Tatiana Karabchuk
Kazuhiro Kumo
Kseniia Gatskova
Ekaterina Skoglund *Editors*

Gendering Post-Soviet Space

Demography, Labor Market and Values in Empirical Research

Springer

Gendering Post-Soviet Space

Tatiana Karabchuk · Kazuhiro Kumo ·
Kseniia Gatskova · Ekaterina Skoglund
Editors

Gendering Post-Soviet Space

Demography, Labor Market and Values in Empirical Research

Springer

Editors
Tatiana Karabchuk
Department of Government and Society
United Arab Emirates University
Al-Ain, United Arab Emirates

Kseniia Gatskova
Department of Economics
Leibniz Institute for East and Southeast
European Studies
Regensburg, Bayern, Germany

Kazuhiro Kumo
Institute of Economic Research
Hitotsubashi University
Kunitachi, Japan

Ekaterina Skoglund
Department of Economics
Leibniz Institute for East and Southeast
European Studies
Regensburg, Bayern, Germany

ISBN 978-981-15-9357-4 ISBN 978-981-15-9358-1 (eBook)
https://doi.org/10.1007/978-981-15-9358-1

This Springer imprint is published by the registered company Springer Nature Singapore Pte Ltd.
The registered company address is: 152 Beach Road, #21-01/04 Gateway East, Singapore 189721, Singapore

Acknowledgments

The editors of the volume are especially thankful for the opportunities of research stays at Institute of Economic Research (IER), Hitotsubashi University during 2015–2019. The grants of (1) the Institute of Economic Research, Hitotsubashi University in 2015, 2019 & in 2020; (2) the Center for Economic Institutions Visiting Fellowships, IER, Hitotsubashi University in 2015, 2017 & in 2018; and (3) the Research Project "Comparative Institutional Analysis of Economic Systems in Emerging Countries" under the Center for Economic Institutions, IER, Hitotsubashi University, 2016–2020 allowed to pursue the research and to form our international team of co-authors and co-editors. The idea of this volume was developed within one of the research stays of the editors at the IER, Hitotsubashi University in Tokyo.

We would also like to express our gratitude to scholars, who have supported this book project. Kazuhiro Kumo thanks Dr. Takashi Oshio and Dr. Toshiaki Watanabe, the directors of the IER, Hitotsubashi University, for their generous financial support for the project. Kseniia Gatskova thanks Leibniz Institute for East and Southeast European Studies for institutional support and in particular Dr. Barbara Dietz for her thoughtful comments and valuable feedback. Tatiana Karabchuk thanks Dr. Hasan Al-Naboodah, Dean of College of Humanities and Social Sciences at the UAEU, Dr. Mohammed Binhwaidin, Chair of the Department of Government and Society at the UAEU, and Dr. Aqil Kazim, Chair of the Department of Sociology at the UAEU, for their constant support of her research projects and this book editing work. Ekaterina Skoglund thanks the team of the fellow-coeditors who supported the idea of the book creation and, most importantly, dedicated a lot of their time and effort to push the project to its completion, and furthermore, her husband Johan Skoglund, especially for his egalitarian views toward the housekeeping duties.

The editors express warm thanks to all the contributors of this volume for their hard work on the chapters and their dedication for in-time submissions. It was a real pleasure to work on this project with such a great team.

Introduction

After the collapse of the Soviet Union, independent states experienced three decades of unique social and economic development. Diverse economic, demographic, and social policies led to different transition results. Societies in general, and social groups in particular, adopted new strategies to the changing realities.

Men and women were perceived equal in their rights according to the Soviet ideology, although historical evidence suggests that the proclaimed equality was not always reflected in real life. What happened with gender roles and gender equality attitudes during the transition period? Are there any gender differences in education, job opportunities, wage distributions, family roles, and civic activities? Do young or older women have the same access to good jobs and career development as their male counterparts of the same age groups? How much less do women usually earn than men in the post-Soviet countries? Is the gender pay gap in these countries higher or lower than in Western countries? Is there a motherhood wage penalty? How easily can women organize civic activities in post-Soviet Central Asia? All these questions and many more are discussed in this volume.

According to the OECD Report (2012) on "Closing the Gender Gap: Act Now," gender equality includes multiple dimensions such as economic, political, social, and cultural and is "a key factor in self-reported well-being and happiness across the world" (p. 13). This perspective leaves no doubt on the importance of developing gender equal societies in the post-Soviet space. Our volume brings an opportunity to trace the development of gender equality in the post-Soviet countries over the thirty years of their independence and compare the situation across countries.

In general, the Gender Inequality Index (GII) is quite high in all post-Soviet countries except Estonia, Lithuania, and Belarus, where it varies around 0.120-0.130 (see Table 1 below), which corresponds to higher gender equality. It is 0.196 and 0.197 for Latvia and Kazakhstan, respectively, and over 0.250 for other post-Soviet countries, with higher values for Central Asian countries (excluding Kazakhstan). Despite the high rate of female employment and educational attainment, many countries have a low share of seats held by women in parliament. The adolescent birth rate is extremely different between Baltic states, Caucasian and Central Asian countries. Moreover, women are more restricted from developing their professional careers because

Table 1 Gender Inequality Index and its components in the post-Soviet countries, 2010–2017

HDI rank	Gender Inequality Index			Maternal mortality ratio	Adolescent birth rate	Share of seats in parliament	Population with at least some secondary education		Labor force participation rate	
	Country	Value	Rank	(deaths per 100,000 live births)	(births per 1000 women ages 15–19)	(% held by women)	(% aged 25 and older)		(% aged 15 and older)	
							Female	Male	Female	Male
		2017	2017	2015	2015–2020	2017	2010–2017	2010–2017	2017	2017
Very high human development										
30	Estonia	0.122	27	9	12.6	26.7	100.0	100.0	56.4	70.3
35	Lithuania	0.123	28	10	10.7	21.3	91.8	96.4	55.9	66.2
41	Latvia	0.196	42	18	13.5	16.0	99.4	99.1	55.2	67.3
49	Russian Federation	0.257	53	25	21.6	16.1	95.8	95.3	56.6	71.8
53	Belarus	0.130	31	4	17.2	33.1	87.0	92.2	58.4	70.7
58	Kazakhstan	0.197	43	12	27.5	22.1	98.5	99.1	65.4	77.3
High human development										
70	Georgia	0.350	78	36	45.9	16.0	95.1	96.0	57.9	78.8
80	Azerbaijan	0.318	71	25	53.5	16.8	93.8	97.5	62.9	69.5
83	Armenia	0.262	55	25	23.2	18.1	96.9	97.6	51.4	70.6
88	Ukraine	0.285	61	24	23.8	12.3	94.5	95.6	46.9	63.0
105	Uzbekistan	0.274	59	36	16.5	16.4	99.9	99.9	53.8	77.9
Medium human development										
122	Kyrgyzstan	0.392	91	76	38.1	19.2	98.6	98.3	48.2	75.7
127	Tajikistan	0.317	69	32	36.4	20.0	98.9	87.0	45.5	73.3

Source Human Development Report (2019) Table 5. Gender Inequality Index http://hdr.undp.org/en/content/dashboard-3-women%E2%80%99s-empowerment-0

of family responsibilities and the need for cultural permission to work outside the house in post-Soviet Muslim countries.

Many post-Soviet countries might have faced a revival of traditional values and norms that shaped the labor market participation and fertility patterns of young people. At the same time, many elderly people faced a situation of high economic uncertainty, which induced some of them to seek employment after retirement. Systems of education underwent tangible reforms, while the transition to market economies created new business opportunities. All these changes affected the education to work transition of young people. At present, young females are still facing family cultural restrictions in the transition from education to labor market employment. Thus, in some post-Soviet countries, the share of female graduates, especially in science, technology, engineering, and mathematics programs at the tertiary level, is extremely low. For example, it remains below 10% in Azerbaijan (Table 2 below). Less than 40% of women have accounts at financial institutions or with mobile money service providers in Azerbaijan, Kyrgyzstan, and Uzbekistan. While 42% of women in Tajikistan have access to these financial services, it reaches more than 90% of the female population aged 15 years and above in Estonia and Latvia. This disparity reflects the differences in gender equality attitudes and gender roles in the researched countries.

The last few decades of rapid change in the countries of the post-Soviet space are studied in this volume from the gender perspective using approaches from three disciplines: economics, sociology, and demography. The topics addressed in the seventeen chapters of the book include gender differences in education and labor markets, family formation and fertility patterns, youth and elderly gender differences in labor market participation, as well as subjective well-being, income, and gender attitudes and values. The chapters are grouped into three parts. The first part sheds light on fertility issues in relation to gender inequalities, youth employment, transition from school to education, employment, and job mobility of middle-aged and elderly people. The second part provides intensive analysis of gender differences in adult population employment patterns and gender wage differences. The third part of the book reflects chapters on female voices, gender equality attitudes, women's civic engagement, income, and family gender roles.

Part I. Gender Differences and Demography: Fertility, Youth and Elderly

Chapter 1 by Ekaterina Skoglund on "Evolution of Gender Role Attitudes and Gender Equality in Russia" opens the book by placing the reader in the context of the gender roles theoretical discussions with the follow-up example of the Russian case empirical study. The chapter provides a review of public opinion and gender equality attitudes over the last three decades since the transition period in Russia started at the beginning of the 1990s. This study reflects on gender difference attitudes through the survey

Table 2 Gender Inequality Index and Socioeconomic Women's Empowerment in the post-Soviet countries, 2008–2018

	Gender Inequality Index			Socioeconomic Women's Empowerment				
HDI rank	Country	Value	Rank	Share of graduates in science, technology, engineering and mathematics programs at tertiary level, female, %	Share of graduates from science, technology, engineering and mathematics programs in tertiary education who are female, %	Female share of employment in senior and middle management, %	Women with account at a financial institution or with a mobile money service provider, % female population aged 15+	Mandatory paid maternity leave, days
		2017	2017	2008–2018	2008–2018	2010–2018	2017	2017
Very high human development								
30	Estonia	0.122	27	16.4	38.3	33.2	98.4	140
35	Lithuania	0.123	28	11.4	29.8	38.2	81	126
41	Latvia	0.196	42	10	31.9	43.2	92.5	112
49	Russian Federation	0.257	53	…	…	39.3	76.1	140
53	Belarus	0.130	31	15.4	26.7	…	81.3	126
58	Kazakhstan	0.197	43	14.8	32.9	…	60.3	126
High human development								
70	Georgia	0.350	78	15.8	43.7	…	63.6	183
80	Azerbaijan	0.318	71	6.4	40.1	…	27.7	126
83	Armenia	0.262	55	8.4	32.8	…	40.9	140
88	Ukraine	0.285	61	12.5	27.4	…	61.3	126
105	Uzbekistan	0.274	59	…	…	…	36	126
Medium human development								
122	Kyrgyzstan	0.392	91	13.3	38.7	…	38.9	126
127	Tajikistan	0.317	69	…	…	…	42.1	140

Source Human Development Report (2019) Table 5. Gender Inequality Index http://hdr.undp.org/en/content/dashboard-3-women%E2%80%99s-empowerment-0; Human Development Report (2019) Dashboard 3. Women's empowerment: http://hdr.undp.org/en/composite/GII

data collected by the Russian Longitudinal Monitoring Survey and World Values Survey as well as by the leading Russian sociological and market research agencies such as the Russian Public Opinion Research Center (VCIOM) and the Fund "Public Opinion" (FOM). First, the chapter describes and systematizes a range of statistics connected to such spheres as family life and fertility, paid and unpaid work and the related stereotypes, and political empowerment of women. Second, the chapter discusses whether the evidence collected aligns with the perceptions of traditional gender norms presented in the theoretical bulk of the literature.

Chapter 2 by Konstantin Kazenin & Vladimir Kozlov on "Gender Relations and Transition to Motherhood in Kyrgyzstan" explores the impact of gender relations on age patterns of fertility. Kyrgyzstan is one of the countries where the postponement of marriage and childbirth was not detected. The authors attempt to determine whether gender relations are at least partly responsible for this. Using data from two independent surveys, the authors studied the possible relationship between the hazards of first marriage and first birth in Kyrgyzstan. Among Muslims of Kyrgyzstan, first marriage hazards are positively related to low education of women, approval of husbands' violence toward wives, and several other gender inequalities. Findings show that the probability of getting married and having a first child is declining from elder to younger birth cohorts. The possible explanations for this difference between first marriage and first birth hazards are discussed in this chapter. The lowering of first marriage hazards to younger cohorts is due to certain modernization of gender relations and loosening of the traditional norm that prescribes early marriages for women.

Readers can find more details on youth transition from education to the labor market in Chapter 3 by Michael Gebel, Kseniia Gatskova and Tatiana Karabchuk on "Gender Differences among Youth: Education to Job Transitions in Azerbaijan, Georgia, and Tajikistan." Despite increasing educational levels, decreasing fertility rates, and economic progress, young women still face disadvantages in labor market integration compared to young men in the Caucasus and Central Asia (CCA). The goal of this chapter is to describe gender inequality among young people who are transitioning from school to work in Azerbaijan, Georgia, and Tajikistan. The nationally representative, retrospective life history data from the TEW-CCA "Youth Transitions Surveys" of Azerbaijan, Georgia, and Tajikistan 2017 are used to answer the research question. The gender inequality is described here in various aspects of the transition from education to work. First, the labor market inactivity decision is examined. Second, the authors investigate how much time is required to secure the first full-time permanent job after graduation. Third, the quality of the first job is analyzed. Comparing results across the three countries allows to highlight cross-country similarities and differences.

Chapter 4 by Anita Poplavskaya on "Differences in Employment Patterns of Young Men and Women: Cross-national Comparison of Dynamics in Post-Soviet countries" develops the topic of youth employment patterns in ten post-Soviet countries and provides a comparative analysis of young men and women aged 18 to 29. Post-Soviet countries have experienced fundamentally different historical periods, political regimes, and socio-economic systems and have adopted diverse values and

norms, which inevitably influenced the gendered labor market structure in these countries. This chapter considers the differences in labor market positions of young men and women in Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russian Federation, Ukraine, and Uzbekistan over time. The main question is whether during the last three decades, young women in these countries have reported holding labor market statuses that are as intensive (in terms of working hours) and as high (in terms of job positions) as their male counterparts. The variables of interest include employment type (full-time or part-time employment) and job position (status of a supervisor or a non-supervisor), which serves as an indicator of a more or less high position in the hierarchy. The World Values Survey repeated cross-section data (1981–2014) were used for empirical analysis. Time-trend analysis has shown that there are shared differences between job positions of young men and women in all ten post-Soviet countries. The results of two binary logistic regressions demonstrated that being a young woman in a post-Soviet country decreases the probability of being employed full-time, except in Russia. Interestingly, in Russia and Kazakhstan, young women are more likely to be supervisors than young men.

Chapter 5 by Oxana Sinyavskaya and Anna Cherviakova on "Gender Differences in the Employment Patterns of People Aged above 45 Years Old in Russia" finalizes the demographic part of the book and highlights the situation of the elderly population in the labor market. The employment rates for middle-aged and older men and women in Russia grew remarkably in the 2000–2010s, and the latter increased faster than the former. Possible explanations for this tendency might be the substantially higher life expectancy of women in Russia, the overall growth of female employment, and a decline in women's traditional responsibilities, such as caregiving for grandchildren and disabled relatives. Besides, the 2000–2010s was a period of economic growth in Russia when the overall number of job positions was increasing. Although, in general, the employment rates of people aged 45 and above have been rising, the share of employed people aged 60 and above was less stable in its growth because of changes in pension benefits as well as in the situation in the labor market. The empirical part of this chapter aims to explore the gender differences in the determinants of employment and labor mobility among the middle and older aged populations in Russia. The study uses the Russian Longitudinal Monitoring Survey (RLMS-HSE) data (2010–2017). Gender differences in the influence of current work experience, economic factors, and some job characteristics on employment of middle and older age populations are revealed. Sectors of economy, occupational groups, and particular aspects of job satisfaction are significant for labor mobility in middle and older age populations in Russia, but their impact differs for men and women.

Part II. Gender Differences and Labor Market Outcomes

This part of the volume opens the discussion on gender differences in employment opportunities and wages in the post-Soviet countries. Chapter 6 by Serafima Chirkova and Sona Kalantaryan on "The Gender-Specific Determinants

of Labour Supply in Rural and Urban Contexts: Evidence from Armenia's Transition Economy" estimates the likelihood of female and male employment. To predict female and male employment, the authors use the repeated cross-section Armenian Integrated Living Conditions Survey for 2004–2016, which allows them to control for a rich set of socio-demographic characteristics. This empirical study specifically explores the relationship between the presence of children and the employment outcomes of parents. The results demonstrate that the presence of children is positively associated with men being employed. This is also true for mothers in rural areas, but not for mothers in urban areas, where the estimated effect is negative. The magnitude of the effect increases with the number of children. The results suggest that rural families with children are more likely to conform to the dual-earner model, while those living in cities tend to follow the more traditional single breadwinner model.

The next series of chapters highlight the gender pay gap in Belarus, Estonia, Ukraine, and Russia. Chapter 7 by Maryia Akulava and Alina Verashchagina on "Dynamics of the Gender Wage Gap in Belarus: Are There Any Changes from 2001 to 2016?" discloses the gender wage gap in Belarus via empirical analysis of the Belarusian Household Survey of Income and Expenditure over the last two decades. The analysis presented in the chapter highlights the link between the actual gender wage gap and the policies implemented in the country. The main outcome of the study is that after the gap exceeded 20% in the early 2000s, there was no improvement. The authors argue that this can be a sign of the increased vulnerability of Belarusian women, both in the labor market and within the family. The authors highlight that policymakers' neglect of this issue can lead to negative consequences for the population and economic development of the country. The chapter presents an analysis of the reasons behind such developments and advocates for a more gender-sensitive and sustainable approach in policymaking.

Chapter 8 by Kseniia Gatskova on "Gender Wage Gap and Gender Attitudes in Ukraine" provides a comprehensive analysis of gender inequality in the labor market in Ukraine, focusing on two aspects: the gender wage gap and gender attitudes. An extensive study of the previous literature on gender inequality in Ukraine is provided, and the main trends in the labor market in the country such as horizontal and vertical gender segregation and dynamics of the gender wage gap are discussed. The chapter presents estimations of the gender wage gap based on the Oaxaca-Blinder decomposition technique which was applied to the data of the Ukrainian Longitudinal Monitoring Survey 2003–2012. Furthermore, analysis of the European Values Study 2008 and the Factorial study 2009 provides some insights into the gender attitudes of the population.

Chapter 9 by Marge Unt, Magda Rokicka, Kadri Täht, and Triin Roosalu on "Explaining Gender Wage Gap in Estonia: 'Glass Ceiling' or 'Sticky Floor' in Public and Private sectors?" scrutinizes gender wage gaps by sector across the wage distribution in Estonia, in a country with very high female labor market participation. It uses a unique data set consisting of the Structure of Earnings survey linked to the registries, which enables the authors to account for human capital, including previous employment history, job position, enterprise characteristics, and parenthood. The chapter estimates whether the gender wage gap widens towards the top or at the bottom of

the wage distribution and how much characteristics explain the wage gap at different points of wage distribution. The results highlight that the magnitude of the gender wage gap varies considerably across wage distribution. The gap widens towards the top in the public sector, both at the state and municipality level, as well as in foreign owned private companies, indicating the existence of the so-called "glass ceiling" effect. Only in the public state sector the gap widens at the bottom, indicating the so-called "sticky floor" phenomenon for females.

The situation with gender wage differences in the Russian labor market is described in Chapter 10 by Alexei Oshchepkov on "Gender Pay Gap in Russia: Literature Review and New Decomposition Results." The author presents a systematic review of the existing literature on the gender pay gap in Russia, covering key articles published in both international and Russian academic journals. The study distinguishes between studies in the 1990s, the 2000s, and the 2010s and briefly describes the key findings regarding several traditional economic explanations of the gender gap, including human capital, family factors, employment segregation, and discrimination. Furthermore, the author provides the results of the empirical analysis based on the standard Oaxaca-Blinder decomposition of the gender pay gap for the period 1994–2018 using the Russian Longitudinal Monitoring Survey (RLMS-HSE) microdata. The analysis allowed the author to formulate a few stylized facts concerning the evolution, size, and sources of gender pay gap in Russia, which reached 30–34% at some point of the studied period.

The gender pay gap is not the only disadvantage that women face in the labor market. The motherhood pay gap was also tackled by this volume. Chapter 11 by Tatiana Karabchuk, Tatiana Trach and Varvara Pankratova on "Motherhood Wage Penalty in Russia: An Empirical Study on RLMS-HSE Data" builds on previous studies of the motherhood wage penalty across the world and presents further empirical analysis of motherhood's impact on women's earnings in Russia. The chapter addresses the differences in monthly and hourly wages of mothers and non-mothers in Russia. The RLMS-HSE is used for the empirical analysis of the motherhood wage penalty. The study discloses an 11% penalty for mothers in their hourly wages on average in Russia in the period 2000–2015. Despite having the same level of education, tenure, and qualifications, women with two and more children are paid significantly less than women without children. Women with very young children work fewer hours and receive lower monthly wages. At the same time, the age of children has no effect on the hourly wage penalty; it remains fixed at about 4–5% at any age of the youngest child. The chapter shows that the motherhood wage penalty in Russia is lower than in Germany, the UK, and the US, especially for mothers with preschool age children.

The next two chapters address two interesting aspects of employment: gender differences in academic careers of scientists and gender differences among freelancers. Chapter 12 by Anna Khanukaeva and Lili Di Puppo on "Entrepreneur or Group Member? Women in Science and Career Strategies in Russia and Germany" provides a clear understanding of the female challenges in obtaining scientific careers, comparing Russia with Germany. STEM (Science, Technology, Engineering, and Mathematics) is traditionally seen as an academic field that is male dominated and less open and accessible to women scientists. To gain entry and pursue a career in this

field, women may choose to adopt a specific gendered professional identity as a career strategy. Based on semi-structured interviews with women in STEM disciplines at the National Research University Higher School of Economics (Moscow, Russia) and the Karl Eberhard University of Tübingen (Germany), the authors analyzed the differences and similarities between two groups of scientists. The analysis revealed that different work environments and academic cultures explain various choices of career strategy and perceptions of success.

Given the importance of online freelancing in both Russia and Ukraine, Chapter 13 by Mariya Aleksynska, Andrey Shevchuk and Denis Strebkov on "Online Platform Work in Russia and Ukraine: Gender Differences in Earnings and Work Satisfaction" asks whether gender differences also exist in the online labor markets of these two countries. The empirical analysis draws on the survey data of online freelancers in both countries. The chapter first demonstrates that as online freelancing becomes a more widespread phenomenon in Russia and Ukraine, more women join online labor markets. The chapter further describes general gender differences in terms of shares of men and women working online, tenure of online freelancing, gender differences in occupations, and differences in work for local or foreign labor markets. Finally, the chapter closely examines gender differences in earnings and work satisfaction. In both countries, women who work as online freelancers suffer from lower earnings compared to men. In contrast, the situation with work satisfaction is reversed: women are at least as satisfied as men with online work in Ukraine, and more satisfied than men in Russia. The chapter concludes by discussing the potential policy implications of these findings.

Part III. Women's Political Empowerment, Gender Equality Attitudes, Family Income, and Well-Being

This part of the volume contains four chapters dedicated to other socio-economic gender equality issues outside the labor market. Here, the book presents qualitative studies of women's voices in Kazakhstan, Tajikistan, and Russia. Thus, Chapter 14 by Noriko Igarashi and Kazuhiro Kumo on "Women's Voices: Work-Life Balance and Power Relationship in the Household in Tajikistan" explores the characteristics and outlook for the gender situation in Tajikistan. The authors use the results of their in-depth interviews in the country as well as data from a large survey conducted by the United Nations Children's Fund. The chapter presents a study of the diversification in gender patterns since the breakup of the Soviet Union. In addition, the trends concerning the status of women in Tajikistan provide hints for observing the gender situation in the former Soviet republics of Central Asia, which have experienced large-scale labor emigration.

Chapter 15 by Elena Maltseva on "Women's Political Empowerment in post-Soviet Kazakhstan" examines the factors that have contributed to women's political mobilization in Kazakhstan in recent years and assesses the implications of

this trend for the country's political and social institutions. Using the framework of social grievances and political opportunities, this chapter argues that changing socioeconomic conditions, coupled with growing frustration among women over their inability to influence the policymaking process due to the closed structure of Kazakhstan's political institutions, as well as renewed interest in feminist ideas among the younger generation of Kazakhstani women and the rise of social media are the factors that best explain the recent wave of women's activism in Kazakhstan. The study is based on extensive research conducted by the author in Kazakhstan between 2014 and 2019, including interviews with female activists as well as a comprehensive review of primary and secondary literature on the topic.

Chapter 16 by Daria Salnikova and Tatiana Karabchuk on "Gender Equality and Individualistic Values as Determinants of Employment and Income in Central Asian countries" addresses the relationship between economic activity and post-materialist values, namely, individualism and support for gender equality in Kazakhstan, Kyrgyzstan, and Uzbekistan in comparison to Russia. Using the World Value Survey data of 2011, the authors empirically test and discuss whether support for gender equality and individualism explains variations in employment status in Central Asia and Russia. Recent empirical research has shown a significant relationship between values and employment status, but only for economically developed countries. This chapter attempts to fill the gap in the literature by adding evidence from developing countries of Central Asia and Russia. The effect of gender equality on employment varies across the aforementioned four countries. Kazakhstan and Kyrgyzstan show that support for gender equality is negatively related to self-employment. The pattern in Russia is the opposite. Gender moderates the relationship between support for gender equality and employment status in Central Asian countries, as distinct from Russia.

Chapter 17 of the volume is dedicated to family gender roles and spending patterns. "Spent by Mammy as Earned by Daddy: Rethinking Household Consumption as a Foundation of Gender Egalitarianism," written by Elena Berdysheva and Boris Belyavskiy, analyzes voluntary choices of consumption practices among middle-class women to reconstruct conscious justification of the importance of housekeeping. For this purpose, 37 in-depth semi-structured interviews were conducted with Russian housewives from Moscow. The chapter justifies the assumptions that either with the rise of the thrift economy or the recognition of the role of consumption for social reproduction in market societies, practices of economizing within household management obtain positive connotations and open new ways of equalizing female and male positions in market society. The authors describe the dynamics of spending practices in Russia against the background of stability of that part of the current gender contract that has prescribed women to bear responsibility for family needs, consumption, and expenditures management. The chapter discusses the

results of the interviews by presenting two empirically rooted logics of economizing, which were developed by housewives in Moscow.

Kazuhiro Kumo
Tatiana Karabchuk
Kseniia Gatskova
Ekaterina Skoglund

References

Human Development Report (2019) Dashboard 3. Women's Empowerment. http://hdr.undp.org/en/composite/GII

Human Development Report (2019) Table 5. Gender Inequality Index. http://hdr.undp.org/en/content/dashboard-3-women%E2%80%99s-empowerment-0

OECD (2012) Closing the Gender Gap: Act now. OECD Publishing. https://www.oecd.org/gender/closingthegap.htm

Contents

Editors and Contributors

About the Editors

Tatiana Karabchuk, Ph.D. is an Associate Professor at the Department of Government and Society, College of Humanities and Social Sciences, UAE University, Al Ain. Her research interests include labor market studies, demography, happiness, and cross-country comparative studies in education and employment. Her articles on youth employment and fertility, informal employment, family values, job stability, and subjective well-being are published in such journals as *The ANNALS of the American Academy of Political and Social Science, Journal of Happiness Studies, Service Industries Journal, and Asia-Pacific Population Journal* among others. E-mail:tkarabchuk@uaeu.ac.ae.

Kazuhiro Kumo, Ph.D. is a Professor at the Institute of Economic Research, Hitotsubashi University, Tokyo. He is the author of *Migration and Regional Development in the Soviet Union and Russia* (Beck Publisher Russia, 2003) and *Demography of Russia* (with T. Karabchuk and E. Selezneva, Palgrave Macmillan, 2017), along with articles published in *Europe-Asia Studies*, *Post-Communist Economies*, *Comparative Economic Studies* and *Polar Science*, among others. His research focuses on demography, migration, and economic geography of the former Soviet Union and Russia. E-mail:kumo@ier.hit-u.ac.jp.

Kseniia Gatskova, Ph.D. is a Researcher, quantitative sociologist working at the Economics Department of the Leibniz Institute for East and Southeast European Studies. Her research interests encompass post-Soviet transformation, social inequality, migration, and gender studies as well as methods of empirical social research. Her recent publications appeared, among others, in the *Journal of Comparative Economics, International Migration, Feminist Economics,* and *Social Indicators Research.* E-mail:gatskova@ios-regensburg.de.

Ekaterina Skoglund, Ph.D. is a Management Research and Dissertation Coordinator at the EU Business School in Munich and an Associated Researcher at the

Leibniz Institute for East and Southeast European Studies (IOS Regensburg). Ekaterina published successfully in such journals as *The Journal of Economic Inequality*, *Economics of Transition, IZA World of Labour*, and *Economic Systems*. Her scientific and professional interests include applied research related to labor market and gender economics topics, specifically focused on the usage of subjective measures. E-mail:eka.skoglund@gmail.com.

Contributors

Maryia Akulava BEROC Economic Research Center, Minsk, Belarus

Mariya Aleksynska OECD Development Center, Paris, France

Boris Belyavskiy National Research University Higher School of Economics (HSE), Moscow, Russia

Elena Berdysheva National Research University Higher School of Economics (HSE), Moscow, Russia

Anna Cherviakova National Research University Higher School of Economics, Moscow, Russia

Serafima Chirkova Department of Economics, University of Santiago, Santiago, Chile

Lili Di Puppo National Research University Higher School of Economics, Moscow, Russia

Kseniia Gatskova Department of Economics, Leibniz Institute for East and Southeast European Studies, Regensburg, Bayern, Germany

Michael Gebel Department of Sociology, University of Bamberg, Bamberg, Germany

Noriko Igarashi Department of Area Studies, Tenri University, Nara, Japan

Sona Kalantaryan European University Institute, Florence, Italy

Tatiana Karabchuk Department of Government and Society, United Arab Emirates University, Al-Ain, United Arab Emirates

Konstantin Kazenin Russian Academy for National Economy and Public Administration, Moscow, Russia

Anna Khanukaeva Uppsala University, Uppsala, Sweden

Vladimir Kozlov National Research University Higher School of Economics, Moscow, Russia

Kazuhiro Kumo Institute of Economic Research, Hitotsubashi University, Tokyo, Japan

Elena Maltseva Department of Political Science, University of Windsor, Windsor, ON, Canada

Aleksey Oshchepkov National Research University Higher School of Economics, Moscow, Russia

Varvara Pankratova Prosveshcheniye Publishing, Moscow, Russia

Anita Poplavskaya National Research University Higher School of Economics, Moscow, Russia

Magda Rokicka Tallinn University, Tallinn, Estonia

Triin Roosalu Tallinn University, Tallinn, Estonia

Daria Salnikova Department of Higher Mathematics, HSE University, Moscow, Russian Federation

Andrey Shevchuk National Research University Higher School of Economics (HSE University), Moscow, Russia

Oxana Sinyavskaya National Research University Higher School of Economics, Moscow, Russia

Ekaterina Skoglund Department of Economics, Leibniz Institute for East and Southeast European Studies, Regensburg, Bayern, Germany

Denis Strebkov National Research University Higher School of Economics (HSE University), Moscow, Russia

Kadri Täht Tallinn University, Tallinn, Estonia

Tatiana Trach Johnson & Johnson, Moscow, Russia

Marge Unt Tallinn University, Tallinn, Estonia

Alina Verashchagina Department of Economics and Law, Sapienza University of Rome, Rome, Italy

Part I
Gender Differences and Demography: Fertility, Youth and Elderly

Chapter 1
Evolution of Gender Role Attitudes and Gender Equality in Russia

Ekaterina Skoglund

Abstract Social norms and individual attitudes are proven to shape individual behaviour and impact life-course decisions. The present chapter aims to systematize the fragmented evidence on the evolution of the gender role attitudes, and gender equality indicators since the end of the Soviet era to the present days in order to track whether the views of the Russian men and women have been developing towards more egalitarian, or more traditional, direction. The main focus is on such spheres as family formation and fertility, paid and unpaid work, and leadership and politics. The information on directly reported attitudes is withdrawn from a number of country-representative datasets and from polls collected by the Russian leading sociological and market research agencies. In the family formation and fertility sphere, the majority of the phenomena follow the tendencies characteristic to developed countries. The ambiguity and duality of the views can be observed when women's economic participation, political empowerment, and even sharing of unpaid household duties are addressed.

Keywords Gender norms · Gender equality · Russia · Public polls · RLMS-HSE · WVS

1.1 Introduction

Social norms and individual attitudes are proven to shape individual behaviour and impact life-course decisions. As theories of late modernity see it, wider social patterns appear in the process of de-traditionalization and individualization (Huppatz and Dagistanli 2017); the latter is documented worldwide over the last decades (Brooks and Bolzendahl 2003). Reflected in opinion polls, gender roles in the labour market and at home have been transformed from traditional to more egalitarian, though there are voices suggesting the gender egalitarism trend reversed and flatten recently (Shu and Meagher 2017; Mackie et al. 2015). Simultaneously, there is the evidence

E. Skoglund (✉)
Department of Economics, Leibniz Institute for East and Southeast European Studies, Regensburg, Bayern, Germany
e-mail: eka.skoglund@gmail.com

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_1

of a relative stability of "people's family preferences" with regard to marriage, motherhood and the desired number of children (Esping-Andersen and Billari 2015).

While in many countries gender equality levels are high in the individually-oriented spheres such as education and labour market, the equality is still low if one compares wives and mothers to husbands and fathers (McDonald 2006). Similarly, in the Soviet Union, even if gender equality in all spheres was officially declared and promoted, multiple asymmetries were still observed. Now, three decades after the start of the social and economic transition, a question arise if in the presence of declining fertility, can one also observe the erosion of family norms, and further, whether the views of the Russian men and women have been developing towards more egalitarian, or more traditional, patriarchal, direction.

The present chapter aims to systematize the fragmented evidence on the evolution of the gender role attitudes, and gender equality indicators in Russia since the end of the Soviet era to the present days. The information on directly reported attitudes, e.g., relative importance of family and work, is withdrawn from a number of representative datasets—such as World Values Survey (WVS)[1] and Russian Longitudinal Monitoring Survey of HSE (RLMS-HSE),[2] as well as from the polls collected by the Russian leading sociological and market research agencies such as the Russian Public Opinion Research Center (VCIOM) and the Fund 'Public Opinion' (FOM). Further, statistical information, e.g. on the average firth birth age, comes from the Russian Federal State Statistic Service (Rosstat)'s official statistics and datasets developed by international organizations.

First, the author introduces the definition of gender norms and discuss their measurement. Then this chapter concentrates on such spheres as family formation and fertility, paid and unpaid work, and leadership and politics, and with the mix of statistical and attitudinal information follow the trends in views and behaviours since the late Soviet times to the present days. Conclusions follow.

1.2 Norms: Definitions and Measurement

In the literature, the term "norms" may cover a range of non-interchangeable notions including values, attitudes, preferences, traditions, all deeply embedded into the social life and institutions (Pearse and Connell 2016, p. 34). However, all definitions of social norms include two important components - a reference group, a set of

[1] Inglehart, R, C Haerpfer, A Moreno, C Welzel, K Kizilova, J Diez-Medrano, M Lagos, P Norris, E Ponarin, B Puranen et al. (eds.). 2014. World values survey: all rounds—country-pooled datafile 1981–2014. Madrid: JD Systems Institute. Version: http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp.

[2] "Russia Longitudinal Monitoring survey, RLMS-HSE", conducted by National Research University "Higher School of Economics" and OOO "Demoscope" together with Carolina Population Center, University of North Carolina at Chapel Hill and the Institute of Sociology of the Federal Center of Theoretical and Applied Sociology of the Russian Academy of Sciences. (RLMS-HSE web sites: http://www.cpc.unc.edu/projects/rlms-hse, http://www.hse.ru/org/hse/rlms).

(collectively-defined) rules of conduct within the group; and in addition, the reciprocal expectation of the above-mentioned set of rules being followed. Individual behaviour then fits into one of the following patterns: imitation of behaviour of the group or behaving in a way one thinks the group would approve, or following the internal motivation connected to the self-worth perception (Cialdini and Trost 1998).

As Mackie et al. (2015) put it, "a social norm is what people in some group believe to be normal in the group, that is, believed to be a typical action, an appropriate action, or both." (p. 8) The gender norms, in their turn, are "sets of social practices that relate to gender identity" (Huppatz and Dagistanli 2017, p. 1), and thus focus on distinction in the rules of conduct, and interaction between women and men. In the modern literature it is often seen as a set of customs and stereotypes to be changed in order to avoid discrimination (Pearse and Connell 2016). In interdisciplinary literature there is still a discussion at what degree women's and men's behaviour is shaped by biology (bio-psychological point of view) and/or socially constructed (Lévy-Garboua et al. 2006; Seiler 2007). In the economic research, the existence of norms is often only indirectly acknowledged, but has been becoming more and more prominent in underpinning the conclusions of economic analysis (e.g., Alesina et al. 2013).

Measurement of the social norms is a complex activity, which involves answering the following questions: Who is the reference group? What behaviour is typical in the group? What is approved of in the group? (Mackie et al. 2015).

A reference group can be defined as a group of the relevant others, such as colleagues (e.g., income comparisons in Clark and Senik 2010) or population of a region (e.g., social norms related to unemployment in Clark 2003). In this chapter, the opinions and views of the "average" women and men are used as proxies for social norms, thus, representing the population of the whole country or of a smaller geographical area.

Furthermore, in this chapter, the author focus first of all on the norms associated with gender (in)equality. In the academic literature and in policy reports, the economic participation, economic opportunity, educational attainment, health and well-being, and political empowerment are the dimensions most often involved into assessment of gender inequality (Jütting et al. 2008; Connell and Pearse 2015; World Economic Forum 2019). For example, the UNDP Life-Course Gender Gap index[3] covers disadvantages in the labour market, job characteristics, as well as time spent in housekeeping activities. Similarly, McDonald (2006) speaks of the necessity to distinguish between gender equity in individual—education, labour market—and family-oriented institutions and spheres, especially when connecting equity to fertility decisions.

The Global Gender Gap index by the World Economic Forum is one of the synthetic indexes that also allows for tracking the development of gender equality

[3]Life-course gender gap. United Nations Development Programme. Available on-line at: http://hdr.undp.org/en/composite/Dashboard2. The life-course gender gap is assessed with the help of the following sub-indexes: sex ratio at birth, gross enrolment ratio, youth unemployment rate, population with at least some secondary education, total unemployment rate, share of employment in non-agriculture, share of seats in parliament, time spent on unpaid domestic chores and care work, old-age pension recipients.

in Russia since 2006 across four general dimensions (see World Economic Forum 2019, p. 48 for indicators definitions and sources); the subindexes access the equity in economic participation, educational attainment, health and survival, and political empowerment. By 2020, the total index for Russia reaches 0.706, placing the country on the 81st position out of 153. Russia is ranked high in two spheres, namely educational attainment (index value is 1.000 of 1.000), and health and survival (0.980 of 1.000). The former subindex includes such indicators as the literacy rate, enrolment in primary, secondary, and tertiary education. The latter includes the sex ratio at birth, and the healthy life expectancy. The direct discussion of the education and health spheres will be further excluded from this chapter due to their good performance in terms of gender equity.

The two remaining subindexes lowering the value of the total index are the economic participation and opportunity (0.749) and, at the bigger extent, the political empowerment index (0.095). In case of the economic participation and opportunity, the indicators assessed are—in the order from the closest to the most distant from parity—percentage of professional and technical workers (1.000), the labour force participation rate (0.863), share of legislators, senior officials and managers (0.719), wage equality for similar work (0.712) and the estimated earned income (0.579). The estimates can suggest, regardless a high labour market participation, the existence of the glass ceiling and a still-wide gender wage gap (see also Chapter 10 and 13 of this book). The political empowerment—which is relatively low not only in Russia but also across the majority of countries of the world (see Chapter 15 for Kazakhstan)—covers the share of women in parliament (0.187), women in ministerial positions (0.148), and the yeas with female/male head of state within the last half-a-century (0.000). The recent development of the economic participation and opportunity and the political empowerment sub-indexes is clearly non-linear (Fig. 1.1), and due to its significant deviation from the parity, the two dimensions are of particular interest.

The gaps might signalize a range of constraints, including the social norms, preventing from the equality establishment. Thus, the evidence on the behaviour patterns and opinions widespread and accepted will be collected in the spheres of gender relationships where equality is not reached: family formation and fertility, paid and unpaid work, and leadership and politics. In particular, the author address the following:

- Family formation and fertility: legal status of marriage, age of the first marriage, acceptance of divorce, acceptance of the out-of-wedlock births, ideal number of children, age of the first birth and of the first marriage.
- Paid and unpaid work: priority on getting jobs when the latter are scarce, equality in contributing to the financial budget, sharing housekeeping and childcare responsibilities.
- Leadership and politics: opinion on the leadership qualities, most suitable gender in politics, most suitable ministerial portfolios for each gender.

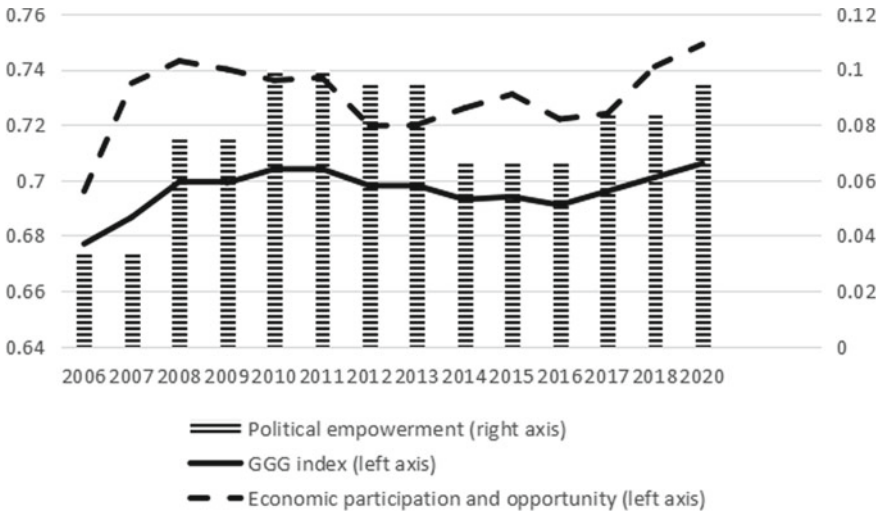

Fig. 1.1 Global Gender Gap index and its subcomponents, Russia (*Notes* data collected from the Global Gender Gap reports available at the World Economic Forum website. Retrieved from http://www3.weforum.org/)

1.3 Family Formation: Marriage and Divorce

In Russia, the legal status and perceived value of registered marriage changed several times over the XX century. Right after the *bolshevik*'s revolution—through desacralization of marriage and enhancement of gender equality—the "new Soviet people" would be breaded (Zdravomyslova and Temkina 2004). As early as in 1917–1918, illegitimate children got recognized *at par* with legitimate children, women got a possibility to keep their maiden names after the marriage, while divorce initiation became possible with no reasons indication. Later, the institute of registered marriage was re-valorized starting from the 1930s, and the abortion ban—alongside measures to protect mothers' and children's welfare—were introduced. Some liberalization of the views came only with the Khrushchev Thaw in the mid–1950s, and then from the mid–1960s in the new Family Code of 1968 that among other simplified the procedure of divorce (see Selezneva 2017 for the list of respective legal documents and further details for 1917–2017).

By the moment of dissolution of the Soviet Union, in 1990, marriage was still "early and universal" (Scherbov and van Vianen 2001, p. 286) and divorce acceptable by 80% of the population.[4] According to the Whole-union Census of 1989, only 161 of 1000 persons aged 16 and older were never married. Yearly, more than 2.6 million marriages were concluded, and about 1 million of marriages dissolved, the divorce incidence being higher in the Baltic Republics and the lowest in Caucasus and

[4]Russian Public Opinion Research Centre (VCIOM). (2019, July 8). *Views of marriage and divorce* [Press release 2194]. Retrieved from https://wciom.com/index.php?id=61&uid=1687.

Central Asia (Goskomstat 1990). In total, "between 1960 and 1992, the total divorce rate more than doubled, rising from 15–20 to 40–50%" (Avdeev and Monnier 2000, p. 17), the biggest share of the increase happening during the 1960–1970s. The crude divorce rate, namely a number of divorces per 1000 of population, rose from 1.5 in 1960 to 5.9 in 2002, and during the most recent decade decreased from 4.9 in 2009 to 4.2 in 2019. A decreasing absolute number of divorces is met with a restrained optimism of experts: the number of marriages is also decreasing, being substituted by cohabitation.[5]

The acceptability of divorce has been also growing[6]; it reached 89% of respondents by 2019. Interestingly, the leading acceptable reason for starting—and stopping—a divorce three decades after the dissolution of the USSR is financial, namely "poverty, unemployment and lack of opportunities to provide for the family (46% in 2019 vs 21% in 2013). The infidelity and jealousy (22% vs 24% in 2013) and selfishness and lack of mutual understanding (21 vs 19% in 2013) complete the top-3 pro-divorce reasons. The two most acceptable reasons for stopping the divorce procedure are problems with division of property and housing (19%), and national or religious customs (15%).

