerned over rising inflation and expanding fiscal deficits. Fiscal deficits were widening due to rising international oil prices and the resulting increase in oil- and fuel-related subsidies as the

[5] For discussions of policies to manage capital flows, see Kawai and Lamberte (2008).

[6] This section draws on Kawai (2010).

government kept oil- and fuel-related prices low. Indonesian markets stabilized after the government announced a major cutback in fuel subsidies, which contributed to the reduction in budget deficits, and raised policy interest rates, which successfully contained inflation.

Thailand faced continuous capital inflows throughout most of 2006 and upward pressure on the baht. An appreciating baht raised concerns over the loss of international price competitiveness against other ASEAN countries and the People's Republic of China (PRC), which had more stable exchange rates against the US dollar. The Bank of Thailand imposed capital controls in December 2006, requiring a 30% unremunerated reserve requirement on short-term capital inflows and the need for the inflow to remain in the country for at least one year or face a 10% loss on the inflow amount. When this was met by a sharp decline in equity prices in the Thai stock exchange the next day, the authorities had to announce that the inflow controls would not apply to trade, foreign direct investment (FDI), or portfolio equity, and they had to modify the controls in January 2007 to exempt hedged residential foreign currency borrowing. Eventually, the Bank of Thailand lowered the policy interest rate to respond to an appreciating baht.

7.2.5 Impact of the Global Financial Crisis on the Korean Won

The Korean economy enjoyed relatively stable economic growth and strong financial fundamentals. However, there were some concerns over the high foreign debt (US$ 210 billion in June 2008) and loan-deposit ratios (127%) in the banking sector (IMF 2009 and Bankscope 2009). The Korean financial market was hit hard by the external shock following the collapse of Lehman Brothers in September 2008. As the global financial crisis deepened, funds flowed out of the country due to deleveraging by foreign financial institutions in response to heightened concerns about credit risk. Korean financial institutions faced shrinking foreign currency supply and a severe liquidity crunch even though they had not been exposed to large subprime mortgage-related instruments. The Bank of Korea lost large amounts of foreign exchange reserves, which declined from US$ 264 billion in March 2008 to just below US$ 200 billion in November 2008. Unwilling to go to the IMF or CMI, the Korean authority entered into a US$ 30 billion currency swap arrangement with the US Federal Reserve Board in October 2008 and with the Bank of Japan and the People's Bank of China in December 2008. The currency swap arrangement with the US Federal Reserve Board helped to stabilize the market. In 2009, the low won helped exports recover and reserve accumulation reached US$ 249 billion in September.

7.2.6 Cooperation in Regional Connectivity

As stated in this chapter's introduction, the export sector in East Asia will likely become less important than it has been in the past. Thus, the challenge for East Asia is to develop new sources of sustainable growth. In particular, much discussion has occurred on investment in infrastructure as a potentially important source of growth for the region. Apart from domestic infrastructure investment, cross-border infrastructure is still underdeveloped and therefore has much growth potential. This will obviously involve various regional cooperation initiatives to increase regional connectivity as well as to increase the financial resources available for these investments.

7.2.7 Need to Increase Surveillance Capabilities

It was fortunate for the region that its financial institutions were not greatly affected directly by the global financial crisis. Ironically, one reason that Asia was spared extensive adverse effects may be that the region's financial system is still relatively undeveloped, so, at the time when these bad assets were being introduced into the global (West's) financial system, there was a lack of understanding of all the new financial innovations developed in the 1990s and early 2000s. However, as the region develops financially and is more linked to what happens outside of it, surveillance must go beyond internal surveillance within the region and include external surveillance of regional trade and financial systems. Moreover, Asia, as the largest holder of foreign reserves, is a major investor in (mostly the West's) global bond market. Because of this, what happens to financial conditions in the West directly affects the risks and returns on Asia's investment. Because of the size of Asia's investment, the decisions from this part of the world can significantly affect global financial conditions. In the past, investors and creditors in Asia have been rather passive. Asian economies should strive to be more involved in shaping the directions and stability of the global financial system.

7.2.8 Exchange Rate Cooperation

As most of the Asian economies depend on exports to drive growth (Chapter 2), and each economy is to some extent competitive with each other in third-country markets, each Asian economy is very reluctant to let its currency become stronger vis-à-vis the other currencies in the region. Thus, in spite of large current account surpluses and large net capital inflows, Asian central banks have been buying up foreign currency inflows, thus accumulating foreign reserves, to keep their currencies from strengthening too much. This contributes to the development of the global

imbalance and can also put pressure on domestic monetary policy and the central banks' balance sheets through the need to sterilize their foreign currency purchases.

As discussed in Chapter 1, while the global imbalance was not the direct cause of the global financial crisis and accompanying global recession, it is difficult to deny that the imbalance nevertheless contributed to the crisis. If the resolution of the global financial crisis does not rectify the global imbalance, another major financial crisis might be waiting to happen. And certainly if such a crisis occurs, from whatever source, it is unlikely that Asia will be immune to the impacts of the crisis. Thus, Asia should consider some form of exchange rate cooperation or coordination and take the lead in seriously dealing with the global imbalance for the region's own self-interest.

7.3 Global Responses to the Global Financial Crisis and Implications for Asia

Effective responses to the global financial crisis should be global. To some extent, there has been some attempt to coordinate global responses to the crisis through the emergence of the Group of Twenty (G20) as the major forum for global economic consultation and cooperation; there have been achievements in coordinated fiscal expansion and monetary easing. The G20 has also agreed to substantially increase the resources available to the IMF and ADB, and has established the Financial Stability Board through which new global standards for financial supervision and regulation may emerge. The G20 can also be a key forum for discussing reforms of the international financial architecture and governance of the global international financial institutions.[7] Other issues involving global public goods are likely to become part of the G20 agenda, such as environmental issues and climate change.

Given the importance of the G20, Asian countries should participate as much as possible in this forum and try to get the Asian perspectives reflected in outcomes arising from the G20 discussions. Given the importance of Asia in the global economy, Asian countries should have a much bigger say within the governing structure of the global international financial institutions. Any reforms to the international financial architecture and financial supervisory and regulatory regimes should reflect the concerns of Asia, given the region's huge holdings of foreign reserves, and the impacts that such reforms will inevitably have on the region.

Of the East Asia Summit group of countries, six are members of the G20 (Australia, the PRC, India, Indonesia, Japan, and the Republic of Korea).[8] However, these countries cannot reflect a common Asian or East Asian voice in the G20. They

[7] For a comprehensive discussion of areas for reforms of the international financial architecture and also some aspects of Asia's emerging financial architecture, see Kawai (2009a).

[8] The East Asia Summit involves the ASEAN countries, the PRC, Japan, the Republic of Korea, Australia, India, and New Zealand. This evolved from the ASEAN+3 group that was formed as a result of the 1997–1998 financial crisis (see discussions of post-1997–1998 regional cooperation below).

are members of the G20 because of their individual size and global importance and not because they are in any sense representatives of Asia as a whole. To reflect an Asian position in the G20—if there is one—there need to be prior consultations among the Asian countries with an agreed position reflected in the G20 discussions.

On this last point, one interesting development is that the leader of the ASEAN country that is the chair of ASEAN has been invited to attend the last two meetings of the G20 in London and Pittsburgh (Thailand in this case), and it is likely that the ASEAN chair will continue to be invited to G20 meetings. This is appropriate because ASEAN is now emerging as an important economic bloc, with the implementation of the ASEAN Free Trade Area (AFTA) and the upcoming ASEAN Economic Community, and ASEAN has become the hub of many FTAs with other major economies and regions. The chair of ASEAN is also the chair of the ASEAN+3 Leaders' Summit and the chair of the East Asia Summit, which are held as side meetings of the ASEAN summits. In these summits, the chairman's statements are released to the public and the media about the agreements reached in these summits, so these chairman's statements do reflect common positions arising out of the meeting. Therefore, it is appropriate for the ASEAN chair to convey the positions of these regional summit meetings to the G20 meeting.

For such a process to be effective, the ASEAN summits' schedule (during which the ASEAN+3 and the East Asian summits are held) should be synchronized with the G20 meetings, with ASEAN summits held a few weeks before G20 meetings and, in the ASEAN+3 and East Asian summits, the agendas should discuss ASEAN's positions related to the issues on the G20 meeting's agenda. The ASEAN chair can then act as the spokesperson for the group in the G20.

While the G20 has become the focal point for discussions on global economic cooperation and reforms, one should avoid having unrealistically high expectations about what the G20 can achieve. The G20 is after all only a consultative meeting and there is no dedicated secretariat to support the process. Also, the G20 has held annual meetings of finance ministers and central bank governors since 1999. These meetings did not help to achieve any meaningful reforms of the international financial architecture, though there were numerous calls for such reforms after the Asian financial crisis (for example, on the need to regulate highly leveraged institutions and the role of credit-rating agencies). While the G20 process has been elevated to the summit level, there are still diverse interests within the group, particularly between advanced economies and emerging market economies. Any reforms will likely generate gainers and losers among the various G20 members. Thus, comprehensive global reforms of the international financial architecture to reduce volatilities and risks inherent within the current global financial system, and hence reduce the likelihood of future crises, will be difficult.

While global forums and reforms are important, Asia also needs to develop deeper cooperation and regional initiatives for its own common interests. Some G20 initiatives have benefited Asia, such as the tripling of ADB's capital. Others are less relevant, such as the increased resources for the IMF, as very few Asian countries will be willing to go under another IMF program, given the stigma the IMF has in the region from the East Asian crisis experience, even though such a program is

Table 7.1 Institutional families in global economic governance. (Adapted from Kawai et al. (2009))

Function	Global institutions	Asian institutions
Macroeconomic cooperation	International Monetary Fund (IMF)	Asian Monetary Fund (AMF) to evolve from Chiang Mai Initiative Multilateralization (CMIM)
	Surveillance, systemic stability, crisis lending	
		Regional surveillance, stability, crisis lending
Development finance	World Bank	Asian Development Bank
	Global public goods: poverty, environment	*Open regional priorities, infrastructure*
Trade liberalization	World Trade Organization (WTO)	Comprehensive Economic Partnership for East Asia
	Global disciplines, dispute resolution, Article XXIV	*(to emerge through consolidating free trade agreements)*
		Deeper, wider agreements
Financial system stability	Financial Stability Board	Asian Financial Stability Dialogue
	Global standards, colleges of regulators	*(to be created)*
		Region-specific regulatory initiatives

now likely to have only minor conditionalities. So certainly Asia should participate fully in global cooperation and reform processes, such as through the G20 and other initiatives that may arise, and should try to have its views more strongly reflected in global reform, as well as to increase its representation in international financial institutions. However, regional cooperation initiatives can serve the interests of the region, can supplement what can be achieved globally, and probably can contribute to making the global financial architecture more effective.