As for the mean age at the first marriage, it had barely changed over a century. For women from the end of the XIX century to the breakdown of the USSR, it amounted to 21.4 in 1897, and 21.8 in 1989, respectively (Scherbov and van Vianen 2001). The mean age at marriage, however, varied greatly across generations due to, for example, famine and war periods. From the 1960s to the mid-1990s, the average age at the first marriage was well under the levels of the western Europe and still declining for both genders, e.g., 26.5 and 23.9 for men and 24.7 and 21.8 for women in 1960 and 1992, respectively (Avdeev and Monnier 2000). Rosstat[7] reports on the average marriage age of women plummeting under 18 by 1994, and a practically linear growth since then to reach 25.3 by 2015–2017. Before 1994, the first marriage took place most frequently at the age of 18–22 (18–19 for 44.5% of women, 20–22 for 43.8% of men); by 2015–2017, both genders choose the age of 23–25 (28.9%) for the first marriage, men still having a tendency to marry on average later than women. This evidence aligns with the opinion[8] on the ideal age of the first marriage, as 24 for women (in 2019, or 23 y.o. in 2017) and a bit higher, 27 y.o., for men.

Vishnevsky (2006) points out, that during Soviet Censuses the self-defined marital status was registered, which often led to anecdotal situations with the number of married women exceeding the number of married men (p. 100). The first attempt to

[5]Russian Census (2020, February 14) Davai pozhenimsya: pochemu brakov stalo bol'she, a razvodov menshe [Let's get married: why there is more marriages and less divorces] [Press release]. Retrieved from https://www.strana2020.ru/media-office/davay-pozhenimsya-pochemu-brakov-stalo-bolshe-a-razvodov-menshe/.

[6]Russian Public Opinion Research Centre (VCIOM). (2019, June 8). *Views of marriage and divorce* [Press release 2194]. Retrieved from https://wciom.com/index.php?id=61&ui=1687.

[7]Rosstat. *Selective monitoring of population reproductive plans in 2017* [Statistic tables]. Retrieved from http://www.gks.ru/free_doc/new_site/RPN17/reports.html.

[8]Russian Public Opinion Research Centre (VCIOM). (2019, June 8). Views of marriage and divorce [Press release 2194]. Retrieved from https://wciom.com/index.php?id=61&uid=1687.

estimate the share of unregistered marriages (*grazhdansky brak*) was undertaken in 1967, leading to an estimate of 9–13% unregistered pairs. Registered and unregistered partnerships are accounted as two separate categories only since Micro Census of 1994, giving an estimate of 6.5% of men and 6.7% of women living in unregistered marriage. Two decades later, the cohabitation shares among all partnerships are manifold higher and continue to grow[9]: from 20.8% of women and 24.3% of men in 2010–2014 to 40.6% of men and 41.3% of women in 2015–2017, respectively. In December 2014, 16% of respondents[10] declared cohabitation unacceptable; interestingly, this is only a 2 p.p. decline in comparison to a poll conducted in the Russian Soviet Federative Socialist Republic in 1989. A higher incidence of cohabitation barely impacted the social views.

While the share of cohabiting couples has been growing, the importance of the official registration is still high[11] (77% in 2019), with even higher support by older generations. Further, women value the official act of registration more than men, and moreover even consider it as an obligatory action for the first marriage[12] (65.6% of women and 58.6% of men). For the consecutive marriages, the obligatory character of the registration shifts to the second place, giving space to desirability of the registration.[13] Among men, the view of the non-obligatory—and non-desirable—registration of marriage is more widespread in comparison to women, and in particular among younger men (14.2%, under 25 y.o) when compared to older men (8.4% among 40 and older).

Pregnancy—and birth of a child—continues being a strong motive for marriage registration. The stigma of an out-of-wedlock child was re-introduced in 1944, with the notion of "single mother" and a dash instead of the name of biological father in birth certificate; the latter remained in the legislation until 1968 (Denisenko and Elisarova 2014). The share of children born in cohabitation has been growing, and accounted for 7% in 1980–1983 and already 29% in 2000–2003 (Perelli-Harris and Gerber 2011). What also changed over these twenty years is the age composition of the mothers: in the 1980s out-of-wedlock births were concentrated out of the peak reproductive age (20–35), while in 2001 the births are more uniformly distributed across different age groups.[14] Moreover, the births out of registered marriage are more characteristics for less educated women in unstable cohabitation, the so-called

[9]Federal Statistical Service (Rosstat). *Selective monitoring of population reproductive plans in 2017* [Statistic tables]. Retrieved from http://www.gks.ru/free_doc/new_site/RPN17/reports.html.

[10]Russian Public Opinion Research Centre (VCIOM). (2015, February 10). *Marriage, children, marriage betrayals: now and 25 years ago* [Press release 2771]. Retrieved from https://wciom.ru/index.php?id=236&uid=609.

[11]Russian Public Opinion Research Centre (VCIOM). (2019, June 8). *Views of marriage and divorce* [Press release 2194]. Retrieved from https://wciom.com/index.php?id=61&uid=1687.

[12]Federal Statistical Service (Rosstat). *Selective monitoring of population reproductive plans in 2017* [Statistic tables]. Retrieved from http://www.gks.ru/free_doc/new_site/RPN17/reports.html.

[13]Ibid.

[14]Vychnevsky, A (Ed.) (2002). The 9th annual demographic report 'Population of Russia'. Institute of economic forecasting of the Russian Academy of Sciences. Retrieved from http://www.demoscope.ru/weekly/knigi/ns_r01/sod_r.html.

"pattern of disadvantage", associated with high probability of further rearing the child by the unmarried mother alone (Perelli-Harris and Gerber 2011). Over the same period the share of pregnancies that led to marriages—in order to lower the social pressure—declined from 46 to 37% (ibid.).

This tendency fits the milder views on legitimization of children born out of official marriage: even if the most important reason for creation of a family is procreation[15] (the statement supported by 60% of respondents in 2014 and by 56% in 1989), 28.9% of women and 33.1% of men think[16] an official registration of the marriage is not needed if a child is already born. Only about a third of the respondents (35.8% of women and 38% of men) believe the registration is then obligatory.

1.4 Fertility: Ideal and Actual Number of Children

According to the last Soviet Census of 1989, right before the start of social and economic transition, the average family size was at 3.5; in the Russian Soviet Federative Socialist Republic[17] the average was only slightly lower at 3.2. The urban (3.3) and rural (3.8) family size averages suggested the prevalence of one-child families in the urban, and two-children families in rural areas (Goskomstat 1990).

The USSR average barely changed in comparison to the Census of 1979 (ibid.). In fact, already in the 1970s, the share of first-borns among all children in the USSR reached 60%, surpassing many western countries.[18] This tendency is one of the signs of family model transformation, rooted in the early XXth century, and accelerated in the 1970s.

In the literature that address the 1970s, authors mention transformation involving multiple life dimensions and at the end impacting the family model widespread (Vishnevsky 2006; Hilevych and Rusterholz 2018): changing live standards, further development of the Social Security system and thus lower dependence of elderly on their children, improved medical provisions and decreased infant mortality. Simultaneously, the tempo of civil construction (i.e., *khrushchevka*) increased and lead to a possibility of families to leave communal flats and move to own housing. Villages were ageing because the youth moved to urban areas. The view of children as a workforce got abandoned (Litvinova 1989) and got substituted by the idea of having children as one of the options—for self-realization—among many (McDonald 2006).

---

[15] Russian Public Opinion Research Centre (VCIOM). (2015, April 3). *Marriage in Russia: yesterday and today* [Press release 2807]. Retrieved from https://wciom.ru/index.php?id=236&uid=115214.

[16] Federal Statistical Service (Rosstat). *Selective monitoring of population reproductive plans in 2017* [Statistic tables]. Retrieved from http://www.gks.ru/free_doc/new_site/RPN17/reports.html.

[17] When interpreting figures for the whole Soviet Union, one should keep in mind significant regional (Republican) heterogeneity.

[18] Institute of economic forecasting of the Russian Academy of Sciences. (2006, July). Informational bulletin 'Population and society', 100 [Press release]. Retrieved from http://www.demoscope.ru/acrobat/ps100.pdf.

The patriarchal family model[19] with numerous children was mostly being abandoned in favour of the urban family model—parents and their children—which means that multiple generation stopped living together and sharing financial and family responsibilities.

At the beginning of the 1970s, average number of children per family in industrial cities was equal to 1.4 (Novikova et al. 1978). By the end of the 1980s, 34.2% of population lived in two-member households, 28.0% in three-member families, 25.2% in four-member families, and only 12.6% in the big families (4–5 family members) (Vyshnevsky 1996).

By the beginning of the 1990s, the urban nuclear family is the most widespread family type. However, due to the economic difficulties of the transition period, multiple compound/composed families (*slozhnaya semya*) are formed. Grown-up youth, especially those without higher education and with difficulties to find a stable employment, could not buy or rent an appropriate housing and thus establish their own households. The compound families, that resembled patriarchal families, as several generation live together got widespread due to the scarce financial resources (Kultygin 1993).

Over the 1990s, further convergence of birth rates for rural and urban population was observed,[20] with 1.2 children born per woman in urban areas. The variation of the number of children born per woman reduces (Maleva and Sinjavskaja 2006). Data from the World Value Survey[21] allow to illustrate how the number of children per woman (family) and the desired number of children were declining over the first two decades of the transition (Table 1.1).

As it is across Europe, the ideal (or desired) number of children on average exceeds the number of children actually born (Table 1.1, also see Ajzen and Klobas 2013). This evidence confirms the well-known conclusion that "fertility ideals" cannot predict actual fertility (Sobotka and Beaujouan 2014). The ideal number of children (or "ideal family size" in some versions) is likely to deviate from the actual number of children born as the former embodies the evaluation that is relevant to the "ideal conditions". The discrepancy between the ideal and actual conditions leaves space for policy-relevant studies of constraints leading to the deviation from the ideal situation (Morgan and Racking 2010).

Nevertheless, the "ideal number" can be seen as reflecting the social norm widespread in a society,[22] namely "the *air du temps* […] the changing attitudes toward family, childbearing, and the value of children in society" (Sobotka and Beaujouan

[19] *Patriarchal family model*—apart from the traditional division of obligations/roles between which also often implies several generations living together in one household.

[20] According to the Rosstat, from 1990 to 2004, the difference between the number of births per 1000 of population diminished from 2.7 to 1.0 (becoming 10.2 and 11.2 promille, respectively).

[21] At the moment of writing, first six waves were available, covering period form 1990 to 2011 for Russia. Wave 7 was announced to be added to the online accessible dataset in July 2020. For more information, see http://www.worldvaluessurvey.org/.

[22] It should be noted, that even if the desired number of children reflects social context, it is still a personal norm which can change over life as a reaction to change of socio-economic status, or characteristics of a reference group (Kuhnt et al. 2017; Puur et al. 2018).

Table 1.1 Actual and ideal number of children per woman

	1990				1995		2011		2018[a]
Age	15–49	15–49	50+	50+	15–49	15–49	15–49	50+	15+
Number of children	Actual	Ideal	Actual	Ideal	Actual	Ideal	Actual	Actual	Actual
No child	21.2%	1.2%	8.6%	0.8%	13.9%	0.8%	24.6%	12.1%	20.3%
1 child	30.2%	4.4%	25.1%	1.8%	38.6%	9.3%	**40.4%**	32.1%	31.3%
2 children	**39.8%**	**52.6%**	**45.9%**	38.3%	**40.6%**	**68.6%**	29.5%	**42.4%**	**35.1%**
3 children	6.8%	33.8%	13.2%	**46.0%**	5.6%	19.1%	4.2%	10.3%	9.5%
4 and more	2.0%	8.0%	7.2%	13.1%	1.4%	2.1%	1.3%	3.2%	3.9%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Mean	1.4	2.2	1.8	2.7	1.4	2.1	1.2	1.6	N.a.
Std. Dev.	1.0	1.3	1.1	1.7	0.9	0.9	1.0	1.0	N.a.
Obs.	708	708	413	413	663	663	712	650	193,427

Notes the data for 1990, 1995 and 2011 come from the WVS; women aged 16 and older
[a]The data for 2018 come from the Trial Census of 2018; women aged 15 and older. Retrieved from http://www.gks.ru/free_doc/new_site/inspection/prob-pn2018/prob-perep2018.htm

2014, p. 393; Philipov and Bernardi 2011). In fact, the ideal number of children varies across the world (see Mussino and Ortensi 2018, and the OECD Family Database[23]). In (Western) Europe, two children as the ideal number stayed rather stable over the last century (evidence collected by Esping-Andersen and Billari 2015), though the underlying social norms can erode in the near future leading to the one-child idea dominating in Europe (Sobotka and Beaujouan 2014).

The Eastern European ideas, namely the "less than two" children (Mussino and Ortensi 2018) align with the evidence for Russia: "not less that one child, but no more that two" (Avdeeva 2010, p. 67). In addition, Zakharov (2008) argues that among Russians, the desire to be like the relevant others is followed in a rather strict manner—, even among emigrants (Mussino and Ortensi 2018)—which leads to the smaller variation of the number of children born per woman from the social norm.

At the beginning of the 1990s as in the 1970s, the ideal number of children oscillates near 2.7–2.9 (Novikova et al. 1978; Bodrova 1994). In can also be seen from the WVS data for 1990 in Russia if observing the women that completed their fertility by the year of the survey (over 50). It is worth noting, that from the 1990s through the 2000s, the ideal and the actual number of children drops to 2 and below (Table 1.1).

[23]OECD Family database. Retrieved from http://www.oecd.org/els/family/database.htm.

A decade later, in 2007, the youth aged 16–26 was explicitly asked to imagine an ideal situation; 2.3 children came as the average ideal number.[24] The desired number of children in the contemporary conditions is 0.5 lower (at 1.8). From the same survey, one can note that the ideal number of children is aligned with the actual number of children in the families of parents (2.3 against 2.1). This evidence reminds findings of Testa and Grilli (2006), and it also can be clearly seen in the WVS data (Table 1.1). The latter implies that the desired—and thus the actual—number of children per family unlikely exceeds two in the nearest future.

The results of public polls by VCIOM are more optimistic[25]: while in 2014 two children was the most preferred option (53%), and three children followed with 28% of respondents, in 2018, it is already 42 and 43% of respondents, respectively.

When interpreting these whole-Russia figures, one should however be cautious. Nowadays, in the aftermath of implementation of the maternal capital scheme in 2007, fertility declines for the first and second births and increases for the third and further births, especially in the North-Caucasus region (see Kazenin and Raksha 2019 and Chapter 2). Similarly, Iwasaki and Kumo (2020) underline the regional and intergenerational heterogeneity in fertility, and list a lower share of Slavic population as one of the factors boosting regional fertility.

1.5 Paid and Unpaid Work

In the context of paid and unpaid work division in a couple, by the *traditional gender roles* the author understands that "women [align] with nurturing and the home, including employment that relates to care, and men with breadwinning, the public sphere, strength, and rationality" (Huppatz and Dagistanli 2017, p. 1). Thus the traditional roles prescribe that women are responsible for all housekeeping duties, including childcare, while only their minor involvement in the labour market is accepted.

At the foundations of the Soviet state, alongside the proclamation of the equal rights of women and men, protection of motherhood and childhood was guaranteed with with such measures as child care leaves for mothers and an extended network of child care facilities in order to achieve the ability to combine work, housekeeping, and motherhood (see Zavadskaya 2001 for the Soviet legislation review). However, the desire to free women from "kitchen slavery" got over the years transformed into the expectation that women would simultaneously perform the roles of workers

[24] Institute of Sociology of the Federal Center of Theoretical and Applied Sociology of the Russian Academy of Sciences. (2007) Youth of the new Russia: way of living and priorities. [Analytical report]. Retrieved from: https://www.isras.ru/analytical_report_Youth.html.

[25] Russian Public Opinion Research Centre (VCIOM). (2018, July 17). *Flowers of life, or how many children are needed for happiness?* [Press release 3717]. Retrieved from https://wciom.ru/index.php?id=236&uid=9212.

and mothers-housekeepers. The *dual-earner/state-female carer* scheme[26]—with the childcare provided in some occasion by state through childcare facilities—was explicitly promoted in the Soviet Union (Motiejunaite and Kravchenko 2008).

Two tendencies can be noted. First, the institutional and social expectations and norms reaffirmed the housekeeping and child rearing as women's responsibility (e.g., childcare leave unavailable to fathers until 2007). Moreover, as these tasks were associated with a lower prestige in the eyes of the society, women considered work as a way to increase their own prestige in the eyes of the others, in particular, of their husbands and children (Novikova et al. 1978). Already the generation born in the 1950s judged housekeeping activities rather negatively due to their monotonicity and low productivity. In the 1970s, sociological surveys showed the active interest of women towards being involved into professional and political activities, to socialize with other workers and for being economically independent.

The second tendency was that, men were favoured in the labour market but "squeezed out" of the participation in family life, with their main function within family often limited to earning money (Ashwin and Lytkina 2004). This led to a lower authority of men within families, and desire of men to further improve their labour market position. Instead of an effort towards increasing intra-family cooperation in performing the housekeeping activities—as requested by women—polls from the end of the 1980s reveal a demand for further development of the public service sector—as requested by men (Novikova et al. 1978; Litvinova 1989).

After the transition start, labour market participation became one of the individual choices, unlike in the Soviet times, when its absence was considered illegal and stigmatized (*tuneyadstvo* or *parasitism*). Multiple studies mention that the decline in the employment rate of women was much lower than it would be expected. Over 1992-1998, women contributed up to 40% of family budgets (see Åhlander 2001 for a review). The return to the male-breadwinner model—if it was desired—would not be sustainable due to insufficiency of one income (male's one) to maintain the whole family.

The following observations should be taken into considerations here. Women experienced a lower social pressure when losing their employment (Hadfield 1999). Moreover, the new working reality harmed more the conditions of female workers in comparison to their male counterparts: multiple social welfare policies and measures aiming at improving work-life balance of (working) mothers disappeared or declined in volumes (Glass 2008). Working women were not seen as principal breadwinners, and thus—in the eyes of society—could not pretend to get jobs while men were unemployed.

It is noted in the literature that women themselves accepted this "lower status" in the labour market (Ogloblin and Brock 2005). Similarly, 33.7% of female and 43.6% of male respondents, agreed in 1990 that in case of scarcity of jobs, men should have

[26]This can be seen as one of the variations of the weak male-breadwinner model that implies that both men and women work at full-time jobs, while women also bear main responsibility for housekeeping and childcare. (Deloach and Hoffman 2002).

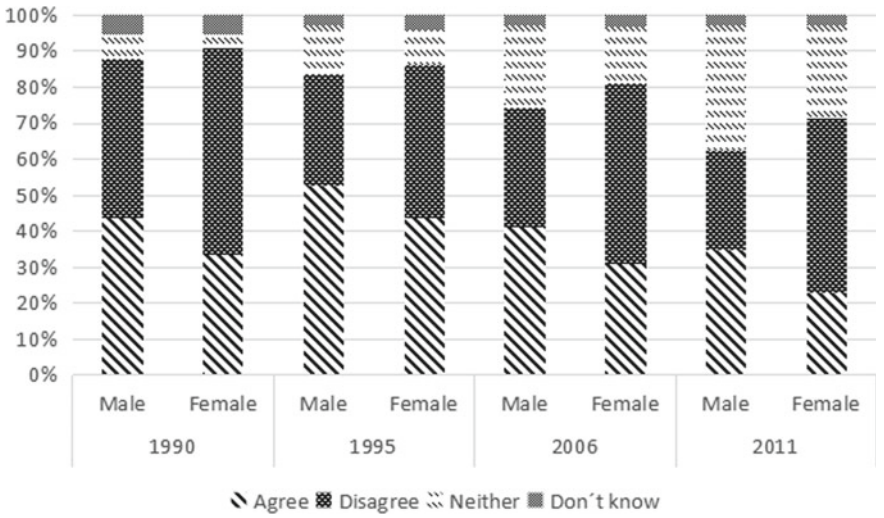

Fig. 1.2 Support of the opinion that men should be given preference in case of job scarcity (*Notes* The author's estimates based on WVS for Russia)

more right for getting jobs than women.[27] The unemployment rate was growing, over the 1990s—Rosstat[28] reports 5.2% unemployment rate in 1992 and already 13.3% in 1998—and so the agreement of both genders to preferential treatment of men in the situation of job scarcity. From 1999 to 2011 the unemployment trend was negative (12.6 to 6.6%), and similarly, the percentage of those agreeing with the statement above was declining. An interesting observation, however, can be done: over the two decades in consideration the share of those who choose the category "neither men or women" has been also growing (Fig. 1.2).

A preference for a specific gender of workers—a discriminatory practice - can still be found in HR practices, though its incidence is declining (Roshchin and Zubarevich 2005; Gerasimova 2010). In 2007, 36% of job vacancies published in specialized newspapers in Moscow explicitly mentioned the preferred sex of the applicants. In three cities covered by the study (Moscow, Samara, and Kemerovo), 44% of vacancies also included a discriminatory age limit (41 on average) for the applicants; among those, 56% of adds stated explicitly the preference for male candidates (Gerasimova 2010).

The alleviation of recruiting discrimination is suggested by the self-assessed difficulty of finding a job in a hypothetical situation of lay-off (Fig. 1.3). While men are still slightly more confident to find a new job of equivalent quality in comparison to women, the difference declined significantly over the three decades of transition.

[27] World Value Survey, Russia, 1990, 1995, 2006, 2001; the authors' estimates.

[28] Labor and employment in Russia. (2011). Federal State Statistic Service. *Main indicators of the labour market of the Russian Federation* [Statistical tables]. Retrieved from https://www.gks.ru/bgd/regl/b11_36/IssWWW.exe/Stg/d1/01-01.htm.

Fig. 1.3 Self-assessed confidence of finding a new job in situation of lay-off (*Notes* Russian Longitudinal Monitoring Survey, 1994–2018, the authors' estimates)

In 1994, 19.1% of women were absolutely or fairly certain' to find a new job, against 34.5% of men. By 2018, the gap between responses of two genders shrank to roughly 2 p.p. (certainty among 35.4% of women and 37.2% of men).

If women and men evaluate their chances to find a good job similarly, what would this mean for the equality of financial responsibilities? A decade after the

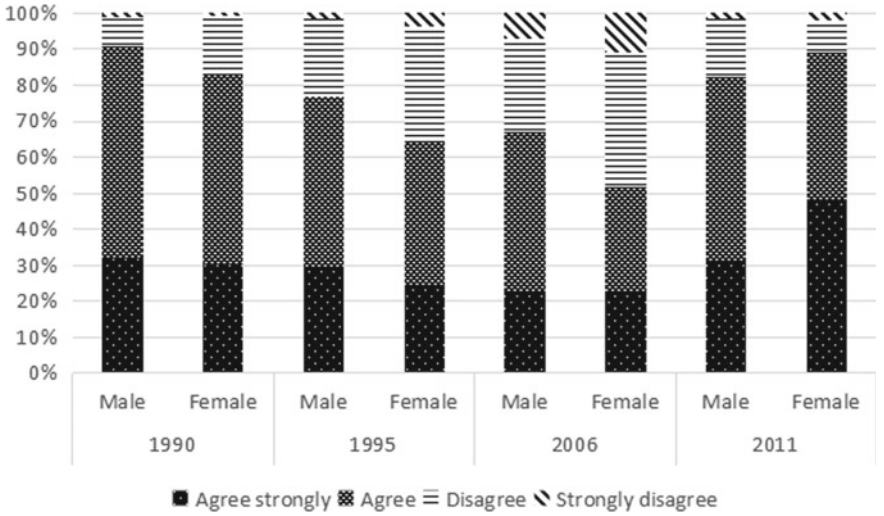

Fig. 1.4 Opinion that being a housewife is just as fulfilling as working (*Notes* WVS, Russia, 1990, 1995, 2006, 2011, the authors' estimates)

transition start, the purely traditional view[29] of men as breadwinners and women as housekeepers was supported by 12.7% of men and 22.4% of women only.

The opinions collected, in fact, align with the inherited from the Soviet era model of 'dual-earner/female-carer'. In 2000, 38.8% of men and 34.2% of women agreed that it is bad for family life if wife works.[30] Simultaneously 40.1% of men and 52.8% of women agreed[31] that a working wife is more respected in her family in comparison to being a housewife. The opinion that being housewife is as fulfilling as working, declined over the first 15 years from the transition start, but reversed in the aftermath of the financial crisis of 2008 (Fig. 1.4). The interpretation of the latter can be manifold: a reflection of a more positive view of housewives in general due to recognition of their unpaid work, a higher attractiveness of the housewife's role in times of higher uncertainty, and a self-validation of the women's role in case when the scare jobs should be taken by men. Furthermore, for some working women, the own income might still be important as an insurance to be able to provide for the children financially in case of the divorce (Hilevych and Rusterholz 2018).

[29] RLMS-HSE, 2003, the authors' estimate.

[30] RLMS-HSE, 2000, the authors' estimate.

[31] Ibid.

What caused mixed feelings is a possibility of women having more income than husbands: 47.3% of men and 37.8% of women would see is negatively.[32] Nevertheless, the support[33] of the equal financial responsibility for the family is highly widespread through the 1990s and at the beginning of the 2000s, particularly among women. By the end of the 2010s, the equality idea start ceasing. In 2019, the agreement shares are practically halved: 28% of men and 43% of women consider the equal distribution of financial duties a fair practice[34]; over a half of the respondents believes that men should bear a higher financial duty (66% of men, 52% of women). In Moscow and St. Petersburg, the views are slightly more egalitarian (52% for equality and 41% for responsibility shifted on men). In urban style settlement and rural areas, two thirds (62%) of respondents assign the role of the main breadwinner to men.

If one is observing a shift towards the more traditional roles in the financial responsibility sphere; how then the division of responsibilities for unpaid work has been changing?

In 1990, adult female family members spent nearly trice more time on unpaid housekeeping activities than adult male family members, namely 6:39 hours daily for women and 2:51 for men in urban areas, and 7:16 and 3:04, respectively, in rural areas (Rosstat 2018, p. 182). After nearly 15 years, in 2014, the time gap declined significantly, but mainly due to the reduction of the housekeeping and care time pursued at a greater extend by women in comparison to men. In 2014, the housekeeping budgets shrank to 4:28 daily for women and 2:38 for men in urban areas, and 4:59 and 2:41, respectively, in rural areas. The UNDP reports[35] very similar figures for women (4:25) and an even lower amount of housekeeping time by men (1:57). Let's take the urban area averages from Rosstat: from 1990 to 2014, the share of unpaid work performed by men increased from 30% to 37%; as mentioned above, this increase is not obligatorily the good news for gender equality.

By 2019, the idea of equal distribution of household chores appeals[36] to 77% of women and 64% of men; the majority of remaining respondents sees housekeeping as women's domain. Moscow and St. Petersburg are the most pro-equal in the views (80% of support).

Recalling the Soviet times idea of father's function reduced to financial provision, the author also considers the opinions related to child rearing and care. On the one

[32] WVS, 1995, the author's estimate.

[33] Agreement with the statement 'Husband and wife should both contribute to income'. World Value Survey: 73.1% of men and 78.1% of women (1990), 81.0% of men and 88.3% of women (1995). Russian Longitudinal Monitoring Survey: 68.2% of men and 82.5% of women (2003).

[34] Russian Public Opinion Research Centre (VCIOM). (2019, November 26). *Leadership: gender stereotypes are receding* [Press release 2229]. Retrieved from https://wciom.com/index.php?id=61&uid=1726.

[35] United Nations Statistics Division. (2018, August). Data use portal. Retrieved from https://unstats.un.org/unsd/gender/timeuse/.

[36] Russian Public Opinion Research Centre (VCIOM). (2019, November 26). *Leadership: gender stereotypes are receding* [Press release 2229]. Retrieved from https://wciom.com/index.php?id=61&uid=1726.

hand, by 2014 the agreement[37] on the importance of both parents participating in education and upbringing of children is rather universal (86% of men and 89% of women). In 2019, the support[38] for equality in child rearing duties declined, accounting for 78% of men and 85% of women. The most important, the Russian respondents believed[39] that fathers are as capable as mothers in taking care of children (70% in 2017, 72% in 2019). The youth (18–24) was even more confident (90%).

Nevertheless, the share of fathers taking a parental leave for caring of a child under 1.5 y.o. is still extremely low[40] (2.01% in 2018). Unsurprisingly, in 2019, only 10% of respondents said[41] they knew a family with the father on parental leave. The knowledge that father is also eligible for the parental leave—since 2007—is relatively low, namely 45% of women and 55% of men; 28% of men and 32% of women heard of this measure only at the moment of the poll. Furthermore, 55% of male respondents and 63% of female respondents declared[42] that could not imagine that in their family the father would take a parental leave to care for a newborn while the mother restarts working; such situation is not judged as normal.

Financial provision for the family continue entering the top-2 of father's responsibilities. In 2014, 22% of men even mentioned[43] a high pressure making them to work more (42% in 1989) as one of the negative sides of family life. In 2019, the view of husband as breadwinner is supported[44] by 48% of respondents, while 47% value the role of educator of the own children more. Involvement of a father into child caring and the ability to provide for the family are the most often mentioned[45] components of the parenthood. A bad father is the one who is "indifferent" (37%). A good father is the one "who is involved in child rearing", and "raises a good person" (21%). The financial aspect is found on the solid second place: a bad father "does

[37]Foundation 'Public Opinion' (FOM) (2014, January 28). *Family and children. How do Russian take decisions about birth of a child? With whom the child should stay after divorce?* [Press release]. Retrieved from https://fom.ru/Rabota-i-dom/11315.

[38]Russian Public Opinion Research Centre (VCIOM). (2019, November 26). *Leadership: gender stereotypes are receding* [Press release 2229]. Retrieved from https://wciom.com/index.php?id=61&uid=1726.

[39]Russian Public Opinion Research Centre (VCIOM). (2019, September 19). *Daddy can do anything?* [Press release 3986]. Retrieved from https://wciom.ru/index.php?id=236&uid=9759.

[40]Russian News Agency TASS. (2019, March 6). *Paternity leave was taken by more than 13.7 thousands of men in the pilot regions of the program by the Social Security Fund*. Retrieved from https://tass.ru/obschestvo/6190434.

[41]Russian Public Opinion Research Centre (VCIOM). (2019, September 19). *Daddy can do anything?* [Press release 3986]. Retrieved from https://wciom.ru/index.php?id=236&uid=9759.

[42]Ibid..

[43]Russian Public Opinion Research Centre (VCIOM). (2015, April 3). *Marriage in Russia: yesterday and today* [Press release 2807]. Retrieved from https://wciom.ru/index.php?id=236&uid=115214.

[44]Russian Public Opinion Research Centre (VCIOM). (2019, September 19). *Daddy can do anything?* [Press release 3986]. Retrieved from https://wciom.ru/index.php?id=236&uid=9759.

[45]Russian Public Opinion Research Centre (VCIOM). (2019, October 23). *'Invovled parenthood', or what children prize above money* [Press release 2220]. Retrieved from https://wciom.com/index.php?id=61&uid=1717.

not provide for his family"; a good father, on the opposite, "makes good money", "works" (20%).

Another poll[46] in June 2020 re-confirms these two roles in the context of the image of a "responsible father", namely the ability to provide for family (36%), to spend time with children, organizing games, and teaching them useful skills (35%), to teach children finding solutions in difficult situations (28%).

The respondents feel that the modern fathers have a better connection to sons in comparison to the past. However, a number of yet hypothetical steps could make—not only financial—involvement of fathers in the life of families even stronger. First of all, a more responsible view of parenthood is needed in the mass-media[47] (62% respondents in 2019). Further, additional measures of social policy were seen[48] as potentially beneficial, including one week of paid leave for fathers within the first month after birth (79% in 2020), one month of a paid leave for father to be taken within three first years after birth (89%), and introduction of "paternal capital" (an analogue to the maternal capital, starting from the third child born within the same marriage) (83%).

1.6 Leadership and Politics

The core institutional factors of gender equality go beyond the economical and educational participation and opportunities, and also include political empowerment for both genders (Jütting et al. 2008). Russian women were actively introduced to social, economic, and political life of the country since the Revolution of 1917. By 1929, the Communist Party announced that women won their struggle for equality (Nechemias 2016).

Nowadays, the potential of women in leading and managerial roles is not neglected: at the beginning of the 2000s, only 16.6% of men and 35.5% of women agreed that men are more suitable for those roles.[49] A leader is someone who can inspire and lead people, and can also build a team (options mentioned by 52% of men and 70% of women, and 50% of men and 57% of women, respectively).[50] Thus, gender is not important for success in the professional leadership (58% of respondents). The high incidence of men as leaders can be explained by men more likely having a penchant for leadership, e.g., "[men] have a strong character", "they

[46]Russian Public Opinion Research Centre (VCIOM). (2020, June 19). *Fathers of our times* [Press release 4264]. Retrieved from https://wciom.ru/index.php?id=236&uid=10333.

[47]Russian Public Opinion Research Centre (VCIOM). (2019, September 19). *Daddy can do anything?* [Press release 3986]. Retrieved from https://wciom.ru/index.php?id=236&uid=9759.

[48]Russian Public Opinion Research Centre (VCIOM). (2020, June 19). *Fathers of our times* [Press release 4264]. Retrieved from https://wciom.ru/index.php?id=236&uid=10333.

[49]RLMS-HSE, 2003, the author's estimate.

[50]Russian Public Opinion Research Centre (VCIOM). (2019, November 26). *Leadership: gender stereotypes are receding* [Press release 2229]. Retrieved from https://wciom.com/index.php?id=61&uid=1726.

are career-oriented/leadership qualities", but also by stereotypes characteristics for a traditional gender model, e.g., "[because] it is common/patriarchal society", "[men] are free/fewer household chores", "[men] are the head in the family/breadwinner", and even "because they are men!".[51] The two main perceived reasons preventing women from becoming leaders are lack of interest (36%) and lack of leadership qualities (35%), then follow the extensive family duties (31%), barriers made by employer (26%), and stereotypes (15%).

In general, women are more supportive towards other women becoming leaders[52] (58% vs 36% of men). Rural respondents see women-leaders in a more positive manner (55% positively, 42% negatively), while in the urban areas the opinions are reversed (e.g., 44% support and 53% do not support women as leaders in Moscow and St. Petersburg). About a quarter of the respondents, however, believes that female leaders are more suitable in the traditionally female-dominated industries such as education, healthcare, fashion and culture (also see Chapter 12). This aligns, for example, with the recruiting study—undertaken nearly 15 years before the poll cited above—by Roshchin and Zubarevich (2005) who reveal that employers followed gender stereotypes when looking for employees, e.g., a secretary should be a woman, while for a position of engineer a man would be preferred.

Moving from the topic of professional leadership to politics, the author finds even more traditional views on the role of the two genders. Already after the WWII, women's presence was the most widespread—one-third of all positions in 1966—at the lowest levels of the party hierarchy. Women often held part-time positions, and positions of secretaries of the primary party organizations and party cells. At higher levels, the female share among regional and country secretaries stuck to one-digit figures. A relatively high representation of women in the USSR Supreme Soviet was mainly due to a system of gender quota. As Nechemias (2016) notes, the share of women among the party elite, the Central Committee, reached 4% only by 1986, and only one woman (Ekaterina Furtseva[53]) served in the Politburo between the WWII and the start of the perestroika; two more women during the perestroika. The transformation of the USSR Supreme Soviet into the Congress of People Deputies at the edge of the 1990s, led to a decrease of women's share among the deputies.

During the transition period, the issue of gender equity in politics was overlooked, as liberal and market economy was assumed to guarantee the equality "by default" (Metcalfe and Afanassieva 2005). Russian women "found that they would be discriminated against in legislation and would lose power relative to men in the political sphere" (Åhlander 2001, p. 57). The persistent low level of representation

[51] Ibid.

[52] Ibid.

[53] Ekaterina Furtseva was born in 1910 to working-class parents. Her impressive political career starts with the Komsomol as a raion committee secretary in the early 1930s, and soon shifts to the All-Union level. Along with her tertiary education studies,in Moscow, Ms Furtseva grew from the head of propaganda department in the Moscow city soviet to the first secretary of the Moscow's Party organization. In 1957, with the support from Nikita Khrushev, she became the first woman ever joining Politburo (see Ciboski 1972 for more biographic details).

of women in the legislative system led to the criticism from political activists stating that democratization without women is not democracy (Nechemias 2016).

In the first Parliament elections in 1993, that followed the Constitution reform by Boris Eltsin, the Women of Russia (*Zhenshchiny Rossii*)—a woman only electoral bloc—took 23 of 450 mandates in the State Duma, the lower house of the Russian Parliament.[54] The party image irradiated a search for consensus, not for power, which often mentioned as the reason of their success in 1993 (Nechemias 2016). Already in the 1995 elections, the electoral block did not pass the 5% barrier in the party-list ballot.

By 2000, the proportion of women in the Parliament[55] was as low as 7.7%, though the proportion of seats grew since and until 2007, and then again since 2016. In 2018, 15.9% of seats in the Duma (71 of 447) and 17.8% (or 30 of 169) in the House of Federations were occupied by women (Rosstat 2018). According to the Political Empowerment subindex, in 2020, Russia is placed on the 122th position of 152, between Sierra Leone and Morocco (World Economic Forum 2019).

One of the reasons for the relatively low success of women in the political sphere might be the ideas widespread among women themselves. In the early 2000, only 22.3% of men and only 12.5% of women agreed that men and women should play equally important parts in politics.[56] In general, Russians still believe that men make better political leaders than women. That can be clearly seen in the data from the World Value Study and the Russian Longitudinal Monitoring survey for 1995–2011. Interestingly, men support this thesis more widely in comparison to women, namely 65.2% of men and 51.2%.[57] As in case of the professional leadership, in 2011, Russians[58] could imagine female politicians to succeed in top governmental positions, however would find them more fitting for portfolios of the ministers associated with such traditional female occupations and spheres as culture (61% men, 66% women), healthcare (59 and 65%), and education and science (56, 60%). Over 30% of respondents could see a woman as a successful minister in economy sphere (minister of finance, minister of agriculture, minister of economic development), but only 12 to 25% could imagine a female minister in the legal, justice, defence and military sphere (e.g., for Chief of Justice of the Supreme Court, Chairman of the Federation Council, Prime Minister, or Minister of Defence). The poll from 2014, apart from being in accordance with the most suitable for women ministerial portfolio, reveals

[54]Russian News Agency TASS. (2011, November 30). The history of elections to the State Duma in the modern Russia. Retrieved from https://tass.ru/spravochnaya-informaciya/508433.

[55]The World Bank (2020). Proportion of seats held by women in national parliaments (%)—Russian Federation. Retrieved from https://data.worldbank.org/indicator/SG.GEN.PARL.ZS?locationsRU&name_desc=false.

[56]RLMS-HSE, 2003, the author's estimate.

[57]WVS, 2011, author's estimate.

[58]Foundation 'Public Opinion' (FOM) (2011, July 13). *Women in the Russian [political] seats* [Press release]. Retrieved from http://fom.ru/Politika/10095.

that 44%—or 11 p.p. less in comparison to 2004—could imagine a woman becoming president of the Russian Federation within the upcoming 10-20 years.[59]

In the latest polls,[60] one also sees the ambivalence of the opinions. In 2019, 81% of respondents agrees that women should participate in politics equally with men. Simultaneously, 40%—or 13 p.p. more in comparison to 1998—think that "the number of female politicians in Russia is sufficient". The assessment of women politicians reveal a number of gender stereotypes coming to the fore both connected to disadvantages (soft character—9%, being emotional—9%, being busy not only with job but also children and family—6%) and advantages (better understanding social problems—11%, another way of thinking and intuition—8%). Professionalism and wisdom is only mentioned by 7% of respondents.

1.7 Conclusions

In the demographic literature it was already announced nearly two decades ago that Russia would be unlikely returning to the traditional patterns of marriage (Zakharov 2012). Majority of the phenomena, such as older age of the first marriage and of the first birth, more frequent divorces and widespread—and socially accepted—cohabitation are all the tendencies also characteristic to developed countries.

However, this statement would not be true in all spheres the gender roles are penetrating. The ambiguity and duality of the views can be observed when women's economic participation, political empowerment, and even sharing of unpaid household duties are addressed. Russian women and men often see themselves as equally capable to perform a variety of jobs, to be leaders, and to share housekeeping and childrearing responsibilities. Simultaneously, in the times of economic turmoil and uncertainty, women—in a very traditional way—are still ready to make way for men if the jobs are scarce. The support of the view that both partners should equally contribute to the family budget might be declining, thus recently showing a drift towards more traditional distribution of the financial duty. Both in the labour market and in politics, women' leadership is seen acceptable if connected to the traditionally female-dominated spheres, such as culture, education, and healthcare. There is a rather universal support of the idea that women should participate in politics equally with men, while the actual representation of women on the political scene is low (e.g., less than 16% of seats occupied by women in the Parliament). Simultaneously, a significant share of population considers the number of female politicians as already sufficient. Furthermore, only just above 2% of fathers take parental leave yearly, while more than a half of the population does not find this acceptable.

---

[59] Foundation 'Public Opinion' (FOM) (2014, March 07). *Women in politics: Pros and contra. What Russian think about the fair sex participation in politics* [Press release]. Retrieved from http://fom.ru/Politika/11369.

[60] Russian Public Opinion Research Centre (VCIOM). (2019, September 16). *Women in politics: Russian version* [Press release 2212]. Retrieved from https://wciom.com/index.php?id=61&uid=1706.

If the view which directly associates gender equity and female empowerment with fertility (e.g., McDonald 2006) is accepted (and improvement of fertility would be highly desirable in the times of depopulation), then the a range of measures to reconcile careers and motherhood, or even better, parenthood, and to promote the entrance of female specialists to the male-dominated areas of the labour market, are of the utmost importance.

Acknowledgements Ekaterina Skoglund thanks to all the staff and participants of the research seminars during her visiting research stay at the IER Hitotsubashi University in 2015 when the idea for the Chapter 1 was conceived. The financial and administrative support making this stay possible is also gratefully acknowledged.

References

Åhlander AMS (2001) Women's and men's work in transitional Russia: legacies of the Soviet system. Post-Sov Aff 17(1): 56–80

Ajzen I, Klobas J (2013) Fertility intentions: an approach based on the theory of planned behavior. Demogr Res 29: 203–232

Alesina A, Giuliano P, Nunn N (2013). On the origins of gender roles: women and the plough. Q J Econ 128(2): 469–530

Ashwin S, Lytkina T (2004) Men in crisis in Russia the role of domestic marginalization. Gender Soc 18(2): 189–206

Avdeev A, Monnier A (2000) Marriage in Russia. a complex phenomenon poorly understood. Popul: Engl Sel 12(1): 7–49. https://www.persee.fr/doc/pop_0032-4663_2000_hos_12_1_7082

Avdeeva M (2010) Implementations of the French policy measures in Russia. In: Schleinstein N, Sucker D, Wenninger A, Wilde A (eds) Family patterns and demographic development. Social—Sciences Eastern Europe. GESIS Leibniz Institut for the Social Sciences, pp 67–74

Bodrova V (1994) Public opinion on fertility and population problems: results of a 1990 survey. In: Lutz W, Scherbov S, Volkov A (eds), Demographic trends and patterns in the Soviet Union Before 1991. Routledge, pp 231–247

Brooks C, Bolzendahl C (2003) The transformation of US gender role attitudes: cohort replacement, social-structural change, and ideological learning. Soc Sci Res 33: 106–133

Cialdini RB, Trost RM (1998) Social influence: social norms, conformity and compliance. In: Gilbert D, Fiske ST, G. Lindzey (eds.). *The Handbook of Social Psychology.* McGraw-Hill, 4th ed., pp. 151–192

Ciboski K (1972) A Woman in soviet leadership: the political career of Madame Furtseva. Can Slavon Pap/Rev Can Slavistes 14(1), 1–14

Clark AE, Senik C (2010) Who compares to whom? The anatomy of income comparisons in Europe. Econ J 120(544): 573–594

Clark AE (2003) Unemployment as a social norm: psychological evidence from panel data. J Labor Econ 21(2): 323–351

Connell R, Pearse R (2015) *Gender: in World Perspective*, 3rd ed. Cambridge, Polity Press

Deloach S, Hoffman A (2002) Russia's second shift: Is housework hurting women's wages? Atl Econ J 30(4): 422–432

Denisenko MB, Elizarova VV (eds) (2014) *Razvitie naseleniya i demograficheskaya politika* [*Population development and demographic policy*]. Moscow, MAKS Press. ISBN 978-5-392-18115-5

Esping-Andersen G, Billari FC (2015) Re-theorizing family demographics. Popul Dev Rev 41(1): 1–31. https://doi.org/10.1111/j.1728-4457.2015.00024.x

Gerasimova E (2010) Zhenshchiny v trudovykh otnosheniyakh v Rossii [Women in labour relationships in Russia]. In: G. Mikhaleva (ed) *Zhenskoe dvizhenie v Rossii: vchera, segodnya, zavtra. Materialy nauchnoj konferenzii* [*Women movement in Russia: yesterday, today, tomorrow. Conference proceedings*]. Moscow, RODP Yabloko & KMK Publishers, pp. 15–18. https://www.yabloko.ru/files/womens-book.pdf

Glass CM (2008) Gender and Work during Transition, East Eur Polit Soc 22(4): 757–783. https://doi.org/10.1177/0888325408316530

Goskomstat (1990) *Naseleniye SSSR po dannym vsesoyuznoj perepisi naseleniya 1989. [Population of the USSR according to the Whole-union Census of 1989]*. The USSR State Committee for Statistics, Moscow: Finansy i Kredit

Hadfield, G. (1999). A coordination model of the sexual division of labor. J Econ Behav Organ 40(2): 125–153

Hilevych Y, Rusterholz C (2018) 'Two children to make ends meet': the ideal family size, parental responsibilities and costs of children on two sides of the Iron Curtain during the post-war fertility decline. Hist Fam 23(3): 408–425

Hochschild A, Machung A (1990) The second shift: working parents and the revolution at home. Avon Books

Huppatz, Dagistanli (2017) Gender roles. The Wiley-Blackwell encyclopedia of social theory, pp. 1–2

Iwasaki I, Kumo K (2020) Determinants of regional fertility in Russia: a dynamic panel data analysis. Post-Communist Econ 32(2): 176–214

Jütting JP, Morrisson C, Dayton-Johnson J, Drechsler D (2008) Measuring gender (in) equality: The OECD gender, institutions and development data base. J Hum Dev 9(1): 65–86

Kazenin K, Raksha A (2019) Dinamika rozhdaemoski po regionam RF v 2018 g.: osnovnye tendencii [Fertility dynamics by regions of the Russian Federation in 2018: main tendencies]. Russ Econ Dev 26(8): 71–78

Kuhnt AK, Kreyenfeld M, Trappe H (2017) Fertility ideals of women and men across the life course. In: Kreyenfeld M, Konietzka D (eds.) Childlessness in Europe: contexts, causes, and consequences. Springer, Cham, pp 235–251

Kultygin VP (1993) Poverty and social trends in Russia. Scand J Soc Welf 2(3): 142–149

Lévy-Garboua L, Meidinger C, Rapoport B (2006) The formation of social preferences: some lessons from psychology and biology. In: Kolm S.-Ch., Ythier JM (eds.) Handbook of the economics of giving, altruism and reciprocity, 1, pp 545–613

Litvinova G (1989) Nado li povyshatj rozhdaemostj? [Should the fertility level be increased?] In *Svet i teni progressa (social'no-demografitsheskie problemy SSSR)*. Sovetskaya Rossiya, Moskva, pp. 63–142

Mackie G, Moneti F, Shakya H, Denny E (2015) *What are social norms? how are they measured?* UNICEF/University of California, San Diego, Center on Global Justice

Maleva T, Sinjavskaja O (2006) Social'no-economitcheskie faktory rozhdaemosti v Rossii: empiritcheskie izmerenija i vyzovy social'noj politike (Socio-economic factors of fertility in Russia: empirical estimations and challenges for social policy. SPERO, 5: 70–97. http://demoscope.ru/weekly/2007/0309/analit02.php

McDonald P (2006) Low fertility and the state: the efficacy of policy. Popul Dev Rev 32(3): 485–510

Metcalfe DB, Afanassieva M (2005) Gender, work, and equal opportunities in central and eastern Europe. Women Manag Rev 20(6), 397–411

Morgan SP, Rackin H (2010) The correspondence between fertility intentions and behavior in the United States. Popul Dev Rev 36(1), 91–118

Motiejunaite A, Kravchenko Z (2008) Family policy, employment and gender-role attitudes: a comparative analysis of Russia and Sweden. J Eur Soc Policy 18(1): 38–49

Mussino E, Ortensi LE (2018) The same fertility ideals as in the country of origin? a study of the personal ideal family size among immigrant women in Italy. Comp Popul Stud-Z Für Bevölkerungswissenschaft 43, 243–274

Nechemias, C. (2016) Women and Politics in Post-Soviet Russia. In: Rueschemeyer M. (ed) Women in the politics of postcommunist Eastern Europe. Routledge, pp. 8–23
Novikova E, Yazykova V, Yankova Z (1978) Zhenshina. Trud. Semjya. Sociologitsheskiy otsherk. (Woman. Job. Family. Sociological essay), Moscow, Profizdat. http://www.a-z.ru/women/texts/nov1r.htm
Ogloblin C, Brock G (2005) Wage determination in urban Russia: underpayment and the gender differential. Econ Syst 29(3): 325–343
Pearse R, Connell R (2016) Gender norms and the economy: insights from social research. Fem Econ 22(1): 30–53
Perelli-Harris B, Gerber TP (2011) Nonmarital childbearing in Russia: second demographic transition or pattern of disadvantage?. Demography 48(1): 317–342
Philipov D, Bernardi L (2011) Reproductive decisions: concepts and measurement in Austria, Germany and Switzerland. Comp Popul Stud 36(2–3): 95–530
Puur A, Vseviov H, Abuladze L (2018) Fertility intentions and views on gender roles: Russian women in Estonia from an origin-destination perspective. Comp Popul Stud 43: 273–306
Roshchin S, Zubarevich N (2005) *Gendernoe ravenstvo i rasshirenie prav i vozmojnostei zhenshin v Rossii v kontekste celei rasvitia tysyacheletia [Gender Equality and the Extending of Rights and Opportunities of Women in Russia, in the Context of Millennium Development Objects]*. UNDP report, 2005
Rosstat (2018). Muzhchiny i zhenshchiny Rossii (Men and women of Russia). Federal State Statistic Service, Moscow. Retrieved from https://www.gks.ru/free_doc/doc_2018/wo-man18.pdf
Scherbov S, van Vianen H (2001) Marriage and fertility in Russian of women born between 1900 and 1960: a cohort analysis. Eur J Popul 17(3): 281–294
Seiler LH (2007) What are we? The social construction of the human biological self. J Theory Soc Behav 37(3): 243–277
Selezneva (2017) Population policies in soviet and modern Russia. In: Karabchuk T, Kumo K, Selezneva E (eds) Demography of Russia. From the past to the present. Springer, pp. 63–113
Shu X, Meagher KD (2017) Beyond the stalled gender revolution: Historical and cohort dynamics in gender attitudes from 1977 to 2016. Soc Forces 96(3): 1243–1274
Sobotka T, Beaujouan É (2014). Two is best? The persistence of a two-child family ideal in Europe. Popul Dev Rev 40(3): 391–419
Testa MR, Grilli L (2006) The influence of childbearing regional contexts on ideal family size in Europe. Population 61(1): 99–127
Vishnevsky (ed) (2006) *Demograficheskaya modernizaciya Rossii 1900–2000 [Demographic modernization of Russia 1900-2000].* Moscow, Novoe izdatel'stvo
Vyshnevsky A (1996) Family, fertility, and demographic dynamics in Russia: analysis and forecast. In: DaVanzo J (ed.) *Russia's Demographic 'crisis'*. RAND, pp. 1–35. http://www.rand.org/pubs/conf proceedings/CF124/CF124.chap1.html
World Economic Forum (2019) Global Gender Gap Report 2020. http://www3.weforum.org/docs/WEF_GGGR_2020.pdf
Zakharov S (2008) Russian federation: from the first to second demographic transition. Demographic Res 19: 907–972
Zakharov S (2012) Rost rozhdaemosti v 2007–2010: est li prichini dlia optimzma? [Increase of fertility in 2007-2010: Cause for optimism?] Demoscope Weekly, 495–496. http://demoscope.ru/weekly/2012/0495/tema01.php
Zavadskaya L (ed) (2001) Gendernaya ekspertiza rossijskogo zakonodatel'stva [Gender expertise of the Russian legislation. Moscow, Izdetel'stro BEK
Zdravomyslova E, Temkina A (2004) Gosudarstvennoe konstruirovanie gendera v sovetskom obshchestve [The state's construction of gender in soviet society]. Zhurnal issledovanii sotsialnoi politiki 1(3–4): 299–321

Chapter 2
Gender Relations and Transition to Motherhood in the Post-Soviet Kyrgyzstan

Konstantin Kazenin and Vladimir Kozlov

Abstract This chapter deals with the influence of gender relations on transition to motherhood in Kyrgyzstan. Although a shift of fertility towards older age was dominant in the post-Soviet space during the recent decades, some post-Soviet countries with mainly Muslim population showed stability of age patterns, with the peak of women's fertility remaining below 25. Kyrgyzstan is one of those countries, and the authors investigate whether the parameters of gender relations are at least partly "responsible" for the lack of fertility postponement there. It is shown that among the Muslim peoples of Kyrgyzstan, first marriage hazards are positively related to low education of a woman, approval of husband's violence towards wife, and others and are declining from elder to younger birth cohorts. Meanwhile, first birth hazards among married women demonstrate no relation to gender asymmetries. The analysis has shown that the lowering of first marriage hazards for younger cohorts can be due to certain modernization of gender relations and loosening of the traditional norm that prescribes early marriage for women. This is accompanied by a low social acceptability of out-of-marriage fertility. Under these conditions, younger women are likely to enter the first marriage mainly after they have consciously chosen to have children. This supports the relatively early timing of first births in Kyrgyzstan.

Keywords Gender asymmetries · Central Asia · Fertility · Nuptiality · Timing

2.1 Introduction and Background

The problem considered in this chapter is the relationship between fertility timing and gender asymmetries in post-Soviet countries. By gender asymmetries, the authors mean differences between gender roles in family organization, manifested (among

K. Kazenin
Russian Academy for National Economy and Public Administration, Moscow, Russia
e-mail: kz@ranepa.ru

V. Kozlov (✉)
National Research University Higher School of Economics, Moscow, Russia
e-mail: vakozlov@hse.ru

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_2

other things) in the degree of women' s freedom to acquire education, take a job outside her household, take part in making important family decisions, and so on. The significance of these characteristics for fertility has been broadly discussed in recent decades (see Jejeebhoy 1995; Malhotra et al. 1995; Mason 2001; Phan 2013; Bongaarts et al. 2017, among many others). It is generally agreed that women's dependent position in the family and poor access to education and the labor market correlate with higher fertility and earlier transition to motherhood.

A shift of fertility peak toward age 25+ is one of the most remarkable changes in fertility behavior in post-Soviet countries, which they have shared with Eastern European countries since the 1990s (Billingsley and Duntava 2017; Karabchuk et al. 2017; Zakharov 2008, 2018). However, not much attention is paid to the fact that fertility postponement does not take place so clearly in the former Soviet republics of Central Asia and in Azerbaijan (South Caucasus) as it does in other post-Soviet countries. It is noteworthy that at least for some of these countries more pronounced asymmetries between gender roles, lower levels of women empowerment, and so on, compared with other parts of the post-Soviet space have been reported (see Ishkanian 2003; Constantine 2007, and Poliakov and Olcott 2016 for Central Asia). Addressing the rather puzzling differences in timing trends between post-Soviet countries, the authors consider the extent to which this stability of early fertility timing is explained by characteristics of gender relations in these countries.

After the 1990s crisis, economic recovery began in most post-Soviet countries in the 2000s, which was accompanied by changes in demographic trends, including an increase in total fertility rate (TFR) after its dramatic decrease in the first post-Soviet decades.[1] Figure 2.1 plots TFR dynamics in post-Soviet countries with Muslim (Kazakhstan, Kyrgyzstan, and Azerbaijan) and non-Muslim (Russia, Belarus, and Armenia) population as the majority.[2] At the beginning of the 1990s, TFR was considerably higher in Muslim countries, as they were at an earlier stage of the first demographic transition at that time. However, subsequent trends, including the fall of TFR after the collapse of the Union of Soviet Socialist Republics (USSR) and

[1]The total fertility rate indicates the number of children who would have been born per woman (or per 1,000 women) if she/they were to pass through the reproductive period bearing children according to a current schedule of age-specific fertility rates.

[2]Fig. 1 only includes countries whose population statistics are treated as relatively reliable. Georgia is not included as data on fertility in that country could be debatable because of abrupt changes in official TFR estimates after the census in 2014 and 2002 (this indirectly demonstrates problems with migration statistics), and because data from this country does not include breakaway Abkhazia and South Ossetia (see Sulaberidze et al. 2019). The reliability of the TFR for Moldova is also debatable due to the possibly low accuracy of migration statistics (see Penina et al. 2015). The TFR for Ukraine could be underestimated due to problematic quality of statistics in the Donetsk and Lugansk regions after separatists took power there in 2014 and due to difficulties in estimating internal and external migration at the country level (Romaniuk and Gladun 2015). The data from Tajikistan are unreliable because of poor migration statistics quality (Chudinovskikh 2006) that leads to strange fluctuations in TFR. Finally, for Uzbekistan and Turkmenistan, TFRs are calculated only on administrative statistics, which cannot be compared to census data. For instance, in post-Soviet Uzbekistan no census was ever held between 1991 and 2019, and census results for Turkmenistan are not public. However, without a comparison with census results, the reliability of administrative statistics is questionable.

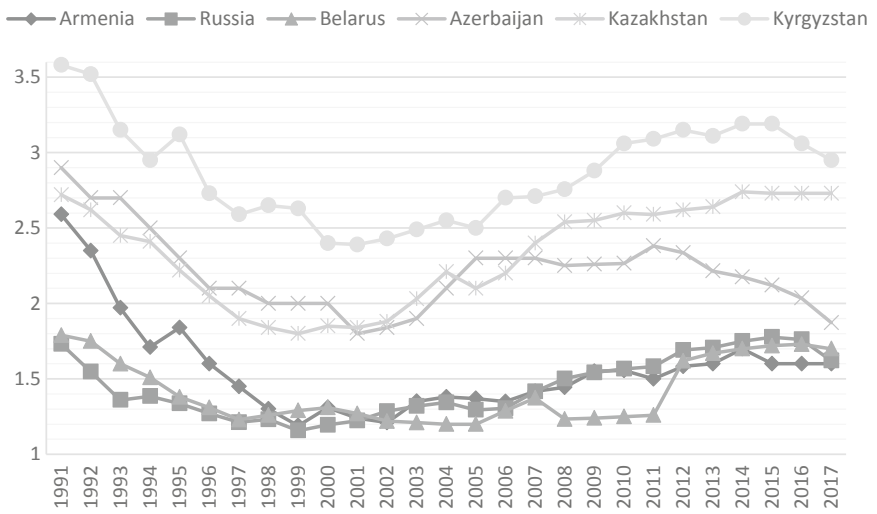

Fig. 2.1 TFR in several post-Soviet countries, 1991–2017 (*Source* Based on data available at http://www.demoscope.ru/weekly/ssp/sng__tfr.php)

its gradual increase in the 2000s, were to a large extent common in the two groups of countries. Moreover, a decline in TFR in the mid-2010s was observed in some countries of both groups.

Despite these similarities, these two groups of countries differ in their fertility timing trends in the last 10 to 15 years. This becomes obvious if the differences in inputs of age-specific fertility rates (ASFRs; annual number of births per 1,000 women in some age group) for five-year age groups to the total fertility rates (Fig. 2.2) in 2004 and 2015 are considered for both groups. The inputs are calculated as the ratio of an ASFR to the TFR; the differences are calculated by subtracting the input of an age group in 2004 from the input of the same age group in 2015. As Fig. 2.2 shows, in the non-Muslim countries, the age distribution of fertility changed seriously during the decade, shifting the peak of fertility from the 15–19 and 20–24 age groups to the elder age groups (for more details on this age shift in post-Soviet and other East European countries see Frejka et al. 2016). This distorted the "Eastern European" early fertility pattern of the last decades of the twentieth century (see Roussel 1994; Rychtarikova 1999 on that model). No age shift of that scale was observed in the Muslim post-Soviet countries according to their official statistics, at least in those where official statistics provide ASFRs, namely, Azerbaijan, Kazakhstan, and Kyrgyzstan. For the latter two countries, inputs of the younger age groups (15–19 and 20–24) to TFR decreased much less than in the non-Muslim countries, whereas in Azerbaijan, their input increased. Note that in the three countries, trends in fertility quantum were not identical in the considered period, as shown in Fig. 2.1. Nevertheless, the contrast with the post-Soviet countries that experienced the age shift was common for the Muslim countries for which the ASFRs were available.

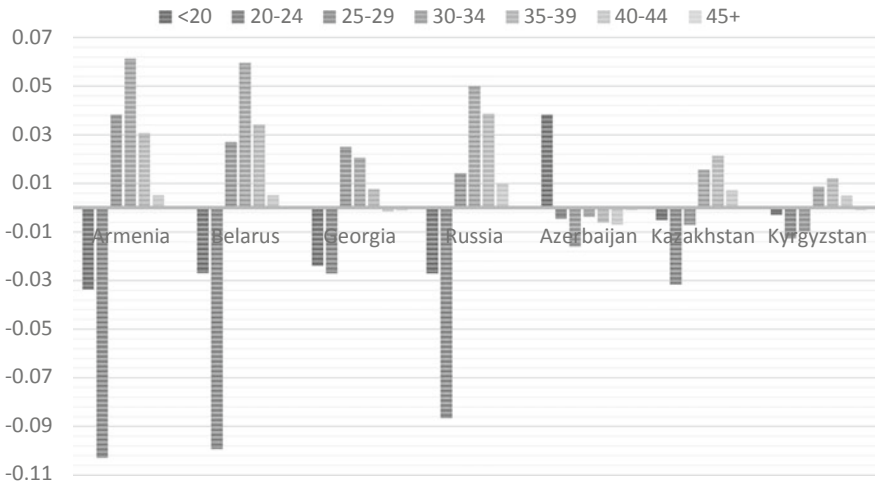

Fig. 2.2 Differences between the proportions of inputs of age groups to total fertility from 2004 to 2015 in some post-Soviet countries (*Source* The authors' calculations based on data available at: http://www.demoscope.ru/weekly/ssp/sng_asfr.php)

The contrast in trends of fertility timing between Muslim and non-Muslim countries of the former USSR has parallels to data on some regions of Russia where Muslims are the majority. Thus, according to Kazenin and Kozlov (2016), some of these regions have demonstrated a stable age distribution of fertility (unlike the country as a whole) within the last two decades. Moreover, the possibility that religious affiliation and cultural norms related to it are significant for the observed contrast between post-Soviet countries is supported by observations that ethnic Russians (mainly non-Muslims) of Central Asian countries differ from their indigenous Muslim population in some fertility trends (Agadjanian 1999; Agadjanian et al. 2013; Spoorenberg 2015).

Further discussion in the present chapter is organized as follows. In Sect. 2.2, the authors briefly consider fertility trends in Central Asian countries and Azerbaijan compared with other post-Soviet countries, and the basic theoretical assumptions on the relations between fertility and gender values are put forward. Section 2.3 presents the research strategy and the survey description. The analysis is presented in Sect. 2.4 and discussed in Sect. 2.5.

2.2 The Theoretical Approach

Current theoretical assumptions suggest that the lack of fertility postponement observed in Kyrgyzstan is at least partly related to gender asymmetries existing in that country.

First, it is widely acknowledged that fertility postponement in post-Soviet and Eastern European countries took place together with a certain "detraditionalization" of family life, which assumed a higher value of women's education and professional self-realization—a departure from traditional family norms that force men and women to "specialize" on strictly different tasks in households (Knight and Brinton 2017; Funk and Mueller 2018). The relation between these phenomena seems straightforward: as soon as housekeeping and childbearing are no longer treated as an obligatory priority for women, many women tend to put more time and effort in education and employment, which often leads to postponement of marriage and childbearing. At the same time, under strict asymmetry of gender roles, childbearing becomes one of very few ways for a woman to secure a high social reputation for herself (Salway 2007), which, in turn, motivates her not to postpone motherhood. Given this, it is quite natural to suggest that if no fertility postponement is observed in some post-Soviet countries, gender roles remain more "traditional" in it compared with other former republics of the USSR.

Besides, the expectation that lack of fertility postponement correlates with stricter gender asymmetries is supported by the fact that in post-Soviet countries without postponement the majority of the population is Muslim. It is widely assumed that in Muslim societies conservative contrasts between gender roles are likely to be more stable than in societies with other religious composition (in demographic research, this assumption is common, at least since Caldwell, 1987). Although some researchers have questioned or calibrated this assumption (see e.g., Morgan et al. 2002; Stonawski et al. 2016), the contrast in fertility timing between Muslim and non-Muslim post-Soviet countries suggests that differences in gender roles come into play.[3]

Therefore, the central hypothesis considered in this chapter is that the lack of fertility postponement is related to retaining traditional family institutions and gender asymmetries.

Following existing research on measuring gender relations, the authors use several indicators of gender asymmetries in the analysis.

First, these include factors of gender equality, rather than gender equity, in McDonald (2000). Under that distinction, gender equality is an "objective" concept that compares outcomes for men and women in areas such as education, employment, wages, and so on (whereas gender equity is a more subtle parameter that shows to what extent men and women consider differences of those outcomes in the society to be fair). In recent decades, Central Asia has experienced considerable social changes related to massive rural-to-urban migration of the indigenous population (Demko et al. 2018; Kasenov 2017; Wei et al. 2018). These resulted in a gradual growth of women with higher education and women working outside the traditional agricultural economy. However, these changes differed remarkably in their speed and depth

[3]This does not mean that the relation between strict gender asymmetries and early timing is restricted to Muslim societies. In some post-Soviet countries with a different religious composition of population retaining or revival of traditional gender relations was considered as one of the possible reasons for certain changes in fertility (see Klüsener et al. 2019 for Belarus).

across various parts of the region, ethnicities, and so on. Therefore, the "objective" parameters, such as educational level and labor force participation of women, are important indicators of gender relations in today's Central Asia, which probably can point to differences not only between countries, but also between smaller areas, population groups, and so on.

Second, the authors use parameters that indicate the level of patriarchy in a woman's family. Patriarchy, following Gruber et al. (2012) and Lerch (2013), is the domination of men over women and of older generations over younger generations in a family. Among the indicators of patriarchy acknowledged in the studies just quoted, the age gap between husband and wife plays an important role, as typical patriarchal order assumes younger age of women at marriage compared to men. Another possible indicator of a woman's subordinate position in relation to her husband is domestic violence practiced by the husband towards her and/or the woman's finding of domestic violence as being acceptable, at least conditionally (Wallach et al. 2010; Martinez and Khalil 2013). Women's preference for male newborn children is also treated as a signal of a high level of patriarchy in her family (Mitra 2014). For Central Asia, patterns of patriarchy have been reported as typically followed by indigenous peoples throughout the Soviet era (Edgar 2006). This suggests that the patriarchy parameters remain relevant for the analysis of gender relations in this region.

Additionally, the authors use the educational gap between women and their husbands as indicators of gender relations. This indicator is somehow in-between the "objective" parameters of gender equality and the parameters of family norms (patriarchy) because differences in education between spouses can arise either from customs and norms of the society or from economic and institutional reasons that limit women' s access to education (Stromquist 1990; Inglehart et al. 2017). However, whatever the reason may be for gender gaps in education, these gaps obviously strengthen general gender asymmetries.

For all the parameters of gender relations listed in the present section, the ways in which they can influence fertility have been extensively discussed in a large number of studies (see e.g., Phan 2013 for a recent overview). Despite much debate on particular mechanisms relating fertility and women's position in a society, it is generally agreed that higher fertility and women's younger age at the first marriage and first birth correspond to more pronounced gender asymmetries and patriarchy.

2.3 The Research Strategy

From the post-Soviet countries that demonstrated no clear tendency towards fertility postponement between the mid-2000s and mid-2010s, Kyrgyzstan was chosen. This choice is justified by the better availability of representative surveys of women of reproductive age for Kyrgyzstan than for the other countries with stability of fertility timing mentioned above. Surveys are essential for the study because, unlike official statistics, they allow following up relations between fertility parameters and the characteristics of gender relations at the level of individual respondents. Kyrgyzstan is

the only post-Soviet country without a shift of fertility peak to the ages of 25–29, for which two sample surveys were available for the period under study. These include the Demography and Health Survey of 2012 (DHS2012) and the Multiple Indicators Cluster Survey of 2014 (MICS2014). Parallel analysis of the two independent samples of these surveys enhances the reliability of the study's results. The authors concentrate on women of indigenous ethnicities of Kyrgyzstan (Kyrgyz and Uzbeks), as ethnic Russians of Central Asia generally followed fertility-eldering paths similar to their co-ethnics in other countries in post-Soviet times (Agadjanian et al. 2013; Spoorenberg 2017; see below in this section for the proxies for ethnicity used in the analysis).[4]

The authors deal with the hazards of the first childbearing in relation to gender asymmetries. The scope of the study is restricted to the first childbearing because its propensity is essential for fertility patterns in general. Moreover, there are special reasons to hypothesize the significance of gender relations for transition to the first birth because strict gender asymmetries are expected to be prohibitive to women's (voluntary) childlessness and therefore make propensity to transition to the first child especially high. Since Kyrgyzstan is a country with a very low level of out-of-marriage fertility (see below for some details), the hazards of the first birth in that country are decomposed into hazards of entering the first marriage for all women and hazards of transitioning from the first marriage to the first birth. For this reason, the authors run two sets of models, one treating the hazards of entering the first marriage for all women starting with the age of 15 years, and the other one treating the hazards of the first birth for women who have been married since the first marriage. The surveys allow them to undertake such an analysis as they offer data on the age of respondents both at entering the first marriage and the first birth.[5] The two sets of models are considered independently for the samples of the two surveys, producing highly similar results. Hazards of the first marriage and the first birth in marriage for five-year birth cohorts are compared, from 1970–1974 to 1990–1994 years of birth. Elder cohorts present in the samples of the surveys were not included in the analysis because in the period under study, between the mid-2000s and mid-2010s, they were at the very end of their reproductive age or had already passed it.

The cohort perspective looked most appropriate for the study because the birth cohorts included in the analysis differed considerably in their life experience—the older ones being born and undergoing their initial socialization in the Soviet era, and the youngest growing up in a society that was considerably different from Soviet social patterns. All the cohorts witnessed the turmoil following the collapse of the USSR but experienced it at different stages of their biography. This allows us to expect differences between the cohorts in both fertility behavior and typical patterns of gender relations.

[4]In 2018 the proportion of ethnic Kyrgyz was about 73.3% according to the National Statistical Committee of Kyrgyz Republic: Uzbek at 14.7% and Russians at 5.6%. No other ethnicity had a proportion higher than 1% (http://www.stat.kg/ru/opendata/category/312/).

[5]Both surveys supply the dates of the actual start of the women's first marriage, whether registered or not. The MICS questionnaire asked for the date when a respondent "first married or started living with a man as if married," while the DHS asked about "starting living with the first husband/partner."

2.3.1 Data Sources

The DHS2012 was carried out in August to December 2012 and included 8,208 women born in 1962–1997 in its individualized record set. The MICS2014, conducted in April to June 2014, covered 6,854 women born in 1964–1999. Thus, the samples of both surveys included women of the cohorts chosen for the study. Individualized data sets of both surveys contained data of women's first marriage and first birth (year and month), enabling a straightforward way to calculate women's age at both events, as well as the number of months between women reaching the exact age of 15, her entering the first marriage and the first child bearing, if any of these events had taken place before the survey. In addition, both surveys included a number of the indicators of gender relations according to the assumptions outlined in Sect. 2.2 (for particular parameters, see the description of models below).

Since the authors concentrate only on Kyrgyz and Uzbek women and only on those born between 1970 and 1994, the samples of the study were smaller than the whole survey samples. Table 2.1 summarizes the demographic characteristics of the samples included in the study.

In Kazenin and Kozlov (2020), reliability of the DHS2012 and MICS2014 data is discussed in detail. Here, the authors briefly consider two potential sources of biases in these surveys that can be considered the most important. First, it is often expected that sample surveys in developing countries tend to underestimate the proportions of childless and single women (see e.g., Hull and Hartanto 2009), arguing that the DHSs held in Indonesia give lower proportions of single women than censuses in that country do). This problem was acknowledged for the Kyrgyzstan DHS2012 by Spoorenberg (2017), who argued for underrepresentation of childlessness in the DHS2012 compared with vital statistics from the National Statistics Office of Kyrgyzstan. Obviously, this underrepresentation can distort the estimation of fertility

Table 2.1 Demographic characteristics of the MICS and the DHS samples included in the analysis

	MICS		DHS	
	Mean	N	Mean	N
Age (std. dev.)	30.3 (7.01)	4523	28.61 (7.07)	4811
Share of rural inhabitants, %	61.9	4523	67.5	4811
Share of women in marriage, %	83.7	4523	75.1	4811
Share of Kyrgyz language speakers, %	82.4	4523	92.9	4811
Share of women with higher education (DHS), with secondary professional and tertiary education (MICS)	48.4	4523	44.7	4811

timing based on survey results. However, there are reasons to assume that these distortions, if present, are more likely to produce incorrect estimations of births at ages 25 + than in younger ages because, as shown in Kazenin and Kolzov (2020), disparities between the surveys and the census become larger starting from the age of 25.

Another possible reason for distortions in the surveys' data on fertility in the case of Kyrgyzstan concerns out-migration. Labor migration from Kyrgyzstan, mainly targeting Russia, has been quite intensive in recent decades.[6] In cases where the out-migration of women of reproductive ages is intensive, survey results may be biased, as they do not reflect the fertility of those women who were temporarily absent from the country because of working abroad at the time of the survey. Births given by such women during their stay in Kyrgyzstan are out of the surveys' scope. Importantly, migrants are often selective for lower fertility in their home country before migration. This is especially likely for labor migrants, which typically include more educated and less family-oriented women.[7] Because of this, the absence of current migrants from survey samples is likely to result in a bias towards higher meanings of the fertility indicators. However, note that available sources on the age composition of labor migrants from Kyrgyzstan do not suggest that women absent from the country because of temporary labor migration are concentrated in the younger age groups (15–19, 20–24, and 25–29) (Florinskaya et al. 2015). Therefore, although labor migration can cause overestimation of fertility levels in sample results, this overestimation is not expected to be stronger in young people than in older ones.

2.3.2 The Models

Proportional hazard models are estimated for the transitions: (1) to the first marriage, for all women aged 15 and above and (2) to the first child bearing, for women after entering their first marriage. Since the samples included childless women and women who had never been married, rightward censoring took place in both types of models. For each woman, the period for which hazards of the first marriage were considered started at 15 years 0 months and ended either in the month when she entered her first marriage or the month of the survey (for those who had never been married before the survey). The period for which hazards of the first birth were considered started

[6] Kyrgyz migration survey reported more than 700 thousand Kyrgyz citizens registered in other countries (including 640 thousand in Russia) in 2018 (State migration service of Kyrgyz government 2020). Russian official statistics reported 360–400 thousand labor migrants from Kyrgyzstan (10% of all labor migrants coming to Russia) in 2016 (Zajonchkovskaya et al. 2018, p. 368). Notably, the proportion of women among migrants from Kyrgyzstan to Russia was about 40% in recent years, which is higher than among most of other migration flows targeting Central and Eastern Europe (FIDH 2016).

[7] Note that the results of the Russian Census 2010 agree with the suggestion of selectivity of Kyrgyz migrants for lower fertility. That is, the completed fertility of real cohorts of Kyrgyz women living in Russia indicated by Census results (not shown here) is much lower compared with the same cohorts of women Kyrgyzstan.

at the month when the women entered her first marriage and ended in the month of the first birth or in the month of the survey (for childless women).

For both the transition to the first marriage and the first birth cohorts, effects were estimated together with the effects of the gender relations parameters discussed in Sect. 2.2 and the control variables (the ways the variables were calculated are introduced in the next sub-section). The models were run separately for the DHS and for the MICS samples. The modeling results, produced as maximum likelihood estimates of parameter effects, are presented in the following section in the form of hazard ratios. In accordance with the theoretical assumptions outlined in Sect. 2.2, the following gender relations parameters are involved in the models:

1. *Domestic violence*: A dichotomous parameter showing whether a woman finds a husband beating his wife as appropriate, at least in some circumstances (43.7% of the MICS respondents and 41.3% of the DHS respondents expressed their approval of domestic violence);
2. *Educational level of women*: Due to differences in education measurements between the DHS and MICS data, parameters indicating educational level were not identical for the two surveys. Women with education higher than secondary were contrasted with other women by a dichotomous parameter introduced for the DHS, where the proportion of women having reached this educational level was 48.4%. For the MICS, a dichotomous parameter indicated if a woman had professional education (either tertiary or secondary); women with positive meaning of this parameter accounted for 44.7% of the MICS sample. The databases of both surveys did not contain information about the age at which a woman completed her education. This did not allow us to supply distinct meanings of this parameter to each month of the woman's life course included in the analysis, which would have been the most correct treatment of the educational parameters in the models. Therefore, the only option was to consider educational level as a parameter invariable for a woman in the process of time. There is an assumption that the temporal invariability of the educational parameter would not distort the results of the analysis. The reason for this is that women are enrolled in both tertiary and secondary professional education at relatively early ages in Kyrgyzstan (cf. Education 2018). Given such educational "timing," the expected period between reaching the age of 15 and starting tertiary or secondary professional education is rather brief. Moreover, it is natural to expect that this period in the life of a woman would also be influenced by plans for further education. This justifies the use of education as a parameter invariable in time;
3. *Preferences of the child's gender*: Whether a respondent prefers a boy to a girl as an extra child (for the DHS only; 13.6% of respondents expressed this preference);
4. The *education gap between spouses*: (for the DHS only; among married women of the DHS sample, 20.1% (11.6%) had higher (lower) education than their husband, and no spousal education gap was registered for the others);
5. The *age gap between spouses*: The average gap was 4.54 (4.03) years for the MICS (DHS) sample.

Clearly, the first three of the listed parameters refer to both married and unmarried women, whereas the last two parameters refer to married women only. Therefore, all five parameters were used in modeling the hazards of the first birth for married women, but only the first three parameters were used to model the hazards of entering the first marriage.

The authors use a number of control parameters in their study of gender asymmetries. The cohort parameter distinguished between women in the following years of birth: 1970–1974 (17.8% of the sample in the MICS and 15.7% of the sample in the DHS), 1975–1979 (19.5 and 16.7%), 1980–1984 (23.2 and 19.4%), 1985–1989 (24.3 and 24.5%), and 1990–1994 (15.2 and 23.5%). The authors control for the urban/rural residence of a woman, as gender asymmetries are always expected to be more stable in rural milieus. In addition, ethnicity is also controlled for since interethnic differences in reproductive behavior and possibly also in family traditionalism in post-Soviet Central Asia have been reported in a number of studies (Agadjanian et al. 2013; Spoorenberg 2015). Unfortunately, no direct questions about women's ethnicity were asked either in the DHS or MICS. In the former, the "proxy" for ethnicity was the native language of the respondent, and in the latter it was the native language of the head of the respondent's household. As the study concerns only indigenous people of Kyrgyzstan, the parameters included in the models distinguished only between Kyrgyz and Uzbek speakers. Finally, the family wealth index is used as an additional control parameter because the distribution of gender roles can be different from one income group to another (Roy and Chaudhuri 2008). This parameter was present in the DHS and MICS databases. In both surveys, wealth indices were calculated using data on women's households, including ownership of a number of consumer items and other characteristics related to wealth status. Women were divided into quintiles on the family wealth index in both surveys.

2.4 Results

Consider first the models with the hazard of first marriage as the dependent parameter.[8] The models for both MICS and DHS samples confirm the postponement of entering the first marriage for the younger cohorts compared with the older ones. After including the gender relations parameters and the control parameters in the models, the first marriage hazards still remain significantly lower for younger cohorts. For the cohorts born between 1980–1984 and 1985–1989, the first marriage hazards were significantly lower than for elder cohorts in both samples. For the youngest cohort (1990–1994), hazard changes were counter-directed in the two surveys. Note that this cohort had spent few years in its adult life by 2012 and 2014, and future surveys are needed to obtain a more reliable picture of its nuptiality (possibly the results of the MICS2018 will be helpful for this purpose) (Table 2.2).[9]

[8] See Sect. 2.6 for further discussion.

Table 2.2 The hazard ratios for the first marriage in Kyrgyzstan (only for Kyrgyz and Uzbek women)

	Model 1		Model 2		Model 3	
	HR	St. errors	HR	St. errors	HR	St. errors
(a) The DHS 2012 database						
Cohort 1970–74	1		1		1	
Cohort 1975–79	1.024	0.051	1.027	0.0526	1.015	0.0519
Cohort 1980–84	0.912[a]	0.050	0.913[a]	0.0456	0.903[b]	0.0451
Cohort 1985–9	0.848[c]	0.049	0.848[c]	0.0416	0.844[c]	0.0414
Cohort 1990–94	0.815[c]	0.060	0.827[c]	0.0497	0.821[c]	0.0493
Rural	1.37[c]	0.036	0.883[b]	0.0511	1.331[c]	0.0489
Uzbek language	1.022	0.062	1.070	0.0672	0.988	0.0619
Education higher than secondary	0.62[c]	0.033	0.625[c]	0.0209	0.630[c]	0.0212
Wealth index 1 (lowest)			1			
Wealth index 2			1.002	0.0491		
Wealth index 3			0.764[c]	0.0418		
Wealth index 4			0.516[c]	0.0374		
Wealth index 5 (highest)			1.027	0.0526		
Supports domestic violence					0.903[b]	0.0451
(b) The MICS 2014 database						
	Model 1		Model 2		Model 3	
	HR	St. errors	HR	St. errors	HR	St. errors
Cohort 1970–74	1		1		1	
Cohort 1975–79	1.019	0.054	1.011	0.054	1.017	0.054
Cohort 1980–84	0.827[c]	0.052	0.826[c]	0.052	0.827[c]	0.052
Cohort 1985–89	0.903[b]	0.051	0.902[b]	0.051	0.903[b]	0.051
Cohort 1990–94	1.132[b]	0.055	1.145[b]	0.055	1.131[b]	0.055
Rural	1.225[c]	0.044	1.222[c]	0.034	1.15[c]	0.044
Uzbek language	1.175[c]	0.044	1.168[c]	0.043	1.142[c]	0.044
Education: professional	0.625[c]	0.035	0.639[c]	0.034	0.637[c]	0.035
Wealth index 1 (lowest)					1	
Wealth index 2					1.040	0.047
Wealth index 3					0.992	0.048
Wealth index 4					1.056	0.055
Wealth index 5 (highest)					0.841[c]	0.066
Supports domestic violence			1.182[c]	0.032		

Here and after [a], [b], and [c] denote significance at the 1, 5, and 10% levels, respectively

Among the gender relations parameters, lower education and support of family violence make the first marriage hazards significantly higher. The significance of the two gender relations parameters for the first marriage hazards provides strong evidence that gender relations are an important regulator of nuptiality for the cohorts under study in Kyrgyzstan. The control parameter of rural residence made the first marriage hazards significantly higher in the models run for the DHS sample (except for the model where the wealth index is controlled for), but this was not significant for the MICS sample. The hazards of the first marriage were significantly lower among women of the third and fourth wealth quintiles for the DHS and the wealthiest quintile for the MICS sample. Finally, the hazards for Uzbek speakers were significantly higher for the MICS, but no significant "linguistic" contrasts were observed in the DHS sample (the authors do not discuss possible reasons for ethnic differences below; see Nedoluzhko 2012 for a discussion of possible origins of differences in demographic behavior of Kyrgyz and Uzbeks in Kyrgyzstan).

Now, let us turn to the hazards of the first birth among women who have never been married (Table 2.3). For both surveys, the authors observe significantly higher first-birth hazards for younger cohorts, starting with women born in 1985 for the DHS and with women born in 1980 for the MICS sample. The higher propensity of the first birth in marriage was characteristic for rural residents and the lower propensity for women of high wealth quintiles (only in the DHS sample). Among the gender relations parameters, attitudes toward domestic violence and spousal education gap were insignificant, and age gap (although significant) had a hazard ratio close to 1. Women's higher education, somewhat contrary to expectations, was associated with significantly higher first-birth hazards. Thus, unlike first marriage hazards, where the analysis of both surveys pointed to the significance of a number of the gender relations parameters, for the hazards of the first birth, both surveys did not point to the significance of gender relations parameters.

2.5 Interpretation of the Results and Discussion

The models fitted for both the DHS and MICS samples have pointed to a somewhat inverse dynamics of the first marriage and the first birth hazards between the birth cohorts from 1970–1974 to 1990–1994. The hazards of the first marriage became significantly lower from the elder to the younger cohorts, whereas the hazards of the first birth became higher for the younger cohorts (results for the two surveys did not agree only in trends for the youngest cohort). Low first marriage hazards in younger cohorts fit the commonly expected picture of modernizing demographic changes in developing countries (Coontz 2004). Moreover, the analysis has shown that first marriage hazards are higher with lower education of a woman and with

[9]Note that models estimated for the MICS2014 sample in Kazenin and Kozlov (2020) give slightly different results for inter-cohort hazard ratios. There models are run for the whole sample of the MICS2014, unlike models only for the two biggest indigenous ethnicities in the present chapter.

Table 2.3 The hazard ratios for the first birth in marriage in Kyrgyzstan (only for Kyrgyz and Uzbek women)

	Model 1		Model 2		Model 3		Model 4	
	HR	St. errors	HR	St. errors	HR	St. errors	HR	St. errors
(a) The DHS 2012 database								
Cohort 1970–74	1		1		1		1	
Cohort 1975–79	1.070	0.052	1.063	0.0548	1.065	0.0548	1.062	0.0547
Cohort 1980–84	0.993	0.051	1.066	0.0540	1.061	0.0537	1.061	0.0537
Cohort 1985–89	1.17[c]	0.051	1.318[c]	0.0664	1.315[c]	0.0662	1.313[c]	0.0661
Cohort 1990–94	1.379[c]	0.068	1.757[c]	0.119	1.773[c]	0.120	1.759[c]	0.118
Rural	1.261[c]	0.039	1.044	0.0635	1.187[c]	0.0463	1.151[c]	0.0438
Uzbek language	1.008	0.066	1.032	0.0686	1.007	0.0665	0.976	0.0633
Education higher than secondary	1.096[c]	0.035	1.123[c]	0.0393	1.116[c]	0.0391		
Wealth index 1 (lowest)			1					
Wealth index 2			0.96	0.0479				
Wealth index 3			0.910[a]	0.0466				
Wealth index 4			0.880[b]	0.0507				
Wealth index 5 (highest)			0.779[c]	0.0609				
Supports domestic violence			1.063	0.0548	1.065	0.0548		
Education gap (wife higher)							1	
Education gap (the same)							0.901[b]	0.0386

(continued)

Table 2.3 (continued)

	Model 1		Model 2		Model 3		Model 4	
	HR	St. errors	HR	St. errors	HR	St. errors	HR	St. errors
Education gap (wife lower)							0.914	0.0568
Age gap							0.989[a]	0.005
(b) The MICS2014 database								
	Model 1		Model 2		Model 3		Model 4	
	HR	St. errors	HR	St. errors	HR	St. errors	HR	St. errors
Cohort 1970–74	1		1		1		1	
Cohort 1975–79	1.043	0.055	1.044	0.055	1.043	0.055	1.061	0.058
Cohort 1980–84	1.069	0.052	1.071	0.052	1.071	0.052	1.119**	0.055
Cohort 1985–89	1.145[a]	0.052	1.147[c]	0.052	1.145[c]	0.052	1.146[b]	0.054
Cohort 1990–94	1.284[a]	0.058	1.283[c]	0.058	1.285[c]	0.058	1.286[c]	0.061
Rural	1.073[b]	0.035	1.083[a]	0.044	1.068[a]	0.036	1.029	0.037
Uzbek language					0.974	0.045	0.999	0.046
Education: professional	1.078[b]	0.034	1.076[b]	0.035	1.078[b]	0.035	1.051	0.036
Wealth index 1 (lowest)			1					
Wealth index 2			0.993	0.048				
Wealth index 3			0.976	0.050				
Wealth index 4			1.038	0.056				
Wealth index 5 (highest)			0.998	0.066				
Supports domestic violence					1.048	0.033		
Age gap							0.998	0.003

her treating as appropriate a husband's violence toward his wife. Therefore, the lower economic independence of a woman and her acceptance of some patriarch family norms are statistically associated with a higher propensity to enter her first marriage. This makes the picture somewhat "classical" for developing countries, with more pronounced gender asymmetries resisting changes in the life course of women, which nevertheless take place between birth cohorts. Higher first marriage hazards for rural women support this conclusion, as rural populations generally are expected to demonstrate more gender conservatism, as well as more "traditional" age patterns of key demographic events.

Note that the conclusions regarding the first marriage agree in two important aspects with the findings of Nedoluzhko and Agadjanian (2015) and Agadjanian et al. (2013) on marriage in post-Soviet Kyrgyzstan. First, based on a different survey, these studies show that marriage generally declined in Kyrgyzstan in the 2000s compared with the 1990s (the authors conclude on a period decline of marriages, but the cohorts for which a significant decline in marital activity was observed in the present study entered their adulthood for the most part exactly in the 2000s). Second, the relation of lower first marriage hazards to more "modernized" gender relations discovered in the present chapter also agrees with the conclusion of Nedoluzhko and Agadjanian (2015) that the decline in marriage in the 2000s was accompanied by certain detraditionalization of family life (they demonstrate detraditionalization with a decrease in arranged marriages, a parameter not available from the data we use in this chapter). In addition, the results concerning first marriage hazards presented in this chapter are in line with a large number of recent studies on different countries showing that marital activity declines with social changes that make women's role in society less restricted by traditional norms (see e.g., Jejeebhoy 1995 for an overview, Gore and Carlson 2010 for Turkey, Ikamari 2005 for Kenya, among many others).

It has to be added that the analysis for the first marriage actually concerns only the comparative intensity of entering the first marriage by different cohorts at ages they have already passed through. Since none of the cohorts under analysis reached the age of 50 by the time of the surveys, the analysis does not definitely mention the resulting proportions of having ever been in marriage in the cohorts under study.

However, for the hazards of the first birth in marriage, the picture that we found is more complex and less expected. Indeed, a departure from traditional family norms is usually supposed to result in a decrease of birth hazards rather than in their increase, which the analysis has pointed to. Another unexpected result is that, unlike first marriage hazards, first birth hazards showed no positive relation to more pronounced gender asymmetries. Among the parameters considered to be gender-related, only women' s educational level was significant for first birth hazards, but it made them higher, contrary to expectations.