In some cases, it may be desirable to decentralize some decision-making by the main international financial institutions, i.e., to have decisions made by regional groupings of stakeholders in those organizations, rather than the entire organization. Such an approach is proposed in Kawai et al. (2009). They propose an international decision-making framework that would consist of global and sub-global institutions and principles that define the division of labor between them. This framework is illustrated in Table 7.1 for the four major functional areas of cooperation between global financial institutions and their regional Asian counterparts. Some of the sub-global institutions in Table 7.1 already exist, but need to be strengthened, such as the CMIM. Others, such as the Asian Financial Stability Dialogue, do not yet exist, and need to be developed.

7.4 Post-1997–1998 Regional Cooperation and Architecture Development

The future economic cooperation and architecture of the region will evolve from initiatives the region has already put in place in response to the 1997–1998 East Asian financial crisis as well as new initiatives from new challenges posed by the global financial crisis. It is therefore important to highlight some of the key cooperation initiatives that arose from that crisis. Many of these are unfinished and are also related to the challenges to the region arising from the global financial crisis.

7.4.1 The 1997–1998 Financial Crisis as a Major Impetus for Regional Cooperation

Crises can provide the necessary push factors for international cooperation and integration. The clearest case is that of Europe, where a major concern in the early days of European integration was to avoid the types of conflict between sovereign nations that had led to the devastations of the world wars. However, Asia does not have a comparable history that could push the region to integrate along the same path as did Europe. Many countries in the region are still suspicious of each other for historical reasons and sovereignty is jealously guarded (Katada 2009). This is especially so since many countries in the region were colonized for long periods in the past. However, while European-style integration may not be a realistic model for Asia, there is no reason why Asia cannot embark on various regional cooperation initiatives given the presence of appropriate push factors. At the same time, many substantive regional cooperation measures can be achieved without impinging on the sovereignty of countries. So, cooperation can be a win-win under appropriate circumstances. In East Asia, the 1997–1998 financial crisis sparked the start of a regionwide move toward deeper economic cooperation. It led to the formation of the ASEAN+3 group (ASEAN plus the PRC, Japan, and the Republic of Korea), a group that was hard to envisage prior to the crisis because of historical frictions among some members of the group. In fact, the ASEAN+3 group was similar to the East Asian Economic Caucus proposed by the then-prime minister of Malaysia, Mahathir Mohamad, in 1991.[9] However, this idea was too radical back in the early 1990s and the rationale for such as group was not entirely clear, so some key countries opposed the idea and the proposal did not get off the ground. The 1997–1998 crisis, however, provided the appropriate push factors and rationales for economic cooperation among the ASEAN+3 group.

First, the contagion resulting from the crisis that started in Thailand showed that East Asian economies were inextricably linked to each other and could not afford to ignore what was happening elsewhere within the region.

[9] ASEAN+3 does not contain Hong Kong, China and Taipei,China; however, it does include all the newer ASEAN member countries.

Second, East Asia as a whole had a saving surplus of about US$ 100 billion annually before the 1997 crisis. Yet the saving deficit countries in the region that became insolvent during the crisis and had to resort to IMF assistance (i.e., Thailand, Indonesia, and the Republic of Korea) had to rely mostly on short-term foreign borrowings to finance their saving deficits, as the saving surplus of the region was invested mostly in US dollar denominated assets. If the financial resources within the region had been better utilized, to provide liquidity support and longer-term development financing to countries in need in the region, then a crisis such as the 1997 crisis could have been avoided.

Third, countries in the region had very limited influence on the crisis resolution measures in the IMF-assisted countries. Many of the conditionalities imposed by the IMF were highly controversial—for example, the full guarantee for foreign creditors imposed on Thailand even though they were responsible for a lot of irresponsible lending prior to the crisis, and the many structural reform conditions, such as privatization and asset sales to foreign investors at what many regarded as "fire sale" prices.[10] The conditionality for the various countries tended to be almost the same without sensitivity to their different political and sociocultural contexts, which even led to a change of political regime in Indonesia.[11] Because of the dissatisfaction with the way the crisis was handled, many in the region felt that if the region had had greater input into the crisis resolution measures, the crisis could have been resolved with much less pain than what actually happened.

Because of the factors bringing the region together, it was not surprising that the first substantive cooperation agreement of the ASEAN+3 countries was in the area of finance, the CMI. Since then, ASEAN+3 cooperation has expanded to include economic surveillance through the Economic Review and Policy Dialogue (ERPD), bond market development (Asian Bond Markets Initiative [ABMI], together with the Asian Bond Funds), and numerous ministerial meetings in agriculture, energy, environment, information and communication technology, and transnational crime. Regional cooperation has also extended to numerous subregional free trade and comprehensive economic partnership agreements, with many of these involving ASEAN. There are also many bilateral agreements between countries. The proliferation of these agreements becomes like a "noodle bowl." At the very top, the annual meeting has also been expanded to include India, Australia, and New Zealand, known as the East Asia Summit. Overall, the 1997–1998 crisis strongly encouraged regional cooperation actions, and the regional cooperation and architecture situation now is completely different to what existed before the crisis.

[10] For detailed discussions of the IMF program for Thailand, see Sussangkarn (2002).

[11] Criticisms of the IMF came not just from within the region but also from many prominent scholars in the West: for example, Krugman (1998), Feldstein (1998), and Stiglitz (2002).

7.4.2 Financial Cooperation

The first proposal for regional financial cooperation after the crisis actually did not get off the ground. This was the proposal by Japan at the Group of Seven/IMF meeting in Hong Kong, China, in September 1997 to set up an Asian Monetary Fund (AMF). With such a radical proposal, a lot of background work, informal discussions, and lobbying of key stakeholders was necessary for the proposal to succeed. However, these were not done, and the proposal also came when the IMF was already implementing the rescue package for Thailand. So it was not surprising that it did not receive much support within the region and was strongly opposed by the IMF and the US, and the proposal was quickly pushed aside.[12] It was strongly argued that establishing a new regional monetary organization would cause problems for the IMF's role and create a lot of moral hazard. In fact, regional monetary organizations are nothing new, as they already exist in Latin America and in the Middle East,[13] and they coexist with the IMF, so this argument was an exaggeration. However, given the circumstances of the Thailand crisis and lack of time to discuss the issues, the proposal was simply too radical and came at the wrong time. Yet the idea of East Asia having its own financial and monetary organization did not disappear. In fact, such an organization may yet emerge, as will be discussed in Section 7.5.

Even though the AMF idea did not gain acceptance, subsequent financial cooperation agreements emerged. These initiatives were developed mainly to prevent another crisis, at least a crisis similar to the 1997–1998 crisis. The major areas of cooperation were liquidity support under the CMI, surveillance mechanisms, and the development of regional long-term financing for development. These will just be briefly touched upon below as they are fairly well known.[14]

The CMI was an expansion of the existing ASEAN Swap Arrangement of foreign reserves by increasing the size of the swaps, and adding a network of bilateral swap agreements between the countries of ASEAN and the plus three countries. Its basic idea is that a country under speculative currency attack can borrow foreign currency from another country and use the fund to stabilize the exchange rate. This will provide the country with greater room for maneuver. However, because of the worry about moral hazard with the IMF, which was a big issue when the AMF proposal was introduced, CMI compromised so that only 10% of the bilateral swap agreements amounts can be withdrawn unconditionally. Extra amounts can only be accessed if the country goes under an IMF-supervised program. Subsequently, the total amounts of swap agreements under the CMI gradually increased and reached US$ 120 billion in 2009 and US$ 240 billion in 2014. Also, the link to the IMF was gradually relaxed so that the percentage that could be withdrawn without linking to

[12] For details on Japan's proposal for the AMF, see Lipscy (2003).

[13] See, e.g., Sussangkarn (2000).

[14] For more detailed discussions of these cooperation measures, see Sussangkarn (2003) and Sussangkarn and Vichyanond (2006). Kawai (2008) provides a good overview of the evolution of the regional financial architecture since the crisis.

Table 7.2 CMIM contributions and borrowing multipliers. (Sources: ASEAN Secretariat (2012)

	Contribution (US$ billion)		Borrowing multiplier	Maximum swap amount	
					IMF delinked portion (30%)
Brunei Darussalam	0.06		5	0.3	0.09
Cambodia	0.24		5	1.2	0.36
People's Republic of China	76.8	68.4 (Excluding Hong Kong, China)	0.5	34.2	10.26
		8.4 Hong Kong, China	2.5[a]	6.3	1.89
Indonesia	9.104		2.5	22.76	6.83
Japan	76.8		0.5	38.4	11.52
Republic of Korea	38.4		1	38.4	11.52
Lao PDR	0.06		5	0.3	0.09
Malaysia	9.104		2.5	22.76	6.83
Myanmar	0.12		5	0.6	0.18
Philippines	9.104		2.5	22.76	6.83
Singapore	9.104		2.5	22.76	6.83
Thailand	9.104		2.5	22.76	6.83
Viet Nam	2		5	10	3.00

Lao PDR Lao People's Democratic Republic

[a] Hong Kong, China's borrowing is limited to the IMF-delinked portion because Hong Kong, China is not a member of the IMF

an IMF program increased from 10 to 20% in 2009 and 30% in 2014. The current structure of the CMI as of 2014 is shown in Table 7.2. The table also shows the borrowing multipliers; that is, the amount a country can borrow is up to its contribution times its borrowing multiplier. So, for example, Thailand can borrow US$ 9.1 billion (its contribution) times 2.5 (its borrowing multiplier), or US$ 22.8 billion.

While the total of all the various swap arrangements in Table 7.2 may appear large, the amount available to each country is in fact not that large, especially if the drawing is not linked to an IMF program. For example, if the current CMI had been available before the crisis in 1997, Thailand would have been able to draw something like US$ 7 billion from the CMI swap arrangements prior to asking for IMF assistance. This amount is still small compared to the scale of problem that Thailand faced in mid-1997, or compared to the size of the IMF package for Thailand (US$ 17.2 billion). Therefore, the amount of money available under the current CMI is still too small to make a lot of difference. The CMI should instead be viewed as a significant symbolic initiative, showing that the economies in East Asia are willing to work together to develop self-help mechanisms to reduce the risk of a future crisis. The CMI is clearly a work in progress, especially given the compromises necessary to bring it about, which need to be developed into something more tangible and substantive. Particularly problematic as well is the link to the IMF, given the bad experiences that most economies had with the harsh conditionalities

imposed on them. The evolution of the CMI has been very slow, but progress has been made and further development should be accelerated in response to the global financial crisis (see Section 7.5).

Another important factor for avoiding crises is surveillance. Prior to the 1997–1998 crisis there were insufficient warnings. Only a few years previously, the East Asian miracle was a model put up for developing countries to follow (World Bank 1993). Victims of the crisis were countries with supposedly sound economic fundamentals. However, in hindsight, the nature of the crisis was not foreseen, and therefore crucial indicators that could have given good warnings of the crisis were not scrutinized, particularly the data on the extent of short-term foreign debt in the various countries.

Within ASEAN, the global surveillance process of the IMF was supplemented by the ASEAN Surveillance Process (ASP). This is meant to be an informal process based on a peer review system that would complement the regular surveillance by the IMF. A unit within the ASEAN Secretariat was set up to assist in coordinating the work of the ASP and also to prepare a series of semiannual ASEAN *Surveillance Reports*, and ADB provided technical support for the operation of the ASP. The peer review of the ASP is conducted at the ASEAN Finance Ministers' Meeting, which is held twice a year.[15] In ASEAN+3, surveillance is conducted through the ERPD. The deputies hold the ERPD twice a year to discuss economic and financial developments in the region and make reports to the ASEAN+3 Finance Ministers' Meeting, which is held annually. Recently, the ASEAN+3 Macroeconomic Research Office (AMRO) was established in Singapore in 2011 to conduct surveillance of ASEAN+3 economies for the CMIM.

While surveillance can be useful in monitoring the economic situation and highlighting issues of concern to the region, there are many limitations.[16] It is doubtful whether the existence of a regional peer review process prior to 1997 would have helped prevent the 1997 crisis. In hindsight, we know the importance of avoiding a huge buildup of short-term foreign debt, but in the accepted paradigm before the crisis, not much attention was paid to short-term foreign debt, and in many countries, data on short-term foreign debt were not readily available. Countries may have even regarded the ability to attract foreign borrowing as a sign of confidence by foreign lenders in the strength of the economy. Also, the accompanying increase in official reserves as a result of the large inflow of foreign borrowing may also have been regarded as another sign of increased stability.

The point is that if countries agree on what types of indicators point to major risks for an economy to get into a crisis, then a regional peer review process can help countries find ways to deal with potential problems. However, a crisis normally arises from previously unexpected reasons. Where there is little consensus on what might bring about a crisis, the effectiveness of a regional surveillance process

[15] Manupipatpong (2002) gives details on the development and process of the ASP as well as an evaluation of its potential contributions and limitations.

[16] For detailed discussions on surveillance, both regionally and by the IMF, including limitations, see Murase (2007).

is much more doubtful. From my own experience as Thailand's finance minister between March 2007 and February 2008, in these regional finance ministers' meetings it would be extraordinary for a country to admit to serious vulnerabilities to a crisis. Vulnerable countries would tend to ensure everyone that everything is under control. Political considerations at home also lead to this. Effective surveillance also requires sufficient resources and a team of well-qualified, full-time professionals to support the process.[17] AMRO is increasing the effectiveness of regional surveillance, but there is some way to go.

The introduction of a surveillance capability in AMRO also paved the way for developing a precautionary lending facility by the CMIM, which would parallel the Flexible Credit Line, the Precautionary Credit Line, and other related facilities of the IMF. The ASEAN+3 finance ministers and central bank governors agreed to establish a crisis prevention facility called the "CMIM Precautionary Line (CMIM-PL)" in May 2012 (ASEAN Secretariat 2012).

The development of the region's bond markets is another way to generate more long-term financing for deficit countries to replace the past reliance on short-term foreign borrowing.[18]

Another important issue is that as the region's capital markets (stocks and bonds) become more developed, there will be more portfolio capital flows within the region. Flows such as the yen-carry trade have become substantial since 2001, when Japanese short-term interest rates fell to near zero. However, this can create problems for macroeconomic management. Thailand, for example, faced large capital inflows in 2006. This led to rapid appreciation of the Thai baht at a time when export was just about the only engine of growth. Pressures on the authorities finally led to the imposition of strong capital controls in December 2006. The large fall in the stock market forced the authorities to reverse some of the policies the next day, excluding inflows to invest in the stock market, creating significant credibility problems for the authorities. In any case, the bond market was severely affected, reversing the move to develop the region's bond market. The capital controls were finally removed in March 2008. What this showed was that capital market development has to be viewed as part of an overall macroeconomic management regime.

7.4.3 Free Trade Agreements and Broader Economic Cooperation

As the ASEAN+3 process has become institutionalized with an ASEAN+3 Summit being held annually as well as ASEAN+1 Summits (separately with the PRC, Japan, and the Republic of Korea), it was natural that cooperation, whether for the whole of ASEAN+3 or as a subset of these countries, would be developed in various areas.

[17] Murase (2007) stressed this point.

[18] Most of the lending to developing countries was short-term because under the provisioning requirements of the Basel Capital Accord, a 20% risk weighting is applied to short-term loans to non-OECD banks, while 100% risk weighting has to apply for long-term loans (with a maturity of one year or more).

The area where economic agreements have been very prolific is in FTAs or broader agreements, sometimes called comprehensive economic agreements, covering a wider ranges of issues, such as investment and labor movements.

Most of the subregional agreements have ASEAN as one of the partners. So ASEAN free trade or comprehensive economic partnership agreements with each of the plus three countries (i.e., ASEAN-PRC, ASEAN-Japan, and ASEAN-Republic of Korea) have already been agreed upon and are being implemented as of early 2010. Negotiations are in progress for ASEAN-India, ASEAN-Closer Economic Relations (CER) (i.e., Australia and New Zealand), and ASEAN-EU agreements. The reason ASEAN has been at the core of these agreements is that the partners see complementary trade patterns between themselves and ASEAN, though agreements among these partners themselves have been slower to make progress, because of both economic and political reasons. However, there are proposals being explored for agreements among these partners of ASEAN, such as between the plus three countries and even more ambitious proposals for an ASEAN+3 or ASEAN+6 FTA.

Apart from subregional agreements, there have also been numerous bilateral agreements by countries in the region. Chia (2009) noted that countries of ASEAN+6 have been involved in 210 trade agreements (categorized as either negotiated, concluded, or implemented), both plurilateral and bilateral; 127 of these have been done with other ASEAN+6 groups or countries. There are also another 75 proposed FTAs that may be negotiated in the future. The proliferation of these FTAs has led to what many call a "noodle bowl."

A number of factors lie behind the proliferation of these agreements. Chia (2009) identified some key ones, including the slow progress of global trade negotiations (the Doha Round); the increasingly greater economic linkages within the region from market-driven factors, particularly FDI and trade; the emergence of significant blocs in other parts of the world, such as North America and Europe; and a domino effect as countries do not want to fall behind other countries, whether for economic or political reasons, such as when the PRC proposed an ASEAN-PRC FTA, Japan had to follow suit. Of course the fallout from the 1997–1998 crisis and the institutionalization of the ASEAN+3 meeting—later expanded to ASEAN+6—was also a key factor.

The market-driven integration of the region together with the gradual implementation of these numerous trade agreements within the region has helped to increase intraregional trade. ADB (2009) indicated that the share of intraregional trade in East Asia increased from about 42% in 1994–1995 to about 48% in 2004–2005, with more integration in intraregional imports than in exports. Prior to the global financial crisis, many thought that the increasingly important intraregional trade in East Asia meant that the region was now less dependent on export markets in the West, the so-called decoupling. Of course we now know that this is not the case as was discussed in Chapter 2.

Apart from these free trade and comprehensive economic partnership agreements, numerous areas of cooperation among the ASEAN+3 or ASEAN+6 or subsets of these groups have emerged over time. For example, as was already indicated, there are annual ministerial meetings of ASEAN+3 in areas such as agriculture, energy, environment, information and communication technology, and transnational crime.

7.5 Post-Global Crisis Regional Cooperation and Architecture

Following on from what the region had started following the 1997–1998 financial crisis, this section discusses some areas for future regional cooperation and architecture development to meet the various challenges resulting from the global financial crisis and earlier Asian crisis, and to supplement the global cooperation and reform initiatives discussed in Section 7.3. The issues covered will be the provision of foreign exchange liquidity, the need to increase the demand for final goods within the region, the creation of new regional sources of sustainable growth, developing increased surveillance capabilities and a more proactive role in the global financial system, and exchange rate cooperation.

7.5.1 The Provision of Foreign Exchange Liquidity

As was indicated earlier, the CMI was a work in progress. However, participants came to understand that, for the CMI to be more effective, it was necessary to move from the series of bilateral agreements of the CMI to a multilateralized system. Progress has been rather slow. This may be because as countries accumulated more and more reserves, the urgency of the CMI declined. Eventually, at the 10th ASEAN+3 Finance Ministers' Meeting in Kyoto in May 2007, the principle of a multilateralized CMI (or CMIM) with a single contractual agreement was agreed upon. The Joint Ministerial Statement said, "We unanimously agreed in principle that a self-managed reserve pooling arrangement governed by a single contractual agreement is an appropriate form of multilateralisation… We instructed the Deputies to carry out further in-depth studies on the key elements of the multilateralisation of the CMI including surveillance, reserve eligibility, size of commitment, borrowing quota and activation mechanism" (Ministry of Finance, Japan 2007:1).[19]

Because of the slow progress, there was a danger that countries might lose interest in the whole exercise, especially since the Republic of Korea could get liquidity support by agreeing to a swap arrangement with the US Federal Reserve as was indicated earlier. While the US Federal Reserve can always provide such liquidity if it chooses to do so, it would be a major mistake to rely on such agreements in the future. The important point is that the selection of which countries the US chooses to give swap agreements to will be driven mainly by US interests. For example, the swap may allow US investors to more easily withdraw from some country in a time of severe liquidity shortages, such as during the global financial crisis, without suffering additional losses from large depreciations of the local currency because the country has foreign exchange shortages. Thus, it was a good thing that the process to work out the details of the CMIM continued, and eventually the size of contribu-

[19] The author was co-chair of this meeting in his capacity as Thailand's minister of finance at that time.

tions and borrowing quotas was agreed at the 12th ASEAN+3 Finance Ministers' Meeting on 3 May 2009, in Bali, Indonesia, and then doubled on 3 May 2012 in Manila, finally becoming effective in 2014. Table 7.2 above gives the details. [20]

To make the CMIM fully effective, a number of implementation steps are suggested. First, the mechanism must be completely delinked from the IMF. There is now such a stigma against the IMF in many parts of the region that even with the much weaker conditions on current IMF loans—the Flexible Credit Line—it would be politically very risky if a government takes its country into another IMF program. So unless the mechanism is delinked from the IMF, countries in the region are unlikely to make use of the CMIM. Instead, they will resort to various central bank swap arrangements, with the US or other regional central banks. This will bypass the CMIM and make the initiative essentially useless.[21]

Second, the CMIM borrowing quota may not be enough if a country gets into a serious problem. However, it should be possible to supplement money from the CMIM with additional contributions from countries in the group, similar to borrowing from the IMF. For example, when the IMF arranged a borrowing package of US$ 17.2 billion for Thailand in 1997, only US$ 4 billion of that was IMF money (or 23.25%); the rest came from contributions by various countries in the region. If a similar arrangement is done for the CMIM and countries contribute money to specific programs in addition to the money from the CMIM fund, then the total size of resources available would be more like US$ 500–600 billion and not just US$ 240 billion.