A possible explanation for the observed difference between first marriage and first birth hazards is that higher first birth hazards in younger cohorts result from postponement of the first marriage. As the gender asymmetries prescribing early first marriage for women become weaker for younger cohorts, women's marital behavior may become more conscious, so that women tend to enter their first marriage not just when they reach the "prescribed" age, but when they have chosen to have children.

If this is so, no decrease in the hazards of the first birth in marriage is expected for younger cohorts. Moreover, it is expected that these hazards have no positive relation to gender asymmetries, as a quick transition from entering the first marriage to the first child bearing is not associated with family "traditionalism" under this account.

Postponing the first marriage until a decision is made to have a child looks especially reasonable when out-of-marriage fertility is of low acceptability in society. Note that available sources indicate a low propensity for non-marital births in today's Kyrgyzstan. Thus, the sample surveys that the study is based on both point to a very low level of fertility of women who have never been married. From the DHS and the MICS samples, among Kyrgyz and Uzbek women in this category, less than 0.1% had a child. In addition, for less than 1% of the women having at least one child, the reported date of the first birth preceded the date of entering the first marriage. According to the Kyrgyzstan Population Census (2009), only 1.9% of women who identified themselves as single (as opposed to married, divorced, and widowed) had at least one child.[10]

The inter-cohort developments that are observed in Kyrgyzstan probably demonstrate a path that nuptiality and fertility behavior may follow when gender asymmetries become weaker and give women more freedom in their solutions regarding family life, but fertility out of marriage, whether registered or not, is not considered as a "legal" option. One can expect that the counter-directed dynamics of the hazards of the first marriage and the first birth that were observed can also be detected in other countries where traditional gender asymmetries are weakened, but fertility of single mothers is considered as highly undesirable. Additional research is needed to determine whether this expectation is borne out.

Turning back to the stability of inputs of different age groups to total fertility in Kyrgyzstan, the analysis implies that the peak of fertility will remain in the age of 20–24, as long as the peak of marital activity of women will not go beyond that age. For today, it is not expected to exceed the 25-year boundary, which is indirectly shown by official statistics, as the mother's mean age at the first birth fluctuated between 23.2 and 22.9 years in 2004–2018 (Kyrgyzstan Yearbook 2019). Women's mean age at the first marriage is expected to be lower under these circumstances.

Another implication of the analysis is that the stability of fertility age patterns in post-Soviet countries does not necessarily mean preservation of traditional family norms with pronounced gender asymmetries. The weakening of gender asymmetries can have different implications for fertility depending upon other norms that are active in a society, such as norms concerning out-of-marriage births.

2.6 Conclusions

In the present chapter, the authors have attempted to discover gender-related correlates of fertility in a post-Soviet country in Central Asia, Kyrgyzstan. Kyrgyzstan is

[10] See Denissenko et al. (2012) for a detailed discussion of out-of-marriage fertility in Kyrgyzstan.

among those post-Soviet countries that (somewhat against the trend dominating in the post-Soviet space) did not show a pronounced fertility postponement between the mid-2000s and the mid-2010s. Most populations of Kyrgyzstan are Muslims and, as commonly expected that gender asymmetries are better preserved in Muslim societies, we hypothesized that young age patterns of fertility in Kyrgyzstan are supported by gender asymmetries.

To test this hypothesis, the authors measured first marriage and first birth hazards among five-year birth cohorts of women of indigenous Kyrgyzstan ethnicities (Kyrgyz and Uzbeks) born from 1970–1974 to 1990–1994 in two representative survey samples held in this country, the DHS2012 and the MICS2014. The decomposition of first birth hazards into hazards of the first marriage and of the first birth in marriage was justified, as out-of-marriage fertility is of very low level in Kyrgyzstan. The key findings can be summarized as follows. First, the hazards of entering the first marriage become lower toward younger cohorts; however, first birth hazards oppositely become higher. Second, more pronounced gender asymmetries are related to a higher propensity of entering the first marriage, but are not significant for the propensity of the first marital births.

To account for this result, the authors suggested that the observed hazard configuration is expected if entering the first marriage becomes less regulated by traditional gender norms that prescribe a young age for women at the first marriage, but out-of-marriage fertility is considered as highly socially undesirable. Under this setting, entering the first marriage tends to become more of a conscious choice. Moreover, in terms of timing, readiness to have children is one of the central preconditions of this choice. Therefore, first birth hazards in marriage are not expected to be positively related to any kind of family "traditionalism," including strict gender asymmetries, or to become lower toward younger cohorts. Under this account, the lack of fertility postponement in Kyrgyzstan is expected as long as the mean age at the first marriage remains low enough in this country. However, if in the future the mean age at the first marriage grows beyond the boundaries of the 20–24 age group, as expected under the gradual "detraditionalization" of family norms, the peak of fertility is also expected to shift to the 25–29 age group.

Overall, the study does not confirm the hypothesis that the post-Soviet countries where no fertility postponement is observed are characterized by stably conservative gender relations. The example of Kyrgyzstan shows that under gradual weakening of gender asymmetries, fertility postponement can be resisted by other social norms, such as low acceptability of out-of-marriage fertility. Whether this holds true for other post-Soviet countries that do not demonstrate fertility postponement is a subject for future research.

Acknowledgements The chapter was written on the basis of the RANEPA state assignment research program and the research project implemented as part of the Basic Research Program at the National Research University Higher School of Economics (HSE University).

References

Agadjanian V (1999) Post-Soviet demographic paradoxes: Ethnic differences in marriage and fertility in Kazakhstan. Sociol Forum 14(3): 425–446

Agadjanian V, Dommaraju P, Nedoluzhko L (2013) Economic fortunes, ethnic divides, and marriage and fertility in Central Asia: Kazakhstan and Kyrgyzstan compared. Journal of Population Research 30(3): 197–211

Billingsley S, Duntava A (2017) Putting the pieces together: 40 years of fertility trends across 19 post-socialist countries. Post-Sov Aff 33(5): 389–410

Bongaarts J, Mensch BS, Blanc AK (2017) Trends in the age of reproductive transitions in the developing world: the role of education. Population Studies 71(2): 139–154

Chudinovskikh O (2006) Statistics of international migration in the CIS countries. UNICEF Workshop on international migration statistics for countries of CIS and SEE

Constantine EA (2007) Practical consequences of Soviet policy and ideology for gender in Central Asia and contemporary reversal. 115. In: Sahadeo J, Zanca R (eds.) Everyday Life in Central Asia: Past and Present. Indiana University Press, Bloomington and Indianapolis, pp 115–126

Coontz S (2004) The world historical transformation of marriage. J Marriage Fam 66(4): 974–979

Demko GJ, Ioffe G, Zaionchkovskaya ZH (eds.) (2018) Population Under duress: Geodemography of post-Soviet Russia. Routledge, London

Denissenko M, Kalmykova N, Nedoluzhko L (2012) Nuptiality and fertility in Kyrgyzstan. Demoscope Weekly, 493–494, 1–22 January 2012 (in Russian)

Education (2018) Education and science in the Republic of Kyrgyzstan, 2013–2017. Bishkek. (in Russian) http://www.stat.kg/ru/publications/sbornik-obrazovanie-i-nauka-v-kyrgyzskoj-respublike/

Edgar A (2006) Bolshevism, patriarchy, and the nation: The Soviet "emancipation" of Muslim women in Pan-Islamic perspective. Slav Rev 65(2): 252–272

FIDH (2016) Women and children from Kyrgyzstan affected by migration. September 2016: 675a. https://www.fidh.org/IMG/pdf/rapport_kyrgyzstan_uk-2-web2.pdf (addressed 25.06.2020)

Florinskaya J, Mkrtchyan N, Maleva T, Kirillova M (2015) Migration and labor market. Delo, Moscow (in Russian)

Frejka T, Gietel–Basten S, Abolina L, Abuladze L et al. (2016) Fertility and family policies in Central and Eastern Europe after 1990. Comparative Population Studies 41(1): 3–56

Funk N, Mueller M (eds) (2018) Gender politics and post-communism: Reflections from Eastern Europe and the former Soviet Union. Routledge, London

Gore DL, Carlson E (2010) Ethnicity, education, and the non-proportional hazard of first marriage in Turkey. Popul Stud 64(2): 179–191

Gruber S, Szołtysek M (2012) Quantifying patriarchy: An explorative comparison of two joint family societies. Max Planck Institute for Demographic Research Working Paper 17: 1–33

Hull TH, Hartanto W (2009) Resolving contradictions in Indonesian fertility estimates. Bulletin of Indonesian Economic Studies 45(1): 61–71

Ikamari L (2005) The effect of education on the timing of marriage in Kenya. Demographic Research 12: 1–28

Inglehart RF, Ponarin E, Inglehart RC (2017) Cultural change, slow and fast: The distinctive trajectory of norms governing gender equality and sexual orientation. Social Forces 95(4): 1313–1340

Ishkanian A (2003) Gendered transitions: The impact of the post-Soviet transition on women in Central Asia and the Caucasus. Perspect Glob Dev Technol 2(3): 475–496

Jejeebhoy SJ (1995) Women's education, autonomy, and reproductive behaviour: experience from developing countries. Clarendon Press, Oxford

Karabchuk T, Kumo K, Selezneva E (2017) Demography of Russia. From the Past to the Present. Palgrave Macmillan

Kasenov U (2017) Post-Soviet modernization in Central Asia: realities and prospects. In: Rumer B, Zhukov S (eds.) Central Asia: Challenges of Independence. Routledge, New York, pp 28–53

Kazenin K, Kozlov V (2016). Rejuvenation of motherhood in Daghestan: A tendency or an artifact? (Preliminary results of a survey of rural population). Demograficheskoe obozrenie [Demogr Rev] 3(3): 100–123

Kazenin K, Kozlov V (2020) What factors support the early age patterns of fertility in a developing country: The case of Kyrgyzstan. To appear in Vienna Yearbook for Population Research 2020

Klüsener S, Jasilioniene A, Yuodeshko V (2019) Retraditionalization as a pathway to escape lowest-low fertility? Characteristics and prospects of the Eastern European "Baby boom." MPIDR Working Paper WP 2019–014

Knight CR, Brinton MC (2017) One egalitarianism or several? Two decades of gender-role attitude change in Europe. Am J Sociol 122(5): 1485–1532

Kyrgyzstan Population Census (2009) URL: https://data.humdata.org/dataset/kyrgyzstan-population-census-2009 (addressed 25.06.2020)

Kyrgyzstan Yearbook (2019) Demographic Yearbook of Kyrgyz Republic, 2014–2018. Bishkek, National Statistic Office of Kyrgyz Republic http://www.stat.kg/ru/publications/demograficheskij-ezhegodnik-kyrgyzskoj-respubliki/

Lerch M (2013) Patriarchy and fertility in Albania. Demogr Res 29: 133–166

Malhotra A, Vannemann R, Kisher S (1995) Fertility, dimensions of patriarchy, and development in India. Popul Dev Rev 21(2): 281–305

Martinez PR, Khalil H (2013) Battery and development: Exploring the link between intimate partner violence and modernization. Cross-Cult Res 47(3): 231–267

Mason KO (2001) Gender and family systems in the fertility transition. Popul Dev Rev 27: 160–176

McDonald P (2000) Gender equity in theories of fertility transition. Popul Dev Rev 26(3): 427–439

Mitra A (2014) Son preference in India: Implications for gender development. J Econ Issues 48(4): 1021–1037

Morgan SP, Stash S, Smith HL, Mason KO (2002) Muslim and non-Muslim differences in female autonomy and fertility: Evidence from four Asian countries. Popul Dev Rev 28(3): 515–537

Nedoluzhko L (2012) Achieved fertility and fertility intentions among ethnic groups in Central Asia: Kyrgyzstan, Tajikistan, and Uzbekistan compared. Stockholm Research Reports in Demography 2012: 4

Nedoluzhko L, Agadjanian V (2015) Between tradition and modernity: Marriage dynamics in Kyrgyzstan. Demography 52: 861–882

Penina O, Jdanov D, Grigoriev P (2015) Producing reliable mortality estimates in the context of distorted population statistics: The case of Moldova. Rostock: Max Planck Institute for Demographic Research

Phan L (2013) Women's empowerment and fertility changes. Int J Sociol Fam 49–75

Poliakov SP, Olcott MB (2016) Everyday Islam: Religion and tradition in rural Central Asia. Routledge, New York

Romaniuk A, Gladun O (2015) Demographic trends in Ukraine: Past, present, and future. Popul Dev Rev 41(2): 315–337

Roussel L (1994) Fertility and family. In: United Nations and Council of Europe. European Population Conference, Proceedings, vol. I, New York and Geneva, pp 35–110

Roy K, Chaudhuri A (2008) Influence of socioeconomic status, wealth and financial empowerment on gender differences in health and healthcare utilization in later life: Evidence from India. Social Science & Medicine 66(9): 1951–1962

Rychtarikova J (1999) Is Eastern Europe experiencing a second demographic transition. In: Workshop on lowest low FERTILITY, MPIDR, vol. 2, Rostock, pp 105–114

Salway SM (2007) Economic activity among UK Bangladeshi and Pakistani women in the 1990s: Evidence for continuity or change in the family resources survey. Journal of Ethnic and Migration Studies 33(5): 825–847. https:// https://doi.org/10.1080/13691830701359256

Spoorenberg T (2015) Explaining recent fertility increase in Central Asia. Asian Popul Stud 11(2): 115–133

Spoorenberg T (2017) The onset of fertility transition in Central Asia. Population 72(3): 473–504

State migration service of Kyrgyz government (2020) URL: http://ssm.gov.kg/en/ (addressed 25.06.2020)

Stonawski M, Potančokova M, Skirbekk V (2016) Fertility patterns of native and migrant Muslims in Europe. Popul, Space Place 8: 552–567

Stromquist NP (1990) Gender inequality in education: Accounting for women's subordination. Br J Sociol Educ 11(2): 137–153

Sulaberidze A, Archvadze J, Sulaberidze V (2019) The main factors of migration and the structure of migrants in post-communist Georgia. Demographic Rev 6(3): 128–151. https://doi.org/10.17323/demreview.v6i3.9859

Wallach HS, Weingram Z, Avitan O (2010) Attitudes toward domestic violence: A cultural perspective. J Interpers Violence 25(7): 1284–1297

Wei W, Zhu Y, Li H et al. (2018) Spatio-temporal reorganization of cropland development in Central Asia during the post-Soviet era: A sustainable implication in Kazakhstan. Sustainability 10(11): 40–42

Zakharov S (2008) Russian Federation: From the first to second demographic transition. Demographic Res 19(24): 907–972

Zakharov S (2018) Fertility, nuptiality, and family planning in Russia: Problems and prospects. In: Demko GJ, Ioffe G, Zaionchkovskaya Zh (eds.) (2018) Population Under Duress: Geodemography of Post-Soviet Russia. Routledge, London, pp 41–58

Zajonchkovskaya Zh, Florinskaya Ju, Doronina K (2018) International migration: regular observations and results of Microcensus-2015. In: Zakharov S (ed) Population of Russia: the 24th annual demographic report. Moscow: Vysshaja shkola ekonomiki

Chapter 3
Gender Differences Among Youth: Education to Job Transitions in Azerbaijan, Georgia and Tajikistan

Michael Gebel, Kseniia Gatskova, and Tatiana Karabchuk

Abstract Despite education expansion, decreasing fertility rate and economic progress, women still face labor market integration problems and labor market disadvantages compared to men around the world. This applies also to the region of the Caucasus and Central Asia (CCA) and especially to Muslim societies of the CCA region due to the general weak labor market attachment of women in Muslim countries. As gender inequalities emerge already quite early in the working life this chapter focuses on gender inequalities in the transition from education to work. The key research question is how strong gender inequality is among young people who are transiting from school to work in Azerbaijan, Georgia, and Tajikistan. The nationally representative, retrospective life history data from the TEW-CCA "Youth Transitions Surveys" of Azerbaijan, Georgia, and Tajikistan 2017 are used to answer the research question. The gender inequality is described here in various aspects of the transition from education to work. First, the labor market inactivity decision is examined. Second, among those who are active in the labor market, it is investigated how much time it takes from the time of graduation until the moment of finding a first job. Third, the quality of the first job obtained is analyzed in terms of chances of getting access to formal sector jobs. Comparing results across the three countries will allow us to highlight cross-country similarities and differences that are expected because of the common past Soviet institutional legacy and varying economic and cultural conditions.

M. Gebel (✉)
Department of Sociology, University of Bamberg, Bamberg, Germany
e-mail: michael.gebel@uni-bamberg.de

K. Gatskova
Department of Economics, Leibniz Institute for East and Southeast European Studies, Regensburg, Bayern, Germany
e-mail: gatskova@ios-regensburg.de

T. Karabchuk
Department of Government and Society, United Arab Emirates University, Al-Ain, United Arab Emirates
e-mail: tkarabchuk@uaeu.ac.ae

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_3

Keywords Youth · Gender differences · Employment · Job search · Azerbaijan · Georgia · Tajikistan

3.1 Introduction

Despite education expansion, decreasing fertility rate and economic progress, women still face labor market integration problems and labor market disadvantages compared to men around the world (Heyne 2017). This applies also to the region of the Caucasus and Central Asia (CCA) and especially to Muslim societies of the CCA region due to the generally weak labor market position of women in Muslim countries (Heyne 2017; Spierings et al. 2009; Spierings et al. 2010).

Gender inequalities emerge quite early in working life, especially after marriage and childbirth according to studies on Western countries (Brewster and Rindfuss 2000; van der Lippe and van Dijk 2002). In developing countries women's labor market disadvantage often arises earlier, already during the school-to-work transition. Females less actively join the labor market after school and usually have less opportunities to have good jobs (Elder and Kring 2016; Gebel and Heyne 2014). In the standard life course sequence, the transition from school to work represents a central life course event that young women face on their way to adulthood. Previous research has shown that decisions made at this stage of the life course set the track for the future labor market career and patterns of family formation (Blossfeld et al. 2008; Buchmann and Kriesi 2011; Schoon and Silbereisen 2009).

This chapter is following the research tradition of analyses on gender inequalities at labor market entry (Elder and Kring 2016; Iannelli and Smyth 2008; Smyth 2005) with the focus on the CCA region. The central aim of this chapter is to describe the gender inequality in various aspects of the transition from education to work in Azerbaijan, Georgia and Tajikistan.

While previous research has investigated women's school-to-work transition in high income countries, not much is known about youth transition processes in post-Soviet countries, particularly in the CCA region. A notable exception is an ILO report on gender-specific patterns of school-to-work transition in the CCA region but this report does not cover the three countries considered (Elder et al. 2015). Our study fills the research gap by providing the first detailed multivariate analyses of young women's labor market integration drawing on newly collected, nationally representative, retrospective life history survey data from the TEW-CCA "Youth Transitions Surveys" of Azerbaijan, Georgia, and Tajikistan 2017. Moreover, Azerbaijan, Georgia and Tajikistan also represent an interesting cross-country comparative setting for studying gender aspects in the transition from education to work due to similarities (mainly in the institutional setting) and differences (mainly in the economic development and cultural/religious background) of the three countries.

Gender differences are described with respect to key aspects of the school-to-work transition. First, the labor market inactivity decision is examined. Second, among those who are active in the labor market, it is investigated how much time

it takes from the time of graduation until the moment of finding a first job. Third, the quality of the first job obtained is analyzed in terms of chances of getting access to formal sector jobs. Comparing results across the three countries will allow us to highlight cross-country similarities and differences that are expected because of the common legacy and cultural and structural institutions inherited from Soviet Union.

This book chapter is organized as follows: Sect. 3.2 describes the structural, institutional and cultural background of the three countries analyzed. Then, the data set and sample is discussed. The description of the key variables and methods is given in Sect. 3.3 followed by empirical analyses for various aspects of the transition from education to work.

3.2 The Structural, Institutional and Cultural Background

Georgia, located at the Black Sea, and Azerbaijan, located at the Caspian Sea, are countries in the Caucasus. Tajikistan is a landlocked country in Central Asia sharing borders with China and Afghanistan among others. All three countries have a rather similar, relatively small population size (2016: ~9.8 million in Azerbaijan, ~8.7 million in Tajikistan, ~3.7 million in Georgia) (World Bank 2019). It is worth noticing that Tajikistan has the youngest population among the three countries with the increasing number of children every year, while the other two countries have the reversed population pyramids with the biggest share of 24–34 year groups in the population.

In general Azerbaijan and Georgia are better off economically, as they have higher GDP per capita than Tajikistan which is quite a poor country. According to World Bank data, the GDP per capita in 2017 was equal to 4131.67 USD in Azerbaijan; 4078.25 USD in Georgia; 800.97 USD in Tajikistan (World Bank 2019). At the same time total unemployment rate in Tajikistan is not that high (about 7% in 2016–2017) and comparable to Azerbaijan unemployment rate which is not more than 5%, while in Georgia it is about 14% (Statistical Yearbook of Georgia 2018; Demographic Year Book 2018; Socio-Economic Situation of the Countries of the Commonwealth of Independent States 2018; Statistical year Book of Azerbaijan 2019).

Azerbaijan, Georgia and Tajikistan, as well as many countries in the Caucasus and Central Asia, face the demographic challenge of a young population that needs to successfully make the transition to adulthood and economic self-sufficiency in an environment of increasing uncertainties (Elder et al. 2015; Lloyd 2005). Uncertainties stem from multiple causes. First, there are universal long-term trends causing uncertainties for youths such as globalization (Blossfeld et al. 2008). Second, in the specific context of post-socialist countries, the ongoing economic, institutional and social transformation processes have fundamentally shaped the transition process from education to work (Kogan et al. 2011). The demise of the socialist state and the emergent capitalist order put an end to former guarantees of lifetime employment and basic economic security for young people who are starting their labor market career. Azerbaijan, Georgia and Tajikistan suffered from very strong initial

economic recessions and reduced economic growth in the 1990s. Only in the 2000s growth regained some strength, particularly in Azerbaijan, which profited from its oil resources. Third, economic and political shocks due to wars, revolutions and regime changes in the CCA region have contributed to the uncertainties young people face in their life course. In times of unfavorable macro-economic conditions there are fewer job opportunities, which makes the transition to work problematic (Gangl 2002).

Azerbaijan, Georgia and Tajikistan have the Soviet and socialist institutional legacy in common. For example, their education systems had tight education-occupation linkages, a strong vocational system and a small and exclusive tertiary education system in the socialist period (Gerber 2003). In the transformation process education-occupation linkages have weakened, the vocational education system has become more and more unpopular and strong tertiary education expansion and differentiation took place (Kogan et al. 2011). This trend can be observed in Azerbaijan and Georgia and to a lesser extent in Tajikistan. Another similarity is the legacy of a socialist tradition of supporting female labor force integration which can be observed in other post-Soviet and post-Socialist societies as well (Gerber and Mayorova 2006; Kosyakova et al. 2017).

There is clear evidence that youths face great labor market problems in the three countries but there are cross-country differences in the extent and character of labor market problems. Comparable data, provided by World Bank, show that youth (15–24yo) unemployment (modeled ILO estimates) reaches 14.0% in Azerbaijan, 28.4% in Georgia and 19.2% in Tajikistan in 2018 (World Bank 2019), which reveals country differences in the capacity of bringing young people into work. Moreover, disadvantages in terms of job quality are reported for youths in general and young women in particular. Youths have smaller chances of finding a formal sector job and they often end up in jobs in the informal sector, which is of large size in all three countries (ILO 2014).

The three countries also have different religious backgrounds and share the existence of ethnic minority groups. Azerbaijan and Tajikistan are mainly Muslim, whereas Georgia has Orthodox Christian tradition. All three countries are characterized by ethnic minorities: Talysh, Lezgins and Armenians in Azerbaijan, Armenians and Azeris in Georgia and Uzbeks in Tajikistan. Outward migration is common in Georgia and Azerbaijan (Badurashvili 2009), and in Tajikistan this takes place in the form of seasonal migration for work to Russia (Olimova and Bosc 2003).

Each society imposes certain expectations on behavioral patterns of men and women and these expectations are reflected in gender attitudes (Marcus and Harper 2014; Oláh et al. 2018). That is why gender attitudes play an important role as cultural determinants of the patterns of youth's transition from education to work. The empirical data (for a description see Sect. 3.3) contains a battery of questions that measure gender attitudes of young people in Azerbaijan, Georgia and Tajikistan. Table 11.1 summarizes the degree of agreement and disagreement of male and female respondents to various statements about gender roles.[1]

[1]The the percentages of those, who was indifferent or was not able to provide an answer here was not reported. Respondents who strongly agreed or agreed with the statements are summed up in

The data suggest that Tajikistan is the most conservative country with respect to the gender values, where both men and women hold traditional views on gender roles. The most egalitarian gender attitudes were found in Georgia. The value of female education is strikingly low in Tajikistan, where over 70% of respondents of both sexes agree that girls should only go to school to make them good mothers and wives. In Georgia and Azerbaijan, approximately one fifth of respondents agreed to this statement. At the same time, a relatively high share of young people in all three countries disagreed that a woman who has a full-time job cannot be a good mother. This may be explained by the effect of the Soviet policies that promoted active role of women as workers and participants of political process (Selezneva 2017). While working mothers are not considered as unusual or undesirable phenomenon in post-Soviet countries, the overwhelming majority of young people in Azerbaijan and Tajikistan believe that women and girls need their male guardian's (e.g. father, brother or husband) permission to work outside home. In addition, over 70% of respondents from these two countries consider men to be better political leaders and business executives than women. However, in Georgia over 60% of female respondents disagreed to these statements, while male respondents tended to agree with them very moderately. In general, men in all three countries hold more traditional views on gender roles than women. This suggests that young women are the main holders of modern egalitarian gender values, especially in Georgia Table 3.1.

The differences in gender attitudes may cause conflict in the intra-household work allocations, if expectations of men and women differ considerably. Table 3.2 presents the answers of male and female respondents regarding their expectations of who should do the tasks of cooking, earning money, cleaning house and taking care of children in a family.

Again, the most egalitarian gender views were discovered in Georgia, where larger share of respondents ascribed doing household chores to both partners. The only exception is childcare, where more respondents of both sexes from Azerbaijan identified this task as the one, which should be shared by men and women. Cooking and cleaning house were considered as female tasks by the majority of respondents from all countries, while earning money was mostly ascribed to men, with an exception of Georgian women over 66% of whom believed that both partners should contribute to the household budget. This fact indicates that women in Georgia are likely to experience a "triple burden" of working on the labor market simultaneously to performing the unpaid work at home as home keepers and childrearers.

3.3 Data and Sample

For the empirical analysis in this chapter large-scale nationally representative retrospective life history survey data from Azerbaijan, Georgia, and Tajikistan is used.

a category of those, who agreed, and those, who strongly disagreed or disagreed are respectively presented as a group of those, who disagreed.

Table 3.1 Gender attitudes of youth, in %

		Azerbaijan		Georgia		Tajikistan	
		Men	**Women**	**Men**	**Women**	**Men**	**Women**
Girls should only go to school to make them good mothers and wives	agree	21.0	13.6	21.1	17.7	72.4	74.9
	disagree	64.9	79.3	72.2	78.2	17.4	19.4
A university education is more important for a boy than for a girl	agree	24.9	12.6	14.4	9.5	54.4	44.3
	disagree	61.1	76.3	76.3	85.8	31.7	45.6
Women and girls need their male guardian's (e.g. father, brother or husband) permission to work outside home	agree	90.4	79.6	53.2	44.0	88.2	87.8
	disagree	5.1	13.7	32.3	43.6	5.8	6.3
Men make better political leaders than women do	agree	71.2	46.5	41.7	21.4	71.4	63.3
	disagree	14.0	32.0	36.7	60.3	12.0	18.5
Men make better business executives than women do	agree	74.9	52.1	48.4	22.5	70.1	59.9
	disagree	10.2	27.0	35.7	62.4	16.0	23.0
A husband's career should be more important to the wife than her own career	agree	77.8	60.3	33.5	25.9	72.0	69.8
	disagree	7.8	19.6	44.3	58.7	9.7	13.1
A woman who has a full-time job cannot be a good mother	agree	40.2	25.9	27.8	21.4	39.7	27.3
	disagree	42.3	62.9	54.0	66.2	41.7	58.4

Source TEW-CCA Youth Transitions Surveys in Azerbaijan, Georgia and Tajikistan 2017; authors' calculations. Weighted results

These Youth Transitions Surveys were carried out within the international collaborative research project "Opportunities and Barriers at the Transition from Education to Work. A Comparative Youth Study in Azerbaijan, Georgia and Tajikistan" (TEW-CCA) (Gebel et al. 2019). The fieldwork period lasted from October 2016 to February 2017. In each country 2,000 standardized face-to-face interviews of youths were conducted. In Georgia and especially in Tajikistan very remote mountainous

Table 3.2 Youth's opinions on intra-household work allocations, in %

		Azerbaijan		Georgia		Tajikistan	
		Men	Women	Men	Women	Men	Women
What do you think, in a family, who should do the following …							
Cook	man	0.3	0.1	0.5	0.2	0.7	0.2
	both	8.1	12.4	30.5	38.7	11.1	12.4
	woman	91.6	87.5	68.9	61.1	88.2	87.4
Earn money	man	86.6	66.8	53.3	33.3	86.2	69.3
	both	13.0	32.9	45.9	66.1	13.4	30.0
	woman	0.4	0.4	0.7	0.6	0.3	0.7
Clean house	man	0.4	0.2	0.0	0.5	0.3	0.2
	both	3.9	4.9	19.4	18.6	10.6	11.3
	woman	95.7	94.9	80.6	80.9	89.1	88.6
Take care of children	man	0.1	0.2	0.3	0.1	0.7	0.4
	both	52.3	68.4	50.9	54.5	35.1	41.6
	woman	47.6	31.4	48.8	45.4	64.1	58.0

Source TEW-CCA Youth Transitions Surveys in Azerbaijan, Georgia and Tajikistan 2017; authors' calculations. Weighted results

areas were excluded. The original questionnaires were developed in English and translated into Azeri, Georgian, Tajik and Russian.

A multistage stratified random sampling was carried out. Based on a complete list of districts by region, districts were randomly selected. In Azerbaijan, election lists and full lists of voters were used for the random selection procedure. In Georgia and Tajikistan this was done based on most recent population census data. Each of the randomly selected districts contained several clusters. The cluster distribution covered all regions in accordance with the population size of each region and the urban-rural distribution of the population. Multi-stage clustering continued with selection of random households within each randomly selected cluster via route-random selection. Finally, eligible respondents were screened and randomly selected in each household. Design weights were calculated for each country in order to account for different selection probabilities. The data sets provide unique individual-level retrospective data on socio-demographic background, education history and patterns of labor market entry.

A dynamic perspective has already been taken in the definition of the target group of the TEW-CCA Youth Transition Surveys. Following the seminal survey work of the European Training Foundation in its school-to-work transition surveys on Ukraine and Serbia (European Training Foundation 2008) and Syria (Gebel 2012) the TEW-CCA Youth Transition Surveys adopted a dynamic life course definition in order to capture the transition from education to work for each individual. The target group

was defined as young people aged 18–35 who finished or stopped formal education in the period 2006–2015.[2] In this way it is guaranteed that only those respondents were included, who were in the period of their school-to-work transition, irrespectively of their specific biological age.

Leaving education is defined as finishing/stopping formal education (either successfully completing it or dropping out). "Being in education" was defined in terms of formal education. Formal education means enrolment and active participation in high school, university, institute or any other educational institution. This does not include informal education in terms of self-learning a foreign language at home or attending a computer course in the evening. Respondents are also classified as being in formal education if the respondent combines formal education with other activities (e.g. work). Pupils/Students on vacation or students who interrupted education due to parental leave or illness are in formal education. Students with pending status (i.e. students waiting for being accepted to the next stage of education) are also considered to be enrolled in formal education if they neither work nor look for work at the moment of the survey and plan to continue study in the near future.

The aim of the TEW-CCA Youth Transition Surveys was to collect longitudinal data on the dynamic processes of education attainment, labor market entry and the early work history. Due to practical and financial restriction the longitudinal design was implemented via retrospective questions. Information on variables and methods are introduced in each of the subchapter of empirical analyses separately.

3.4 Empirical Results

3.4.1 The School-to-Home Transition and Reasons for that

The chapter starts with the analysis of transition from school-to-home. Incidence of labor market inactivity was analyzed separately for males and females in each country. Definition of the 'inactive' persons in the sample of education leavers was as persons who have neither found a first job nor engaged in any kind of job search activities after leaving education. In the TEW-CCA Youth Transitions Surveys respondents are asked whether they have been actively seeking for work in the period after finishing or stopping formal education. Actively seeking means applying for positions, replying to work offers, answering advertisements, appearing for a job interview, sending CV, going directly to companies' offices. Combining this information with the information gained from the activity calendar allows identifying the group of inactive persons, i.e. young people who have never had a job and have not been looking for a job after leaving education (Gebel et al. 2019).

[2]Traditionally, researchers consider young adulthood as a rather static period between the ages of 15 and 24 and, in recent years, the upper age limit has been increased to 29 or 34 given the strong post-secondary education expansion around the world.

Taking regional specificities into account, engagement in the labor market is defined as a very broad concept, encompassing unregistered informal work arrangements, agricultural waged work, self-employment, and family helpers. Based on our sample definition and definition of inactivity, 25.9% of all Georgian women in our sample do not actively participate in the labor market and instead engage in full-time housework and care duties (see Table 3.3). The school-to-home transition pattern is more widespread in Azerbaijan and Tajikistan, where 40.4%, respectively 48.7% of women became inactive. Thus, the highest inactivity rate among female education leavers can be found in Tajikistan that shares both a Muslim majority background and the lowest economic development level among the three countries (Gebel et al. 2019). This is in line with previous international comparative research that underlined that Muslim women, on average, are less likely to participate in the labor market (Heyne 2017). Next to the individual religious denomination it has been shown that women living in Muslim dominating societies have the lowest probability of participating in the labor market. Within the Christian world labor force participation rates are also lower for predominant Orthodox countries.

Table 3.3 shows that men's inactivity rates are much lower in all three countries. The highest inactivity rate is registered among male Georgian education leavers (11.0%) followed by men in Tajikistan (7.1%) in Azerbaijan (6.3%). Hence, across all three cultural, institutional and structural contexts only a small proportion of men is inactive, which translates into a large gender inequality with respect to the labor market participation decision after leaving education.

As a next step of the empirical analyses on the school-to-home transition we investigate personal reasons given by young men or women for not working and not looking for work after leaving education. When asked about the reasons for inactivity respondents could give multiple answers (Table 3.3). The major reasons for not engaging in job search among Georgian women are 'getting married' (55.5%) and 'care for other household members' (22.7%). These shares are much lower in Tajikistan (where 30.4% of women declared marriage and 11.9% mentioned care for other household members) and in Azerbaijan (where 17.2% of women chose marriage and 7.1% mention care for other household members). In contrast, the major reason for women's labor market inactivity after leaving education in Azerbaijan and Tajikistan is that the women's parents (if not married) and spouses (if married) did not allow them to work outside home. This applies especially to Azerbaijan, where 73.9% of women mention this barrier, followed by Tajikistan (46.4%). This issue is much less relevant for Georgia, where only 6.7% mention this reason of being inactive. Synthesizing the findings suggests that in Azerbaijan and Tajikistan fathers and husbands usually do not allow women to take up a job, whereas in Georgia family-related duties become the prime reasons for not working.

Next to family-related reasons female education leavers also mention the lack of jobs in the immediate surrounding as a reason for their labor market inactivity. This can reflect a general lack in labor market demand but also regional labor mobility barriers for women. Every fifth Georgian inactive woman identifies the lack of jobs in the immediate surroundings as one of the causes of her out of labor market position.

Table 3.3 Economic inactivity rate and reasons for inactivity by gender and country (in %)

	Azerbaijan		Georgia		Tajikistan	
	men	**women**	**men**	**women**	**men**	**women**
Economic inactivity rate	6.3	40.4	11.0	25.9	7.1	48.7
Reasons for economic inactivity (multiple answer categories were allowed)[a]						
There was no job in the immediate surroundings	3.1	10.2	53.0	19.9	23.7	17.0
You were waiting for seasonal work	0.0	0.0	2.0	0.2	14.8	4.9
You did not have useful contacts	4.1	2.6	16.5	2.9	8.9	6.7
You were not properly qualified/trained	0.0	1.3	17.5	7.0	5.2	3.3
You were too young/ inexperienced	2.1	1.6	16.7	6.2	8.9	8.0
You were planning to go abroad (for study, job or marriage)	0.0	0.0	4.6	1.0	9.6	1.0
You were seriously ill or disabled	10.3	0.4	7.5	0.7	8.1	0.5
You got married	0.0	17.2	3.7	55.5	4.4	30.4
Your parents/spouse did not allow you to work outside home	0.0	73.9	1.7	6.7	2.2	46.4
You had to take care for other household members	2.1	7.1	0.0	22.7	3.7	11.9
Due to religious or cultural reasons	0.0	1.3	0.0	0.7	0.0	2.3
You did not want to work	24.7	18.1	16.1	5.8	10.4	7.6
You were waiting for military service	63.9	0.0	–	–	–	–

Source TEW-CCA Youth Transitions Surveys in Azerbaijan, Georgia and Tajikistan 2017; authors' calculations. Weighted results

Remarks [a]Analysis on the reasons for economic inactivity are conducted for the subsample of inactive persons

The problem is of similar size for Tajikistan (17.0%), whereas this is less an issue in Azerbaijan (10.2%).

If we compare the numbers for men and women, it becomes evident that the lack of labor demand is even more an issue among inactive men in Georgia and Tajikistan. About a half of Georgian inactive men and about a quarter of Tajik inactive men

said that they did not search for a job because there was no job in the immediate surroundings. In contrast, this applies only to 3.1% of Azeri inactive men. Given that the share was also lowest for Azeri inactive women it turns out that the lack of local labor demand is not such an issue in Azerbaijan compared to Georgia and Tajikistan. Compared to women, Georgian men also mentioned other labor market related issues as a reason for inactivity such as lack of useful contacts (16.5%), proper qualifications (17.5%) and work experience (16.7%). Health issues are also relatively much more often mentioned among inactive men than among inactive women. Men also more often mention that they did not want to work, which, for example, applies to about a quarter of inactive men in Azerbaijan. In case of Azerbaijan the big number of inactive men report that the reason for being inactive is that they are waiting for the military service after leaving education.

Thus, family restrictions as well as females' social norm choices for family responsibility are the predominant reason for being inactive in the labor market for women, while young men declare more often lack of job opportunities or health issues or army as the major reason for not being engaged in the labor market.

3.4.2 How Long Does It Take to Find a First Job?

Whereas the previous section addressed the labor force participation decision of young people who have left the education system, this section focuses on those persons who actively engage in the job search after they have left the education system. Thus, persons who never had a first job and who are not engaged in a job search were excluded. Instead, the subsample of persons who actively participate in the labor market after leaving education was under focus. Finding a job is a central marker in the transition to adulthood due to its importance in gaining independence from the family, as well as for securing a good socio-economic position, career and life chances. If young persons do not find a job, they mainly rely on their families' economic support because the states in CCA countries provides only weak support in terms of labor market policies.

The duration of the school-to-work transition is measured as the time between leaving the education system and finding a first job (Gebel and Noelke 2011). The date of leaving education is defined as leaving education, irrespective of whether students successfully completed their education level or dropped out before completion. Search periods prior to leaving education are disregarded due to missing information on potential search activities. Also search period while being at school is fundamentally different from the search period after leaving education, as the search after graduation accounts for higher material and psychological costs (Allen and van der Velden 2007).[3]

[3]Using the monthly retrospective activity calendar information, periods of military service were deducted from the measurement of search duration as this is an obligatory time-out that should not be counted to the duration of finding a first job.

Following common definitions (Gebel and Noelke 2011), the first job position for an education leaver was operationalized as any first job, including short-term, casual work and unregistered work, self-employment and work as family helpers. This broad definition accounts for the variety of first job positions in CCA countries. The respondents were asked to fill out a detailed monthly economic activity calendar for the time since leaving education until the time of the job interview. The activity calendar covers a minimum period of one year up to a maximum period of 10 years depending on the year the respondent was leaving education. Based on this calendar the first job was identified. The few graduates who obtain their first job before leaving the education system are counted as making an instantaneous transition (the search period was coded as one month).

Event history analysis is used to study the time elapsed between leaving education and finding a first job. The time elapsed until first employment is described with Kaplan–Meier estimates of transition rates because of the problem of right-censored duration data for those who have not yet found employment at the time of the interview (Blossfeld et al. 2007). Table 3.4 shows the proportion of active job searchers who have found a first job until a specific month after leaving education.

Except in Azerbaijan many education leavers experience direct and quick entries into their first job. In the following years, further labor market integration can be observed, but the conditional transition probabilities (so-called 'hazard rates') decrease: the longer the time elapsed in non-employment after leaving education, the harder it is to find a first job. Such a pattern of so-called negative duration dependence in the job search process is usually explained by discouragement effects that lead to reduced individual search intensities (Bejaković and Mrnjavac 2018; Krug et al. 2019). Moreover, potential employers may interpret the prolonged search period as a negative signal and therefore refrain from making job offers to the long-term

Table 3.4 Share of people (%) having found a first job until a specific month after leaving education, by gender and country

	Months since leaving education						
	1	**6**	**12**	**24**	**36**	**48**	**60**
Azerbaijan							
Men	12	44	57	78	85	90	92
Women	9	39	45	60	67	75	78
Georgia							
Men	38	52	61	72	79	84	87
Women	27	41	49	61	68	72	78
Tajikistan							
Men	47	62	71	79	88	92	94
Women	42	54	59	67	74	78	82

Source TEW-CCA Youth Transitions Surveys in Azerbaijan, Georgia and Tajikistan 2017; authors' calculations. Weighted results
Remark Results based on Kaplan-Meier survival functions

unemployed (Van den Berg et al. 1994). As a result, there is a substantial share of young people who require several years to find a first job, and there is a non-negligible share of young people who do not succeed in finding a first job, even after a long search period. Thus, job seekers are strongly divided into those who find a first job within one year and those who search for longer periods of time (Van den Berg et al. 1994).

The analyses of the Azerbaijanian sample show that men make faster transitions to a first job than women, similar to other traditional societies like Egypt (Heyne and Gebel 2016) or Syria (Gebel 2012). For example, 57% of all young male job seekers find a first job within the first year after graduation, while the share is only 45% for women. After 24 months, the shares of successful job finders increase to 78% for men and 60% for women. After 48 months, 90% of Azeri men and 75% of Azeri women have found a first job.

A faster entry process can be observed in Georgia: 38% of men and 27% of women make immediate transitions within one month after leaving education. After 12 months, 61% of men in Georgia have found gainful employment, and the share increases to 72% after 24 months and 84% after 48 months. In contrast, the share of successful job seekers increases more slowly for women (61% after 24 months and 72% after 48 months).

Tajikistan has the highest share of immediate transitions from education to work. 42% of female job seekers and 47% of active male job seekers find a first job within one month after leaving education. However, afterwards the share only slowly increases to 79% for men and 67% for women after 24 months. After 48 months, 92% of male job seekers and 78% of female job seekers have found a first job. The high rate of instantaneous transitions in Tajikistan could be explained by the higher rates of informal employment in the country. Informal employment is usually quicker and easier to find. Similar reasons might explain the much better situation of the youth labour market in Tajikistan than the statistics from the World Bank gives us an impression. First, the time period until the job is found is discussed, not the static unemployment rates. Second, indeed the official statistics might not consider the informal employment that youth engaged in. Third, the definition of the target group is different (15–24 years old who are active in the labor market in World Bank statistics VS 18–34 years old who are active in the labor market and who left the education system during the last 10 years in the TEW-CCA surveys).

In addition, every respondent who actively searched for a job was asked about the main obstacles the person experienced in finding a job after leaving education. Both respondents who successfully found their first jobs and those who have not yet found their first job during the observation period are included. The results of the analyses differentiated by gender and country are presented in Table 3.5.

In each country a certain share of the respondents reports that they did not have any problems at all finding a job. This is in line with the rather high share of respondents making immediate and rather quick transitions from education to work. In Azerbaijan, around one quarter of men and almost one third of women report no problems in finding a job. The share is also high among Tajik women (24.5%) but lower among Tajik men (17.5%). In Georgia only around 12 to 13% of male and

Table 3.5 Main obstacles of finding a job after leaving education among active persons by gender and country (in %)

	Azerbaijan		Georgia		Tajikistan	
	men	**women**	**men**	**women**	**men**	**women**
You didn't have any problems at all in finding a job.	25.3	31.4	12.3	12.7	17.5	24.5
Requirements for job were higher than education/training received	19.3	10.7	18.2	18.0	7.7	7.7
Not enough work experience	43.3	36.8	36.0	39.2	36.7	27.7
Not enough jobs available	63.0	57.4	61.6	58.3	46.8	49.2
Discrimination based on age	12.9	9.0	1.6	2.9	0.8	0.2
Discrimination based on gender (being female or being male)	1.3	0.8	0.1	0.3	0.3	0.4
Discrimination based on ethnic origin	0.0	0.0	0.4	0.3	0.3	0.5
Low wages in available jobs	25.9	21.5	21.3	19.5	30.8	19.7
Poor working conditions in available jobs	7.0	5.4	9.8	6.4	8.8	4.3
You did not have useful personal contacts	15.8	16.8	11.8	11.5	7.6	5.7

Source TEW-CCA Youth Transitions Surveys in Azerbaijan, Georgia and Tajikistan 2017; authors' calculations. Weighted results

Remarks Analysis are conducted for the subsample of all economically active persons, irrespectively of the fact whether they found a first job or not. Multiple answer categories were allowed

female respondents who were actively looking for a job said that they did not face any problems at all in the job search process.

According to the poplar youth opinion, the biggest obstacle in their job search is lack of jobs available for them in the labour market. For example, this applies to 63.0% of men and 57.4% of women in Azerbaijan. Figures are rather similar in Georgia, whereas the shares are a bit lower in Tajikistan (46.8% among men and 49.2% among women). Many respondents also report the problem that they did not have enough work experience (ranging from 27.7% to 43.3%). This applies more often to men than to women in Azerbaijan and Tajikistan, whereas the share is slightly higher among Georgian women compared to Georgian men.

Respondents also see the problem of unattractive job offers in the job search process. About 20 to 30% report the issue of low wages in available jobs as an

obstacle and 4 to 10% mention poor working conditions as a problem. The shares are higher among men compared to women in each country. This may either reflect the issue that men receive worse job offers because they enter different job segments (see next section) or that men have higher salary expectations on jobs given their role of the main breadwinner.

Interestingly, only about 5.7–16.8% report that they did not have useful contacts as a problem in the job search process. A tiny share of respondents (0.1–1.3%) report that they experienced discrimination based on gender. Similarly, discrimination based on ethnic origin remains in all groups below the 1% threshold. In contrast more people report age discrimination. The share is the highest in Azerbaijan (12.9% among men and 9.0% among women). In contrast the share remains below the 1% threshold in Tajikistan. This can be explained by the growing number of young populations in general in the country.

3.4.3 Job Quality

The previous section showed that finding a first job is not an easy task for many young people in CCA countries as a substantial share of young job searchers experiences long search durations. Even when young people succeed in entering a first job, it is still not guaranteed that the first job will offer good working conditions (ILO 2003). Previous research reported high levels of job precariousness among labor market entrants across the globe (Gebel and Giesecke 2016; Lange et al. 2014; OECD 2013; ILO 2011). In this respect, it is important to study the quality of first jobs.

From a methodological point of view, a multidimensional perspective on various aspects of job quality and working conditions instead of relying on a single job quality dimension (such as wages) or aggregating working conditions into a one-dimensional index is adopted here. The multidimensional perspective of quality of job is well developed both in academia and policy making institutions such as European Commission, ILO and OECD (ILO 2016; OECD 2017). For example, since 1990 the Eurofound every five years carries out European Working Conditions Surveys (EWCS) of all European countries on quality of jobs and working conditions so that changes in job quality and their effects on individuals' well-being can be tracked (Eurofound 2020).

Kalleberg (2011) identifies at least four dimensions in the quality of job like: (1) earnings and fringe benefits; (2) the degree of job security and opportunities for advancement to better jobs; (3) the degree to which people are able to exercise control over their work activities and experience their jobs as interesting and meaningful; and (4) the extent to which people's time at work and control over their work schedules permit them to spend time with their families and in other non-work activities (Kalleberg 2011, p. 5). The approach of the chapter follows this perspective and describes at least three dimension of job quality. Unfortunately, TEW-CCA Youth Transition Survey does not contain the questions on income due to the difficulties for the respondents to remember the exact income in the retrospective questions of the

survey but it does have information on the occupation which could be used as proxy for the wage range. The type of job and type of contract for job security dimension was also discussed.

The advantage of such a multidimensional perspective is that it captures potential trade-offs or cumulative advantages or disadvantages in the working conditions of first job holders in different employment segments. Detecting cumulative disadvantages is important in order to assess the prevalence and degree of precarious work among young female workers. Specifically, job type, type of contract and the occupation are the central objective dimensions of job quality that are described in the Table 3.6 by gender and country.

An important differentiation for job quality is the job type. The specificities of the CCA region were taken into account by distinguishing formal/registered from informal/unregistered employment forms as well as different kinds of work as a family helper and own-account/self-employed worker. Formal versus informal employment are defined at the individual level and not at the firm level. A formal (registered) job means that income taxes for the specific job are paid either by the employer or employee, whereas this is not the case for informal (unregistered) jobs. Many education leavers enter their first jobs as an informal/unregistered employee. This applies, for example, to 23.7% of women in Tajikistan. The shares of informal employees are lower for women in Georgia (18.2%) and in Azerbaijan (15.5%). Across all countries men work more often as informal employees in their first job. In contrast, men are underrepresented in the formal sector. For example, 77.3% of Azeri women compared to 42.6% of Azeri men get their first jobs as formal employees. These is in line with the previous studies, which show that men are more likely to end-up in informal employment due to their risk acceptance nature and lower level of education on average that determines low-skilled jobs available in the informal sector (Karabchuk 2012a; Lehmann and Pignatti 2018; Lehmann and Zaiceva 2015; OECD 2013). There are significant country differences as the share of informal employees among men ranges from 24.4% in Georgia to 44.1% in Tajikistan. The gender gap for formal employees is also considerable and reaches 19 percentage points in Georgia and 17 percentage points in Tajikistan.

Working as an employee or helper in the family business takes rather small percentage. The highest shares are reached among Georgian men (11.2%) and Azeri men (7.3%). Similarly, self-employment remains in the single digit area for all groups apart from Azeri men that just surpass the 10% threshold.

Regarding the type of contract, the distinction is made between contracts of unlimited duration and contracts of limited duration (temporary or seasonal work contracts). It is important to emphasize that here those young people who are hired by someone else and do not work for the family or not self-employed are in the focus. There is a research tradition investigating the role of temporary work, its determinants, characteristics and consequences in Central and Eastern Europe (Baranowska and Gebel 2010; Baranowska et al. 2011; Karabchuk 2012b; Karabchuk 2012c). In the context of the CCA region and post-Soviet Space in general it is, however, even more important to distinguish the case of a written work contract from having no written work contract (just a verbal agreement) (Gërxhani and van de Werfhorst

Table 3.6 Job quality characteristics of first job by gender and country (in %)

	Azerbaijan		Georgia		Tajikistan	
	men	**women**	**men**	**women**	**men**	**women**
Job type						
Formal/registered employee	42.6	77.3	58.0	77.0	46.4	63.4
Informal/unregistered employee	39.5	15.5	24.4	18.2	44.1	23.7
Employee/helper in family business	7.3	4.3	11.2	2.1	2.3	3.8
Self-employed/employee	10.7	2.9	6.4	2.7	7.3	9.1
Type of contract (only for those employed)						
No contract	46.8	19.0	57.3	46.9	51.9	32.4
Unlimited contract	43.4	73.3	29.3	40.4	28.4	49.7
Limited contract	9.2	7.8	12.5	12.4	19.7	18.0
Occupation, ISCO 08 (1 digit)						
Legislators, senior official and managers	1.0	1.6	0.8	1.5	1.0	0.3
Professionals	19.6	37.4	11.9	22.8	16.1	38.4
Technicians, associate professionals	6.4	19.4	21.3	21.4	7.7	15.6
Clerks	5.8	21.5	8.9	17.1	4.3	6.7
Service workers, shop and market sales workers	23.0	12.6	14.1	27.1	7.9	7.3
Skilled agricultural and fishery workers	8.4	4.5	4.1	0.9	2.4	8.1
Craft and related trades workers	17.8	1.0	16.5	3.8	45.1	8.1
Plant and machine operators and assemblers	6.2	0.3	4.7	1.0	4.3	0.7
Elementary occupations	9.6	1.4	16.3	4.2	11.3	14.7
Military occupation	2.2	0.3	1.6	0.0	–	–

2013; Gimpelson and Kapeliushnikov 2015; Gimpelson and Zudina 2012; Karabchuk 2012a; Karabchuk and Soboleva 2014; Kogan 2011; Lehmann and Zaiceva 2015). The case of having no written work contract is often seen as a defining characteristic of informal work arrangements next to or in addition to the distinction between registered and unregistered work.[4]

[4]Informal employment includes employment in both formal and informal sectors but it is a job-based concept and 'encompasses those jobs that generally lack basic social or legal protections or employment benefits and may be found in the formal sector, informal sector or households' (ILO

The share of first job holders without a written contract is highest among men. It reaches around 46.8% in Azerbaijan, 51.9% in Tajikistan and even 57.3% in Georgia. It is worth to underline that women in Georgia (46.9%) have very high probability of working without a contract. In contrast, this applies only to 19.0% of women in Azerbaijan. Limited work contracts do not play a big role in Azerbaijan. In Georgia, men and women face similar risks of getting a limited work contract (around 12–13%). Limited work contracts are a bit more widespread in Tajikistan reaching 19.7% among men and 18.0% among women.

Finally, different first jobs according to their occupational skill level were identified. The surveys classified first jobs based on the International Standard Classification of Occupations (ISCO 08) classification. ISCO-based occupations were grouped at the 1-digit level based on very informative original survey data that provide a very detailed three-digit occupational classification. Table 3.6 shows that only a tiny share of education leavers (less than 2%) succeeds in entering a position as legislators, senior officials and managers (ISCO-1). In contrast a great proportion succeeds in entering the levels of professionals (ISCO-2) or technical and associates professionals (ISCO-3). This is especially the case for women who reach ISCO-2 and ISCO-3 occupational levels more often than men in all three countries. For example, 38.4% of Tajik women work as professionals in their first job, whereas this applies only to 16.1% of Tajik men. Similarly, the share of technical and associate professionals (ISCO-3) is twice as high among Tajik women (15.6%) compared to Tajik men (7.7%). This occupational structure also explains why informal work and temporary jobs are dominated by men. Usually the informal work and temporary contracts are associated with the lower qualifications and lower level positions which are taken by men.

Many female entry jobs are located at ISCO-4 level as clerks. The gender gap at this occupation level is strongest in Azerbaijan, where 21.5% of women work as clerks in their first job compared to just 5.8% of men. The gender pattern is more diverse at ISCO-5 level of service workers, shop and market sales workers. While in Azerbaijan the share of ISCO-5 job among men is twice as much as among women, the opposite is observable in Georgia. In Tajikistan the ISCO-5 shares are rather equal between men and women in their first job. While men dominate the ISCO-6 category of skilled agricultural and fishery workers in Azerbaijan and Georgia the opposite is the case in Tajikistan. Across all countries men clearly dominate the ISCO-7 field of craft and related trades workers. For example, the 17.8% of Azeri male first job holders are in ISCO-7 occupations, whereas this applies only to 1.0% of Azeri female first job holders. The male dominance also applies to plant and machine operators and assemblers (ISCO-8). Elementary occupations (ISCO-9) are more widespread among men than women in Azerbaijan and Georgia, whereas the opposite is the case in Tajikistan.

2011, p. 2). In other words, informal employment refers to all informal jobs, whether carried out in formal sector enterprises, informal sector enterprises or households (ILO 2003).

3.5 Conclusions and Policy Implications

The chapter was dedicated to the description of the gender differences in the transition from school to work in Azerbaijan, Georgia, and Tajikistan. Due to advantage of the comparable design of the survey data collected within TEW-CCA Youth Transition Surveys it was possible to make explicit conclusions on the challenges that youth is experiencing in these countries when entering labor market.

The analysis showed that young women in all three countries remain economically inactive much more often than men. Female inactivity rates at labor market entry are ranging from 25.9% in Georgia to 48.7% in Tajikistan. The share of economically inactive men is low in all three countries and does not exceed 11%. When being asked about the reasons for not working and/or not looking for work after leaving education family factors are the predominant reason for being economically inactive in the labor market for women. In Georgia these are mainly family responsibilities such as marriage and care, whereas young women in Azerbaijan and Tajikistan often report that their parents/spouses did not allow them to work. In contrast, young men declare more often lack of job opportunities or health issues or army as the major reason for not being engaged in the labor market.

When measuring the duration of the period between leaving education and finding a first job it was found that there are gender differences as well. For example, 12 months after leaving education 57% of Azerbaijanian men but only 45% of Azerbaijanian women have found a first job. The same gender gap of 12 percentage points in job search probability is also found in Georgia and Tajikistan. This gender differences persist with ongoing job search duration. For example, 48 months after leaving education 90% of Azerbaijanian men but only 75% of Azerbaijanian women have found a first job. The gender gap is of a similar size in Tajikistan (14 percentage points) and Georgia (12 percentage points). When asked about the main obstacles of finding a first job, young people report the lack of jobs available for them in the labour market as the biggest obstacle. Respondents also see the problem of unattractive job offers in the job search process. About 20–30% report the issue of low wages in available jobs as an obstacle and 4–10% mention poor working conditions as a problem. It is worth to underline that gender discrimination as a reason of not getting a job was mentioned only by 1% of respondents in all countries.

Regarding job quality it is found across all countries that men work more often as informal employees in their first job than women. Thus, men are underrepresented in the formal sector. Young women are more engaged in the stable jobs with unlimited contracts, the gender gap ranges from 11 to 30 percentage points. For both men and women working as an employee or helper in the family business is very unpopular.

There is also a strong occupational gender segregation in the three countries. While women tend to have better chances to enter the levels of professionals, technical and associates professionals, and clerks, men tend to be overrepresented in lower occupational positions such as craft and related trade workers, plant and machine operators and assemblers, and elementary occupations. There is no clear gender

pattern across all countries for medium occupations such as service workers, shop and market sales assistants and craft and related trades workers.

The research findings allow to make the following policy implications. First, all three discussed countries are facing significant gender differences in the youth employment opportunities. These unequal opportunities in the labor market could affect the economic development in the countries (Welzel 2013). Young women still struggle with traditional family restrictions on permission to work outside the house in Azerbaijan and Tajikistan on. Moreover, early marriages that are still popular in these countries drive young women into inactivity (Gebel 2020). Thus, it is highly important to improve the labor market regulations for better female work engagement and support female empowerment. One way of enriching the young females' chances for better jobs is through higher education. As it was shown before, higher education attainment of young women in Azerbaijan, Georgia, and Tajikistan has a strong positive impact on labor market activity and getting a formal sector job (Gebel 2020).

Second, young men forced to be involved more in informal jobs after they leave schools. Job insecurity of informal work creates income instability. Taking into account males gender roles as main breadwinners in all three countries, unstable earnings from informal employment can negatively affect family planning for young adults which might lead at the end to the decrease of fertility rates like it was shown for European countries (Karabchuk 2020). In this case there is a need for special attention to the job opportunities for youth from the governments and policy makers. Unfortunately, the channels of getting good jobs after graduation are not transparent, not openly competitive, and not easy to navigate. Still the chances of getting a good job in the formal sector depend on the social resources of parents in Georgia and Tajikistan and on parents' economic resources in Azerbaijan and Georgia (Gebel 2020).

Acknowledgements Michael Gebel acknowledges funding for the project "Opportunities and Barriers at the Transition from Education to Work. A Comparative Youth Study in Azerbaijan, Georgia and Tajikistan" from the Volkswagen Foundation for the period 2015–2019.

References

Allen J, van der Velden, R (2007) Transitions from higher education to work. In U Teichler (ed) Careers of university graduates. Views and experiences in comparative perspectives. Dordrecht, Springer, pp. 55–78

Badurashvili I (2009) Out-migration from Georgia after 1990. In: Savvidis T (ed) International migration: local conditions and effects (pp. 80–108). Berlin: FU Berlin, Osteuropa-Institut

Baranowska A, Gebel M (2010) The determinants of youth temporary employment in the enlarged Europe: do labour market institutions matter? Eur Soc 12(3): 367–390

Baranowska A, Gebel M, Kotowska IE (2011) The role of fixed-term contracts at labour market entry in Poland: Stepping stones, screening devices, traps or search subsidies? Work, Employ & Soc 25(4): 777–793

Bejaković P, Mrnjavac Z (2018) The danger of long-term unemployment and measures for its reduction: the case of Croatia*, Econ Res-Ekon Istraživanja 31:1, 1837–1850, https://doi.org/10.1080/1331677x.2018.1521295

Blossfeld HP, Buchholz S, Bukodi E, Kurz K (eds) (2008). Young workers, globalization, and the labor market. Cheltenham, Edward Elgar

Blossfeld HP, Golsch K, Rohwer G (2007) Event history analysis with Stata. New York, Erlbaum, Taylor & Francis Group

Brewster KL, Rindfuss RR (2000) Fertility and women's employment in industrialized nations. Annu Rev Sociol 26: 271–296

Buchmann MC, Kriesi I (2011) Transition to adulthood in Europe. Annu Rev Sociol 37(1): 481–503

Demographic Year Book (2018) http://stat.ww.tj/publications/June2019/demographic-yearbook-2018.pdf

Elder S, Barcucci V, Gurbuzer Y, Perardel Y, Principi M (2015) Labour market transitions of young women and men in Eastern Europe and Central Asia. Work4Youth Publication Series No. 28. Geneva, ILO, Youth Employment Programme, Employment Policy Dept

Elder S, Kring S (2016) *Young and female—a double strike? Gender analysis of school-to-work transition surveys in 32 developing countries.* Geneva, ILO

European Training Foundation (2008) Transition from education to work in EU neighbouring countries: results of an ETF Innovation and Learning Project. Luxembourg, European Training Foundation

Eurofound (2020) European Working Conditions Surveys (EWCS) https://www.eurofound.europa.eu/surveys/european-working-conditions-surveys-ewcs

Gangl M (2002) Changing labour markets and early career outcomes. Labour market entry in Europe over the past decade. Work, Employ Soc16(1): 67–90

Gebel M (2012) The transition from education to work in Syria. Results of the Youth Transition Survey 2009. Turin, European Training Foundation

Gebel M (2020) Young Women's Transition from Education to Work in the Caucasus and Central Asia. ANNALS Am Acad Polit Soc Sci 688(1): 137–154. https://doi.org/10.1177/0002716220908260

Gebel M, Badurashvili I, Olimova S, Sattarov R (eds) (2019) Methodological report on TEW-CCA Youth Transition Surveys in Azerbaijan, Georgia and Tajikistan. TEW-CCA Working Paper No. 3. Bamberg, TEW-CCA Project

Gebel M, Giesecke J (2016) Does deregulation help? The impact of employment protection reforms on youths' unemployment and temporary employment risks in Europe. Eur Sociol Rev 32(4): 486–500

Gebel M, Heyne S (2014) Transitions to adulthood in the Middle East and North Africa: Young women's rising? Basingstoke, Hampshire, Palgrave Macmillan

Gebel M, Noelke C (2011) The transition from school to work in Central and Eastern Europe: theory and methodology. In: Kogan I, Noelke C, Gebel M (eds) *Making the transition. Education and labor market entry in Central and Eastern Europe.* Stanford, California, Stanford University Press, pp 29–57

Gerber TP (2003) Loosening links?: School-to-work transitions and institutional change in Russia since 1970. Soc Forces 82(1): 241–276

Gerber TP, Mayorova O (2006) Dynamic gender differences in a post-socialist labor market: Russia, 1991–1997. Soc Forces 84(4); 2047–2075

Gërxhani K, van de Werfhorst HG (2013) The effect of education on informal sector participation in a post-communist country. Eur Sociol Rev 29(3): 464–476

Gimpelson VE, Kapeliushnikov R (2015) Between light and shadow: Informality in the Russian labour market. In: Oxenstierna S (ed) Routledge Contemporary Russia and Eastern Europe Series. The challenges for Russia's politicized economic system. Hoboken: Taylor and Francis, pp 33–58

Gimpelson V, Zudina A (2012) "Informals" in the Russian economy. How many of them and who are they? Probl Econ Transit 55(5): 26–57–57

Heyne S, Gebel M (2016) Education effects on the school-to-work transition in Egypt: A cohort comparison of labor market entrants 1970–2012. Res Soc Strat Mobil 46 (A): 37–49
Heyne S (2017) Culture and female labor force participation in international comparison. Mannheim, University of Mannheim
Iannelli C, Smyth E (2008) Mapping gender and social background differences in education and youth transitions across Europe. J Youth Stud 11(2): 213–232
ILO (2003) Report of the Seventeenth International Conference of Labour Statisticians. 24 November–3 December 2003. Geneva, ILO
ILO (2011) Statistical update on the employment in the informal economy. Geneva, ILO. http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/presentation/wcms_157467.pdf
ILO (2014) Key indicators of the labour market. Eigth edition. Geneva, ILO
ILO (2016) Non-standard employment around the world: Understanding challenges, shaping prospects (1st ed). Geneva, ILO
Kalleberg AL (2011) Good jobs, bad jobs: The rise of polarized and precarious employment systems in the United States, 1970s to2000s. American Sociological Association's Rose series in sociology. New York, NY, Russel Sage Foundation
Karabchuk T (2012a) Informal employment in Russia. Why is it so sustainable? Econ Sociology Eur Electron Newsl 13(2): 29–36
Karabchuk T (2012b) Part-time and temporary workers in Russia: winners or losers? J Labour Mark Res 45(1): 23–39
Karabchuk T (2012c) Temporary employment in Russia. Why mostly men? Eur J Comp Econ 9(2): 279–303
Karabchuk T, Soboleva N (2014) Informal employment and subjective well-being in Europe. Evidence from the European Social Survey Data. Südosteuropa. Z Für Polit Und Ges (04): 397–420
Karabchuk T (2020) Job Instability and Fertility Intentions of Young Adults in Europe: Does Labor Market Legislation Matter? ANNALS Am Acad Polit Soc Sci 688 (1): 225–245. https://doi.org/10.1177/0002716220910419
Kogan I (2011) When informal is normal… On the role of credentials and contacts for the job entry in Serbia. Res Soc Strat Mobil 29(4): 445–458
Kogan I, Noelke C, Gebel M (eds) (2011) Making the transition: Education and labor market entry in Central and Eastern Europe. Stanford, California, Stanford University Press
Kosyakova Y, Saar E, Dämmrich J (2017) Institutional change and gender inequalities at labour market entry: A comparison of Estonia, Russia, and East and West Germany. Stud Transit States Soc 9(2): 17–40
Krug G, Drasch K, Jungbauer-Gan M (2019) The social stigma of unemployment: consequences of stigma consciousness on job search attitudes, behaviour and success. J Labour Market Res 53: 11. https://doi.org/10.1186/s12651-019-0261-4
Lange Md, Gesthuizen M, Wolbers MHJ (2014) Youth labour market integration across Europe The impact of cyclical, structural, and institutional characteristics. Eur Soc 16(2): 194–212
Lehmann H, Pignatti N (2018) Informal employment relationships and the labor market: Is there segmentation in Ukraine? J Comp Econ 46(3): 838–857
Lehmann H, Zaiceva A (2015) Redefining informality and measuring its determinants. Evidence from the Russian labour market. J Int Dev 27(4): 464–488
Lloyd CB (ed) (2005) Growing up global. the changing transitions to adulthood in developing countries. Washington, DC, The National Academies Press
Marcus R, Harper C 2014 Gender justice and social norms—processes of change for adolescent girls. Towards a conceptual framework 2. Overseas Development Institute. London. https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8831.pdf
OECD (2013) *OECD employment outlook 2013.* Paris, OECD
OECD (2017) *How's life? Measuring well-being.* Paris, OECD

Oláh LS, Kotowska IE, Richter R (2018) The new roles of men and women and implications for families and societies. In: Doblhammer G, Gumà J (eds) A demographic perspective on gender, family and health in Europe. Springer, Cham

Olimova S, Bosc I (2003) Labour migration from Tajikistan. Dushanbe, International Organization for Migration

Schoon I, Silbereisen RK (eds) (2009) Transitions from school to work. Globalization, individualization, and patterns of diversity. New York, Cambridge University Press

Selezneva E (2017) Population policies in Soviet and modern Russia. In: T Karabchuk, K Kumo, E Selezneva (eds) Studies in Economic Transition. Demography of Russia. From the past to the present. London: Palgrave Macmillan UK; Imprint Palgrave Macmillan, pp 63–113

Smyth E (2005) Gender differentiation and early labour market integration across Europe. Eur Soc 7(3): 451–479

Socio-Economic Situation of the Countries of the Commonwealth of Independent States (2018) / Reports / CIS STAT http://www.cisstat.org/eng/frame_public.htm

Spierings N, Smits J, Verloo M (2009) On the compatibility of Islam and gender equality. Effects of modernization, state islamization, and democracy on women's labor market participation in 45 Muslim countries. Soc Indic Res 90(3): 503–522

Spierings N, Smits J, Verloo M (2010) Micro—and macrolevel determinants of women's employment in six Arab countries. J Marriage Fam 72(5): 1391–1407

Statistical Yearbook of Georgia (2018) National Statistics Office of Georgia—Tbilisi, 2018.—280 https://www.geostat.ge/media/20931/Yearbook_2018.pdf

Statistical Year Book of Azerbaijan (2019) http://stat.ww.tj/publications/June2019/demographic-yearbook-2018.pdf

Van den Berg, Gerard J, van Ours JC (1994) Unemployment dynamics and duration dependence in France, the Netherlands and the United Kingdom. Econ J 104(423): 432

van der Lippe T, van Dijk L (2002) Comparative research on women's employment. Annu Rev Sociol 28(1): 221–241

Welzel C (2013) Freedom rising: human empowerment and the quest for emancipation. Cambridge, Cambridge University Press. https://doi.org/10.1017/cbo9781139540919

World Bank (2019) World Bank indicators. Washington, DC, World Bank. Retrieved on 4 February 2019 from https://data.worldbank.org/indicator

Chapter 4
Differences in Employment Patterns Between Young Men and Women: Cross-National Comparison of Dynamics in Post-Soviet Countries

Anita Poplavskaya

Abstract Post-Soviet countries have experienced historical periods, political regimes, and socio-economic systems that differ fundamentally from each other and have adopted diverse values and norms, which have inevitably influenced the nations' gendered labor market structures. This chapter considers the differences in labor market position between young men and women in 10 post-Soviet countries over time. The main research question is whether young women in these countries have attained labor market statuses as intensive (in terms of working hours) and high (in terms of job positions) as those of their male counterparts over the last three decades. The study uses World Values Survey cross-section data (1981–2014) as a database. The target group is employed youth aged 18–29 years. Contrary to the initial hypothesis, a time-trend analysis reveals a trend towards differences in job position between young men and women in post-Soviet countries. The results of two binary logistic regressions demonstrate that being a young woman in post-Soviet countries decreases the probability of being employed full-time but that Russia is following the opposite trend. In addition, being a young woman in Russia and Kazakhstan increases the probability of holding a supervisory position relative to the probability for a young man.

Keywords Post-Soviet economies · Youth employment · Gender difference · Employment type · Job position

4.1 Introduction

It has often been stated that the role of women under socialism was extensively reconstructed and that traditional lifestyles were forced to change. The prevailing communist ideology in the Union of Soviet Socialist Republics (USSR) made all citizens engage in the labor force equally. As a result, women played a major role in economic, social, and political life during the Soviet era (Lapidus 1978).

A. Poplavskaya (✉)
National Research University Higher School of Economics, Moscow, Russia
e-mail: aamoiseeva@hse.ru

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_4

Changes in political regimes at the end of the twentieth century and capitalist development have altered the situation in the post-Soviet space. On the one hand, women have become less represented in the labor force (Pollert 2003; Chakars and Sweet 2014) due to a return to traditional norms and practices, the reorientation of some women toward family, and formal legislative changes. For example, women gained the right to stay home and not work; in the USSR, non-employment had been prohibited (Gimpelson et al. 2010). On the other hand, countries have experienced severe economic downturns since the collapse of the USSR. Most people have not been able to earn a living, and the informal sector of the economy has grown sharply (Gimpelsons and Kapelyushnikov 2006). Some women started working to avoid poverty or enhance their household finances, sometimes even becoming the family's sole breadwinner. Furthermore, Western capitalistic values and norms have spread among employers since the fall of the Iron Curtain, and women have longed for monetary and career rewards equal to those of their male counterparts.

Sociologists have been noticing essential shifts in the value, norms, and practices of youth around the world. Since the beginning of the twentieth century, young men and women have demonstrated similar career trajectories, earned the same salaries, and made similar career development plans (Terjeson et al. 2007; Manning and Swaffield 2008; OECD 2012). However, little is known about the temporal and spatial characteristics of the relative job positions of young men and women. This chapter considers that issue by focusing on a region with a unique political history and socioeconomic background.

Recent studies have primarily sought to reveal the trends in the employment patterns of young men and women across 10 post-Soviet countries. This study's main question is whether young women in Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, the Russian Federation, Ukraine, and Uzbekistan have attained labor market statuses as intensive (in terms of working hours) and high (in terms of job positions) as those of their male counterparts over the last three decades. The study's target group comprises employed youth aged 18–29 (in line with the UN and WHO definitions of "youth"). The key variables are *employment type* (full-time or part-time), indicating more or fewer hours of work per week, and *job position* (supervisor or non-supervisor), indicating a higher or lower position in a hierarchy. Using a regression analysis, the study clarifies whether being a young woman increases or decreases the probability of being employed full-time and holding a supervisory position relative to being a young man.

The chapter begins by briefly reviewing the theoretical frameworks addressing the fundamental question of why men and women may have similar or different positions in the labor market. After this theoretical introduction to the wider issue, an overview of empirical studies on youth employment from a gender perspective is briefly presented in Sect. 4.2. Then, the study's data and methodology are described in Sect. 4.3. Next, the analysis results are provided. The last section offers concluding remarks and points to possible directions for future research.

4.2 Literature Review

4.2.1 Theoretical Approaches to Relative Labor Market Positions of Men and Women

The differences in working practices between men and women can be considered from two angles. On the one hand, the sex segregation theory addresses differences in behavior patterns between men and women in socioeconomic terms. This theory postulates that men and women have diverse life trajectories, experiences, skills, different tastes, and contrasting desires, which affects how they invest time and effort into career development. Consequently, males and females tend to have different labor market positions (Schultz 1990; Bussey and Bandura 1999; Grusky and Levanov 2008). According to this theoretical framework, differences in working practices between men and women do not depend on external factors such as institutions or sociocultural factors such as values and norms but on inherent biological differences, which ultimately impact the structure of the labor market.

The postulates of this theory have been corroborated by sociological studies. First, the research has found that men and women have different work motivations, orientations, and behavior patterns. Men tend to be more geared toward achievement, financial success, and career advancement, whereas women choose more socially oriented positions and jobs with flexible schedules, which allow them to combine work with family responsibilities (Hakim 1995; Clark 1997; Bender et al. 2005; Gunderson 2006; Lee et al. 2008; Cha 2010; Poplavskaya and Soboleva 2017, 2019). Second, traditionally "female" jobs have less stable labor market positions and offer fewer opportunities for career development. Women find it much more difficult to achieve financial or career success due to the "glass ceiling" and "sticky floor" problems (Arulampalam et al. 2007; Blau and Khan 2007; Rozada and Yeyati 2018). Third, a "gender paradox" phenomenon has been observed wherein women in objectively less attractive working conditions are more satisfied with their work and find it more interesting than men do; this has been attributed to their lower expectations from work (Clark 1997; Poplavskaya and Soboleva 2017).

On the other hand, social scientists introduced gender theory at the end of the twentieth century, which contrasts with the sex segregation theory described above (Udry 1994; Haig 2004). Gender theory posits that people can choose their own gendered roles in various facets of life. A number of studies have claimed that the role of women in the sphere of employment has been changing in Western societies. Recent survey findings have demonstrated that young women have greater career aspirations than men and are turning into achievers (Terjeson et al. 2007; OECD 2012). Studies have argued that male and female careers have begun to converge and that young men and women have started to earn equal salaries (Terjeson et al. 2007; Manning and Swaffield 2008). Some authors acknowledge a general shift from traditional to secular–rational values, asserting that individualistic aims such as self-actualization and career development are becoming more widespread among both men and women across multiple cultures (Inglehart and Welzel 2010). Some authors

have noted that not only women (Mallon and Cohen 2001; Gold and Fraser 2002; Cabrera 2007) but also men have begun to change their traditional attitudes toward work. Clarke found that some young Australian men have struggled to meet family demands and wish to devote more time to household activities rather than to work, earning money, and career development (Clarke 2015). These tendencies are more evident among youth than among adults.

4.2.2 Empirical Evidence of Relative Labor Market Positions of Young Men and Women

The two theories described above represent fundamentally different approaches to understanding the relative positions of males and females in the labor market. Both theories are supported by empirical evidence.

Sociologists have found significant differences in experiences, work values, motives, career perspectives, attitudes, and behavior patterns between men and women, concluding that women tend to engage in part-time jobs, "flexi-risky" employment, and less demanding, low-wage positions to a greater extent than men do (Kalleberg and Rosenfeld 1991; Gunderson 2006; Manning and Swarffield 2008; Sullivan and Baruch 2009; Parry and Irwin 2011; McGuinness and Sloane 2011; Cuesta and Carcedo 2014). Moreover, women are generally less likely to be employed full-time (World Bank Group 2014), and OECD statistics demonstrate that a significant percentage of companies have no women on their board of directors. Women occupy less than one-third of managerial positions in firms, with small variations across countries (OECD 2012).

However, recent reports demonstrate that the behavior patterns of young men and women are changing. Girls have been found to display higher levels of academic engagement and achievement (Epstein et al. 1988; Francis 2000; Warrington et al. 2000; Duckworth and Seligman 2006), and young women—who are now being encouraged to pursue success and expect gender equity in the employment sphere—are demonstrating changing attitudes towards employment (Ng and Wiesner 2007; Terjeson et al. 2007). Organizational cultures are also changing, as more educated and high-skilled women are actively participating in employment, and more firms are welcoming such employees on board. It is important to test whether these tendencies are observed among post-Soviet youth. This study thus proposes the following:

Hypothesis 1 The labor market positions of young women in post-Soviet countries have become more similar to those of young men in terms of working hours and job positions during the last three decades.

4.2.3 *Individual-Level Characteristics and Labor Market Positions of Young Men and Women*

Current and future labor market positions depend not only on sex but also on diverse individual-level characteristics such as age, education, marital status, and parental status. It is commonly assumed that adults with tertiary education have better chances of being employed full-time and attaining higher positions in the hierarchy. For women, however, the situation is more complicated. First, age does not have the same effect on their job positions as it has on men's. Manning and Swaffield provided evidence that early wage growth was similar for young men and women during the first 10 years of work after the completion of full-time education (Manning and Swaffield 2008) but that a wage gap developed afterward even if the woman continued full-time employment, had no children, and had the same personality as a man. This result shows that men and women have the same chances of obtaining a high-quality job, receiving the same salary, and holding a supervisory position when they are young.

Second, education is very important for labor market entry and often serves as a means of social mobility (Collins 1971; Gangl 2002; Wolbers 2007; Kogan 2012). Young graduates are highly trained and skilled, and tertiary education often helps youth to find well-paid jobs. However, the evidence suggests that young women graduates with tertiary education face problems associated with job mismatches, overeducation, and occupational diversity to a greater extent than their male counterparts (Figueiredo et al. 2015).

Third, marital and parental situations have an effect on the job positions of young men and women. Generally, women are more sensitive to changes in family situations (Stier et al. 2001) and often have to weight the costs and benefits of working against their household responsibilities and obligations (Becker 1981; Gronau 1977). Recent studies have shown that being a married woman with children decreases the likelihood of being employed full-time (Wright and Hinde 1991; Shockey and Mueller 1994). Given all of this evidence, this study proposes the following:

Hypothesis 2 Individual-level factors such as age and tertiary education increase the probability of a young woman in post-Soviet countries (a) to be employed full-time and (b) to be a supervisor. Being married and having children decreases the probability of such a woman (a) to be employed full-time and (b) to be a supervisor.

4.3 Data and Methodology

The study employed World Values Survey (WVS) repeated cross-sectional data (Inglehart et al. 2014) to see how the labor market practices of young men and women in post-Soviet countries have changed over time. The WVS includes nationally representative surveys with common questions for more than 100 countries. The

data were collected in six waves: 1981–1984, 1989–1993, 1994–1999, 1999–2004, 2005–2007 and 2010–2014. These data allow us to compare the situation across countries and regions over time. They are the only available data that are suitable for the aims of this research.

The sample was confined to employed youth aged 18 to 29 years and living in 10 post-Soviet countries: Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, the Russian Federation, Ukraine, and Uzbekistan. The final pool comprised 4,189 respondents. The list of countries and waves employed in the analysis as well as the number of observations according to sex are available in Table 4.1. The variables of interest are presented in Table 4.2.

The methodology consisted of two steps. The first was to calculate the ratio of men to women (a) employed full-time and (b) holding a supervisory position in one of the 10 post-Soviet countries in different time periods. This operation allowed us to paint a general picture of youth employment from a gender perspective across post-Soviet countries over time. The second step involved building two binary logistic regression analyses. The dependent variables were (a) being employed full-time and (b) holding a supervisory position. The independent variables included such characteristics as sex, age, tertiary education, marital and parental statuses, and country of residence.

4.4 Results

4.4.1 Differences in Employment Patterns Between Young Men and Women in Post-Soviet Countries Over Time

The study first analyzed the employment patterns of young men and women in post-Soviet countries in terms of working hours. The results are presented in Table 4.3. The factual ratios reflected in the static numbers indicate that young men seemed to dominate full-time positions in most of the post-Soviet countries. The cases where young women were equally engaged or were dominant in full-time positions were not statistically significant. Regarding temporal changes, there was a clear trend toward differences in employment types between young men and women in four out of the 10 countries. Significantly more men than women held full-time positions in Azerbaijan, Belarus, Kyrgyzstan, and Russia at the end of a period. Ukrainian youth also demonstrated a trend towards difference; however, it was significant only for the latest period of observation. In the middle of the observation period, young men and women worked equal hours. In Uzbekistan, where only one survey was conducted (from 2010 to 2014), significantly more men than women were employed full-time.

The study then calculated the ratio of young men to women holding supervisory positions in the post-Soviet countries (see Table 4.4). The analyses show that many more young men than women have traditionally held supervisory positions in the trans-Caucasian region (Azerbaijan, Armenia, Georgia). In the Western region (Belarus, Moldova, Russia, and Ukraine), young women and men seem to have more

Table 4.1 Number of observations by country-wave

Country (Wave)	Men	Women	Total
Azerbaijan (3)	136	130	266
Azerbaijan (6)	72	38	110
Armenia (3)	109	111	220
Armenia (6)	36	27	63
Belarus (2)	90	117	207
Belarus (3)	112	129	241
Belarus (6)	134	107	241
Georgia (5)	35	23	58
Georgia (6)	42	27	69
Kazakhstan (6)	128	141	269
Kyrgyzstan (4)	60	50	110
Kyrgyzstan (6)	100	93	193
Moldova (3)	69	36	105
Moldova (4)	46	51	97
Moldova (5)	49	47	96
Russian Federation (2)	156	145	301
Russian Federation (3)	109	106	215
Russian Federation (5)	157	124	281
Russian Federation (6)	223	134	357
Ukraine (3)	126	124	250
Ukraine (5)	62	65	127
Ukraine (6)	95	94	189
Uzbekistan (6)	72	52	124
Total	**2218**	**1971**	**4189**

Note The world values survey longitudinal data has been collected in 6 waves: Wave 1 (1981–1984), Wave 2 (1989–1993), Wave 3 (1994–1999), Wave 4 (1999–2004), Wave 5 (2005–2007), and Wave 6 (2010–2014)

Source World values survey, longitudinal data (1981–2014), author's calculations

equal positions in their workplaces' hierarchical structures. Interestingly, Central Asian countries have different patterns. In Kazakhstan, slightly more women than men hold supervisory positions. In Kyrgyzstan, the positions of men and women are fairly equal. In Uzbekistan, men hold more high-status jobs than young women do. Unfortunately, the first hypothesis cannot be tested properly due to a lack of data covering the entire three-decade study period. Questions about supervising status were included in the questionnaire only in the two last waves of the WVS. The trend analysis was conducted only for three of the 10 post-Soviet countries. The analysis revealed that Georgia and Russia showed a trend towards similarity in job positions

Table 4.2 Key survey variables

Variable	Question	Answers
V229	Are you employed now or not? If yes, for about how many hours a week? If more than one job: only for the main job (code one answer):	Yes, has paid employment: 1 Full-time employee (30 hours a week or more) 2 Part-time employee (less than 30 hours a week) 3 Self-employed No, has no paid employment: 4 Retired/pensioned 5 Housewife not otherwise employed 6 Student 7 Unemployed 8 Other
V234	Do you or did you supervise other people at work? (code one answer):	1 Yes 2 No

Source F00001101-WV6_Official_Questionnaire_v4_June2012.pdf

Table 4.3 Time-trend analysis of ratios of men to women employed full-time

Country (Wave)	Relation	Significance of difference between % of men and women employed full-time
	Men to women	
Azerbaijan (1994–1999)	1.32	0.002
Azerbaijan (2010–2014)	2.33	0.033
Armenia (1994–1999)	1.37	0.002
Armenia (2010–2014)	1.81	0.064
Belarus (1989–1993)	0.77	n.a.
Belarus (1994–1999)	0.91	0.206
Belarus (2010–2014)	1.39	0.043
Georgia (2005–2007)	1.47	0.804
Georgia (2010–2014)	1.71	0.396
Kazakhstan (2010–2014)	0.94	0.608
Kyrgyzstan (1999–2004)	1.08	0.433
Kyrgyzstan (2010–2014)	1.43	0.013
Moldova (1994–1999)	1.92	n.a.
Moldova (1999–2004)	0.85	0.607
Moldova (2005–2007)	1.09	0.724
Russia (1989–1993)	1.08	n.a.
Russia (1994–1999)	1.13	0.033
Russia (2005–2007)	1.42	0.009
Russia (2010–2014)	1.65	0.836
Ukraine (1994–1999)	1.07	0.336
Ukraine (2005–2007)	0.96	0.891
Ukraine (2010–2014)	1.18	0.048
Uzbekistan (2010–2014)	3.00	0.000

Source World values survey, longitudinal data (1981–2014), author's calculations

Table 4.4 Time-trend analysis of ratios of men to women holding supervisory positions

Country (Wave)	Relation	Significance of difference between % of men and women holding supervisory position
	Men to women	
Azerbaijan (2010–2014)	6.00	0.088
Armenia (2010–2014)	2.40	0.190
Belarus (2010–2014)	1.32	0.815
Georgia (2005–2007)	9.00	0.035
Georgia (2010–2014)	4.00	0.086
Kazakhstan (2010–2014)	0.67	0.207
Kyrgyzstan (2010–2014)	1.03	0.859
Moldova (2005–2007)	0.86	0.765
Russia (2005–2007)	1.33	0.801
Russia (2010–2014)	1.06	0.029
Ukraine (2005–2007)	1.17	0.565
Ukraine (2010–2014)	1.21	0.509
Uzbekistan (2010–2014)	2.00	0.381

Source World values survey, longitudinal data (2005–2014), author's calculations

between young men and women. In both countries, more women were seen in the last period of observation to be holding high positions in the hierarchical structures of their workplaces than they had in the past.

4.4.2 Influence of Individual-Level Factors on Employment Patterns of Young Men and Women in Post-Soviet Countries

The study conducted a binary logistic regression analysis to examine which individual-level characteristics had an impact on the likelihood of being employed full-time and as a supervisor in the post-Soviet countries. Only the last observation period was analyzed, and the sample was narrowed to 1,605 respondents.

First, the study tested how age, having a partner (i.e., being married), having children, and having tertiary education influenced the probability of being employed full-time. The results showed that being a young woman decreased and being older increased the probability of being employed full-time. Only one interaction effect proved to be significant (see Model 3 in Table 4.5), as having children decreased the probability of being employed full-time for young women.

Model 5 was built to examine the differences across countries. It demonstrated that young women living in the post-Soviet space were generally less likely to be

Table 4.5 Binary logistic regression analysis model: being employed full-time is the dependent variable

	Model 1	Model 2	Model 3	Model 4	Model 5
Women	−0.615[c]	−0.572[c]	−0.415[c]	−0.628[c]	−0.213[b]
	(0.127)	(0.172)	(0.160)	(0.174)	(0.103)
High education	0.13	0.13	0.12	0.115	
	(0.132)	(0.132)	(0.132)	(0.187)	
Being married	0,056	0,106	0,035	0,055	
	(0.162)	(0.211)	(0.161)	(0.162)	
Having children	−0,146	−0,147	0,166	−0,145	
	(0.172)	(0.172)	(0.231)	(0.172)	
Age	0.092[c]	0.091[c]	0.092[c]	0.092[c]	
	(0.024)	(0.024)	(0.024)	(0.024)	
Women*Being married		−0,093			
		(0.250)			
Women*Having children			−0.545[b]		
			(0.264)		
Women*High education				0.028	
				(0.254)	
Azerbaijan					0.069
					(0.463)
Belarus					0.105
					(0.462)
Georgia					0.052
					(0.465)
Kazakhstan					−0.048
					(0.462)
Kyrgyzstan					−0.106
					(0.463)
Russia					0,06
					(0.462)
Ukraine					0,037
					(0.462)
Uzbekistan					−0,181
					(0.463)
Women*Azerbaijan					0,048
					(0.131)
Women*Belarus					0.125

(continued)

Table 4.5 (continued)

	Model 1	Model 2	Model 3	Model 4	Model 5
					(0.115)
Women*Georgia					0.134
					(0.143)
Women*Kazakhstan					0,186
					(0.114)
Women*Kyrgyzstan					0.04
					(0.118)
Women*Russia					0.221[b]
					(0.112)
Women*Ukraine					0,094
					(0.118)
Women*Uzbekistan					−0.124
					(0.126)
Constant	−0.81	−0.822	−0.893	−0.803	1.806[c]
	(0.589)	(0.590)	(0.592)	(0.592)	(0.329)
Observations	1.605	1.605	1.605	1.605	1.605
Log Likelihood	−807,142	−807,073	−804,993	−807,136	−853,865
Akaike Inf. Crit.	1,628,284	1,630,147	1,625,986	1,630,272	1,747.729
Bayesian Inf. Crit.	1,665,951	1,673,194	1,669,033	1,673,319	1,855.471

Note a $p<0.1$ (vs. control) b $p<0.05$ (vs. control) c $p<0.01$ (vs. control)
Source World Values Survey, wave 6 (2010–2014), author's calculations

employed full-time than young men. In Russia, however, the probability of a young woman being employed full-time was higher than that of a young man.