Third, instead of just borrowing from the CMIM, it should also be possible for countries to arrange swap facilities with the CMIM in a similar way to central bank swaps. This will make the CMIM much more flexible and quicker to use during short-term liquidity shortages.

Fourth, expansion to the other members of the ASEAN+6 not yet included in the CMIM (i.e., India, Australia, and New Zealand) should be explored and implemented as soon as possible. Once the mechanism is operational, having major new members may disrupt the balance of power significantly and may be infeasible. Even before the CMIM is fully implemented, it may be difficult to accommodate these three new countries at the same level as the ASEAN+3 members. Remember that it took a long time before the amounts of contributions from various countries could be agreed upon. To add contributions from new members will require further negotiations and could disrupt the implementation process too much. A way to avoid such delays might be to make India, Australia, and New Zealand "contributing partners" (i.e., non-voting partners). That is, they can contribute to specific future borrowing programs to supplement money from the CMIM fund as other ASEAN+3 members

[20] The negotiations on contributions were not that easy, as each major country wanted to make sure that it gives a large contribution because contributions will be related to voting weights when the mechanism is finalized.

[21] Delinking should be agreed at the policy level, but with appropriate sequencing. The IMF can still play an important role for the CMIM through its relationship with the CMIM coordinating organization.

can. Being contributing partners, they will be able to participate in all the technical programs to be carried out in the future under the CMIM umbrella, such as surveillance and activities to support regional integration. This might be the best approach to take at this stage as it will not disrupt what has already been agreed upon and will also make ASEAN+3 and ASEAN+6 financial activities more unified.

Even though the CMIM should be completely delinked from the IMF and its surveillance capacity adequately developed, the IMF would still have an important role to play. It will take some time for the AMRO to develop the technical expertise and credibility to function effectively as a major regional organization. The IMF could provide important technical assistance and capacity building support to the new organization. So while IMF conditionality will no longer be formally linked to borrowing from the CMIM, inputs from the IMF will still be very important in shaping the new organization. The AMRO should, of course, also work closely with other regional and global institutions, such as ADB, ASEAN Secretariat, World Bank, and Bank for International Settlements.

7.5.2 Need for a Regional FTA

A larger regional market is conducive to economies of scale and specialization and thus intra-industry trade in differentiated products. Greater regional cooperation and FTAs can also promote a more balanced trade structure. Removing trade barriers and facilitating trade among countries in East Asia would help stimulate intra-regional trade in final goods as well as redirect export demand from US and Europe toward the region itself.

This last point relates to the need to make the FTA and economic cooperation agreements in the region more integrated. Considerations are now being given to regionwide FTAs, whether among the ASEAN+3 countries through the East Asia FTA or the ASEAN+6 countries through the Comprehensive Economic Partnership for East Asia. It may take some time for these to be achieved, given the huge size and diversity of the region, as well as political considerations. Some still view APEC as an appropriate grouping, though how this will relate to East Asian growth rebalancing to depend more on intraregional demand is not clear.

Recently there have also been ideas put forward to develop various "community" groupings. For example, former Japanese Prime Minister Yukio Hatoyama proposed an "East Asian Community" and Australian Prime Minister Kevin Rudd offered an "Asia Pacific Community." At one end, one might view the idea of community more like a group of countries with common interests and purposes, with many areas of mutual cooperation, but not legally bound into an integrated community like the EU. At the other end, some may want to see a much more legalized community structure like the EU. It is clear that the desirability and feasibility of these various options, or others to emerge in the future, will be discussed and debated for some time. However, it is also clear that the global financial crisis has prompted the countries in the region to think seriously about the economic relations

architecture that should evolve in response to changes in the economic power balance that are expected from the crisis.

7.5.3 Cooperation in Regional Infrastructure Connectivity

One important source of potential growth that has received a lot of attention in the region is investment in infrastructure, especially cross-border infrastructure investment. This can create externalities generating new linkages and economic activities across borders. If successful, this investment, which will be driven mostly by the public sector, can promote private sector activities and investment and lead to sustainable growth without the public sector having to continue to provide the major stimulus.

ADB and ADBI concluded a major study on infrastructure for Asian connectivity (ADB and ADBI 2009). This study highlights the need for enhancing cooperation in regional connectivity in transport, energy, and telecommunications for rebalancing Asia's growth through increasing regional demand and intraregional trade. Asia has many overlapping subregional institutions involved in subregional infrastructure connectivity in different degrees. They operate with varying speeds and are addressing multiple objectives in infrastructure, trade, and other socioeconomic issues. The study proposed the creation of a pan-Asian infrastructure forum that will help coordinate and integrate subregional initiatives toward a seamless Asia (ADB and ADBI 2009). Major countries in the region have also announced policies to support infrastructure development in the region, such as Japan's proposed strategy to double the size of Asia's economy, in which cross-border infrastructure investment plays a central role.[22]

ADB and ADBI (2009) estimate that Asia will need to invest almost US$ 8 trillion in national infrastructure through 2020, some of which (e.g., airports, seaports, and roads connecting borders) are essential for enhancing regional connectivity. In addition, another US$ 290 billion will be needed for regional projects in transportation and energy. Given the huge investment requirement, the issue of financing is very important. This is also linked to the idea arising after the 1997–1998 crisis that more of the large saving surplus in the region should be recycled as long-term development financing for the region. The development of the region's bond market is indirectly related to supplying long-term investment funds for infrastructure investment. Efforts to develop Asian local currency bond markets through the ABMI and Asian Bond Funds should continue, as well as new initiatives that would make it easier for the private sector to raise funds through the Asian Bond Market. This includes implementing the Credit Guarantee and Investment Facility and the Asiaclear system (a system for clearing securities trades between Asia and New York), and developing a market for bonds denominated in an ACU. This should help to raise funding from within the region for infrastructure investment. The ADB and

[22] See Japan's Growth Initiative Towards Doubling the Size of Asia's Economy, a presentation available from Japan's Ministry of Economy, Trade and Industry at http://www.meti.go.jp/policy/trade_policy/asia_pacific/Growth_Initiative(en).pdf.

ADBI study proposes the establishment of a dedicated Asian Infrastructure Fund (AIF) that can assist and mobilize Asian and international funds, to prioritize, prepare, and finance regional infrastructure projects in energy, transport, and telecommunications. Bhattacharyay (2010, p. 19) argues that "AIF could be established as a trust fund under ADB, [which] has adequate experience and expertise in this area and has already initiated a process to establish its Asian Infrastructure Financing Initiative."

There is also a proposal being worked upon under the ASEAN Finance Minister process to set up an infrastructure fund by setting up a special-purpose vehicle that can issue bonds that can be subscribed to by the region's central banks or multilateral agencies. It is not clear yet how decisions to invest these funds will be made and whether the fund will be purely commercial or have elements of official development assistance when investment is made in the more backward countries in ASEAN. The PRC is also working on setting up an Asian Infrastructure Investment Bank, though how this will relate to other existing and planned institutions remains to be seen.

7.5.4 Increased Surveillance Capabilities and a More Proactive Role in the Global Financial System

The 1997–1998 crisis and the global financial crisis have reinforced the need for effective surveillance mechanisms in the region. Because the current global financial crisis emanated from outside the region but ended up having a large indirect impact on the region, this surveillance cannot simply be an internal surveillance of the region. The region needs also to have input into surveillance of the more advanced economies that could cause large indirect impacts on the region. And as East Asia is a major creditor of developed Western economies, it is in Asia's self-interest to carefully monitor what is happening in the markets in which it has a lot of its resources invested. In this section, it will be argued that Asia has the clout to bring about changes necessary to rectify problems brought up by the surveillance and that it should be much more proactive in using this clout.

A regional surveillance mechanism can effectively complement global surveillance. Kawai and Pomerleano (2009) proposed forming an Asia Financial Stability Dialogue (AFSD) as part of the ASEAN+3 process, an idea that has been floating around the region as one way for the region to respond to the global financial crisis, and would be a regional counterpart to the Financial Stability Board at the global level (see Kawai and Pomerleano 2009). This would bring together finance ministers, central bank governors, and financial market regulators and supervisors. The membership could also be expanded to include India, Australia, and New Zealand. The AFSD is expected to enhance information sharing, harmonize prudential indicators, increase coordination on early warning system analysis, and facilitate a more open discussion of national and regional policy interventions.

The key to the success of any kind of surveillance mechanism within the region, whether through the AFSD or through a series of related meetings involving a subset of the relevant authorities, is to have a strong professional secretariat supporting the process. The current structure supporting the various Finance Ministers' and Deputies Meetings is very ineffective. The officials supporting these processes only carry out the tasks part time while maintaining their regular jobs. Finance Ministers' Meetings also tend to be mostly rubber stamping what the officials have prepared through the Deputies' Meetings. From the author's own experience, even making slight changes to the Ministers' Declaration can be complicated as officials may have already spent a lot of time negotiating particular phrases in the declaration so that all the participating countries are happy.

Regional monetary organizations exist in other parts of the world and, in fact, there is already an "AMF," the Arab Monetary Fund, set up by the Economic Council of the League of Arab States in 1976. Its aim is to assist member countries to eliminate payment and trade restrictions, achieve exchange rate stability, develop capital markets, and correct payment imbalances through the extension of short- and medium-term loans; coordinate the monetary policies of member countries; and liberalize and promote trade and payments, as well as encourage capital flows among member countries. Another regional monetary organization is the Latin American Reserve Fund. The Latin American Reserve Fund was established in 1989 as the successor to the Andean Reserve Fund. The aims of these funds are to assist in correcting payment imbalances through loans with terms of up to four years and guarantees extended to members; coordinate members' monetary, exchange, and financial policies; and promote the liberalization of trade and payments in the Andean subregion.

It is important to understand that a regional monetary organization for East Asia (for the purposes of this discussion, will be referred to as an Asian monetary fund (AMF)) will not simply be a regional version of the IMF.[23] The AMF's role would extend to supporting policy coordination (or dialogue), financial cooperation, and the integration of the region. It should also carry out activities in the common interest of the region. For example, Asia is a major investor in foreign reserves assets. This can strongly influence the global financial system, including exchange rates and interest rates. At the same time, what happens in the investment destinations affects the safety of and returns on these investments. Thus, the AMF should provide inputs to the member countries on these issues, including the state and direction of the global financial markets affected by and affecting Asia's financial investment, and impacts of various investment strategies, as well as carry out economic surveillance of the investment destinations.

The AMF would be an important part of the reform of the international financial architecture. Current institutions have proven time and again to be inadequate in foreseeing and preventing major crises. Simply reforming the existing global institutions is unlikely to be effective, as there are too many diverse and conflicting

[23] The Andean Reserve Fund and Latin American Reserve Fund are not simply regional IMFs either. They also support the policy coordination and the integration of the respective regions.

interests. New regional institutions with more focused objectives can contribute to future global financial stability. Apart from managing the CMIM mechanism, the AMF for East Asia can provide technical and administrative support to various forums, such as ASEAN+3 Finance Ministers' Meetings and EMEAP, where central banks meet. It can also support new ones that may be established, such as the AFSD or possibly ASEAN+6 Finance Ministers' Meetings. In fact, the memberships in these various forums should become unified, and ASEAN+6 would be a logical group in which to base all of these financial forums. Even though CMIM is only contributed to by ASEAN+3, the three new members of the East Asia Summit (Australia, India, and New Zealand) could become contributing partners, as suggested earlier, and they can then participate in all side activities coordinated by the AMF. EMEAP should also expand membership to ASEAN+6, and AMF could also provide secretariat support to the EMEAP process.

The EMEAP process should become much more important and more visible than it is at present. The region's central banks should play a crucial role in coordinating the region's monetary policy, exchange rate policies, and foreign reserves investment policies. All of these, particularly the latter two, have global implications. To become more proactive, there should be more frequent "financial dialogues" among the ASEAN+6 countries—for example, an ASEAN+6 Finance Ministers' Meeting every six months, an EMEAP Governors' Meeting every quarter, and then a major AFSD involving all the key regulators once a year. Also important is the need for financial dialogues to become much more visible than now, especially the EMEAP process. Given that East Asia is a region with huge financial resources, and can significantly influence important global financial variables, such as exchange rates and bond yield curves, the world would be very interested in the outcomes of key financial meetings in Asia instead of just looking at the financial policy of the world's largest debtor nation, the US.

It is also very important for global financial stability that Asia become more proactive in the global financial system. The problem is that in recent years, the US Federal Reserve Board is no longer able to fully control monetary conditions in the US, particularly long-term interest rates. Sometimes there is a worrying disconnect between policy rates and long-term rates. While the US Federal Reserve Board was actively pushing up short-term rates between mid-2004 and mid-2006, long-term rates and mortgage rates hardly moved. During that time, it was becoming clear that the US real estate market was overheating. Increases in mortgage rates would have helped to cool down the situation.

7.5.5 Exchange Rate Cooperation

It was indicated earlier that an important challenge for the region arising from the global financial crisis is the need to consider regional measures to deal with the global imbalance problem. Otherwise, a contributing factor to another potentially major global financial crisis will likely remain, and the region will not be able to

isolate itself from such a crisis if it occurs. To be sure, the global imbalance is a problem for the whole world, and adjustments are needed from those economies that have surpluses as well as those with deficits. However, exchange rates, a major variable affecting the global imbalance, are under the control of mainly Asia (the surplus region) than of the US (the world's major deficit country). The US does not manage the rate of exchange of the US dollar, leaving it to be determined by the markets. Asian countries do manage their own exchange rates through central bank intervention in the foreign currency markets. Without coordination, each country will try to prevent its currency from getting too strong in order to protect its exports. Thus, without coordination and with continued current account surpluses and net capital inflows in Asia, foreign reserves accumulation in the region will continue and needed exchange rate adjustments to reduce the global imbalance will not occur. In this scenario, the global imbalance would remain and become even bigger, and the risks of another major financial crisis would increase.

Under the current regional institutional infrastructure, there is no effective forum or mechanism that can deal with exchange rate cooperation or coordination. As indicated in the last section, the establishment of the AMF can contribute to many areas of regional financial cooperation and coordination. For an area such as exchange rate cooperation, there need to be regular consultative meetings of the relevant authorities supported by in-depth technical support. New regular financial forums supported by the AMF, such as a regular meeting of the ASEAN+6 finance ministers and central bank governors and the AFSD, can include exchange rate issues. Cooperation on exchange rates may emerge from these forums, although such cooperation is likely to be informal and deal with general trends rather than any explicit formula.

Looking to the long-term, exchange rate cooperation and coordination will become more and more important because East Asia (and Asia generally) is likely to become much more economically integrated. Intraregional trade and investment are likely to increase further. More extensive cross-border infrastructure linkages will lead to the emergence of various growth poles, with greater cross-border trade and investment within these growth poles. Overall, there will be many more intraregional cross-border financial transactions among various economic agents of the region. This scenario of greater cross-border financial transactions has implications for the way in which these transactions are denominated and settled, and will lead to more attention being paid to the volatilities of the region's various exchange rates.

With such a large number of cross-border financial transactions, major swings among the region's exchange rates would create tremendous costs for economic agents carrying out these transactions, and could become important constraints for greater regional economic integration. In this kind of scenario, there will be calls for greater stability among the region's exchange rates coming from businesses carrying out these intraregional transactions and that must bear the costs of the exchange rate volatilities.

There have been many proposals for greater linkages among the region's currencies, ranging from common basket pegs (Kawai and Takagi 2009; Williamson 1999) to the yen bloc (Kwan 2001) and an East Asian Currency Index (Institute

for International Monetary Affairs 1999). However, there are still many issues that these proposals have to deal with. First, even with a common currency like the euro, the countries adopting the euro are basically pegging their currencies to each other (by using a single currency), but they are floating against all the other currencies in this world of floating exchange rates. In East Asia, a currency linkage would have to be similar to the euro system, that is, East Asian countries would maintain the relative stability of their exchange rates against each other and float against extraregional currencies (such as the US dollar and the euro).[24] However, because East Asia still has significant trade and investment dealings with major economies outside the region—as has been clearly shown by the export impacts arising from the global financial crisis, if the exchange rate between the region's currencies and external currencies were to become volatile, entities within the region carrying out transactions with those outside the region will face high costs. Thus, relative stability among the region's currencies benefits those making intraregional transactions, while relative stability with outside currencies benefits those making extraregional transactions. Of course, the scenario that will please both the intraregional and extraregional traders is if all try to maintain relative stability against the US dollar, which was precisely what happened leading up to the global financial crisis. However, this can lead to huge global imbalances and global crises if there are additional weaknesses in the chain, such as ineffective financial regulations.

Asian economies are very diverse and are at varying stages of development. There is no reason to expect that the relative values of the various countries' currencies today, or at any fixed time, will somehow be "appropriate." So any scheme to maintain relative stability among the region's exchange rates must allow for a structural change in relative currency values as the region develops. Apart from allowing countries to manage their own currencies, it is not clear how this can be accomplished. Then, of course, there is the issue of possible loss of sovereignty (Katada 2009) that makes any discussion of common exchange rate management (through a common peg and such) very difficult politically. Nevertheless, greater cooperation on exchange rate management strategies in general is needed and this should be possible without having to resort to adopting a common peg. This will be necessary even in the short term as indicated in the discussion on the global imbalance. And as indicated earlier, various future East Asian dialogues supported by the AMF can contribute to progress along this front.

Lastly, Asia can still do a lot to reduce the cost of doing intraregional business given the volatilities among the region's currencies. That is, to work together to develop markets and instruments that can be used to reduce the cost of volatilities. Efficient currency markets among the region's main currencies need to be developed, spot markets as well as forward markets, as well as various low-cost hedging instruments. People and businesses can then utilize these markets and instruments to protect themselves from the volatilities. Indeed, no one has been forced to use

[24] Of course, the pegs among each other need not be hard pegs, as it may be necessary to move away from the peg due to special economic circumstances (for example, if a country developed foreign exchange liquidity problems).

the US dollar for the denomination of its trades. The reason the US dollar is used so extensively is because there are deep and efficient markets between the US dollar and almost every currency in the world. Using the US dollar is less costly for businesses than using other currencies. In East Asia, the development of efficient currency markets must come first. If this can be achieved, then gradually businesses will use the region's currencies more and more, and use outside currencies (like the US dollar) less and less. Without efficient markets between the region's currencies, promoting the use of the region's currencies and baskets thereof for trade and investment is likely to be ineffective. In the long run, as the region's economic integration becomes deeper, usage of the region's currencies becomes widespread and supported by efficient currency markets, and exchange rate cooperation and coordination become a normal part of the region's financial architecture, the values of the region's various currencies may begin to move together so frequently that they become generally linked to each other in practice. At that stage, using some kind of an ACU for monitoring and surveillance may prove useful (see discussions of the ACU in Kawai (2009b). A time could be reached when the adoption of a common currency will not be such a radical departure from the types of cooperation and coordination that the region will already be carrying out, and the ACU could evolve to become the region's equivalent of the euro.

To pursue policy coordination, a gradual, step-by-step approach is appropriate. The various stages as proposed by Kawai (2009b) are outlined in Table 7.3. The first step is for regional governments to initiate an intensive policy dialogue covering exchange rate movements, regimes, and issues as part of the region's economic and surveillance exercise. The second step is to coordinate informally on exchange rate regimes by moving toward greater exchange rate flexibility against the US dollar. The third step is to adopt formal, but loose exchange rate policy coordination to promote intraregional rate stability without rigid coordination of monetary policy. The fourth and fifth steps are to progressively intensify formal exchange rate policy coordination. Each of these steps needs to be complemented by stronger cooperation in the areas of finance and trade.

The first step is the introduction of intensive policy discussions on exchange rate policy as a part of the regional economic surveillance process. The objective is to cultivate a culture that views exchange rates as not merely national concerns but also as regional matters, and to intensify discussions among policymakers in order to reach a consensus regarding the implications of large currency misalignments within East Asia. At this stage, an ACU index could be introduced as a benchmark, a tool to measure the value of East Asian currencies as a whole against external currencies—such as the US dollar and the euro—as well as the degree of divergence of each currency's value from the regional average set by the ACU.[25]

The second step is the introduction of informal policy coordination to achieve both greater exchange rate flexibility against the US dollar and improved exchange

[25] The ACU could also be developed for invoicing trade-related transactions and serving as a denomination for Asian bond issues. See Kawai (2009b), and several other papers in Chung and Eichengreen (2009).

Table 7.3 Steps toward exchange rate and monetary policy coordination. (Source: Kawai (2009b))

Stage of coordination	Exchange rate policy	Supporting institutions	Trade and investment
Current state	Uncoordinated exchange rate arrangements	CMI & regional surveillance	Uncoordinated FTAs
1. Intensive policy dialogue on exchange rates	Intensive policy dialogue on exchange rates; use of an ACU index for surveillance	Secretariat for CMI Multilateralization and regional surveillance	Coordination of rules and provisions among FTAs
2. Informal coordination (exchange rate regimes)	Greater exchange rate flexibility vs. US dollar; an SDR-plus currency basket as loose reference	Asian monetary cooperation fund	A single East Asia-wide FTA; East Asian Investment Area
3. Formal but loose coordination (exchange rate policy)	SDR-plus currency basket system with clear rules for intraregional rate stability	Very short-term liquidity facility	Asian customs union
4. Tight coordination (monetary policy)	ACU-based system: "Asian Snake" or "Asian ERM"	ACU clearing and settlement system	Asian common market
5. Full coordination	Asian monetary union	Asian central bank	Asian single market

CMI Chiang Mai Initiative, *FTA* free trade agreement, *ACU* Asian Currency Unit, *SDR* special drawing rights, *ERM* exchange rate mechanism

rate stability within East Asia by using a basket of special drawing right (SDR)-plus currencies—comprising the SDR and a basket of emerging Asian currencies—as a loose reference.[26] By adopting a managed float policy targeted at an SDR-plus currency basket—as is currently practiced by Singapore—all emerging East Asian economies could enhance their mutual exchange rate stability.