The results of the second binary logistic regression analysis demonstrated that having tertiary education and being married increased the probability of holding a supervisory position for both men and women in the post-Soviet countries (see Table 4.6). No significant results were observed regarding the interaction effects between sex and individual-level characteristics. However, Model 5 demonstrated that being a young woman in Kazakhstan and Russia increased the probability of being a supervisor.

4.5 Discussion

This study aimed to reveal the trends in employment patterns for post-Soviet youth from a gender perspective. The focus was on the relative labor market positions of young men and women regarding employment type (full-time vs. part-time) and

Table 4.6 Binary logistic regression analysis model: being a supervisor is the dependent variable

	Model 1	Model 2	Model 3	Model 4	Model 5
Women	−0.135	−0.150	−0.137	−0.130	−0.148
	(0.129)	(0.197)	(0.172)	(0.209)	(0.104)
High education	0.785[c]	0.785[c]	0.785[c]	0.789[c]	
	(0.131)	(0.131)	(0.131)	(0.169)	
Being married	0.524[c]	0.512[c]	0.525[c]	0.525[c]	
	(0.158)	(0.198)	(0.159)	(0.158)	
Having children	0.095	0.095	0.093	0.094	
	(0.163)	(0.163)	(0.204)	(0.163)	
Age	0.040	0.040	0.040	0.040	
	(0.025)	(0.025)	(0.025)	(0.025)	
Women* Being married		0.026			
		(0.256)			
Women*Having children			0,003		
			(0.255)		
Women*High education				−0,009	
				(0.264)	
Azerbaijan					−0.167
					(0.470)
Belarus					−0.115
					(0.469)
Georgia					−0.048
					(0.472)
Kazakhstan					−0.161
					(0.469)
Kyrgyzstan					−0.033
					(0.470)
Russia					−0.165
					(0.469)
Ukraine					−0.091
					(0.469)
Uzbekistan					−0.139
					(0.470)
Women*Azerbaijan					0.034
					(0.133)
Women*Belarus					0.136
					(0.117)

(continued)

Table 4.6 (continued)

	Model 1	Model 2	Model 3	Model 4	Model 5
Women*Georgia					−0.026
					(0.145)
Women*Kazakhstan					0.210[a]
					(0.115)
Women*Kyrgyzstan					0.160
					(0.120)
Women*Russia					0.245[b]
					(0.113)
Women*Ukraine					0.108
					(0.120)
Women*Uzbekistan					0.088
					(0.128)
Constant	−2.981[c]	−2.975[c]	−2.980[c]	−2.983[c]	1.333[c]
	(0.607)	(0.608)	(0.608)	(0.611)	(0.334)
Observations	1.599	1.599	1.599	1.599	1.599
Log Likelihood	−791,219	−791,214	−791,219	−791,219	−874.354
Akaike Inf. Crit.	1,596,439	1,598,429	1,598,439	1,598,438	1,788.708
Bayesian Inf. Crit.	1,634,079	1,641,446	1,641,456	1,641,455	1,896.375

Note a $p<0.1$ (vs. control) b $p<0.05$ (vs. control) c $p<0.01$ (vs. control)
Source World Values Survey, wave 6 (2010–2014), author's calculations

job position (supervisor vs. non-supervisor). The study's database comprised WVS repeated cross-sectional data, which offer a large international sample and enable an observation of trends over a long time period.

The recent research finds evidence of a convergence between male and female career trajectories (Ng and Wiesner 2007; Terjeson et al. 2007) and indicates that young men and women have relatively similar job positions (Manning and Swaffield 2008; OECD 2012). This study's analysis of narrowed WVS samples composed of youth living in post-Soviet countries showed that those findings are not generalizable. The first hypothesis, regarding the trend towards similarity in working practices between young men and women in post-Soviet countries, was rejected. The results regarding working hours showed the opposite trend. During the last three decades, the ratio of men to women holding full-time positions is rising in most post-Soviet countries. Only Ukraine has the ratio fluctuated. This outcome may be a sign of an opposite trend of the difference in employment patterns between men and women and the reappearance of the traditional distribution of social roles in the post-Soviet space. The available temporal statistics on supervisory positions were not sufficient to make assumptions about time trends in post-Soviet countries.

The results of the binary logistic regression analyses also suggested that traditional social roles may be undergoing preservation in the post-Soviet space. In general, young women in post-Soviet countries are less likely to take full-time working positions than men, and having children for a young woman decreases this probability. Age increases the probability of being employed full-time, while being married and having tertiary education increase the probability of being a supervisor for both young men and women. Neither education nor family status has a significant influence on the probability of holding a supervisory position for a young woman.

The effect of country on the probability of a young woman holding full-time and supervisory positions was also tested. A regression analysis demonstrated that the general trend described above does not hold for Russia and Kazakhstan. The results showed that young women in Russia are more likely to have full-time and supervisory positions than men are. In addition, being a young woman in Kazakhstan increases the probability of holding a supervisory position relative to men.

This study provides a general picture of the trends in youth employment in post-Soviet countries. It casts doubt on what has been described as the inevitable convergence between male and female careers over time and across the world. This chapter enriches the literature on youth career trajectories (Sherer 2005; Eichhorst et al. 2014) and on job position comparisons between young men and women (Manning and Swaffield 2008; Clarke 2015).

Despite this study's contributions, it has several limitations. The first one concerns employment of WVS data to assess labor market participation. Although the WVS is not commonly used for that purpose, it provides representative information on the current situation and temporal changes in the countries from which it draws its sample. Thus, using its data is justified, as it corresponds to the goal of this research and provides a fresh approach to the issue it examines. Second, the study assumed that it is possible to talk about common trends in post-Soviet countries, but the results demonstrated that trends differ significantly within the post-Soviet region.

This study points to several fruitful avenues for future research. First, a closer observation of the social, economic, and political backgrounds of the countries under examination is needed to fully explain the trends the study revealed. Second, recent studies provide only a factual preliminary picture of the gendered situation in the youth labor market of post-Soviet countries and do not account for the motives and aims young men and women have when entering the labor market. Such pull factors as a desire to take an active part in employment, work more hours, or climb the career ladder as well as such push factors as the necessity to earn money, escape from poverty, or keep a household have not yet been explored. Third, in-depth case studies on the countries under examination would help to reveal the local changes in the gendered situations in terms of various socioeconomic facets. Such case studies may provide a more thorough and accurate picture of the potential problems these changes could create for individuals, families, countries, and post-Soviet regions.

References

Arulampalam W, Booth AL, Bryan ML (2007) Is there a glass ceiling over Europe? exploring the gender pay gap across the wage distribution. ILR Review 60(2): 163–186
Becker GS (1981) A treatise on the family. Cambridge, MA, Harvard University Press
Bender KA, Donohue SM, Heywood JS (2005) Job satisfaction and gender segregation. Oxf Econ Pap 57(3): 479–496. https://doi.org/10.1093/oep/gpi015
Blau FD, Kahn LM (2007) The gender pay gap. Econ Voice 4(4): 1–6
Bussey K, Bandura A (1999) Social cognitive theory of gender development and differentiation. Psychol Rev 106(4): 676–713
Cabrera EF (2007) Opting out and opting in: understanding the complexities of women's career transitions. Career Dev Int 12(3): 218–237
Clark AE (1997) Job satisfaction and gender: why are women so happy at work? Labour Econ 4(4): 341–372
Clarke M (2015) Dual careers: the new norm for Gen Y professionals? Career Dev Int 20(6): 562–582
Cha Y (2010) Reinforcing separate spheres: the effect of spousal overwork on men's and women's employment in dual-earner households. American Sociological Review 75(2): 303–329. https://doi.org/10.1177/0003122410365307
Chakars M, Sweet EL (2014) Professional women and the economic practices of success and survival before and after regime change: diverse economies and restructuring in the Russian Republic of Buryatia. Geo Journal 79(5): 649–663
Collins R (1971) Functional and conflict theories of educational stratification. American Sociological Review 36(6): 1002–1019
Cuesta B, Carcedo J (2014) Women's part-time jobs: "Flexirisky" employment in five European countries. Int Labour Rev 153(2): 269–292
Duckworth AL, Seligman ME (2006) Self-discipline gives girls the edge: gender in self-discipline, grades, and achievement test scores. J Educ Psychol 98(1): 198–208
Eichhorst W, Boeri T, De Coen A, Galasso V, Kendzia M, Steiber N (2014) How to combine the entry of young people in the labour market with the retention of older workers? IZA J Eur Labor Stud 3(1)
Epstein D, Elwood, J, Hey V, Maw J (1998) Schoolboy frictions: feminism and "failing" boys. Failing boys? Issues in gender and achievement. London, England: Open University Press Buckingham
Figueiredo H, Rocha V, Biscaia R, Teixeira P (2015) Gender pay gaps and the restructuring of graduate labour markets in Southern Europe. Cambridge Journal of Economics 39(2): 565–598
Francis B (2000) Boys, girls and achievement: Addressing the classroom issues. London, England, Routledge
Gangl M (2002) Changing labour markets and early career outcomes: labour market entry in Europe over the past decade. Work, Employ, Soc 16(1): 67–90
Gimpelson V, Kapelushnikov R (2006) Non-standard employment in the Russian economy. Moscow. The Publishing House of NRU HSE
Gimpelson V, Kapelyushnikov R, Lukyanova A (2010) Employment protection legislation in Russia: regional enforcement and labor market outcomes. Comp Econ Stud 52(4): 611–636
Gold M, Fraser J (2002) Managing self-management: successful transitions to portfolio careers. Work, Employ Soc 16(4): 579–597
Gronau R (1977) Leisure, home production, and work—the theory of the allocation of time revisited. J Polit Econ 85(6): 1099–1123
Grusky DB, Levanon A (2008) Four gloomy futures for sex segregation. Public Interes 28: 66–81
Gunderson M (2006) Male-female wage differentials: how can that be? Can J Econ 39(1): 1–21
Haig D (2004) The inexorable rise of gender and the decline of sex: Social change in academic titles, 1945–2001. Arch Sex Behav 33(2): 87–96
Hakim C (1995) Five feminist myths about women's employment. Br J Sociol 46(3): 429–455

Inglehart R, Haerpfer C, Moreno A, Welzel C et al. (eds) (2014) World values survey: all rounds—country-pooled datafile version: http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp
Inglehart R, Welzel C (2010) Changing mass priorities: the link between modernization and democracy. Perspect Polit 8(2): 551–567
Kalleberg AL, Rosenfeld RA (1991) Gender inequality in the labor market: a cross-national perspective. Acta Sociol 34(3): 207–225
Kogan I (2012) Tertiary education landscape and labour market chances of the highly educated in Central and Eastern Europe. Eur Sociol Rev 28(6): 701–703
Lapidus GW (1978) Women in Soviet society: equality, development, and social change. Oakland, CA, University of California Press
Lee TH, Gerhart B, Weller I, Trevor CO (2008) Understanding voluntary turnover: path-specific job satisfaction effects and the importance of unsolicited job offers. Acad Manag J 51(4): 651–671. https://doi.org/10.5465/amr.2008.33665124
Mallon M, Cohen L (2001) Time for a change? Women's accounts of the move from organizational careers to self-employment. Br J Manag 12(3): 217–230
Manning A, Swaffield J (2008) The gender gap in early career wage growth. Econ J 118(530): 983–1024
McGuinness S, Sloane PJ (2011) Labour market mismatch among UK graduates: an analysis using REFLEX data. Econ Educ Rev 30(1): 130–145
Ng ES, Wiesner WH (2007) Are men always picked over women? the effects of employment equity directives on selection decisions. J Bus Ethics 76(2): 177–190
OECD (2012, May 23–24) Gender equality in education, employment and entrepreneurship: Final Report to the MCM 2012. Better policies for better lives. Paris
Parry E, Irwin P (2011) Generational differences in work values: a review of theory and evidence. Int J Manag Rev 13(1): 79–96
Pollert A (2003) Women, work and equal opportunities in post-communist transition. Work, Employ Soc 17(2): 331–357
Poplavskaya AA, Soboleva NE (2017) Men's and women's satisfaction with various job aspects in Russia. Monit Public Opin: Econ Soc Chang 5: 271–288. https://doi.org/10.14515/monitoring.2017.5.15 (in Russian)
Poplavskaya AA, Soboleva NE (2019) Realizatsiya dostizhitelnykh motivov muzhchin i zhenshchin na rynkakh truda raznykh stran mira [Realization of male and female achievement motives in the labor markets across the world]. J Econ Sociol [Ekonomicheskaya sotstiologiya] 20(2): 52–85. https://doi.org/10.17323/1726-3247-2019-2-51-85 (in Russian)
Rozada MG, Yeyati EL (2018) Do women ask for lower salaries? the supply side of the gender pay gap, Buenos Aires, Argentina, Universidad Torcuato Di Tella
Schultz V (1990) Telling stories about women and work: Judicial interpretations of sex segregation in the workplace in Title VII cases raising the lack of interest argument. Harv Law Rev 103(8): 1749–1843
Sherer S (2005) Patterns of labor market entry—long wait or career instability? an empirical comparison of Italy, great Britain and West Germany. Eur Sociol Rev 21(5): 427–440
Shockey M, Mueller C (1994) At-entry differences in part-time and full-time employees. J Bus Psychol 8(3): 355–364
Stier H, Lewin-Epstein N, Braun M (2001) Welfare regimes, family-supportive policies, and women's employment along the life-course. Am J Sociol 106(6): 1731–1760
Sullivan SE, Baruch Y (2009) Advances in career theory and research: a critical review and agenda for future exploration. J Manag 36(6): 1542–1571
Terjeson S, Vinnicombe S, Freeman C (2007) Attracting generation Y graduates: organisational attributes, likelihood to apply and sex differences. Career Dev Int J 12(6): 1117–1142
Udry JR (1994) The nature of gender. Demogr 31(4): 561–573
Warrington M, Younger M, Williams J (2000) Student attitudes, image and the gender gap. Br Educ Res J 26(3): 393–407

Wolbers M (2007) Patterns of labour market entry: a comparative perspective on school-to-work transitions in 11 European Countries. Acta Sociol 50(3): 189–210
World Bank Group (2014) Gender at work. a companion to the world development report on jobs. World development report on gender. World Bank Group's Gender and Development unit
Wright R, Hinde P (1991) The dynamics of full-time and part-time female labour force participation in Great Britain. Eur J Popul. Rev Eur Démographie 7(3): 201–230

Chapter 5
Gender Differences in the Employment Patterns of People 45+ in Russia

Oxana Sinyavskaya and Anna Cherviakova

Abstract The employment rates for middle-aged and older men and women in Russia grew remarkably in the 2000–2010s, and the latter increased faster than the former. Possible explanations for this tendency might be the substantially higher life expectancy of women in Russia, the overall growth of female employment, and a decline in women's traditional responsibilities, such as caregiving for grandchildren and disabled relatives. Besides, the 2000–2010s was the period of economic growth in Russia when the overall number of jobs was increasing. Although, in general, the employment rates of people aged 45 and over have been rising, the share of employed people aged 60 and over was less stable in its growth because of changes in pension benefits, as well as on the situation in the labour market. The empirical part of this chapter aims to explore the gender differences in the determinants of employment and labour mobility in middle and older age in Russia. The study uses the Russian Longitudinal Monitoring Survey (RLMS-HSE) data (2010–2017). Gender differences in the influence of current work experience, economic factors, and some job characteristics on employment in middle and older age are revealed. Industry, occupations, particular aspects of job satisfaction are significant for labour mobility in middle and older age in Russia, but their impact differs for men and women.

Keywords Employment · Middle and older age · Pension age · Pensioners · Labour market

5.1 Introduction

Since 2002, except for during the economic crisis of 2008–2009, the employment of the middle-aged and older population in Russia has been steadily growing. Older women have increased their labour force participation faster than men (Lyashok and

O. Sinyavskaya (✉) · A. Cherviakova
National Research University Higher School of Economics, Moscow, Russia
e-mail: osinyavskaya@hse.ru

A. Cherviakova
e-mail: aermolina@hse.ru

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_5

Maltseva 2012). Female employment rates increased from 81.9% in 2002 to 88.5% in 2019 for those aged 45–49, and from 76.1 to 83.9% in the 50–54, from 45.6 to 54.8% in the 55–59-year-old age groups. Male employment rates rose—respectively from 83.9 to 90.1% in the 4549, from 79.2 to 86.7% in the 50–54, from 68.1 to 77.2% in the 55–59-year-old age groups over the analysed period.[1] The increasing employment rates for the 45+ year-old population were mainly provided by employment in the informal sector of the economy. During 2002–2019, employment rates decreased for 45–49 year-old both men and women and 50–54 year-old men in the formal sector of the economy.[2] These trends highlight the unfavourable position of middle-aged and older workers in the Russian labour market, where they are often forced out of the formal labour market.

The focus of this chapter is individuals who are middle-aged and older, that is 45 years old and above. According to Oxford English Dictionary[3] and American Psychological Association,[4] middle-age or middle adulthood refers to the period between ages 45 and 65 years old. Until 2019, the normal pension age in Russia was 55/60 years for women/men.[5] However, starting with 45 years old, there are many options for early retirement (see Sect. 5.2), and in 2017, the share of pensioners was 7.2 and 19.8% in the 45–49 and 50–54-year-old age groups respectively.[6]

Russian pension legislation allows pensioners to work without any penalties, except for the recent abolishment of pension indexation.[7] The majority of the individuals reaching the pension age, therefore, prefer to apply for a pension, and a substantial number of them continue working. In 2018, 22% of pensioners were officially employed.[8]

In this chapter, the authors analyse factors of the employment of middle-aged and older individuals, as well as labour mobility—changing a job/profession—as a possible strategy for maintaining employment after the pension age. The main research questions ask: to what extent factors affecting employment in middle and older age, and changing a job/profession before or at pension age, are different for men and women?

The chapter has the following structure. The next section provides a brief description of the pension system in Russia, focusing on those aspects that may influence the decision to work in old ages. In Sect. 5.3, based on Russian (Rosstat) and international

[1] The Federal State Statistics Service (Rosstat): https://www.gks.ru/.

[2] The same.

[3] https://www.oed.com/.

[4] https://psycnet.apa.org/search?fa=buy.optionToBuy&uid=1986-19674-001.

[5] From 2019, the normal pension age will gradually increase by one year annually up to 60 for women and 65 for men (Federal Law No. 350-FZ of October 3, 2018 (2018) "On the amendments to certain legislative acts of the Russian Federation on pension provision and payment)".

[6] Statistical Survey of Income and Participation in Social Programs (2017).

[7] Federal Law No. 385-FZ of December 29, 2015 (2015) "On the suspension of certain regulations of the legislative acts of the Russian Federation, the introduction of amendments to certain legislative acts of the Russian Federation and the features of an increase in the insurance pension, the fixed payment to the insurance pension and social pensions".

[8] The Federal State Statistics Service (Rosstat): https://www.gks.ru/.

(European Union Labour Force Survey, EU-LFS) data, the main trends of employment for middle-aged and older men and women in Russia are analysed, in comparison with other countries. Then, the next section presents the theoretical framework of the analysis and the results of previous empirical research into employment in middle and older age. Section 5.5 focuses on the data and methodological approach of our study, which is based on the Russian Longitudinal Monitoring Survey (RLMS-HSE) data for 2010–2017. In Sect. 5.6, the empirical results are presented. Finally, the conclusion summarises the main findings and provides some policy implications.

5.2 Pension System of Russia

The Russian pension system is mostly a state-run mandatory pay-as-you-go (PAYG)[9] system, providing old-age, disability and survival benefits based on previous contributions made by employers to the Pension Fund of Russia (PFR). Private pensions are underdeveloped and have limited coverage.

Until 2019, the normal[10] pension age was 55 for women and 60 for men, for the majority of people.[11] From 2019 the normal pension age began increasing by one year annually to 60 for women and 65 for men.[12] Additionally, in order to receive an old-age pension people should have a minimum period of contributions, that is equal to 10 years in 2019 and increasing up to 15 years by 2024, and a minimum number of individual coefficients (points), that is equal to 16.2 in 2019 and increasing up to 30 by 2025.[13]

Many employees can receive their pensions five to fifteen years earlier than the normal pension age. For instance, military personnel or policemen, as well as miners and some other groups of workers employed in heavy and hazardous conditions, retire on average at 45.[14] People working in Far North regions usually receive their pension approximately five years earlier than the normal pension age.[15] Health care employees in rural areas, and school teachers, become pensioners at 45–50 years old.[16] Mothers with five or more children or mothers with children with disabilities can also receive pensions earlier.[17] People who lost their jobs two years before the

[9] In pay-as-you-go systems the contributions of current employees finance benefits for current pensioners.

[10] The term 'normal pension age' refers to the age when an individual can receive a full old-age pension benefit on a regular basis without any privileges to retire earlier.

[11] Federal Law No. 400-FZ of December 28, 2013 (2013). "On the insurance pensions".

[12] Federal Law No. 350-FZ of October 3, 2018 (2018) "On the amendments to certain legislative acts of the Russian Federation on pension provision and payment".

[13] Federal Law No. 400-FZ of December 28, 2013 (2013). "On the insurance pensions".

[14] Federal Law No. 166-FZ of December 15, 2001 (2001). "On the state pension provision"; Federal Law No. 400-FZ of December 28, 2013 (2013). "On the insurance pensions".

[15] Federal Law No. 166-FZ of December 15, 2001 (2001). "On the state pension provision".

[16] Federal Law No. 400-FZ of December 28, 2013 (2013). "On the insurance pensions".

[17] The same.

retirement age due to a reduction in staff and are registered with the employment service could also expect an earlier pension.[18] As a result, the actual pension age is two to six years lower than the normal pension age (Maleva and Sinyavskaya 2010).

People without sufficient years of contributions or the required number of individual coefficients can receive a so-called "social pension" five years later, at 60 (women) or 65 (men) years.[19] This pension age is also increasing by five years by 2023.[20]

All pensioners can work and receive earnings and pension benefits without any restrictions to their incomes, although from 2016 the benefits of working pensioners are not indexed.[21] Pension age, the age at which people can receive pension benefits, is, therefore, lower than retirement age, the age when they leave the labour market to live on their pension, for many pensioners.

5.3 The Main Trends of Employment in Middle and Older Age in Russia: Gender Differences and International Comparisons

This section focuses on the trends in Russian male and female employment at the ages of 45+ years old over for the period 2002–2019. There is a gradual decrease with age in both male and female employment that accelerates when men and women reach pension age (that is 60–55 before 2018) at the age of 55–59 when most women retire.

There are at least three major trends in the employment of middle-aged and older individuals from 2002 to 2019. First, there is a significant growth in the employment rates for 45–59-year-old men and women over the whole period and of people aged 60 years old and over until at least 2007–2011. Second, the employment rate of men and women over 60 years old fluctuates more and seems to be more prone to changes in the level of pension benefits, their indexation and relationship to wages as well as to the situation in the labour market. Thirdly, over the 2002–2019 period, the gender gap in employment rates has reduced in all age groups due to the more active involvement of older women in paid employment.

The employment of both men and women aged 45–49 years old grew steadily from 2002 except in 2009 when a slight drop occurred because of the economic

[18] The Law of the Russian Federation No. 1032-1 of April 19, 1991 (1991). "On the employment in the Russian Federation".

[19] Federal Law No. 166-FZ of December 15, 2001 (2001). "On the state pension provision".

[20] Federal Law No. 350-FZ of October 3, 2018 (2018) "On the amendments to certain legislative acts of the Russian Federation on pension provision and payment".

[21] Federal Law No. 385-FZ of December 29, 2015 (2015) "On the suspension of certain regulations of the legislative acts of the Russian Federation, the introduction of amendments to certain legislative acts of the Russian Federation and the features of an increase in the insurance pension, the fixed payment to the insurance pension and social pensions".

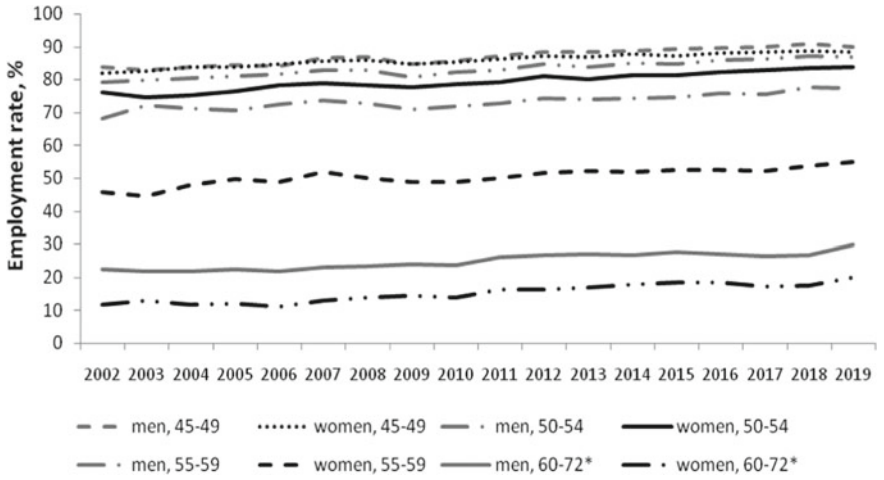

Fig. 5.1 Employment rates of Russian men and women aged 45–49, 50–54, 55–59 and 60–72*, in % (*Notes* data from the Federal State Statistics Service. Retrieved from http://www.gks.ru/) (*In 2000–2007, 60 years and above; in 2019, 60–69 years)

crisis. In 2019, the employment rates of men and women of this age were 90.1 and 88.5% respectively.[22] The gender gap remains small (no more 2.2 p.p.), and it is the smallest gender gap in the employment rates of senior age groups (Fig. 5.1).

The employment rates of men and women aged 50–54 also increased (Fig. 5.1). A slightly larger gender gap might be explained by two factors: the wider availability of early retirement options for women at this age, and more family responsibilities—care for grandchildren and long-term family care—that could pull women into inactivity.

The most considerable increase in the employment rates of men as well as women for 2002–2019 is observed at the age of 55–59: 9.1 and 9.2 percentage points respectively. The largest gap in the employment rates of men and women is also seen in this age group. Women become eligible to retire, and approximately every second woman of this age retires. In 2016, female employment rate stopped growing and then slightly decreased in 2017 after the abolishment of pension benefits indexation.[23]

The Federal State Statistics Service (Rosstat) has provided detailed data on the employment rates of people of 60 years old and above up to 2007, and 60–72 years old since 2008. From 2002 to 2007, the employment rates of both men and women at the age of 60 and above fluctuated considerably (from 21.8 to 22.9% and from 11.2 to 13.1% respectively). After the economic crisis of 2008–2009, steady growth began (Fig. 5.1). The employment rate of 60–72-year-old men increased from 23.7% in 2010 to 26.7% in 2018, and the employment rate of women of the same age increased from

[22]The Federal State Statistics Service (Rosstat): https://www.gks.ru/.

[23]Federal Law No. 385-FZ of December 29, 2015.

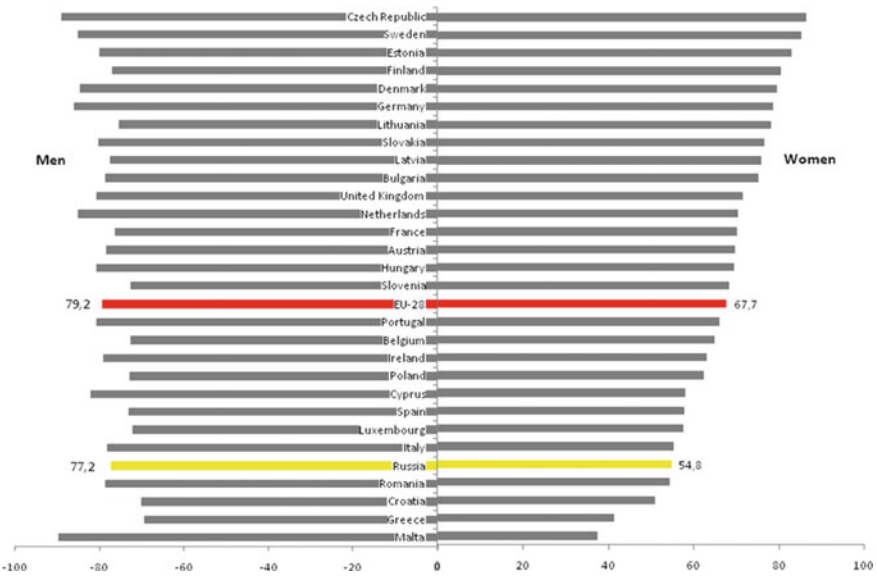

Fig. 5.2 The employment rates of men (*left*) and women (*right*) aged 55–59, % (sorted by women's employment rate), 2019 (*Notes* data from EU-LFS, Federal State Statistics Service)

13.9 to 17.6% over the analysed period.[24] The abolishing of indexation in the pension benefits of employed pensioners since 2016[25] also seems to be a disincentive to work at a pension age that explains the slight decrease of male and female employment rates in 2015–2016.

The employment rates of 45–54-year-old Russian men and women are higher than the EU-28 average. Russia takes seventh and eight places in the ranks of EU countries according to the employment rates for 45–49-year-old women and men, respectively. The employment rate of Russian men aged 50–54 is higher than in Belgium, France, and Finland and close to Slovakia, Denmark, and the UK. The employment rate for women aged 50–54 years is near to that of Germany, Latvia, and Austria.

The majority of Russian women start receiving an old-age pension from 55 years, which causes a drop in their employment rate to 54.8%, below the EU-28 average (67.7%) (Fig. 5.2). Although also decreasing, the men's employment rate at the same age is only slightly below the EU-28 average (77.2 vs 79.2%).[26]

At the age of 60 the majority of Russian men become eligible for an old-age pension, and hence their employment rate declines rapidly to 39.4%, far below the EU average (52.2%). The employment rate of Russian women at the age of 60–64

[24] In 2019, the employment rates of 60–69-year-old men and women were 29.9 and 20.0% (Fig. 5.1). The microdata on the Labour Force Survey (2019) for the calculation of employment rate at the age of 60–72 years are not published yet.

[25] Federal Law No. 385-FZ of December 29, 2015.

[26] The Federal State Statistics Service (Rosstat): https://www.gks.ru/;
EU-LFS: https://ec.europa.eu/eurostat/data/database.

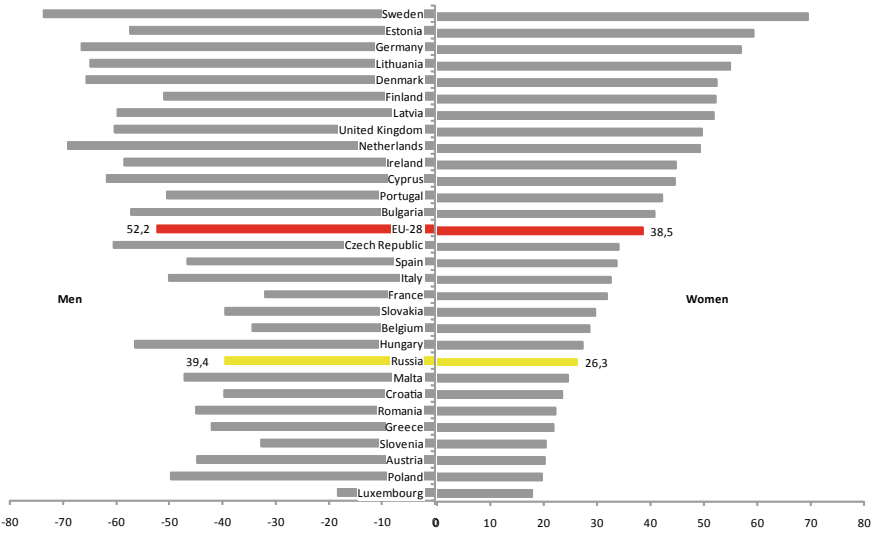

Fig. 5.3 The employment rates for men (*left*) and women (*right*) aged 60–64, % (sorted by women's employment rate), 2018 (*Notes* data from EU-LFS, authors' calculations on the Russian LFS microdata)

is also below the EU-28 average (26.3 vs 38.5%), but the gap is smaller than for men.[27] Many Russian women continue working, unlike their EU counterparts, and their employment rate at this age is higher than those in some eastern and southern EU countries, such as Austria, Romania, and Slovenia (Fig. 5.3).

The employment rate for Russian women aged 65–74 is higher than the EU-28 average (8.4 vs 7.4%), and about the same as in the Czech Republic and Finland (Fig. 5.4). The male employment rate is close to the EU-28 average (11.8 vs 13.4%) and that of Italy and Poland.[28]

In summary, the employment rates of Russian men and women start declining earlier than in many EU countries, but have longer 'tails', with higher employment at ages over 60. Despite the relatively low early and normal pension age in Russia, the employment rates of Russian men and women are comparable with the EU-28 average. The largest gap between Russia and EU countries is seen in the first five-year groups following the normal pension age (55–59 and 60–64 for men and women respectively), and it becomes smaller in older age groups.

[27] The same.

[28] The same.

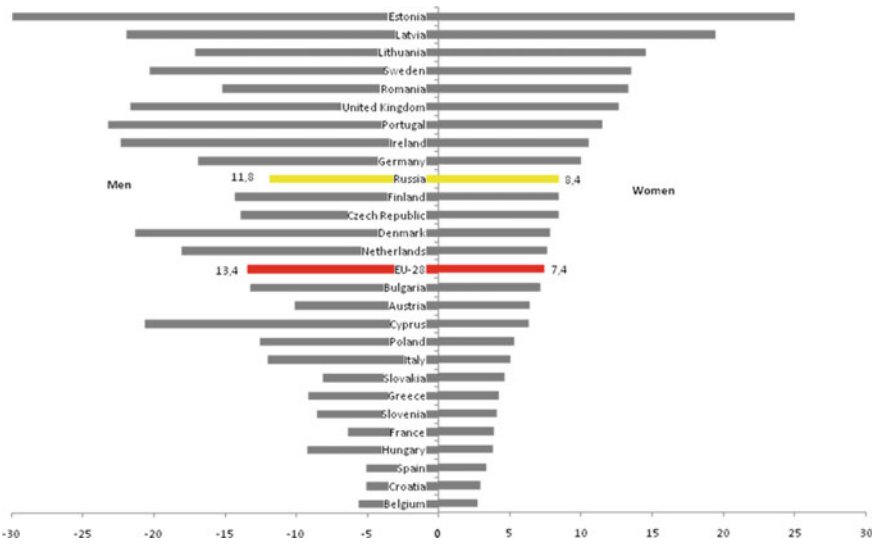

Fig. 5.4 The employment rates for men (*left*) and women (*right*) aged 65–74, % (sorted by women's employment rate), 2018 (*Notes* data from EU-LFS, authors' calculations on the Russian LFS microdata)

5.4 Theoretical Framework of the Analysis and Empirical Evidence of Gender Differences in the Factors of Employment in Middle and Older Age

In recent decades, Russia, as well as many other developed or rapidly developing countries, has been observing a convergence between the employment rates of older women and men, caused by substantial growth for the former and the stagnation or even decline of the latter (e.g., for the US, see Gendell and Siegel 1992). Many scholars explain this trend by higher education and qualification of new female birth cohorts entering the labour market (Goldin and Katz 2018) and the institutional development of childcare and long-term care (Cotter et al. 2002) that had led to the decline in women's family responsibilities (Erskine 1991). Besides, the recent shift from industrial to a more service-based economy has led to the creation of new jobs in female-dominated industries (Kalleberg et al. 1996; Pleau 2010).

These explanations seem to be fair for Russia as well. Besides, due to substantially higher women's life expectancy than that of men in Russia,[29] the former have more opportunities to work longer. At the same time, a large number of senior women become widows[30] that increases their poverty risks. A survey of Russian working

[29] In 2017, in Russia, the further life expectancy of men and women at the age of 60 was 16.46 and 21.95 years correspondingly (Human Mortality Database).

[30] According to Russian microcensus (2015), the share of widows is 35.4, 65.0 and 82.6 in the 60–69, 70–79, 80−89-year-old age groups respectively.

pensioners in 2017 showed that the main reasons for working after pension age are a lack of money for the appropriate and habitual standard of living as before the pension age, desired or needed to help one's adult children and their families,[31] and these motives may be more widespread among female pensioners. By pension age, women, on average, have a slightly shorter period of paid pension contributions than men (Gurvich and Sonina 2012). Women's earnings are also lower than men's on average, due to gender differences in employees distribution across industries and occupations (for example, there are more men than women in the top positions of civil service; Maltseva and Roshchin 2007). This leads to a slightly lower pension benefit for women,[32] that probably contributes to the growth of their employment rate.

5.4.1 The Factors of Employment for Middle-Aged and Older Men and Women: A Review of Previous Studies

Most studies confirm that the health of older workers may restrict their opportunities to work longer (OECD 1998; Bound et al. 1999; Sinyavskaya 2005; Góra et al. 2010; Gurvich and Sonina 2012 and many others). Because of the rather low life expectancy in Russia compared with developed countries and its huge gender gap, the impact of health on the employment of older workers in Russia is likely to be crucial and differs for men and women. Previous research on Russia has found that the self-evaluation of health has a stronger effect on female employment than male, those close to pension age and those at early pension age (Sinyavskaya 2005)[33] as well as among pensioners of 45 years old and above (Góra et al. 2010).[34] More recently, Levin (2015) has reported the opposite tendency for individuals reaching the normal pension age.

A higher level of education seems to be an incentive to work longer. Secondary and post-secondary education increases the length of working careers at the pension age and close to it (Sinyavskaya 2005; Góra et al. 2010; Giles et al. 2011; Gerber and Radl 2014), and raises the probability of re-entry to the labour market (Levin 2015). In Russia, the effect of education is stronger for women than for men, close to the pension age (Sinyavskaya 2005) and at the pension age the situation is reversed (Levin 2015). These findings may correspond with the educational structure of the older generation in Russia. According to the Russian micro census of 2015, in the 45–49, 50–54, and 55–59-year-old age groups, the share of women with tertiary

[31] Validata (2017).Testing of measures of government support. The results of focus-groups.

[32] According to RLMS (2017), the average level of pension benefit was equal to 15,401.1 and 13,925.5 roubles ($632.9 PPP and $572.2 PPP) for men and women, respectively.

[33] In Sinyavskaya (2005), the sample included men of 50–59 and women of 50-54 years old regardless of the status of the pensioner.

[34] In Gora et al. (2010), the sample included pensioners of 45 years old and above and early pensioners.

education exceeds the share of men with the same level of education; in the age groups of 60–64, 65–69, and 70+ years old this is the opposite.

The majority of studies on Russia, as well as other countries, found that having a spouse/partner increases the probability of a male's employment but not a female's (Borland and Warren 2006; Sinyavskaya 2005). More recent Levin (2015)'s study pointed out that the presence of a working spouse raises the probability of both male and female pensioners being employed, and the effect is slightly higher for men.

Family duties in the form of caregiving for small children or aged relatives partly displace employment in older age (Sinyavskaya 2005; Borland and Warren 2006; Gurvich and Sonina 2012), especially for grandmothers close to pension age (Zamarro 2011; Buber-Ennser 2014). In Russia, the presence of small children[35] affects the probability of female but not male employment at pension age (Kovrova 2007; Denisova 2017b), and close to it (Sinyavskaya 2005), that confirms the social roles of grandmothers for grandchildren of pre-school and early school age. The presence of older grandchildren (6–18 years old) in a household also decreases the probability of a grandmother's employment, but the effect is lower than for younger grandchildren (Kovrova 2007). More recently, Levin (2015)'s study revealed that the presence of children aged 0–18 decreases the probability of both male and female employment at pension ages. These contradicting findings of the impact of family duties on male employment may be caused by the differences in the age of children (small/older children only vs children of all ages) as well as the differences in the observation period (the early 2000s vs 2010s). It is possible that older men and women now participate in caregiving for grandchildren more evenly than 10–15 years ago. The findings noted above have allowed formulating a hypothesis that family factors affect the employment of women more than men at pension age (**Hypothesis 1**).

Job characteristics are also significant determinants of the employment of middle-aged and older persons. At pension age, both male and female employment in the public sector grows, with female employment growing more than male (Lyashok and Maltseva 2012).

Besides, informal employment becomes more common, especially among those who change their job when they reach pension age (Sonina and Kolosnitsyna 2015). Men are more often involved in informal employment than women (Grishina et al. 2014). The ability to work from home increases the probability of middle-aged and older women being employed, while part-time employment is positively associated with their exit from the labour market. However, these factors are non-significant for middle-aged and older men's employment (Levin 2015).

Employment at middle and older age is also affected by economic factors such as the level of pension benefit (Sinyavskaya 2005), the earnings level (Gurvich and Sonina 2012), social benefits (Borland 2003), financial support from relatives (Borland and Warren 2006). In Russia, in the early 2000s, the effect of pension benefit on employment at middle and older ages was negative (Kovrova 2007), especially

[35]Of 0–5 years old in Kovrova (2007)'s study, 0–6 years old in Denisova (2017b)'s study, and 0–10 years old in Sinyavskaya (2005)'s study.

for men (Sinyavskaya 2005). A higher pension and social benefits increase the alternative cost of employment and may be a disincentive for employment at older ages (Borland 2003). The positive effect of earnings has been observed for both genders (Kovrova 2007) or for male pensioners only (Gurvich and Sonina 2012). Other household incomes seem to be a disincentive to work longer (Gerber and Radl 2014; Levin 2015) while higher household expenditures push older workers to the labour market (Denisova 2017a). Based on these studies, the following hypothesis was formulated: the probability of middle-aged and older women's employment increases even at a moderate earnings, while for men only high earnings are significant (**Hypothesis 2**).

Finally, a few studies explored the impact of job satisfaction on employment in middle and older age. In particular, Levin (2015) found that occupational growth is more significant for women's employment and general job satisfaction is significant for men's employment.

5.4.2 Previous Studies on the Determinates of Labour Mobility of Middle-Aged and Older Workers

The phenomenon of labour mobility has been the subject of several theories. Labour mobility is seen as the process of searching for optimal matching between an employee and his/her job (Jovanovic 1979; Flinn 1986) in job-matching theory, and as the constraint to the accumulation of specific human capital (knowledge and skills) in companies (Gimpelson et al. 2017), in human capital theory.

The factors of labour mobility have aroused considerable interest among scholars, including in Russia. However, there is little research on labour mobility at the pension age and close to it. Russian men tend to change job/occupation more often than women (Maltseva 2007; Gimpelson et al. 2017), but women benefit from labour mobility much more than men (Maltseva and Roshchin 2007). Thus, the following hypothesis was verified: middle-aged and older women tend to keep the same job after pension age, whereas men of the same age prefer to change their job or occupation (**Hypothesis 3**).

Other factors related to labour mobility are education (Nesterova and Sabirianova 1999; Gimpelson et al. 2017), current and future level of earnings (Morternsen 1986; Maltseva 2005), household material well-being (Maltseva and Roshchin 2007). More educated and highly-paid employees are less likely to change their jobs (Farber 1999; Maltseva 2007; Morternsen 1986) but their expectations of higher earnings at a new job location may be an incentive to labour mobility (Maltseva 2005). Besides financial aspects of a job, individuals, especially at older age, may prefer to have a less stressful job, focus on their personal interests, and increase the time spent with families and friends (Johnson 2011; Feldman et al. 2002). Job dissatisfaction may be a reason for job changes (Cornelissen 2006). In addition, in Russia, labour mobility is higher in commerce and construction (Gimpelson et al. 2017), in private (Maltseva 2009) as well as in small and microenterprises (Gimpelson et al. 2017).

5.5 Methodology and Data

The empirical part of the study covers: (1) the factors in middle-aged and older persons' employment, and (2) the factors in the labour mobility[36] of middle-aged and older workers and its effect on further employment.

The current study is based on the Russian Longitudinal Monitoring Survey (RLMS-HSE)[37] which is an annual nationally representative survey with a longitudinal sample. Its questionnaire contains a broad range of questions about incomes and expenditures, education and employment, health, and so on.

The constructed RLMS-HSE sample covers the period of 2010–2016 that is after the economic crisis of 2008–2009 when the decline of employment rate of middle-aged and older individuals was more noticeable than in the crisis of 2013–2014.

In order to analyse the factors of labour mobility—changing a job/profession—before or at pension age as well as its influence on further employment in middle and older age the sufficient number of individuals who have experienced job changes is needed. In the annual representative RLMS-HSE waves of 2010–2016, 10–13% of individuals of 45 years and over changed a job/profession or entered to the labour market after the period of unemployment, as compared to the year preceding the survey. To increase this share labour mobility over three years is analysed.[38] Higher share of individuals with labour mobility leads to more equal distribution between 0 and 1 cases in the binary variable of labour mobility that allows to increase the statistical significance of estimates (Cohen and Cohen 2010). Besides, the influence of individual's labour mobility on their further employment may occur not only in the next year but through time lag.