Supporting institutional arrangements should be further enhanced to support such informal policy coordination. The CMI secretariat's economic review and policy dialogue (ERPD) process will be transformed into a more structured Asian Monetary Cooperation Fund—like its European counterpart, the European Monetary Cooperation Fund—which would conduct more intensive ERPDs, with advanced peer review and due diligence elements, and drafts lending conditionality when a member country needs to draw CMI resources that are now fully independent of IMF programs.

The third step is the joint adoption of a formal policy of stabilizing intraregional exchange rates using a common basket of SDR-plus currencies as a reference. This formal exchange rate policy coordination will require the availability of a very short-term liquidity facility so that central banks can intervene frequently to maintain exchange rate stability within a band.

[26] Note that an SDR-plus currency basket could be defined as a basket of the US dollar, euro, pound sterling, and an ACU, which would be a basket of the yen and other Asian currencies.

The fourth step is the launch of more systematic exchange rate and monetary policy coordination to create a regional monetary anchor. Here, two approaches are possible—the "European" approach and the "parallel currency" approach (Eichengreen 2006). Under the "European" approach, a common basket peg similar to the snake or exchange rate mechanism could be introduced. The "parallel currency" approach could be considered in the absence of strong political will. This approach involves issuance of an ACU as a parallel legal tender together with national currencies, issuance of ACU-denominated bonds, and the establishment of a clearing and settlement system for ACU transactions.

The final step is complete monetary policy integration and full delegation of monetary policymaking to a regional supranational authority. In this ultimate phase, a single regional currency may be introduced. But this remains a long-run possibility for the region. However, it should be noted that recent problems in the eurozone have raised many questions about the desirability for Asian countries to move toward something like a single currency block.

7.6 Conclusions and Recommendations

This chapter has proposed a number of ways to promote post-global financial crisis regional cooperation and architecture development for Asia. These are further developments on top of those that were initiated by the region after the 1997–1998 Asian financial crisis. Some are completions of initiatives that are still in development, such as the provision of foreign exchange liquidity to countries in need through the CMIM. The next step for this is to strengthen the AMRO, so that links to IMF programs may be dropped. Eventually, this could develop into a full-fledged Asian monetary fund.

Other initiatives are intended to meet new challenges arising directly from the global financial crisis, such as the need to encourage greater reliance of growth on regional demand for final products and to increase financial stability and depth. Further and deeper integration of the region may help as may the development of new sources of growth, such as investment in infrastructure.

Adoption of a regional FTA, including trade and investment in goods and services, could be vital to expanding the regional market and increasing the ability of regional exporters to leverage off of the growing middle classes in the region.

Investment in the region could be supported by various regional initiatives, to deepen regional bond markets by expanding and enhancing the ABMI and Asian Bond Funds by implementing the Credit Guarantee and Investment Facility and the Asiaclear system, and developing a market for bonds denominated in an ACU. In addition, there is a need to develop specific institutions to support infrastructure investment, such as an Asian Infrastructure Investment Fund.

Creation of an AFSD could contribute to economic and financial stability in the region by increasing coordination and information sharing among regional monetary, finance ministry, and regulatory authorities.

This chapter also suggests that Asia should play a much bigger role in the global financial architecture. The G20 is emerging as a major global forum for economic policy cooperation and coordination. Asia should participate as much as possible in the G20 and also make sure that Asia's interests are reflected in any major global dialogue and policy development. The regional surveillance process should be intensified and made more effective by being supported by a regional monetary institution such as the AMF. The finance ministers' process through ASEAN+3 and the central banks' process through EMEAP should become more unified, with common memberships and a coordinated schedule of meetings. Surveillance also needs to extend beyond the region because the region depends on what happens in its export markets and the destinations of its financial investment. The decisions affecting how the region's huge foreign reserves are invested have major implications for the global financial markets, so the region needs to more actively influence the direction of the global financial system.

Finally, the region also needs to seriously consider a staged approach to increased exchange rate cooperation to help address global imbalances, and also to support the region's longer-term economic and financial integration.

References

ADB. 2009. *Asian Development Outlook: Rebalancing Asia's growth.* Manila: ADB.

ADB and ADBI. 2009. *Infrastructure for a seamless Asia*. Tokyo: ADBI.

ASEAN Secretariat. 2012. The Joint Statement of the 15th ASEAN+3 Finance Ministers and Central Bank Governors' Meeting, 3 May 2012, Manila, the Philippines. http://www.aseansec.org/Joint%20Media%20Statement%20of%20the%2015th%20ASEAN+3%20Finance%20Ministers%20and%20Central%20Bank%20Governors'%20Meeting.pdf. Accessed 15 June 2012.

Bankscope Database. 2009. Accessed 12 Dec 2009.

Bhattacharyay, B. N. 2010. Institutions for Asian connectivity. ADBI Working Paper 220. Tokyo: ADBI.

Chia, S. Y. 2009. Regional trade policy cooperation and architecture in East Asia. Paper presented at the ADBI conference on global financial and economic crisis: regional cooperation and architecture policy issues, Tokyo, 16 July (revised Sept 2009).

Chung, D.-K., and B. Eichengreen. 2009. *Fostering monetary & financial cooperation in East Asia*. Singapore: World Scientific.

Eichengreen, B. 2006. The parallel-currency approach to Asian monetary integration. *American Economic Review* 96:2.

Feldstein, M. 1998. Refocusing the IMF. *Foreign Affairs* 77 (2): 20–33.

Institute for International Monetary Affairs. 1999. *Stabilization of currencies and financial systems in East Asia and international financial cooperation*. Tokyo: Institute for International Monetary Affairs.

International Monetary Fund. 2009. International Financial Statistics. http://www.imfstatistics.org/imf/. Accessed 12 Dec 2009.

International Monetary Fund. 2010. International Financial Statistics database. http://www.imfstatistics.org/imf/. Accessed 23 March 2010.

Katada, S. N. 2009. Political economy of regional integration and cooperation: case of East Asia. Paper presented at the ADBI conference on global financial and economic crisis: regional cooperation and architecture policy issues, Tokyo, 16 July (revised Sept 2009).

Kawai, M. 2008. Evolving regional financial architecture in East Asia. Research Policy Brief 25. Tokyo: ADBI.

Kawai, M. 2009a. Reform of the international financial architecture: An Asian perspective. ADBI Working Paper 167. Tokyo: ADBI.

Kawai, M. 2009b. An Asian Currency Unit for regional exchange-rate policy coordination. In *Fostering monetary & financial cooperation in East Asia,* eds. D.-K. Chung and B. Eichengreen. Singapore: World Scientific.

Kawai, M. 2010. Quest for a regional monetary framework in East Asia. Paper presented at the conference on Regionalism and Reform of the Global Monetary and Financial System: What Role for the European Union and East Asia? European Commission, Brussels, 4 Feb.

Kawai, M., and M. B. Lamberte. 2008. Managing capital flows in Asia: policy issues and challenges. ADBI Research Policy Brief 26. Tokyo: ADBI.

Kawai, M., and M. Pomerleano. 2009. International financial stability architecture for the 21st century. Financial Times Economists' Forum. 1 Aug. http://blogs.ft.com/economistsforum/2009/08/international-financial-stability-architecture-for-the-21st-century/. Accessed 15 Oct 2009.

Kawai, M., and S. Takagi. 2009. A proposal for exchange rate cooperation in East Asia. Paper presented at the ADBI conference on global financial and economic crisis: regional cooperation and architecture policy issues, Tokyo, 16 July.

Kawai, M., P. A. Petri, and E. Sisli-Ciamarra. 2009. Asia in global governance: A case for decentralized institutions. ADBI Working Paper 157. Tokyo: ADBI.

Krugman, P. 1998. Fire-sale FDI. Paper presented at the National Bureau for Economic Research conference on Capital Flows to Emerging Markets, Cambridge, Massachusetts, 20–21 Feb.

Kwan, C. H. 2001. *Yen block: Toward economic integration in Asia*. Washington, DC: Brookings Institution Press.

Lipscy, P. Y. 2003. Japan's Asian Monetary Fund proposal. *Stanford Journal of East Asian Affairs* 3 (1): 93–104.

Manupipatpong, W. 2002. The ASEAN surveillance process and the East Asian Monetary Fund. *ASEAN Economic Bulletin* 19 (1): 111–123.

Ministry of Finance, Japan. 2007. The Joint Ministerial Statement of the 10th ASEAN+3 Finance Ministers' Meeting. 5 May. Kyoto, Japan. http://www.mof.go.jp/english/if/as3_070505.pdf. Accessed 22 March 2010.

Murase, T. 2007. Economic surveillance in East Asia and prospective issues. *The Kyoto Economic Review* 76 (1): 67–101.

Stiglitz, J. 2002. *Globalization and its discontents*. New York: W.W. Norton & Co.

Sussangkarn, C. 2000. A framework for regional monetary stabilization. *NIRA Review* 7 (4): 16–20.

Sussangkarn, C. 2002. Economic crisis and recovery in Thailand: The role of the IMF. In *Asian economic recovery: Policy options for growth and stability*, ed. K. Y. Tan. Singapore: The Institute of Policy Studies, Singapore University Press and World Scientific.

Sussangkarn, C. 2003. East Asian financial cooperation: An assessment of the rationales. In *East Asian cooperation: Progress and future,* ed. Y. Zhang. Beijing: World Affairs Press.

Sussangkarn, C., and P. Vichyanond 2007. 10 years after the financial crisis in Thailand: What has been learned or not learned? *Asian Economic Policy Review* 2 (1):100–118.

Sussangkarn, C., and P. Vichyanond. 2006. Directions of East Asian regional financial cooperation. *Asian Economic Papers* 5 (3):25–55.

Williamson, J. 1999. The case for a common basket peg for East Asian currencies. In *Exchange rate policies in emerging Asian countries,* eds. S. Collignon, J. Pisani-Ferry, and Y. C. Park. London: Routledge.

World Bank. 1993. *The East Asian miracle: Economic growth and public policy*. New York: Oxford University Press.

Chapter 8
Beyond the Crisis: Toward Balanced and Sustainable Growth

Masahiro Kawai and Jong-Wha Lee

Abstract The global financial crisis of 2007–2009 shattered Asia's complacency regarding the sustainability of its export-led growth strategy. The sharp decline in the region's economic expansion in 2009 arising from the collapse in developed countries' demand for its exports highlighted the need for a more balanced structure for Asian economies that is less dependent on external demand—particularly from the US and the European Union—and more reliant on domestic and regional demand. Asian economies should contribute to global economic adjustment by creating their own growth engines and transform themselves into a large consumer market, while maintaining their competitiveness as the world's factory. The global financial crisis provided Asian countries with an opportunity to bring regional policy coordination and cooperation to the next level. Asia's future growth must be balanced, sustainable, and supportive of the global economy. This includes implementing measures to encourage rebalancing of production, expanding social protection, deepening the financial system, and forging regional cooperation.

Keywords Rebalancing growth · Sustainable growth · Macroeconomic stability · Social protection · Regional cooperation

JEL Codes F15 · F42 · F43

8.1 Introduction

Despite the 2009 collapse in its exports to destinations outside the region, developing Asia came out of the 2007–2009 global financial crisis ahead of the rest of the world. The uneven pace of recovery between developing Asia and the developed

M. Kawai (✉)
Graduate School of Public Policy, Tokyo University, Tokyo, Japan
e-mail: mkawai@pp.u-tokyo.ac.jp

J.-W. Lee
Korea University, Seoul, Republic of Korea
e-mail: jongwha@korea.ac.kr

M. Kawai and J.-W. Lee (eds), *Rebalancing for Sustainable Growth,* Economics, Law, and Institutions in Asia Pacific, DOI 10.1007/978-4-431-55321-2_8

economies suggests that Asia will once more be an attractive destination for capital inflows. Faster growth in developing Asia also meant it began to remove accommodative fiscal and monetary policies earlier than the rest of the world, bringing higher yields and an anticipation of currency appreciation that spurred several currency carry trades. Indeed, some countries, including the PRC, began to tighten policy. As a result, capital began to flow in again.

But large and volatile capital flows entail some risks. Massive inflows could fuel inflation and asset price bubbles, while an abrupt withdrawal of foreign capital could lead to a financial crisis in a country with an insufficient amount of international reserves relative to short-term foreign debt payments and/or an unhealthy financial system. As the 1997–1998 Asian financial crisis demonstrated, a rapid reversal of capital flows can have catastrophic economic effects. Excessive openness would thus leave Asia susceptible to another global crisis.

One positive outcome of the global financial crisis is the reduction in global imbalances. In 2009 global imbalances contracted to a significant extent, due to a substantial decline in, both the current account deficit of the US and the surplus of oil exporters. But the world's current account balance remains precarious. Before the global turmoil erupted, there had been concern that a "disorderly unwinding" of this burgeoning and unsustainable problem could spark a global crisis. In the end, it was not the direct cause of the 2007 subprime crisis. Instead, inadequate financial market regulation and overly easy monetary policy, particularly in the US, were at its root. Combined, these factors encouraged US consumers to overspend. Excessive saving and large current account surpluses in other parts of the world, particularly Asia were the mirror image of the US current account deficits. The current account surpluses of developing Asian economies, in particular the PRC, might increase again once the US economy fully recovers, raising the risk of future global turmoil unless significant reductions in these levels are made (IMF 2009).

The 2007–2009 global financial crisis underscored the urgency for Asia to reduce its dependence on exports to the developed economies. This would shift the economy to a more balanced and sustainable growth pattern, more reliant on the strengthening of domestic and regional demand and the pursuit of more socially inclusive and environmentally friendly growth.

Making progress toward this growth pattern requires consistent adjustments on the demand side and supply side of the economy. It also necessitates increased regional cooperation to augment policy measures at the national level. This study is an attempt to provide a comprehensive analysis of the impacts of the crisis and a set of policy recommendations, encompassing the dimensions of macroeconomic policy, real sector structural policy, social policy, financial reform and regulation, and regional cooperation and architecture. The major agenda items by thematic area are summarized in Table 8.1. Among its key recommendations, it suggests that Asian policymakers need to:

- Implement a monetary policy framework that takes into account asset prices and financial market stability, and adopt a judicious mix of policies to manage volatile capital flows effectively in order to achieve greater macroeconomic sta-

Table 8.1 An agenda for rebalancing for sustainable growth

Themes	Objectives	Policy measures
Improving macroeconomic stability	Improve the effectiveness of macroeconomic policy frameworks	Secure sufficient policy space, strengthen coordination of monetary policy and macroprudential policy to achieve financial and price stability, and enhance automatic stabilizers
	Promote macroeconomic stability	Exit from easy monetary and fiscal policy when recovery takes hold, and accept currency appreciation in response to persistent capital inflows
	Facilitate global rebalancing	Use regional cooperation to provide liquidity in the event of a crisis
Rebalancing production	Enhance human capital investment, technological innovation, and productivity	Provide workers with high quality education and marketable skills and invest in R&D
	Promote the services sector and green growth	Remove obstacles to investment, market entry, and business activity and promote energy efficiency and environmental protection
	Liberalize trade and investment globally and regionally	Support the World Trade Organization Doha Round and regional FTAs
	Encourage cross-border infrastructure investment	Improve intraregional infrastructure and connectivity
Enhancing social protection	Strengthen social protection programs and provide support to the vulnerable	Design cost-effective social protection programs and reform pension systems
	Improve targeting of social protection programs	In low-income countries, focus on extreme poverty, basic health, and nutrition
	Ensure sustainability and adequacy of social benefits	Provide capacity building to improve governance and administrative efficiency
Deepening the financial system	Broaden and deepen financial markets while maintaining financial stability	Create effective frameworks for financial regulation and supervision, including adoption of macroprudential supervision and resolution regimes
	Increase the ability to prevent and manage financial crises	Promote Asian bond markets and improve market infrastructure
	Improve efficiency of regional financial intermediation	Develop credit databases and raise accounting standards and services
	Enhance financing for SMEs	
Forging regional cooperation	Strengthen regional liquidity provision, surveillance, and macroeconomic policy cooperation	Strengthen the Chiang Mai Initiative Multilateralization (CMIM) leading to the creation of an Asian Monetary Fund (AMF) and establish an Asian financial stability dialogue
	Integrate regional markets	Create a Regional Comprehensive Economic Partnership (RCEP) to liberalize regional trade in goods and services and investment
	Initiate exchange rate policy coordination	Create an Asian Currency Unit index to facilitate policy dialogue
	Contribute to reform of global financial architecture	Increase Asian voice on global financial institutions

bility and resilience. Authorities also need to ensure adequate monetary and fiscal space in good times to provide capacity to react when growth is threatened.

- Encourage growth of domestic and regional demand and facilitate the reorientation of the supply side of the economy more non-tradable activities. Subsidies and other distortions that favor exporters and tend to suppress labor's share of income should be removed. Authorities should also deregulate and encourage investment in growth areas of the services sector, including health, education, information and telecommunications, and other knowledge-intensive sectors; support greater investment in infrastructure, and promote a shift to a low-carbon society and support green growth industries; and promote a more supportive regime for small and medium-sized enterprises, including greater access to finance.
- Strengthen social protection in the areas of health insurance, unemployment insurance, and pensions to enhance social resilience. Enhancing such social protection can help reduce the need for precautionary saving, contributing to a post-crisis rebalancing. Governments also need to increase public spending on education and health to support productivity growth. Targeted social assistance programs to address extreme poverty, basic nutrition and health needs also should be strengthened.
- Increase the stability of the financial sector: this requires stronger surveillance and regulatory regimes, including an institutional framework for macroprudential surveillance and regulation, and a systemic stability regulator with adequate enforcement tools and mandates.
- Deepen and develop domestic bond markets in order to facilitate the use of domestic funds to support investment and consumption in the region by adopting measures, such as harmonizing regulation and tax rules, strengthening legal frameworks, and further developing credit rating agencies.
- Enhance regional efforts to pursue financial and economic policy cooperation and coordination, structural adjustment, and integration of regional markets. Key elements of these efforts include: strengthening the Chiang Mai Initiative Multilateralization (CMIM), and the ASEAN+3 Macroeconomics Research Office (AMRO); establishing an Asian financial stability dialogue (AFSD) to foster economic and financial coordination; promoting measures to support increased regional infrastructure investment including an Asian infrastructure investment fund; and establishing the Regional Comprehensive Economic Partnership (RCEP) to encourage intra-regional trade in goods and services and foreign direct investment (FDI) so Asia can benefit from the economies of scale and dynamic efficiency of a larger market. Asian policymakers should also strengthen cooperation on exchange rates, which will help them overcome concerns about unilateral currency adjustment and promote intra-region exchange stability to support trade and investment within the region.
- Participate actively in major global forums and policy dialogues—and ensure Asia's global voice is commensurate with Asia's economic and financial importance. Asia can benefit and help lead the global economy through a stronger, balanced, and more resilient Asian economy, with multiple sources of growth.

Export-led growth served Asian nations well. But, it also raised the cost of economic vulnerability and introduced substantial economic distortions—while its prospective benefits now look much diminished. Simply put, Asia has grown too big to maintain its pre-crisis share of world exports, and, as such, the global financial crisis presents authorities an opportunity for structural reforms that can ensure a more balanced and sustainable growth pattern.

8.2 Improving Macroeconomic Stability

With ample space for implementing monetary and fiscal policy, most Asian economies were able to quickly adjust monetary and fiscal policies in the early stages of the crisis, providing substantial stimulus that contributed significantly to the rapid recovery. Clearly, this means that in good times, countries must secure sufficient monetary and fiscal policy space by keeping interest rates high enough and public debt-to-gross domestic product ratios low enough.

But greater effort is needed to make macroeconomic policy frameworks work toward stable and sustainable growth. First, the experience of developed economies underlines the need for monetary policy frameworks that take account of asset prices and financial stability. Second, as Asian economies shift toward more balanced growth, Asian currencies need to have greater flexibility against the US dollar. Asian economies should move beyond beggar-thy-neighbor policies of large-scale intervention to depress their currencies, and instead develop an institutional framework that accommodates greater exchange rate flexibility of regional currencies vis-à-vis the US dollar, as well as greater intra-regional exchange rate stability. Further work is also needed to enable regional institutions to provide more adequate hard-currency liquidity.

Although most Asian economies did not fall into a "liquidity trap," a number of countries made effective use of unconventional monetary policy measures. In particular, the emergence of a shortage of US dollar liquidity in the region underlined the necessity to strengthen institutions to provide hard-currency liquidity. In addition, central banks need to be proactive in responding to signs of an asset bubble, i.e., "lean against a bubble." Price and financial stability are not incompatible; central banks can achieve financial stability without being given an explicit mandate to do so. As long as their objective is to minimize some combination of fluctuation in inflation around a target value and fluctuation of output around its natural level, central banks should consider all relevant information, including asset prices and financial stability.