The longitudinal RLMS-HSE samples are more likely to have higher rates of attrition than other household panel surveys because of its design features and sampling strategy (Gerry and Papadopoulos 2015). In the longitudinal sample of adult respondents[39] from 2001 to 2010 the annual attrition was approximately 10% on average and the overall attrition over a nine-year period was 49%; 40.3% of respondents participated in all 10 waves. Individuals of 60 years and over were the dominant

[36]Changing a job/profession. In this study, these terms are used as synonyms.

[37]RLMS-HSE is conducted by the National Research University Higher School of Economics (https://www.hse.ru/en/rlms) and ZAO Demoscope, together with Carolina Population Centre, University of North Carolina at Chapel Hill and the Federal Centre of Theoretical and Applied Sociology of the RAS (https://www.cpc.unc.edu/projects/rlms-hse).

[38]This variable is constructed on the three-year panel RLMS sample. The fact of changing/getting a job (occupation) by an individual is fixed in every year out of three years based on the following RLMS question: "Try to recall whether you have changed your job or occupation since the previous November, or has everything remained the same? (1) Occupation and job remain the same; (2) Changed occupation, but not job; (3) Changed job, but not occupation; (4) Changed both job and occupation; (5) Didn't work in the previous November; (6) Doesn't know; (7) Refuses to answer". Options (2)—(5) are coded as changing/getting a job (occupation), others are coded as keeping the current job place (see Table 5.1). If an individual has changed or got a job (occupation) at least once over the three-year period, the dependent variable equals 1, otherwise—0.

[39]17 years old and over.

group among those leaving and never returning to the sample (the same). Thus, a seven-year panel (for 2010–2016) of individuals of 45 years and over is likely to have high rates of attrition. After testing different length of the panel sample the five-year period was chosen as the optimal for the number of observations. Besides, this length of the sample allows to analyse individual's labour mobility over a three-year period as well as its factors in the year before, and its influence on further individual's employment in the year after.

The sample for this study was compiled from three five-year panels of 2010−2014, 2011–2015, and 2012–2016. It contains 2069 individuals (598 men and 1471 women) aged 45 years and above at the first year of observation, who will be working pensioners at the fourth year of observation.[40]

In order to answer the research questions two logistic regressions are estimated. This statistical method allows to estimate the probability of experiencing a particular lifetime event (exit from labour market as well as labour mobility) within a limited period (Liu 2012). Unlike survival analysis, time of the occurrence of lifetime event and the length of survival process are not in the focus of this study. Besides, the assumptions of survival analysis about an independence of individual's censored time and proportional risks are likely to be disturbed[41] (Singer and Willet 2003).

The dependent variable of the first regression is an individual's employment status (employed/unemployed)[42] at the year *t*. In the second regression the dependent variable is the fact of changing/getting a job (occupation) by an individual over the last three years preceding the year *t*.

In both regressions, the independent variables include (1) socio-demographic characteristics (2) job characteristics (3) job satisfaction and erosion of workers' rights (4) economic factors. The independent variables are measured one year earlier than the dependent variables. Also, the first regression includes the fact of changing/getting a job (occupation) by an individual over the three-year period as an independent variable.

The *socio-demographic characteristics* are age, location (regional centre/city or town/urban-type settlement/rural), partnership status (in couples/not in couples (single)), education (lower secondary/secondary/undergraduate), self-rated health (poor or very poor/fair/good and very good), disability status (persons with disabilities/persons without disabilities), eligibility for early retirement (does not have eligibility/have eligibility). *Job characteristics* cover the industry, occupation, type of employment (formal/informal), length of a working-week (full/part-time job), job tenure (less than 1 year/1–2 years/3–5 years/6–10 years/11–20 years/more than

[40]This sample design is used in order to analyse the factors of individual's employment in the last year of observation.

[41]The influence of predictors on the risk of exit from labour market as well as labour mobility seems to be different in different periods.

[42]This variable is based on the following RLMS question: "Let's talk about your primary work at present. Tell me, please: (1) You are currently working; (2) You are on paid leave (maternity leave or taking care of a child under 3 years of age); (3) You are on another kind of paid leave; (4) You are on unpaid leave; (5) You are not working; (6) Doesn't know; (7) Refuses to answer". Options (1)—(4) are coded as employed, others are coded as unemployed (see Table 5.1).

20 years),[43] firm ownership (state/private/mixed or no answer), firm size (micro-/small/medium/large/no answer). The group of *job satisfaction and erosion of workers' rights* factors comprise general job satisfaction, satisfaction with working conditions, earnings, job opportunities (a 4 or 5-step scale from dissatisfied to completely satisfied), employer's monetary debt to the employee, reduction of earnings or hours of work, enforced unpaid leave (yes/no). Finally, economic factors are measured by the ratio of pensioner's earnings to the minimum regional wage. The descriptive statistics of the above variables, as well as the RLMS-HSE questions used for their calculation, are presented in Table 5.1.

5.6 Empirical Results and Discussion

In this section, the models for the factors in middle-aged and older persons' employment are firstly presented, and then the models for the factors in the labour mobility before or at pension age are discussed. Separate models for general job satisfaction and satisfaction with various aspects of job are constructed due to the multicollinearity of these variables. Also separate models with the industries and occupations are constructed in order to provide a sufficient number of observations in each group of categorical variables.

5.6.1 The Factors of Employment at Middle and Older Age

The coefficients in the constructed models may suggest that the factors involved in the employment of 45+ year-old men and women are quite different. The main differences are observed in the effect of an individual's level of education and self-rated health, job characteristics (industry, occupation, job tenure, firm size and ownership), and job satisfaction, as well as economic factors regarding the probability of being employed (Table 5.2).

Beginning with socio-demographic characteristics, every additional year of life decreases the probability of being employed by 0.6–1.0% and 0.6–0.7%[44] for 45+ year-old men and women respectively, depending on the model specification (Table 5.3). Living in a rural area decreases the probability of women's employment in some model specifications (see Table 5.3).

Poor and very poor self-rated health decrease the probability of men's employment (by 16.4–20.7% on average, in comparison to fair health, depending on the

[43]The continuous variable of job tenure was also tested. However, its significance was lower than the significance of the categorical variable; thus, the second specification is preferable.

[44]The average marginal effect is calculated as the following:

$\Delta P\{y_i = 1|x_i\} \simeq \frac{\partial P\{y_i=1|x_i\}}{\partial x_{ik}}$, where $\Delta P\{y_i = 1|x_i\}$ is the increase/decrease of the probability that the dependent variable equals 1; ∂x_{ik} is the marginal change of k^{th} independent variable.

Table 5.1 Descriptive statistics of the variables

Variable name	Variable categories	Frequencies (%)		RLMS-HSE question
		t_0 (1st equation)	$t_{1.3}$ (2nd equation)	
Independent variables				
Socio-demographic characteristics				
Age	Mean	56	59	Respondent's socio-demographic profile
	Min	45	48	
	Max	81	84	
Gender	Men	28.9		Respondent's socio-demographic profile
	Women	71.1		
Location	Regional centre	37.3		Respondent's socio-demographic profile
	City/town	32.8		
	Urban-type settlement	6.3		
	Rural	23.6		
Partnership status	In couples	33.6	37.3	Married/having a partner and living together are coded as 'In couples', others are coded as 'Not in couples'
	Not in couples	66.4	62.7	
Education	Lower secondary	6.4	4.9	What is your highest level of education confirmed by certificate or diploma? General or incomplete secondary school (1) Complete secondary school (2) Vocational courses of driving, accounting, typing, etc. (3) Vocational training school without secondary education (4) Vocational training school with secondary education, technical trade school (5) Technical community college, medical, music, pedagogical, art training school (6) Institute, university, academy including specialist diploma (7) Institute, university, academy including bachelor's degree (8) Institute, university, academy including master's degree (9) Post-graduate course, residency (10) PhD degree (11) Doctoral degree (12) Options (1) and (4) are coded as 'lower secondary', options (2), (3), (5), (6) are coded as 'secondary', options (7)—(11) are coded as 'undergraduate'
	Secondary	59.7	61.0	
	Undergraduate	33.8	34.1	

(continued)

Table 5.1 (continued)

Variable name	Variable categories	Frequencies (%)		RLMS-HSE question
		t_0 (1st equation)	$t_{1.3}$ (2nd equation)	
Self-rated health	Poor and very poor	15.2	15.7	How would you rate your health? Very good (1) Good (2) Average—not good, but not bad (3) Bad (4) Very bad (5) Doesn't know (6) Refuses to answer (7) Options (1)–(2) are coded as 'Good and very good', options (3), (6), (7) are coded as 'Fair', options (4)–(5) are coded as 'Poor and very poor'
	Fair	76.2	74.4	
	Good and very good	8.6	10.0	
Disability status	Persons with disabilities	5.1	6.5	Are you assigned to any disability classification? Yes (1) No (2) Doing the paperwork (3) Doesn't know (4) Refuses to answer (5) Option (1) is coded as 'Persons with disabilities', options (2)–(5) are coded as 'Persons without disabilities'
	Persons without disabilities	94.9	93.5	
Eligibility for early retirement	Does not have eligibility	81.2	81.7	Is the firm where you work reported as harmful (unhealthy) or dangerous, in other words, allowing you early retirement with granted pension, or granting additional payments or benefits? Yes (1) No (2) Doing the paperwork (3) Doesn't know (4) Option (1) is coded as 'Have eligibility', options (2)—(4) are coded as 'Does not have an eligibility'
	Has eligibility	18.8	18.3	
Job characteristics				
Industry	Manufacturing	18.8	18.0	To what industry does this job belong? Light industry, food industry (1) Civil machine construction (2) Military industrial complex (3) Oil and gas industry (4) Other branch of heavy industry (5) Construction (6) Transportation, communication (7) Agriculture (8) Government and public administration (9)
	Public sector	37.7	39.1	
	Army, civil service	7.4	7.3	
	Construction	4.6	4.1	
	Transportation, communication	6.7	6.2	
	Agriculture	4.2	3.5	
	Commerce	11.4	12.0	

(continued)

Table 5.1 (continued)

Variable name	Variable categories	Frequencies (%)		RLMS-HSE question
		t_0 (1st equation)	$t_{1.3}$ (2nd equation)	
	Housing and communal services	6.4	5.8	Education (10) Science, culture (11) Public health (12) Army, military of internal affairs, security services (13) Trade, consumer services (14) Finances (15) Energy (power) industry (16) Housing and communal services (17) Real estate operations (18) Other (19) Options (1)—(5) and (16) are coded as 'Manufacturing'; options (10)—(12) are coded as 'Public sector'; options (9) and (13) are coded as 'Army, civil services'; options (6)—(8), (14) and (17) remain the same; options (15), (18) and (19) are coded as 'Other'
	Other	2.8	4.0	
Occupation	Skilled labour engaged in manual labour and using machines and mechanisms	19.3	16.9	Occupation Military (1) Legislators; high-level officials; top and middle managers (2) Specialists of higher qualification (3) Specialists of middle-level qualification; officials (4) Employees of office and customer service (5) Employees of commerce and service industry (6) Skilled workers of agriculture, forestry and fish farming (7) Skilled labour engaged in manual labour (8) Skilled labour using machines and mechanisms (9) Unskilled workers of all industries (10) Options (1) and (2) are coded as 'Military; legislators; high-level officials; top and middle managers'; option (3) remains the same; options (4)—(6) are coded as 'Specialists of middle-level qualification; officials; employees of office and customer service; employees of commerce and service industry'; options (7) and (10) are coded as 'Skilled workers of agriculture, forestry and fish farming; unskilled workers of all industries'; options (8)—(9) are coded as 'Skilled labour engaged in manual labour and using machines and mechanisms'.
	Military; legislators; high-level officials; top and middle managers	10.3	7.6	
	Specialists of higher qualification	25.5	26.2	
	Specialists of middle-level qualification; officials; employees of office and customer service; employees of commerce and service industry	29.0	32.9	
	Skilled workers of agriculture, forestry and fish farming; unskilled workers of all industries	15.9	16.4	

(continued)

Table 5.1 (continued)

Variable name	Variable categories	Frequencies (%)		RLMS-HSE question
		t_0 (1st equation)	$t_{1.3}$ (2nd equation)	
Type of employment	Formal	91.8	90.4	1. Does this job belong to a firm or organisation? I mean any organisation or firm where more than one person works, no matter if it is private or state−owned. For example, any establishment, factory, firm, collective farm, state farm, farming industry, store, army, government service, or other organisation. You work at a firm or organisation (1) Not at a firm, nor at an organisation (2) Doesn't know (3) Refuses to answer (4) 2. Are employed in this job officially, in other words, by labour book, labour agreement, or contract? Working officially (1) Not officially (2) Doesn't know (3) Refuses to answer (4) Options (1) in the 1st question and (1) in the 2nd question are coded as 'Formal employment', other options are coded as 'Informal employment'
	Informal	8.2	9.6	
Length of a working-week	Full-time job (more 35 hours a week)	88.9	86.9	On average, how many hours is your usual work week? More than 35 hours are coded as 'Full-time job', others options are coded as 'Part-time job'
	Part-time job	11.1	13.1	
Job tenure	Less than 1 year	7.0	6.7	Tell me, please: Since what year have you been working at this job? If you left and then returned to this firm, give the date you last returned The variable is based on the difference between the year of the survey and the answered year on this question
	1–2 years	11.2	9.4	
	3–5 years	14.8	12.9	
	6–10 years	17.5	17.7	
	11–20 years	19.5	21.7	
	More than 20 years	30.0	31.6	

(continued)

Table 5.1 (continued)

Variable name	Variable categories	Frequencies (%)		RLMS-HSE question
		t_0 (1st equation)	$t_{1.3}$ (2nd equation)	
Firm ownership	State ownership	55.5	55.9	1. Is the state the owner or co-owner of your firm or organisation? Yes (1) No (2) Doesn't know (3) Refuses to answer (4) 2. Is your firm or organisation owned or co-owned by any Russian private individuals, employees, or Russian private firms? Yes (1) No (2) Doesn't know (3) Refuses to answer (4) Option (1) in the 1st question and option (2) in the 2nd question are coded as 'State ownership'; option (2) in the 1st question and option (1) in the 2nd question are coded as 'Private ownership'; others options as well as those who do not work in the organisations and enterprises are coded as 'Mixed ownership; no answer; question wasn't asked.
	Private ownership	29.6	29.8	
	Mixed ownership; no answer; question wasn't asked	14.9	14.4	
Firm size	Micro−, small firm (<100 workers)	43.3	45.3	How many people work in your firm? If you don't know exactly, estimate.
	Medium, large firm (>100 workers)	27.2	22.6	
	No answer; question wasn't asked	29.6	32	
Job satisfaction and erosion of workers' rights				
General job satisfaction	Completely satisfied	16.8	17.0	Tell me, please: How satisfied or unsatisfied are you with…? Your job in general Absolutely satisfied (1) Mostly satisfied (2) Neutral (3) Very unsatisfied (4) Absolutely unsatisfied (5) Doesn't know (6) Refuses to answer (7) Option (1) is coded as 'Completely satisfied', option (2) is coded as 'Rather satisfied', options (3), (6), (7) are coded as 'Yes and no', options (4) and (5) are coded as 'Dissatisfied'
	Rather satisfied	50.5	55.8	
	Yes and no	21.1	18.8	
	Dissatisfied	11.6	8.3	

(continued)

Table 5.1 (continued)

Variable name	Variable categories	Frequencies (%)		RLMS-HSE question
		t_0 (1st equation)	$t_{1.3}$ (2nd equation)	
Satisfaction with working conditions	Completely satisfied	14.4	16.0	Tell me, please: How satisfied or unsatisfied are you with…? Your work conditions Absolutely satisfied (1) Mostly satisfied (2) Neutral (3) Very unsatisfied (4) Absolutely unsatisfied (5) Doesn't know (6) Refuses to answer (7) Option (1) is coded as 'Completely satisfied', option (2) is coded as 'Rather satisfied', options (3), (6), (7) are coded as 'Yes and no', options (4) and (5) are coded as 'Dissatisfied'
	Rather satisfied	50.5	54.6	
	Yes and no	19.7	17.9	
	Dissatisfied	15.4	11.5	
Satisfaction with earnings	Completely satisfied	5.5	8.1	Tell me, please: How satisfied or unsatisfied are you with…? Your earnings Absolutely satisfied (1) Mostly satisfied (2) Neutral (3) Very unsatisfied (4) Absolutely unsatisfied (5) Doesn't know (6) Refuses to answer (7) Option (1) is coded as 'Completely satisfied', option (2) is coded as 'Rather satisfied', options (3), (6), (7) are coded as 'Yes and no', option (4) is coded as 'Rather dissatisfied' and option (5) is coded as 'Completely dissatisfied'
	Rather satisfied	26.1	31.9	
	Yes and no	18.8	20.3	
	Rather dissatisfied	31.4	27.3	
	Completely dissatisfied	18.1	12.3	
Satisfaction with job opportunities	Completely satisfied	10.0	11.6	Tell me, please: How satisfied or unsatisfied are you with…? Opportunity for professional growth Absolutely satisfied (1) Mostly satisfied (2) Neutral (3) Very unsatisfied (4) Absolutely unsatisfied (5) Doesn't know (6) Refuses to answer (7) Option (1) is coded as 'Completely satisfied', option (2) is coded as 'Rather satisfied', options (3), (6), (7) are coded as 'Yes and no', option (4) is coded as 'Rather dissatisfied' and option (5) is coded as 'Completely dissatisfied'
	Rather satisfied	35.9	41.1	
	Yes and no	27.5	27.5	
	Rather dissatisfied	16.9	12.8	
	Completely dissatisfied	9.7	7.0	

(continued)

Table 5.1 (continued)

Variable name	Variable categories	Frequencies (%)		RLMS-HSE question
		t_0 (1st equation)	$t_{1.3}$ (2nd equation)	
Employer's monetary debt to the employee	Yes	3.6	2.8	At the present time, does your employer owe you any money that, for various reasons, has not been paid on time? Yes (1) No (2) Doesn't know (3) Refuses to answer (4) The question is asked by those who work in organisations, enterprises, the rest of respondents are coded as 'Does not work in the organisation' Option (1) is coded as 'Yes', options (2)—(4) are coded as 'No'
	No	91.4	91.7	
	Does not work in the organisation	5.0	5.5	
Reduction of earnings and hours of work	Yes	5.0	6.4	In the course of the last 12 months has your salary or have your work hours been cut without your requesting it? Yes (1) No (2) Doesn't know (3) Refuses to answer (4) Option (1) is coded as 'Yes', options (2)—(4) are coded as 'No'
	No	95.0	93.6	
Enforced unpaid leave	Yes	2.5	2.2	In the last 12 months has the administration sent you on compulsory unpaid leave? Yes (1) No (2) Doesn't know (3) Refuses to answer (4) Option (1) is coded as 'Yes', options (2)—(4) are coded as 'No'
	No	97.5	97.8	
Economic factors				
The ratio of pensioner's earnings to regional minimal wage	Less than 2 RMW	6.7	7.2	How much money did you receive in the last 30 days from your primary job after taxes? If you received all or part of the money in foreign currency, please convert that into roubles and report the total Regional minimal wage (RMW) is used for the year of survey The variable is calculated as the ratio of the reported earnings to RMW
	2–3 RMW	29.8	26.4	
	3–5 RMW	25.1	27.5	
	More than 5 RMW	8.8	9.2	

(continued)

Table 5.1 (continued)

Variable name	Variable categories	Frequencies (%)		RLMS-HSE question
		t_0 (1st equation)	$t_{1.3}$ (2nd equation)	
Dependent variables				
Variable name	Variable categories	Frequencies in t_2 (%)		RLMS question
Employment status	Employed	84.6		Let's talk about your primary work at present. Tell me, please: You are currently working (1) You are on paid leave (maternity leave or taking care of a child under 3 years of age) (2) You are on another kind of paid leave (3) You are on unpaid leave (4) You are not working (5) Doesn't know (6) Refuses to answer (7) Options (1)—(4) are coded as employed, others are coded as unemployed
	Unemployed	15.4		
Labour mobility	Changing/getting a job (occupation) at least once in a three-year period	21.7		Try to recall whether you have changed your job or occupation since the previous November, or has everything remained the same? Occupation and job remain the same (1) Changed occupation, but not job (2) Changed job, but not occupation (3) Changed both job and occupation (4) Didn't work in the previous November (5) Doesn't know (6) Refuses to answer (7) Options (2)—(5) are coded as changing/getting a job (occupation), others are coded as keeping the current job place
	Keeping the current job place	78.3		

model specifications) while this factor is non-significant for women. Women's lower secondary education decreases the probability of their employment whereas the same education for men increases the probability of men's employment; however, these results do not seem to be robust to all tested model specifications (see Table 5.3).

The probability of being employed is higher in the army and civil service for men; and the probability of women being employed is lower in transportation and communication, construction, agriculture, the army and civil service in comparison to the public sector. These results mainly support the previous findings regarding the gender structure of the employment of seniors (Sonina and Kolosnitsyna 2015).

No significant differences in the probability of women's employment were observed among occupations. The probability of men being employed is higher for specialists of higher and middle-level qualification, officials, employees of offices and

Table 5.2 The significant factors in the employment of men and women of 45 years and older

Variable	Men	Women
Age	−[a]	–
Location	N/s[b]	Lower in rural area
Education	Higher for lower secondary education	Lower for lower secondary education
Self−rated health	Lower for poorer health	N/s
Industry	Higher in army and civil service	Lower in army and civil service, construction, transportation, agriculture
Occupation	Higher for specialists of higher and middle−level qualification; officials; employees of office and customer service; employees of commerce and service industry	N/s
Firm size	Higher in large firms	N/s
Firm ownership	Higher in mixed firms	N/s
Length of a working week	N/s	Higher for full−time job
Job tenure	+	+
The ratio of pensioner's earnings to minimal regional wage	+	+
General job satisfaction	N/s	+
Satisfaction with working conditions	N/s	+
Employer's monetary debt to employee	–	N/s
Enforced unpaid leave	N/s	–
Changing a job/occupation	+	N/s

[a]"−"/"+" means negative/positive influence on the probability of employment
[b]N/s—non-significant

customer service, and employees in the commerce and service industry in comparison to skilled labour workers engaged in manual labour.

Firm size and ownership seem to be the significant determinants only of senior men's employment. The probability of being employed is higher at large firms (by 10.8–15.5% on average, depending on the model specification, as compared to microenterprises). Working at large firms is often characterised by wider social guarantees and greater stability, which may attract older workers. Somewhat surprisingly, the probability of men's employment is higher at firms with mixed ownership in comparison with state-owned firms. Possibly, in order to receive full pension benefit, older workers choose informal employment, which is more common at firms with mixed ownership than at state-owned firms.

Table 5.3 Regression coefficients in the models of employment for middle-aged and older individuals

Model specification	Industries, general job satisfaction		Industries, satisfaction with various aspects of job		Occupations, general job satisfaction		Occupations, satisfaction with various aspects of job	
Variable	Men	Women	Men	Women	Men	Women	Men	Women
Age	−0.048* (0.022)	−0.061*** (0.015)	−0.045* (0.022)	−0.056*** (0.016)	−0.064** (0.021)	−0.063*** (0.015)	−0.062** (0.021)	−0.059*** (0.015)
Location (city/town—ref.)								
Regional centre	−0.117 (0.312)	−0.122 (0.211)	−0.052 (0.312)	−0.172 (0.214)	−0.178 (0.304)	−0.060 (0.212)	−0.107 (0.302)	−0.087 (0.215)
Urban-type settlement	−0.393 (0.552)	0.333 (0.397)	−0.477 (0.527)	0.403 (0.413)	−0.228 (0.513)	0.251 (0.406)	−0.303 (0.478)	0.311 (0.422)
Rural	0.371 (0.410)	−0.339 (0.245)	0.369 (0.419)	−0.295 (0.250)	0.180 (0.362)	−0.509* (0.234)	0.160 (0.370)	−0.448* (0.240)
Education (secondary—ref.)								
Lower secondary	0.692 (0.523)	−0.608* (0.344)	0.664 (0.524)	−0.560 (0.369)	0.813* (0.491)	−0.401 (0.341)	0.740 (0.498)	−0.370 (0.351)
Undergraduate	0.061 (0.330)	0.059 (0.211)	0.054 (0.347)	0.036 (0.211)	−0.282 (0.374)	−0.059 (0.230)	−0.312 (0.378)	−0.078 (0.234)
Self-rated health (fair—ref.)								
Good and very good	0.352 (0.355)	0.089 (0.265)	0.363 (0.360)	0.115 (0.267)	0.260 (0.359)	0.102 (0.273)	0.276 (0.356)	0.137 (0.275)
Poor and very poor	−1.114** (0.427)	−0.431 (0.286)	−1.259** (0.425)	−0.455 (0.286)	−1.037* (0.420)	−0.397 (0.279)	−1.167** (0.437)	−0.419 (0.279)
Disability (no disability—ref.)	−0.314 (0.503)	−0.314 (0.415)	−0.250 (0.506)	−0.306 (0.412)	−0.570 (0.436)	−0.208 (0.382)	−0.512 (0.439)	−0.205 (0.384)

(continued)

Table 5.3 (continued)

Model specification	Industries, general job satisfaction		Industries, satisfaction with various aspects of job		Occupations, general job satisfaction		Occupations, satisfaction with various aspects of job	
In coupes (not in couples—ref.)	0.152 (0.393)	−0.094 (0.176)	0.132 (0.378)	−0.151 (0.179)	0.330 (0.406)	−0.079 (0.171)	0.237 (0.407)	−0.130 (0.172)
Eligibility for early retirement (no eligibility—ref.)	−0.264 (0.385)	0.296 (0.284)	−0.295 (0.391)	0.370 (0.295)	−0.271 (0.392)	0.484* (0.278)	−0.307 (0.398)	0.567* (0.290)
Industry (public sector—ref.)								
Manufacturing	−0.380 (0.473)	−0.124 (0.382)	−0.380 (0.485)	−0.077 (0.372)				
Army, civil service	0.962* (0.562)	−0.818* (0.336)	1.053* (0.575)	−0.831* (0.333)				
Construction	−0.586 (0.533)	−1.234* (0.551)	−0.540 (0.532)	−1.285* (0.566)				
Transportation	0.213 (0.579)	−1.316*** (0.334)	0.266 (0.601)	−1.297*** (0.346)				
Agriculture	−0.189 (0.695)	−1.310** (0.509)	−0.253 (0.711)	−1.163* (0.496)				
Commerce	−0.369 (0.616)	−0.496 (0.336)	−0.147 (0.638)	−0.439 (0.331)				
Housing and communal services	0.637 (0.596)	−0.267 (0.466)	0.589 (0.590)	−0.340 (0.473)				
Other	2.117* (1.034)	−0.631 (0.401)	2.131* (0.864)	−0.605 (0.399)				

(continued)

Table 5.3 (continued)

Model specification	Industries, general job satisfaction		Industries, satisfaction with various aspects of job		Occupations, general job satisfaction		Occupations, satisfaction with various aspects of job	
Occupation (skilled labour engaged in manual labour and using machines and mechanisms—ref.)								
Military; legislators; high-level officials; top and middle managers					0.421 (0.466)	0.043 (0.577)	0.525 (0.474)	0.118 (0.587)
Specialists of higher qualification					1.007* (0.541)	−0.026 (0.434)	1.058* (0.551)	−0.046 (0.440)
Specialists of middle-level qualification; officials; employees of office and customer service; employees of commerce and service industry					1.103** (0.415)	−0.535 (0.396)	1.112* (0.437)	−0.581 (0.399)
Skilled workers of agriculture, forestry and fish farming; unskilled workers of all industries					0.574 (0.366)	−0.673 (0.415)	0.448 (0.369)	−0.689 (0.422)
Firm size (microenterprise—ref.)								
Small	0.739 (0.475)	−0.072 (0.264)	0.659 (0.498)	−0.051 (0.264)	0.499 (0.448)	−0.027 (0.259)	0.387 (0.457)	−0.025 (0.256)
Medium	0.559 (0.561)	0.381 (0.401)	0.327 (0.569)	0.425 (0.413)	0.424 (0.486)	0.357 (0.398)	0.165 (0.505)	0.415 (0.406)

(continued)

Table 5.3 (continued)

Model specification	Industries, general job satisfaction		Industries, satisfaction with various aspects of job		Occupations, general job satisfaction		Occupations, satisfaction with various aspects of job	
Large	1.247* (0.568)	0.359 (0.406)	1.161* (0.589)	0.302 (0.413)	0.924* (0.541)	0.313 (0.363)	0.804 (0.563)	0.257 (0.363)
No answer	0.771 (0.472)	−0.118 (0.272)	0.643 (0.497)	−0.138 (0.275)	0.528 (0.447)	−0.122 (0.263)	0.420 (0.463)	−0.161 (0.264)
Firm ownership (state—ref.)								
Private	0.378 (0.333)	0.158 (0.287)	0.321 (0.349)	0.123 (0.282)	0.168 (0.276)	−0.103 (0.224)	0.118 (0.279)	−0.107 (0.223)
Mixed	1.443* (0.615)	−0.162 (0.447)	1.522* (0.662)	−0.150 (0.446)	1.262* (0.578)	−0.375 (0.428)	1.392* (0.665)	−0.344 (0.419)
No answer	0.044 (0.693)	−0.516 (0.481)	−0.002 (0.719)	−0.600 (0.487)	−0.084 (0.679)	−0.885* (0.469)	−0.091 (0.700)	−0.976* (0.469)
Formalemployment (informal—ref.)	−0.009 (0.607)	0.483 (0.391)	−0.033 (0.574)	0.589 (0.395)	−0.106 (0.603)	0.428 (0.378)	−0.086 (0.571)	0.521 (0.382)
Full−time job (part−time—ref.)	−0.202 (0.482)	0.417* (0.255)	−0.261 (0.514)	0.452* (0.231)	−0.180 (0.443)	0.339 (0.222)	−0.162 (0.473)	0.377* (0.227)
Job tenure (less than 1 year—ref.)								
1−2 years	−0.068 (0.512)	0.444 (0.372)	−0.002 (0.549)	0.440 (0.384)	−0.084 (0.517)	0.443 (0.372)	−0.050 (0.538)	0.411 (0.382)
3−5 years	0.419 (0.548)	0.584 (0.420)	0.366 (0.560)	0.585 (0.425)	0.387 (0.519)	0.592 (0.433)	0.399 (0.532)	0.605 (0.445)
6−10 years	1.058* (0.559)	0.360 (0.404)	1.042* (0.577)	0.373 (0.414)	0.886* (0.502)	0.284 (0.416)	0.916* (0.527)	0.301 (0.431)

(continued)

Table 5.3 (continued)

Model specification	Industries, general job satisfaction		Industries, satisfaction with various aspects of job		Occupations, general job satisfaction		Occupations, satisfaction with various aspects of job	
11–20 years	0.785 (0.534)	0.634 (0.401)	0.793 (0.546)	0.671 (0.411)	0.690 (0.489)	0.569 (0.429)	0.740 (0.496)	0.609 (0.439)
more than 20 years	1.505* (0.595)	0.838* (0.411)	1.554** (0.601)	0.849* (0.418)	1.265* (0.544)	0.613 (0.436)	1.373* (0.549)	0.634 (0.449)
The ratio of pensioner's earnings to minimal regional wage (5 and more MRW—ref.)								
Lessthan 2 MRW	−0.657 (0.452)	−0.994** (0.363)	−0.690 (0.452)	−1.098** (0.379)	−0.568 (0.455)	−0.777* (0.383)	−0.483 (0.474)	−0.873* (0.397)
2–3 MRW	−0.726* (0.396)	−0.862* (0.358)	−0.703* (0.408)	−0.957** (0.370)	−0.576 (0.398)	−0.712* (0.373)	−0.503 (0.414)	−0.792* (0.381)
3–5 MRV	−0.379 (0.432)	−0.380 (0.389)	−0.389 (0.435)	−0.347 (0.398)	−0.179 (0.409)	−0.264 (0.400)	−0.178 (0.421)	−0.240 (0.406)
General job satisfaction (dissatisfied—ref.)								
Completely satisfied	−0.248 (0.573)	0.533 (0.340)			−0.091 (0.553)	0.462 (0.343)		
Rather satisfied	−0.076 (0.466)	0.468 (0.295)			−0.104 (0.450)	0.427 (0/296)		
Yes and no	−0.725 (0.134)	0.716* (0.334)			−0.743 (0.473)	0.648* (0.326)		
Satisfaction with working conditions (dissatisfied—ref.)								

(continued)

Table 5.3 (continued)

Model specification	Industries, general job satisfaction		Industries, satisfaction with various aspects of job		Occupations, general job satisfaction		Occupations, satisfaction with various aspects of job	
Completely satisfied			0.377 (0.589)	0.440 (0.405)			0.435 (0.600)	0.388 (0.396)
Rather satisfied			0.170 (0.400)	0.783** (0.296)			−0.007 (0.408)	0.814** (0.289)
Yes and no			−0.086 (0.436)	0.712* (0.319)			−0.082 (0.433)	0.713* (0.308)
Satisfaction with earnings (completely dissatisfied—ref.)								
Completely satisfied			0.226 (0.653)	−0.194 (0.503)			0.273 (0.653)	−0.023 (0.493)
Rather satisfied			−0.223 (0.421)	−0.375 (0.341)			−0.087 (0.423)	−0.385 (0.331)
Yes and no			0.016 (0.394)	−0.478 (0.332)			0.159 (0.383)	−0.421 (0.324)
Rather dissatisfied			0.423 (0.410)	−0.186 (0.311)			0.533 (0.419)	−0.137 (0.307)
Satisfaction with job opportunities (completely dissatisfied—ref.)								
Completely satisfied			−0.619 (0.617)	0.288 (0.483)			−0.547 (0.652)	0.281 (0.482)
Rather satisfied			0.189 (0.543)	−0.531 (0.359)			0.288 (0,568)	−0.470 (0.362)

(continued)

Table 5.3 (continued)

Model specification	Industries, general job satisfaction		Industries, satisfaction with various aspects of job		Occupations, general job satisfaction		Occupations, satisfaction with various aspects of job	
Yes and no			−0.563 (0.496)	−0.300 (0.355)			−0.618 (0.540)	−0.253 (0.356)
Rather dissatisfied			0.456 (0.634)	0.043 (0.394)			0.409 (0.639)	0.176 (0.399)
Employer's monetary debt to the employee (no—ref.)								
Does not work in the organisation[a]	−0.358 (0.954)	0.442 (0.663)	−0.351 (0.934)	0.669 (0.682)	−0.091 (0.936)	0.650 (0.659)	0.010 (0.926)	0.931 (0.673)
Yes	−1.417** (0.493)	0.278 (0.580)	−1.350** (0.460)	0.293 (0.619)	−1.399*** (0.429)	0.288 (0.591)	−1.327*** (0.414)	0.320 (0.641)
Reduction of earnings and hours of work (no—ref.)	−0.055 (0.454)	−0.244 (0.369)	−0.078 (0.450)	−0.274 (0.360)	−0.170 (0.473)	−0.116 (0.358)	−0.216 (0.477)	−0.166 (0.348)
Enforced unpaid leave (no—ref.)	−0.338 (0.727)	−0.758 (0.489)	−0.313 (0.740)	−0.895* (0.452)	−0.348 (0.669)	−0.976* (0.473)	−0.395 (0.691)	−1.095* (0.460)
Changing of a job/occupation (without changes—ref.)	0.983* (0.427)	0.089 (0.310)	0.863* (0.402)	0.153 (0.317)	0.796* (0.372)	0.109 (0.319)	0.754* (0.365)	0.180 (0.328)
Number of observations	598	1471	598	1471	598	1471	598	1471
Pseudo R^2	0.148	0.131	0.165	0.139	0.134	0.117	0.153	0.127

p-level—*0.1; **0.01; ***0.001

[a]The RLMS-HSE question about employer's monetary debt to the employee was addressed only for those who work in the organisations, firms

The job tenure (work experience at the current job) of 4+ -year-old men seems to be more appreciated than that of women of the same age. A job tenure of more than 20 years, as compared to less than 1 year, increases the probability of being employed by 18.2–20.2% and 7.4–9.7% on average for men and women respectively, depending on the model specification. The shorter job tenure (6 years and more) is also significant for men's employment but not for women's. Women often have career breaks for maternity leave, so longer job tenure may be rarer for women than for men.

Senior women are more likely to continue working full-time rather than part-time that may be a step to retirement due to caregiving for grandchildren or elderly relatives (Levin 2015).

Overall satisfaction with a job as well as particular aspects of job satisfaction and erosion of workers' rights are significant determinants of employment for middle-aged and older women mainly. Compared to job dissatisfaction, the average satisfaction with job increases the probability of a woman being employed by 7.8–8.5% on average, depending on the model specification. An employer's monetary debt to the employee negatively influences men's employment. These results confirm Levin's (2015) earlier findings about the importance of job satisfaction for employment at the pension age in Russia. However, the author revealed that the employment of men close to the pension age is more sensitive to general job satisfaction, while the employment of women of the same age depends on satisfaction with opportunities for professional growth (Levin 2015). These differences can be attributed to the economic changes in Russia. The observation period of 2009–2012 in Levin's (2015) study covers the period of economic growth in Russia when real earnings and incomes were growing, and job expectations were relatively high. The current study covers the 2010–2016 period after the economic crisis of 2013–2014 when real earnings and incomes stopped growing,[45] which has probably changed the career expectations of employees.

Economic factors are significant determinants of employment for both men and women. For men, however, only relatively high earnings seem to be an incentive to maintain employment, while for women lower earnings also increase the probability of being employed. In comparison to pensioner's earnings more than five minimal regional wages, pensioner's earnings of 2–3 minimal regional wages decreases the probability of middle-aged and older men's and women's employment by 8.2–8.5% and 6.8–8.3% on average, depending on model specification. Thus, the second hypothesis was supported.

Finally, labour mobility—changing/getting a job (occupation)—increases the probability of employment of 45+ year-old men, and is insignificant for women of the same age, which confirms the third hypothesis.

[45] https://www.gks.ru/.

5.6.2 *Factors in the Labour Mobility of Middle-Aged and Older Workers*

The main differences in the factors of male and female labour mobility are summarised in Table 5.4. Men are more likely to change a job/occupation in regional centres and urban-type settlements than in cities and towns; there were no significant location differences for women. Men having a lower secondary education have lower probability of their labour mobility, compared to men having secondary education. This finding seems to be somewhat contradictory to the previous studies (Nesterova and Sabirianova1999; Gimpelson et al. 2017), but a low education probably does not enable a higher paid job, which is one of the main reasons for men's labour mobility in Russia (Gimpelson et al. 2017).

In line with the previous studies, the probability of labour mobility decreases with age, about the same for men and women (by 0.6–0.8% every year, depending on the model specification) (Table 5.5).

The probability of changing a job/occupation is higher in construction, transportation and communication for men of 45 years and older (Table 5.4). These industries

Table 5.4 The significant factors of labour mobility for men and women of 45 years and older

Variable	Men	Women
Age	–[a]	–
Location	Higher in regional centres and urban–type settlements	N/s[b]
Education	Lower for lower secondary education	N/s
Industry	Higher in construction, transportation and communication	N/s
Occupation	Lower for specialists of higher qualification	Higher for top and middle managers, high-level officials, legislators
Firm ownership	N/s	Higher in private firms
Job tenure	–	–
General job satisfaction	N/s	–
Satisfaction with working conditions	–	–
Satisfaction with earnings	+	–
Satisfaction with job opportunities	N/s	–

[a]"–"/"+" means negative/positive influence on the probability of labour mobility (changing of a job/occupation)
[b]N/s—non–significant

Table 5.5 Regression coefficients in the models of middle-aged and older individuals' labour mobility (DV: change of a job/occupation at least once over the 2nd, 3rd, 4th years of observation = 1; no changes = 0)

Model specification	Industries, general job satisfaction		Industries, satisfaction with various aspects of job		Occupations, general job satisfaction		Occupations, satisfaction with various aspects of job	
Variable	Men	Women	Men	Women	Men	Women	Men	Women
Age	−0.057* (0.027)	−.052** (0.018)	−0.061* (0.027)	−0.048*** (0.019)	−0.046* (0.026)	−0.052** (0.019)	−0.051* (0.026)	−0.048** (0.019)
Location (city/town—ref.)								
Regional centre	0.712* (0.373)	0.220 (0.257)	0.863* (0.375)	0.136 (0.258)	0.845* (0.371)	0.261 (0.261)	0.956** (0.372)	0.175 (0.261)
Urban-type settlement	1.358* (0.666)	0.376 (0.392)	1.493* (0.676)	0.300 (0.402)	1.668** (0.593)	0.366 (0.399)	1.698** (0.591)	0.293 (0.408)
Rural	0.736 (0.464)	−0.239 (0.298)	0.714 (0.473)	−0.212 (0.303)	0.663 (0.426)	−0.178 (0.289)	0.674 (0.427)	−0.148 (0.295)
Education (secondary—ref.)								
Lower secondary	−0.911* (0.497)	0.423 (0.434)	−0.918* (0.524)	0.457 (0.417)	−1.135* (0.510)	0.436 (0.439)	−1.111* (0.519)	0.473 (0.418)
Undergraduate	−0.276 (0.337)	0.238 (0.214)	−0.277 (0.345)	0.290 (0.220)	0.085 (0.431)	0.084 (0.245)	0.009 (0.441)	0.113 (0.251)
Self-rated health (fair—ref.)								
Good and very good	−0.173 (0.321)	−0.396 (0.249)	−0.199 (0.321)	−0.370 (0.254)	−0.132 (0.318)	−0.377 (0.250)	−0.140 (0.317)	−0.358 (0.254)
Poor and very poor	−0.068 (0.482)	−0.314 (0.289)	−0.205 (0.491)	−0.410 (0.289)	0.196 (0.432)	−0.357 (0.290)	0.062 (0.462)	−0.451 (0.292)

(continued)

Table 5.5 (continued)

Model specification	Industries, general job satisfaction		Industries, satisfaction with various aspects of job		Occupations, general job satisfaction		Occupations, satisfaction with various aspects of job	
Disability (no disability—ref.)	0.282 (0.521)	0.687 (0.500)	0.257 (0.531)	0.791 (0.491)	0.133 (0.460)	0.043 (0.272)	0.167 (0.477)	0.785 (0.275)
In couples (not in couples—ref.)	0.407 (0.538)	0.042 (0.190)	0.589 (0.613)	0.038 (0.194)	0.636 (0.557)	−0.005 (0.191)	0.819 (0.618)	−0.015 (0.195)
Eligibility for early retirement (no eligibility—ref.)	0.208 (0.395)	0.160 (0.270)	0.067 (0.421)	0.114 (0.271)	0.153 (0.398)	0.043 (0.272)	0.072 (0.418)	0.005 (0.275)
Industry (public sector—ref.)								
Manufacturing	0.470 (0.508)	0.187 (0.360)	0.414 (0.511)	0.103 (0.354)				
Army, civil service	0.570 (0.651)	0.295 (0.394)	0.574 (0.673)	0.309 (0.402)				
Construction	1.487* (0.584)	−0.147 (0.709)	1.367* (0.618)	−0.371 (0.675)				
Transportation	1.428* (0.588)	0.590 (0.448)	1.415* (0.595)	0.552 (0.461)				
Agriculture	−1.595 (1.163)	0.901 (0.581)	−1.492 (1.168)	0.931 (0.612)				
Commerce	0.716 (0.731)	0.325 (0.351)	0.633 (0.758)	0.293 (0.351)				
Housing and communal services	0.245 (0.696)	0.074 (0.437)	0.285 (0.715)	0.011 (0.465)				
Other	−1.439 (1.177)	−0.258 (0.509)	−1.525 (1.226)	−0.247 (0.521)				

(continued)

Table 5.5 (continued)

Model specification	Industries, general job satisfaction		Industries, satisfaction with various aspects of job		Occupations, general job satisfaction		Occupations, satisfaction with various aspects of job	
Occupation (skilled labour engaged in manual labour and using machines and mechanisms—ref.)								
Military; legislators; high-level officials; top and middle managers					−0.373 (0.513)	1.010* (0.434)	−0.363 (0.519)	1.073* (0.454)
Specialists of higher qualification					−1.467* (0.587)	0.118 (0.433)	−1.292* (0.589)	0.194 (0.441)
Specialists of middle-level qualification; officials; employees of office and customer service; employees of commerce and service industry					−0.638 (0.478)	0.060 (0.369)	−0.694 (0.519)	0.076 (0.384)
Skilled workers in agriculture, forestry and fish farming; unskilled workers in all industries					−0.701* (0.403)	−0.196 (0.445)	−0.670 (0.408)	−0.195 (0.453)
Firm size (microenterprise—ref.)								
Small	0.534 (0.535)	−0.041 (0.267)	0.489 (0.538)	−0.077 (0.272)	0.509 (0.466)	0.033 (0.268)	0.500 (0.466)	−0.002 (0.275)

(continued)

Table 5.5 (continued)