The recent crisis also presents fiscal policy lessons. For instance, policies should specifically target liquidity-constrained economic agents, as general spending measures and tax cuts can be ineffective and wasteful. Large-scale public investment can also be problematic in that it entails serious implementation problems. Despite that, investment spending has an important role to play in economic stimulus programs, given the importance of infrastructure to long-term economic growth. As

the crisis makes clear, such investment should ideally accelerate projects already under way. Over the medium-term, building sound fiscal institutions is crucial to effective fiscal management. Once binding fiscal rules are introduced, governments can more likely use fiscal policy countercyclically without creating debt sustainability concerns. Governments should also give high priority to enhancing automatic stabilizers which are designed to benefit those likely to be hurt by an economic downturn.

In the area of exchange rate policy, it is clear that Asian economies should not go on keeping their exchange rates stable against the US dollar and continue amassing foreign exchange reserves. This path led to unsustainable payments imbalances. Achieving rebalancing growth and gaining greater domestic macroeconomic stability require that authorities allow their currencies to be more flexible against the US dollar, and to exit from an easy monetary policy promptly when recovery takes hold.

In the event of upward pressure on Asian currencies, regional cooperation may help these governments overcome the fear of unilateral appreciation—by helping to foster collective appreciation—and the loss of export competitiveness. Such cooperation should focus on increasing collective flexibility against the US dollar, while promoting the stabilization of intra-regional exchange rates. A framework for closer coordination of macroeconomic policy would make countercyclical fiscal policy more effective and exchange rate cooperation more enduring. There must at least be a dialogue process when the region's currencies diverge from each other abruptly and substantially.

8.3 Rebalancing Production

Adjustment of the supply side of the economy is also needed for more sustainable growth, which, broadly speaking, is likely to involve a shift of resources from tradables to non-tradables. Policies to aid this adjustment include: eliminate subsidies and factor-price distortions that favor tradable goods producers in countries; deregulate services sectors; improve the environment for investment and productivity growth; and promote a regional free trade agreement. Services can be made more open, efficient, and competitive if governments remove regulatory distortions, which would raise productivity not only in services, but also in other sectors for which services such as transportation and telecommunications are important production inputs.

Asian countries also need to encourage production networks to graduate to higher value-added, knowledge-intensive activities. Governments can aid this process by promoting environment friendly FDI to allow local firms to participate more in regional production networks. Authorities should encourage higher levels of investment in research and development and higher education to achieve this aim. SMEs can, additionally, play an important role in supporting industrial clusters and producing higher domestic value-added. Policymakers can also take a number of steps to create an eco-friendly system for them, which could lead to "green" industrial agglomeration and technology transfer to domestic firms.

Regional integration can also play a greater role in bringing firms and consumers in the region together, an important step for Asia's burgeoning middle classes. An East Asia-wide free trade and investment agreement that covers goods and services and FDI could help regional firms reorient production more broadly toward the needs of Asian consumers. RCEP among ASEAN+6 countries (ASEAN plus Australia , the PRC, India, Japan, the Republic of Korea, and New Zealand) is expected to integrate Asian markets more deeply and support Asia's supply chains.

The lessons of the global financial crisis also suggest that Asian countries should not simply rebuild their economies as before, depending excessively on a few export-oriented and polluting industries fueled by a few carbon-intensive energy sources. The aftermath of the crisis presents the chance to shift economies onto a more environmentally sustainable path. By decarbonizing economic growth to help control climate change and fostering green industries, governments could enhance long-term sustainability, help create jobs, raise skills, and boost competitiveness. A decarbonized Asia could be a world leader in green technology, innovation, and growth.

Infrastructure investment can also help achieve greater productivity and bring together demand and supply within the region. Estimates of the need for new infrastructure run into more than $ 8 trillion, and the implementation of these plans would often require strong regional planning and financing arrangements.

8.4 Enhancing Social Protection

Although many Asian countries for some time now have chased economic growth with only limited regard for social protection and policy, new circumstances point to those playing a more important role. First, urban migration and lower birth rates have put pressure on traditional family support mechanisms, especially on old age support. Second, governments increasingly are recognizing that health care, education, and economic security boost economic competitiveness in a globalized world, and help economies reach a higher growth path. Third, in many countries households tend to maintain high precautionary household savings—for education costs, health expenses, unemployment, and retirement—which tends to depress consumer spending. By easing the burden in these areas, effective social programs can encourage consumers to spend more, stimulating domestic demand.

The global economic and financial crisis presents the opportunity to expand and improve the coverage of social protection systems, and operate in a financially sustainable manner. This would include broadening the coverage of major programs such as public health insurance, unemployment insurance, and public pension schemes and raising spending on public education. Targeted income transfers to improve the distribution of income and provide a more sustainable environment for investment should also play an increasingly important role.

8.5 Deepening the Financial System

Asian economies came out of the global financial crisis relatively unscathed. This mainly reflected effective management and regulation, but also was partly due to the underdevelopment of financial markets. As such, the crisis serves as an alarm. Asian countries must review and strengthen their own financial regulatory systems to avoid making the same mistakes as countries outside Asia that thought they had good systems for financial stability. This applies to both crisis prevention and management. Reforms must aim to reduce the disruptive potential of volatile capital flows, and to develop domestic financial markets to enhance resilience to outside shocks and keep funds for investment and consumption within the region. While predominantly undertaken at the national level, many of these reforms can be better taken at the regional level. Such measures will need to be coordinated with the ongoing work of the international institutions, particularly the Basel Committee and the Financial Stability Board (FSB).

In that light, crisis prevention is best tackled by: reducing procyclicality not just by removing the perverse incentives in capital buffers and accounting valuations but also through positive incentives to adopt countercyclical buffers and similar mechanisms; improving microprudential monitoring that ensures individual financial institutions strive to be prudent in their own interests and implement a better calibrated system of risk assessments; and establishing a mechanism for effective macroeconomic surveillance and action, particularly a high-level systemic stability regulator integrating monetary, financial supervisory, and fiscal authorities, and empowered with policy tools it can employ separate from monetary policy. Several changes could also improve crisis management. These include: establishing a coordinated set of institutions that between them cover all phases of the crisis; forming a credible system for handling the failures of all types of financial institutions, particularly those that operate across borders; implementing an effective deposit insurance system; and improving resilience against shocks by substantial enhancement of regional mechanisms, among other things, through an AFSD.

To develop regional bond markets, governments should encourage foreign participation, especially by multinational institutions and corporations; improve government debt management, including maintenance of a reliable set of government bond benchmark issues and adequate liquidity; improve market infrastructure to allow issuers to hedge maturity and currency risk; expand the coverage of private issues by credit rating agencies; and cooperate at the regional level to achieve adequate scale economies.

Finally, to help SMEs, governments should encourage banks to build capacity in transaction technologies, and encourage them to innovate and try technologies that have a comparative advantage in a certain institutional environment; encourage foreign-owned banks; raise accounting standards and services; and set up a consistent and accessible SME financial database.

8.6 Forging Regional Cooperation

Several major initiatives for enhancing regional financial cooperation and architecture for Asia will be needed to support the region's sustainable growth. Some initiatives are still in development following the Asian financial crisis, but have not made enough progress, such as the provision of foreign exchange liquidity through the CMIM. Other issues stem directly from the global financial crisis, for example, the need to bolster financial and economic stability through closer economic and financial surveillance and to enhance the potential of domestic and regional demand to support economic growth through regional trade agreements and institutions to facilitate investment in infrastructure.

Authorities should intensify and improve the regional surveillance process through AMRO, a regional surveillance institution, as part of the CMIM, potentially, leading to development of an Asian monetary fund. Surveillance also needs to be extended outside the region, as Asia remains heavily dependent on export markets and the destination of its financial investment. Finally, in view of the need for a global rebalancing of demand, cooperation could foster a collective adjustment of the region's currencies against the US dollar. Policymakers must seriously consider exchange rate cooperation to deal with the global imbalance, and to support the region's economic integration in the longer term.

Removing trade barriers and facilitating trade among East Asian countries, by establishing a regional free trade and investment area in the form of RCEP, would help stimulate intra-regional trade in final goods and services.

Further steps are also needed to develop domestic and regional funding sources to better address Asia's huge infrastructure investment needs. Efforts to develop Asian bond markets through the Asian Bond Markets Initiative and the Asian Bond Funds should continue, as well as new initiatives. An Asian infrastructure investment fund could raise funds from a combination of sources, such as governments, the private sector, and multilateral agencies, thereby supplementing existing funding facilities through multilateral agencies and bilateral organizations.

Globally speaking, Asia also has a much bigger role to play, particularly given the changes taking place that promise to transform the global financial architecture. The Group of 20 meetings are now emerging as a major global forum for economic policy cooperation and coordination. Asia must ensure that its voice is heard and its needs reflected in any major global dialogue and policy development. Given the region's financial resources in the form of savings, private sector financial assets, and foreign exchange reserves, the decisions affecting how these are invested have major implications for global financial markets, so the region needs to play a more proactive role in influencing the direction of the global financial system.

8.7 The Path to Sustainable Growth

The global financial crisis of 2007–2009 shattered Asia's complacency regarding the sustainability of its export-led growth strategy. The sharp decline in the region's economic activity in 2009 arising from the collapse in developed countries' demand for its exports highlighted the need for a more balanced structure for Asian economies. Asia cannot continue to rely on exports as its main driver of growth. Asia needs a more balanced and sustainable growth strategy.

It would be wrong to say that Asia's export-led strategy was the main problem. In fact, Asia's growth in the medium-term will likely remain partly export-led. The crucial difference is that the target market for the region's exports should no longer be the developed countries in the west, but rather focused on the region's large and growing middle class.

It is unlikely that the US and Europe will fully resume their roles as engines of global growth in the medium to long run; Asian economies should contribute to a global economic adjustment by creating their own growth engines. Only then can Asia sustain its own growth and contribute more to global long-term economic growth in the post-global financial crisis era. In order to achieve this, Asia needs to transform itself into a large consumer market while maintaining its competitiveness as the world's factory, by rebalancing sources of growth away from excessive dependence on external demand—particularly the US and the European Union—toward domestic and regional demand. Asian firms can target the rising high-income and middle class in emerging Asia—the PRC, India, and the ASEAN countries—which could become a major source of final consumption demand.

The core challenge is that Asian economies must work together to avoid the next crisis. It will require a multifaceted effort at the national, regional, and global levels. The global financial crisis provided Asian countries with an opportunity to bring regional policy coordination and cooperation to the next level. The region must coordinate regionally, but stay globally connected. Asian policymakers must actively participate in global dialogues and policy coordination to support strong and sustainable growth for the global economy. Asia's future growth must be balanced, sustainable, and supportive of the global economy.

References

International Monetary Fund. 2009. *World Economic Outlook: Sustaining the recovery*. Washington, DC: International Monetary Fund.

Index

M. Kawai and J.-W. Lee (eds), *Rebalancing for Sustainable Growth,* Economics, Law, and Institutions in Asia Pacific, DOI 10.1007/978-4-431-55321-2