Model specification	Industries, general job satisfaction		Industries, satisfaction with various aspects of job		Occupations, general job satisfaction		Occupations, satisfaction with various aspects of job	
Medium	−0.129 (0.710)	−0.230 (0.374)	−0.101 (0.730)	−0.214 (0.380)	−0.419 (0.631)	−0.070 (0.377)	−0.428 (0.659)	−0.038 (0.381)
Large	0.359 (0.587)	−0.172 (0.362)	0.306 (0.575)	−0.189 (0.364)	0.098 (0.484)	0.045 (0.346)	0.062 (0.490)	0.007 (0.350)
No answer	0.273 (0.515)	−0.094 (0.268)	0.359 (0.516)	−0.062 (0.267)	0.049 (0.441)	0.080 (0.268)	0.097 (0.447)	0.122 (0.267)
Firm ownership (state—ref.)								
Private	0.439 (0.326)	0.623* (0.279)	0.567 (0.356)	0.662* (0.285)	0.383 (0.286)	0.755*** (0.229)	0.458 (0.296)	0.760*** (0.233)
Mixed	−0.138 (0.485)	0.267 (0.401)	0.057 (0.465)	0.303 (0.408)	−0.186 (0.444)	0.381 (0.387)	−0.061 (0.423)	0.394 (0.393)
No answer	0.218 (0.719)	−0.233 (0.604)	0.062 (0.738)	−0.226 (0.584)	−0.308 (0.824)	−0.154 (0.601)	−0.395 (0.848)	−0.144 (0.580)
Formal employment (informal—ref.)	−0.606 (0.785)	−0.612 (0.448)	−0.480 (0.816)	−0.524 (0.423)	−0.928 (0.766)	−0.714 (0.450)	−0.859 (0.728)	−0.629 (0.422)
Full−time job (part−time—ref.)	−0.166 (0.695)	−0.012 (0.266)	−0.207 (0.684)	−0.008 (0.263)	0.069 (0.623)	−0.045 (0.261)	0.073 (0.626)	−0.046 (0.257)
Job tenure (less than 1 year—ref.)								
1−2 years	−1.157** (0.434)	−1.894*** (0.317)	−1.064* (0.455)	−1.959*** (0.326)	−1.122** (0.379)	−1.938*** (0.313)	−1.036** (0.392)	−2.015*** (0.319)

(continued)

Table 5.5 (continued)

Model specification	Industries, general job satisfaction		Industries, satisfaction with various aspects of job		Occupations, general job satisfaction		Occupations, satisfaction with various aspects of job	
3−5 years	−2.582*** (0.494)	−1.560*** (0.338)	−2.588*** (0.520)	−1.667 (0.341)	−2.445*** (0.454)	−1.674*** (0.333)	−2.487*** (0.477)	−1.797*** (0.336)
6−10 years	−2.104*** (0.471)	−1.755*** (0.334)	−2.217*** (0.487)	−1.806*** (0.344)	−1.936*** (0.438)	−1.852*** (0.341)	−2.037*** (0.442)	−1.918*** (0.353)
11−20 years	−2.559*** (0.514)	−2.190*** (0.335)	−2.683*** (0.538)	−2.288*** (0.352)	−2.325*** (0.480)	−2.371*** (0.340)	−2.456*** (0.507)	−2.492*** (0.364)
More than 20 years	−2.695*** (0.555)	−2.369*** (0.330)	−2.832*** (0.585)	−2.461*** (0.334)	−2.615*** (0.528)	−2.516*** (0.359)	−2.710*** (0.522)	−2.633*** (0.363)
The ratio of pensioner's earnings to minimal regional wage (5 and more MRW—ref.)								
Less than 2 MRW	−0.149 (0.452)	0.376 (0.364)	0.017 (0.457)	0.156 (0.377)	−0.365 (0.441)	0.575 (0.369)	−0.184 (0.453)	0.371 (0.381)
2−3 MRW	−0.307 (0.405)	0.218 (0.354)	−0.193 (0.420)	0.066 (0.365)	−0.528 (0.407)	0.342 (0.355)	−0.463 (0.419)	0.198 (0.368)
3−5 MRV	0.327 (0.339)	0.098 (0.366)	0.380 (0.345)	0.028 (0.371)	0.197 (0.337)	0.129 (0.367)	0.269 (0.334)	0.060 (0.373)
General job satisfaction (dissatisfied—ref.)								
Completely satisfied	−0.120 (0.483)	−0.715* (0.301)			−0.033 (0.485)	−0.781** (0.301)		
Rather satisfied	−0.498 (0.379)	−0.492* (0.242)			−0.506 (0.369)	−0.525* (0.246)		

(continued)

Table 5.5 (continued)

Model specification	Industries, general job satisfaction		Industries, satisfaction with various aspects of job		Occupations, general job satisfaction		Occupations, satisfaction with various aspects of job	
Yes and no	0.212 (0.395)	−0.069 (0.252)			0.065 (0.401)	−0.072 (0.249)		
Satisfaction with working conditions (dissatisfied—ref.)								
Completely satisfied			−0.953* (0.532)	−0.776* (0.383)			−0.911* (0.518)	−0.745* (0.382)
Rather satisfied			−0.933* (0.437)	−0.366 (0.256)			−0.988* (0.416)	−0.364 (0.257)
Yes and no			−0.584 (0.442)	0.003 (0.242)			−0.614 (0.419)	0.011 (0.244)
Satisfaction with earnings (completely dissatisfied—ref.)								
Completely satisfied			1.486* (0.599)	0.183 (0.504)			1.525* (0.645)	0.258 (0.500)
Rather satisfied			−0.239 (0.418)	−0.389 (0.295)			−0.055 (0.408)	−0.365 (0.293)
Yes and no			0.010 (0.413)	−0.626* (0.274)			0.217 (0.404)	−0.576* (0.271)
Rather dissatisfied			0.186 (0.391)	−0.315 (0.223)			0.204 (0.375)	−0.325 (0.223)

(continued)

Table 5.5 (continued)

Model specification	Industries, general job satisfaction		Industries, satisfaction with various aspects of job		Occupations, general job satisfaction		Occupations, satisfaction with various aspects of job	
Satisfaction with job opportunities (completely dissatisfied—ref.)								
Completely satisfied			0.146 (0.618)	−0.582 (0.513)			−0.060 (0.616)	−0.743 (0.512)
Rather satisfied			0.185 (0.557)	−0.419 (0.325)			0.062 (0.515)	−0.527* (0.314)
Yes and no			−0.125 (0.490)	0.107 (0.317)			−0.241 (0.461)	0.026 (0.306)
Rather dissatisfied			0.074 (0.512)	−0.001 (0.307)			−0.140 (0.488)	−0.055 (0.300)
Employer's monetary debt to the employee (no—ref.)								
Does not work in the organisation[a]	−1.889 (1.196)	−0.206 (0.761)	−1.631 (1.245)	−0.137 (0.747)	−1.747 (1.344)	−0.487 (0.747)	−1.718 (1.385)	−0.470 (0.733)
Yes	0.660 (0.460)	0.143 (0.518)	0.486 (0.488)	0.063 (0.522)	0.561 (0.461)	0.145 (0.546)	0.438 (0.467)	0.076 (0.545)
Reduction of earnings and hours of work (no—ref.)	−0.089 (0.509)	0.161 (0.394)	−0.317 (0.552)	0.208 (0.361)	−0.154 (0.506)	0.114 (0.419)	−0.424 (0.552)	0.145 (0.383)
Enforced unpaid leave (no—ref.)	0.243 (0.752)	0.346 (0.553)	0.495 (0.802)	0.298 (0.521)	0.426 (0.727)	0.357 (0.553)	0.711 (0.782)	0.269 (0.519)
Number of observations	598	1471	598	1471	598	1471	598	1471
Pseudo R^2	0.232	0.137	0.251	0.153	0.197	0.142	0.218	0.158

p level—*0.1; **0.01; ***0.001

[a]The RLMS-HSE question about employer's monetary debt to the employee was addressed only for those who work in the organisations, firms

are traditionally characterised by lower social guarantees, a wider informal sector, and frequent staff changes. Previous studies report that men of working age work in commerce, construction, transportation, while men of the pension age mainly work in housing and communal services, education and construction (Sonina and Kolosnitsyna 2015). The analysed sample may cover changes of occupation at pension age. No differences in labour mobility were revealed among industries for women of 45 years and older.

Male specialists with higher qualifications are less likely to change a job/occupation, compared to skilled labour workers engaged in manual labour and using machines and mechanisms (by 17.2–20.5% on average, depending on the model specification) (Table 5.5). Female top and middle managers, high-level officials, and legislators change job/occupation more often than skilled workers engaged in manual labour (by 14.4–17.1% on average, depending on the model specification). Probably, top and middle manager positions may be less preferable at pension age and close to it, due to high mental and physical load, which can cause stress.

The length of job tenure (working experience at the current job) is negatively correlated with both men's and women's labour mobility (changing a job/occupation), which supports the previous studies on this topic. However, the effect of tenure is not linear. In comparison to job tenure of less than one-year, one to two years of tenure affects women's labour mobility more than men's (the ability to change a job/occupation is higher by 38.7–40.2% and 20.1–20.7% respectively, depending on the model specification) (Table 5.5). Longer job tenure decreases the probability of changing job/occupation more for men of 45 years and older than for women of the same age.

The probability of labour mobility is also higher at private firms but this effect is significant only for women (Table 5.4). Other job characteristics (enterprise size, formal/informal employment, full-time/part-time job) do not significantly affect the probability of middle-aged and older men's and women's jobs/occupation changing.

General job satisfaction is significant only for the labour mobility of 45+ year-old women. Their complete satisfaction with the job decreases the probability of changing their job/occupation by 11.1–11.7% on average, depending on the model specification, as compared to general job dissatisfaction. Satisfaction with working conditions is significant for both men's and women's labour mobility but its effect is higher for men. Satisfaction with earnings (in both model specifications with the industries and occupations) and job opportunities (in the model specification with occupations only) seems to be significant for women's job/occupation changing but not for men's (Table 5.5). The unexpected result is the positive impact of complete satisfaction with earnings on men's labour mobility. If complete satisfaction with earnings represents real high earnings then these job positions may be rather stressful and intensive, and less preferable for middle-aged and older workers, which may partly explain this result.

The erosion of workers' rights through an employer's monetary debt to an employee, a reduction of earnings or working hours, and enforced unpaid leave are insignificant for changing a job/occupation for both men and women, in all model specifications (Table 5.5).

Finally, economic factors seem to be insignificant in the labour mobility of middle-aged and older workers. The non-financial aspects of a job may become more important in older age. The model specifications used here do not include earnings from a new job, or a comparison with the previous earnings, which may correlate with labour mobility.

5.7 Conclusion

The employment rates of Russian middle-aged and older men and women have been increasing for almost the last two decades. Furthermore, the rate of increase was higher for women than for men. This trend can be explained in the following ways. Firstly, it may be the result of the overall growth of female employment due to the higher human capital of new cohorts entering the labour market. Secondly, Russian female life expectancy is much higher than that for males. Due to lower earnings over the life cycle and a slightly shorter period of paid contributions to the pension system, on the average, women receive lower pension benefits in comparison to men.

The employment rates of both men and women aged 45–54 have been growing more sustainably than of those aged 60 years and above. The employment rates of the latter were more prone to changes in the pension legislation (restrictions on the employment of pensioners, pension indexation, etc.) as well as to the situation in the labour market. The most significant difference in employment rates between men and women is observed in the 55–59-year-old age group when the majority of women begin to receive pension benefits.

The empirical analysis of the factors in male and female employment in middle and older ages (45 years old and above) in Russia supports the previous findings regarding differences in men's and women's places of work. Men are more likely to continue working in the army and civil services and in positions as specialists with higher- and middle-level qualifications, as officials, and employees of offices and customer service, and employees of commerce and the service industry, while women are more likely to maintain their employment in the public sector. Middle-aged and older men also continue to work more often in large firms with mixed ownership. Part-time jobs may be seen as a step towards retirement for women only.

The impact of education on the employment of middle-aged and older men and women is inconsistent in the tested model specifications. At the same time, job tenure significantly contributes to employment in middle and older age, for both men and women, but its effect is higher for men.

The obtained results fail to support the first hypothesis: partnership status is insignificant for both male and female employment in all model specifications. In support of the second hypothesis, economic factors are more crucial for women of 45+ than for men of the same age. Even modest earnings increase the probability of female employment but do not do so for males. At the same time, an employer's monetary debt to an employee significantly decreases the probability of male employment only. Middle-aged and older men probably more often work in private firms or firms with

mixed ownership, where monetary debts to employees are more widespread than in state-owned companies. Other forms of erosion of worker's rights—enforced unpaid leave—as well as satisfaction with working conditions and general job satisfaction are important for women only.

Labour mobility—changing a job/occupation—may be an effective strategy to maintain employment in middle and older age for men only. It is better for women to keep their current job without any changes. Thus, the third hypothesis was confirmed.

References

Borland J (2003) Perceptions of job security in Australia. Mimeo, Melbourne Institute, University of Melbourne

Borland J, Warren D (2006) Labour force outcomes for the mature age population. Report prepared for the Australian Government Department of Employment and Workplace Relations under the Social Policy Research Services Agreement. Melbourne Institute, University of Melbourne

Bound J, Schoenbaum M, Stinebricker T, Waidmann T (1999) The dynamic effects of health on the labor force transitions of older workers. Labour Econ 6: 179–202

Buber-Ennser I (2014) Grandparental childcare across Europe. Research report for the World Bank's Human Development Department, World Bank, Washington, DC

Cohen J, Cohen P (2010) Applied multiple regression/correlation analysis for the behavioral sciences. Second Edition. Taylor & Francis e−Library

Cornelissen T (2006) Job characteristics as determinants of job satisfaction and labour mobility. Discussion Paper No. 334. University of Hannover

Cotter DA, Hermsen JM, Vanneman R (2002) Gendered opportunities for work. Effects on employment in late life. Res Aging 24(6): 600–629

Denisova I (2017a) From labor market to pension-age inactivity: Micro evidence from Russian data. The 3rd RLMS−HSE User Conference, May 2017

Denisova I (2017b) Exit of elderly cohorts from the labour market: survival analysis. Popul Econ 1(1): 22–49

Farber H (1999) Mobility and stability: The dynamics of job change in labor markets. In: Ashenfelter O, Card D (eds), Handbook of Labor Economics, Vol. 3. Amsterdam and New York, Elsevier, 2439–2483

Feldman D, Leana C, Bolino M (2002) Underemployment and relative deprivation among re−employed executives. J Occup Organ Psychol 75(4): 453–471

Flinn C (1986) Wages and job mobility of young workers. J Polit Econ 94: S88–S110

Erskine H (1991) The polls: Women's role. Public Opin Q 35: 282–287

Gerber T, Radl J (2014) Pushed, pulled, or blocked? The elderly and the labor market in post−Soviet Russia. Soc Sci Res 45: 152–169

Gerry CJ, Paradopoulos G (2015) Sample attrition in the RLMS, 2001–2010. Lessons for longitudinal analysis and an application on health. Econ Transit 23(2): 425–468

Gendell M, Siegel JS (1992) Trends in retirement age by sex, 1950–2005. Mon Labor Rev 115(7): 22–29

Giles J, Wang D, Cai W (2011) The labor supply and retirement Behaviour of China's older workers and elderly in comparative perspective. World Bank Policy Research Working Paper 5853

Gimpelson V, Kapeliushunikov R, Otshepkov A (2017) "Juniors" and "seniors" in the Russian labour market: An analysis through prism of tenure. Working paper WP3/2017/01. Moscow, Higher School of Economics Publishing House

Goldin C, Katz LF (eds) (2018) Women working longer. Increased employment at older ages. University of Chicago Press, Chicago and London

Góra M, Rohozynsky O, Sinyavskaya OV (2010) Pension reform options for Russia and Ukraine: A critical analysis of available options and their expected outcomes (with particular focus on labor market, industrial restructuring and public finance). ESCIRRU Working Paper No. 25, February, Berlin

Grishina E, Dormidontova Y, Lyashok V (2014) The influence of informal employment on the sustainability of the pension system in Russia. Econ Policy 6: 7–24

Gurvich E, Sonina Y (2012) Microanalysis of the Russian pension system. Vopr Econ 2: 27–51

Johnson R (2011) Phased retirement and workplace flexibility for older adults: Opportunities and challenges. Ann Am Acad Polit Soc Sci 638: 68–85

Jovanovic B (1979) Job matching and the theory of turnover. J Polit Econ 87(5): 972–990

Kalleberg AL, Knoke D, Marsden PV, Spaeth JL (1996) Organizations in America: Analysing their structures and human resource practices. Thousand Oaks, CA, Sage

Kovrova I (2007) Shaping a pension system: Distributive and incentive effects of the Russian pension reforms. Ph.D. dissertation, University of Turin

Levin V (2015) Time to retire: Analysis of older Russians' retirement decisions. Draft Working Paper, World Bank

Liu X (2012) Survival analysis: models and applications. John Wiley & Sons

Lyashok V, Maltseva I (2012) Older population of Russia on the labour market in 2000s years. In: Kozyreva PM, Kosolapov MS, Radaev VV, Roshchin SY, Roshchina YM (eds) Vestnik of Russian Longitudinal Monitoring Survey—HSE (RLMS-HSE), Volume 2. Moscow: National Research University Higher School of Economics, 95–110

Maleva TM, Sinyavskaya OV (2010) The increasing of pension age: Pro et contra. J New Econ Assoc 8: 117–139

Maltseva I (2005) Gender differences in occupational mobility and segregation in the labour market: The experience of Russian economy. Moscow, EERC

Maltseva I (2007) Today is here, tomorrow is there: Intersectoral labour mobility in Russia. Otechestvennye zapiski, 3. Retrieved from: http://www.demoscope.ru/weekly/2008/0349/analit03.php

Maltseva I (2009) Labour mobility and stability: How much is the return from specific human capital in Russia? HSE Economic Journal 13(2): 243–278

Maltseva I, Roshchin S (2007) Gender segregation and labour mobility in the Russian labour market. Moscow, Higher School of Economics Publishing House

Morternsen D (1986) Job search and labor market analysis. In: O. Ashenfelter, R Layard (eds) Handbook of labor economics, Vol. 2. Amsterdam, North-Holland, 849–919

Nesterova D, Sabirianova K (1999) Investments in human capital in the transition period in Russia. EERC Working Papers Series, 99/04

OECD (1998) Work force ageing: consequences and policy responses. Ageing Working Paper 4.1

Pleau RL (2010) Gender differences in postretirement employment. Res Aging 32(3): 267–303

Singer JD, Willett JB (2003) Applied longitudinal data analysis: modeling change and event occurrence. Oxford University Press

Sinyavskaya O (2005) Pension reform in Russia: A challenge of low pension age. PIE Discussion Paper, 267, March 2005, Project on Intergenerational Equity, Hitotsubashi University (Japan)

Sonina, J, Kolosnitsyna, M (2015) Pensioners in the Russian labour market: trends of economic activity of retirement age. Demogr Rev 2: 37–35

Zamarro G (2011) Family labor participation and child care decisions: The role of grannies. The RAND Labor and Population Working Paper Series

Part II
Gender Differences and Labour Market Outcomes

Chapter 6
The Gender-Specific Determinants of Labour Supply in Rural and Urban Contexts: Evidence from Armenia's Transition Economy

Serafima Chirkova and Sona Kalantaryan

Abstract The subject of this chapter is gender-specific determinants of labour supply in Armenia. Using the repeated cross-section Armenian Integrated Living Conditions Survey for 2004–2016 the study estimates the likelihood of female and male employment, controlling for a rich set of socio-demographic characteristics. It particularly looks at the relationship between the presence of children and the employment outcomes of parents. The results demonstrate that the presence of children is positively associated with men being in employment. This is also true for mothers in rural areas, but not, interestingly, for mothers in urban areas, where the estimated effect is negative. The magnitude of the effect increases with the number of children, preserving both the sign and statistical significance. The results suggest that rural families with children are more likely to conform to the dual-earner model; while those living in cities tend to follow the more traditional single breadwinner model.

Keywords Transitional economy · Armenia · Gender inequality · Employment · Family economics

6.1 Introduction

The last decades have been characterised by impressive progress towards gender equality and women's empowerment. Despite these efforts gender inequality is still present in modern societies in both developed and developing countries, with larger disparities observed in the developing world.[1] The economic and social benefits

[1]For a more detailed discussion of gender inequality issues see the World Development Report 2012 (World Bank 2012b).

S. Chirkova (✉)
Department of Economics, University of Santiago, Santiago, Chile

S. Kalantaryan
European University Institute, Florence, Italy
e-mail: sona.kalantaryan@eui.eu

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_6

associated with reducing the gender gap are well documented in the economic literature (Heintz 2006; Loko and Diouf 2009; Aguirre et al. 2012; Steinberg and Nakane 2012). The underrepresentation of women in the labour market is an important barrier against economic growth (Do et al. 2011; Croppenstedt et al. 2013; Hsieh et al. 2019 among others). Instead, the movement towards equality creates important advantages for economic development (Rees and Riezman 2012). Transition economies are quite unique in this respect, as they are characterised by high female educational attainments (often higher than for men) and low labour market participation. Armenia conforms to this pattern: women are more likely than men to have gone to university, but the gender-specific employment rate gap has been oscillating around 18 percentage point with little sign of convergence.[2]

In the past, gender equality policies in the Soviet Union led to significant improvements in the legal and social status of Armenian women. This included an increase in labour force participation in various sectors of the economy. The end of Soviet rule to some extent reversed matters, in part due to the rejection of what was considered "Soviet". The notion of gender equality was abandoned, leaving more space for patriarchal views and customs (ADB 2015). This can be seen in the numbers. The female employment rate is currently notably lower (43.2% in 2016) than what was observed at the end of the Soviet period (66.7% in 1990).[3] The country is facing a shrinking working-age population due to population ageing and a fall in the fertility rate. Identifying and removing the obstacles preventing more active female labour force participation can contribute to a larger labour force and hence attenuate the adverse consequences of negative demographic dynamics on the economic potential of the country.

This chapter aims at empirically investigating the determinants of employment in Armenia and the differential effect of these determinants for men and for women. Benefiting from a rich set of information provided by the Armenian Integrated Living Conditions Survey (AILCS), covering 2004–2016, the study estimates the relationship between various socio-demographic characteristics (such as age, education, marital status, children etc.) and employment outcomes in Armenia. Given the prevalence of traditional attitudes towards family life and the role of women in the household there, it further focuses on married couples to detect how the presence of children differentially affects the employment outcomes of men and women.

The study contributes to the existing literature in several ways. First, it provides important insights into the determinants of labour market participation (employment) in Armenia, one of the transition economies in the post-Soviet space. The existing gender gap in employment is examined and quantified across various types of settlement. The academic literature on gender inequality in the labour market in Armenia is scarce. What the existing studies mostly trace are gender inequality and its dynamics without analysing the causes (e.g. Bakhtavoryan and Dallakyan 2013; Semykina and

[2] IMF (2019).

[3] Armstat (1994, 2017).

Linz 2010; Karapetyan 2018).[4] Second, it contributes to the economic literature on the relationship between fertility and labour supply. Most of the studies (see, for instance, Rosenzweig and Wolpin 1980; Angrist and Evans 1998; Bloom et al. 2009) find a negative relationship between the presence of children in the household and female labour supply. However, some studies document a positive effect (Priebe 2011; King and Porter 2012; Trako 2019). This study provides new evidence and contributes to both strands of this literature. It also draws attention to the understudied relationship between the presence of children and male employment. The analysis adds a new evidence to the scare literature that examines how children affect not only female but also male employment prospects. Finally, it provides policy pointers for the importance of childcare services for preschool children, in freeing up women to (re)enter the labour market.

6.2 Historic and Institutional Background

The fall of the Soviet Union led to dramatic changes in its former republics. These affected not only the political system, but also the economy, social norms and the institutional framework of the successor states. Prior to gaining independence, all the former Soviet republics had lived under planned economies for seven decades. The legal and institutional framework inherited from the Soviet Union was not fit to deal with the free labour market specific challenges the countries suddenly faced in the 1990s. Armenia together with other newly independent states in the South Caucasus experienced ethnic conflicts, which, in some cases, escalated into military actions: separatist movements in autonomous regions of South Ossetia and Abkhazia within Georgia; the conflict between Armenia and Azerbaijan over a disputed region of Nagorno-Karabakh (O'Loughlin et al. 2007; Rowland 2008). These made the Armenian economic transition particularly turbulent. While GDP *per capita* increased over time (from $1976.5 PPP in 1991 to $3224.1 PPP in 2000, and $8744.7 PPP in 2016) employment rates fell back, recovering only slowly, from 80.3% in 1990 (Armstat 1994) to 33.6% in 1999 and to 50.1% in 2016 (World Bank 2017). The lack of employment opportunities in the country obliged many to look for work abroad (World Bank 2016).[5]

All these changes naturally affected decisions made at the household and individual levels. Choices related to education, labour market participation and fertility were made in anew and uncertain environment. The transition, among other things, led to changes in women's role in society reinforcing patriarchal views there.

[4]Several reports produced by international organisations address this knowledge gap and provide some stylized facts (e.g. Serrière 2014; ADB 2015; Rodriguez-Chamussy 2018).

[5]Remittances sent by migrants from abroad constitute an important source of income for many Armenian households. 2005–2015, the estimated financial support received from migrants accounted for an average of 17% of GDP (World Bank 2016).

To tackle these negative tendencies the Armenian government adopted the *Concept Paper on Gender Equality and the Gender Policy Strategic Action Plan, 2011–2015*. This document created the basis for addressing issues related to gender equality in the economy, education, health, the media, gender-based violence and participation in decision-making in general. In 2013, *the Law on Equal Rights and Equal Opportunities for Men and Women* was adopted.[6] The Council on Women's Affairs and the Division of Family, Children and Women's Issues (the Ministry of Labour and Social Affairs) are the main institutions in charge of gender policy in the country. However, the government's efforts to create the necessary legal and institutional framework to address male-female inequality has had only limited effects.

Despite the country's progressive gender equality policies, the evidence is unclear. On the one hand, Armenia has relatively good placement in terms of the *Gender Inequality Index* (ranked 55 of 160 countries in 2017) and the value of *Gender Development Index* (0.969 in 2017) indicates that the gender gap in human development is relatively small. At the same time, the *Gender gap index* placed Armenia in ninety-eighth position in a global ranking of 144 countries both in 2018 (0.678) and 2020 (0.684), with the country scoring below the global average.[7] The slight progress detected through the above-presented indicators becomes even less impressive when one looks across all dimensions. While men and women seem to have equal opportunities when it comes to *Education attainment* (1.000) and *Health and survival* (0.939) the situation is worse when it comes to *Economic participation and opportunities* (0.675) and *Political empowerment* (0.099). Within the *Economic participation and opportunities* dimension, the score is lowest for the components related to *Women employment as Legislators*, *Senior officials and managers* (0.419) and *Earnings* (0.545). Within *Political empowerment* Armenia scores poorly in all three components: *Women in parliament* (0.221); *Women in ministerial positions* (0.125); and *Years with a female head of state within last 50 years* (0.000).

6.3 The Evolution of Labour Force Participation in Armenia

In the Soviet republics labour markets were characterized by a high degree of centralization and state control. It was the state's responsibility to promote full employment (85% employment rate according to Kolosov [1991]) and with minor exceptions, an individual was obliged to work (Lane 1986, 2019). In 1990, before the

[6]Law NO. HO-57-N of 20 May 2013 on Guaranteeing Equal Rights and Opportunities for Women and Men. accessed at https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=&p_isn=94756&p_classification=05

[7]The Global Gender Gap Index examines the gap between men and women across four fundamental categories (subindexes): economic participation and opportunity; educational attainment; health and survival; and political empowerment. A value equal to zero stands for imparity and one for parity (World Economic Forum 2018, 2020).

Soviet Union's collapse, the employment rate in the Armenian Soviet Republic was 80.3% (Armstat 1994). The Soviet system continuously promoted gender equality in the labour market. To maintain full female employment, the Soviet government implemented various family policies including child-care benefits and maternity leave schemes. The state-sponsored system of day-care nurseries and kindergartens offered childcare to mothers encourageding them to return to work after childbirth (Zaporozhets and Kurbatova 1974; Lokshin 1999).

After the fall of the Soviet regime, Armenia went through radical political and economic changes. In 1985, 87.6% of employees were working in state enterprises, with half of them being women. This number dropped to 55.2% in 1994. The decrease was proportional both for men and women (Armstat 1994). During this period, the informal sector increased significantly. The estimates of Eilat and Zinnes (2002), and of Grigoryan (2007) suggest that during the 1990s (the first decade of transition) the shadow economy represented, on average, 60% of the country's economic activity. Moreover, during this period the country experienced massive emigration.[8] The typical profile of a migrant was a man of working age that left his wife at home to take care of the children and her in-laws, occupying her time with housework and informal jobs. As a result, female working hours significantly decreased leading to a deterioration in human capital among women.

Labour market conditions have remained difficult in the last decade, especially for women. In 2004, the labour force participation rate was 58.7% for men and 44% for women (Armstat 2005). In 2016, the female labour force participation rate was 58%, 17 percentage points lower than for men. In general, the share of long-term unemployment is higher among women than men. Women are more likely to face unemployment because of job cuts and layoffs (World Bank 2017).

The observed labour force participation gap is accompanied by significant differences between men's and women's raw average earnings: around 36 percentage points (World Bank 2017). The existing gender wage gap can be partially attributed to the specific characteristics of jobs performed by men and women. Women typically work shorter hours in jobs that all too often mismatch their skills. They are underrepresented in managerial positions. They are more likely to engage in their own-account farm activities and unpaid work. Agriculture accounts for almost 40% of female compared to 31% of male workers. As a result, female employment is significantly higher in rural than in urban areas. Rodriguez-Chamussy et al. (2018) demonstrate that the wage gap is mostly driven by wage structure effect (unexplained component) which accounts for almost all the wage gap in the middle and even more at the top of the wage distribution range.

These gender differences in various dimensions of the labour market point to the barriers to participation faced by Armenian women. Current Armenian social norms define a female gender role as a wife and mother that can have a part-time job, but her primary activity should be childcare and household tasks. A dominant male view is that a man remains the main breadwinner of the family. The views

[8] In 1993 the emigration rate was 0.8; almost one *per* thousand citizens was leaving the country every year (World Bank 2016).

of Armenian women on such a patriarchal model varies: some have equal rights in family-related decisions; some have no right to object to decisions made by their husbands (Mikaelyan 2011). However, women in Armenia, it is fair to say, do not easily enjoy positions of leadership and authority.

6.4 Data and Descriptive Analysis

The dataset used for the empirical analysis presented in this study is built on cross-section microdata from the nationally representative Armenian Integrated Living Conditions Survey (AILCS) and covers the period from 2004 to 2016. The AILCS is an annual survey conducted by the National Statistical Service of the Republic of Armenia (Armstat) with the technical assistance of the World Bank.[9] The survey has detailed information on demographic and socio-economic characteristics at both household (size, composition, settlement type, income level, poverty level etc.) and individual (age, sex, education, employment status, marital status etc.) levels.[10] The survey covers all twelve provinces with urban and rural areas being equally represented.[11]

To obtain a repeated cross-section dataset and build a set of additional variables, thirteen waves of AILCS were pooled. Following the literature, the analysis focuses on men and women aged between 20 and 49 years old (WHO 2006). The age interval is explained by the fact that, within this age group, most of the individuals have completed their compulsory studies and have entered or at least aspire to enter the workforce. Compulsory schooling lasts nine years in Armenia (ETF 2018). Children enter primary school at the age of six or seven and complete intermediate school, on average, at sixteen. Then they have two options. Either they continue their studies for two more years to prepare for tertiary education. Or they opt for post-secondary non-tertiary education which lasts between two and four years. Here they prepare for both labour market entry and/or tertiary education. Only 3.5% of the sample report being enrolled in educational activities and this percentage become negligible once the age interval is restricted to 25-49 years old (less than 0.6%).

[9] AILCS follows a universally recognized survey methodology for collecting information about the living conditions of households. 2004 is chosen as the starting year since in Armenia, the survey methodology was established on a regular basis only from 2004 with World Bank technical assistance. From 2001 to 2003 the survey was conducted in the pilot mode. The survey provides information collected via face-to-face interviews with the head of household or another adult member over multiple visits.

[10] The survey classifies the households into three groups according to their poverty status. Non-poor households correspond to the households whose food and non-food consumption is above the upper poverty line. Poor households include households whose consumption are between the upper and lower poverty lines. Very poor households are households with consumption below the lower poverty line. For more detailed explanations, see Armstat (2012).

[11] Marz is a provincial level administrative unit in Armenia. Armenia is divided into eleven provinces and the city of Yerevan, the capital.

6.4.1 Whole Sample

The initial sample is gender-balanced and consists of 144,085 individuals: 51% females and 49% males. The principal (age-restricted) sample is gender-balanced too: 73,732 females and 70,353 males. On average, a household is composed of about five adults. This indicates that various generations are likely to share the same dwelling space. The percentage of cohabiting couples is extremely low—less than one per cent—reflecting the prevalence of traditional attitudes towards family life. The share of married women is higher than married men, 70.2% against 64.0% in the whole sample.

The household composition related variable (relation to head of household) allows for couples to be identified and for parents to be linked to children. Fertility history information is based on the reported family structure which is used to identify children's birth order and the total number of children. Since the survey does not provide information about children that no longer live in the household, the constructed fertility variable potentially contains measurement errors. However, the assumption made is that the observed fertility history is representative of the entire fertility history of Armenian parents.

Table 6.1 presents the demographic and socio-economic characteristics of the sample. Columns (1) and (2) report descriptive statistics for, respectively, females and males. The average age of women is 34 and, of men, 33 years old. The vast majority of the sample are natives; only four percent are foreign-born. About three percent of individuals report being in education. The share of women with tertiary education is 34.5% that is 6% percentage point higher than men. This difference is statistically significant at the one percent level.

To construct the *labour market status* (employed vs not employed) variable self-reported information on employment status during the seven days prior to the interview was used.[12] An individual is considered to be *employed* if he/she has any paid work as an employee or in their own business (either self-employed or employer). Figure 6.1 shows the dynamic of employment during the period under analysis. The employment rate among men was higher during the whole period considered in this study. The dynamics of the employment rate among women shadow that of men. In the sample, fewer than half of women (47.6%) are employed: 13 percentage point lower than what is observed for men (60.5%). As columns (3)—(6) show, the employment gap is higher in cities (20.0 percentage points) compared to in rural areas (one percentage point). This might be at least partially explained by the presence of large numbers of women in agriculture.[13]

[12]The underlying data is a Labour Force Survey designed to capture labour-market status strictly following the ILO definition.

[13]The share of women employed in agriculture (among total employed women) is 43.2%, against 29.2 for men (based on AILCS 2004–2016).

Table 6.1 Summary statistics of the explanatory variables by sex, age group 20–49

Variables	Whole sample						Married couples					
	All		Urban		Rural		All		Urban		Rural	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Personal characteristics:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Age	33.99	33.37	33.83	33.25	34.23	33.54	33.68	37.68	33.50	37.28	33.93	38.24
	(9.078)	(9.067)	(9.019)	(8.884)	(9.165)	(9.309)	(7.633)	(7.498)	(7.560)	(7.466)	(7.727)	(7.508)
Foreign born	0.049	0.040	0.056	0.046	0.038	0.032	0.042	0.044	0.050	0.053	0.031	0.033
	(0.216)	(0.196)	(0.230)	(0.209)	(0.192)	(0.176)	(0.200)	(0.205)	(0.217)	(0.223)	(0.174)	(0.177)
Tertiary education	0.345	0.284	0.433	0.363	0.206	0.175	0.326	0.299	0.420	0.380	0.195	0.185
	(0.475)	(0.451)	(0.495)	(0.481)	(0.405)	(0.380)	(0.469)	(0.458)	(0.494)	(0.485)	(0.396)	(0.388)
Studying	0.036	0.034	0.044	0.043	0.025	0.022	0.008	0.005	0.009	0.006	0.005	0.003
	(0.187)	(0.182)	(0.204)	(0.202)	(0.156)	(0.147)	(0.086)	(0.069)	(0.096)	(0.079)	(0.071)	(0.054)
Married	0.702	0.640	0.665	0.638	0.762	0.643						
	(0.457)	(0.480)	(0.472)	(0.481)	(0.426)	(0.479)						
Working	0.476	0.605	0.374	0.574	0.638	0.647	0.458	0.713	0.321	0.688	0.649	0.748
	(0.499)	(0.489)	(0.484)	(0.494)	(0.481)	(0.478)	(0.498)	(0.452)	(0.467)	(0.463)	(0.477)	(0.434)
Presence of children												
no child	0.272	0.412	0.297	0.416	0.233	0.406	0.064		0.069		0.058	
	(0.445)	(0.492)	(0.457)	(0.493)	(0.423)	(0.491)	(0.246)		(0.254)		(0.233)	
1 child	0.201	0.143	0.212	0.156	0.183	0.127	0.224		0.242		0.198	
	(0.400)	(0.350)	(0.409)	(0.362)	(0.386)	(0.333)	(0.417)		(0.428)		(0.399)	
2 children	0.361	0.304	0.363	0.319	0.357	0.283	0.488		0.512		0.453	

(continued)

Table 6.1 (continued)

Variables	Whole sample						Married couples					
	All		Urban		Rural		All		Urban		Rural	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
	(0.480)	(0.460)	(0.481)	(0.466)	(0.479)	(0.450)	(0.500)		(0.500)		(0.498)	
3 or more children	0.166	0.141	0.127	0.110	0.227	0.185	0.224		0.176		0.290	
	(0.372)	(0.348)	(0.333)	(0.313)	(0.419)	(0.388)	(0.417)		(0.381)		(0.454)	
any child of preschool age	0.271	0.272	0.273	0.286	0.267	0.252	0.429		0.453		0.396	
	(0.444)	(0.445)	(0.446)	(0.452)	(0.442)	(0.434)	(0.495)		(0.498)		(0.489)	
Household characteristics:												
Number of adult members	5.010	5.056	4.817	4.898	5.315	5.271	5.345		5.191		5.561	
	(1.755)	(1.715)	(1.750)	(1.694)	(1.718)	(1.720)	(1.644)		(1.639)		(1.628)	
HH poor	0.264	0.256	0.267	0.259	0.261	0.251	0.279		0.280		0.277	
	(0.441)	(0.436)	(0.442)	(0.438)	(0.439)	(0.434)	(0.448)		(0.449)		(0.447)	
HH very poor	0.034	0.030	0.043	0.040	0.019	0.017	0.033		0.043		0.019	
	(0.180)	(0.171)	(0.203)	(0.196)	(0.135)	(0.128)	(0.178)		(0.202)		(0.136)	
Urban area	0.613	0.578					0.583					
	(0.487)	(0.494)					(0.493)					
Observations	73732	70353	45192	40667	28540	29686	38692	38692	22568	22568	16124	16124

Source AILCS pooled data, 2004–2016, own calculations

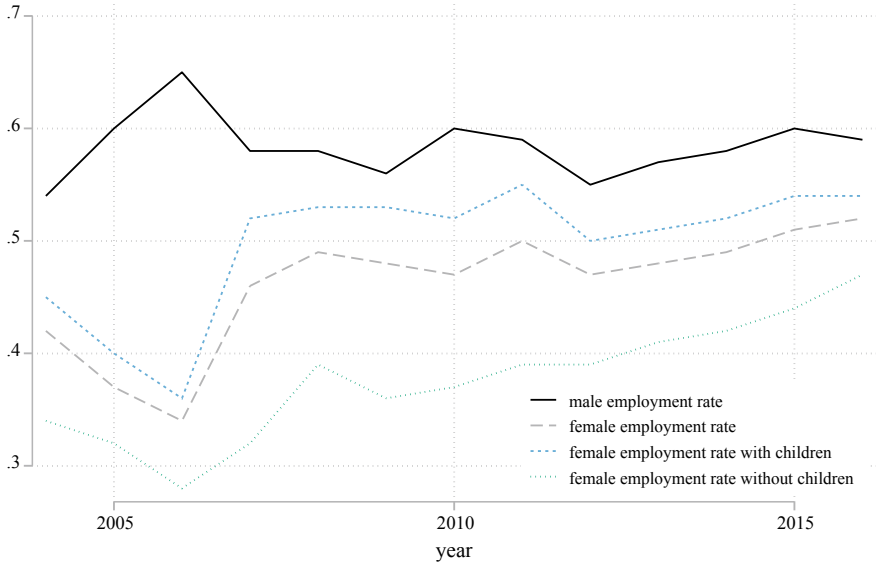

Fig. 6.1 The employment rate in Armenia, 2004–2016 (*Source* own calculations based on Armenian ILCS 2004–2016)

6.4.2 Restricted Sample

The restricted sample—married individuals with observable information for both partners—consists of 38,692 couples (around 80% of married individuals in the initial age-restricted sample). The descriptive statistics for this group is reported in the Columns (7) and (8) of Table 6.1. Overall, the household characteristics of married couples are in line with what is observed for the whole sample. On average women become mothers at 22 compared to men becoming fathers at 26. Married couples have, on average, two children. About a quarter have one child, half have two children, and the rest have three or more children. Among families with children, 45.9% have at least one child of pre-school age.[14] In this restricted sample too, women are, on average, better educated. The percentage of tertiary-educated women is about three percent higher and this difference is statistically significant at the one percent level. The gender employment gap among married couples is wider compared to the whole sample (25.5 vs 12.9%). It is mostly driven by significantly higher employment rate among married men leading to 36.7 and 9.9 percentage point gap in, respectively, urban and rural areas (see columns (9)–(12)). The share of women employed in agriculture remains significant: 49.2 against 22.1% for men.

[14] In this study a preschool age is defined as between 0 and 6. Therefore the analyzed preschool-age category includes both toddlers (age 0–2) and children of preschool age (3–6).

The primary objective of this study is to understand the impact children have on employment. This subsection looks at the relationship between employment status and number of children through a set of descriptive statistics.

Women without children represent 27.2% of the whole female subsample. They are less likely to be married (19.3%) and are relatively young (60% are below 27 years old). Only 7.8% of women at the end of their reproductive cycle (age 45 plus) do not have children. On the contrary, about 90% of women with children are married. One can conclude here that there is a positive association between decisions to get married and to have children in Armenia. This trend is stable across time: around 65% of observed women are married and 90% have children in each wave.

Table 6.2 presents the distribution of the number of children (none, one, two, three and more) across couples' employment profiles (both working, only the husband working, only the wife working and none working) for the whole sample (Panel A), urban (Panel B) and rural (Panel C) areas. Overall, couples in which both partners work or in which only husbands work are equally likely in Armenian society. As the

Table 6.2 The employment pattern of couples by number of children

	Number of children				Total
	0	1	2	3 or more	
	Panel A: Whole sample				
Both working	25.4%	28.6%	36.2%	45.3%	35.8%
Only husband working	41.7%	41.6%	35.1%	28.6%	35.5%
Only wife working	6.8%	8.2%	10.4%	11.6%	10.0%
None working	26.2%	21.6%	18.4%	14.5%	18.7%
% in the sample	**6.4%**	**22.4%**	**48.8%**	**22.4%**	**100.0%**
	Panel B: Urban subsample				
Both working	21.9%	22.1%	25.4%	24.7%	24.3%
Only husband working	44.3%	47.9%	43.5%	43.0%	44.5%
Only wife working	6.5%	7.0%	8.3%	8.1%	7.8%
None working	27.3%	23.0%	22.7%	24.2%	23.4%
% in the sample	**6.9%**	**24.2%**	**51.2%**	**17.6%**	**100.0%**
	Panel C: Rural subsample				
Both working	31.1%	39.6%	53.2%	62.8%	52.0%
Only husband working	37.3%	30.7%	21.7%	16.3%	22.8%
Only wife working	7.4%	10.3%	13.7%	14.6%	12.9%
None working	24.2%	19.3%	11.5%	6.3%	12.2%
% in the sample	**5.8%**	**19.8%**	**45.3%**	**29.0%**	**100.0%**

Source Own calculations based on Armenian ILCS 2004–2016

number of children increases women are more likely to work.[15] The employment profile of couples varies significantly from urban to rural areas. In urban areas, couples are more likely to represent the traditional "one breadwinner" model, with the husband as the main household earner. On the contrary, couples in rural areas are more likely to be "dual breadwinner" households. For instance, couples with two children and both parents working constitute more than half (53.2%) of couples living in rural areas. This figure is twice as low in urban areas (25.4%). Women living in rural areas seem to have more success in employment than their urban counterparts. It is important to note that higher employment rates might capture different and rather negative phenomena. On the one hand, the unemployment rates in urban areas are higher than in rural areas where the agricultural sector provides formal and informal employment opportunities. On the other hand, women in urban areas might choose not to work since they cannot find a job in line with their qualifications: in the sample 75% of women with tertiary education live in urban areas. Low wages and scarce employment opportunities lower women's opportunity costs which might lead households in urban areas to converge on the "one breadwinner model". Interestingly, the income distribution is similar in both areas; around 30% of families belonging to the "poor" and "very poor" groups.

6.5 Empirical Strategy

This section presents the empirical strategy used to assess the determinants of employment from a gender perspective. In particular, it pays closer attention to the potentially differentiated effect of individual socio-demographic characteristics (including having children) on the probability of being employed for men and women. For this purpose the probability of being employed is estimated as a non-linear function of personal and household characteristics using the following empirical model:

$$\Pr\left(Employed_{ijt} = 1\right) = F\left(Fert_{ijt}\alpha + X_{ijt}\beta + Z_{ijt} + v_t + \gamma_j + \varepsilon_{ijt} \geq 0\right) \quad (6.1)$$

where $Employed_{ijt}$ is a binary variable equals to 1 if an individual i observed in year t and residing in province j reports him/her being either an employee or being self-employed. The value 0 is assigned to those who reported being unemployed or economically inactive in the labour market. $Fert_{ijt}$ is a set of dummy variables capturing the number of children ever born to parent i. Since the evidence in the literature indicates that the childbirth order has a non-linear impact on the labour market participation decisions of parents (Lalive and Zweimüller 2009), the number of children here is not treated as a continuous but rather as a categorical variable. The

[15] For instance, among couples with three or more children, 45.3 percent belong to "both working" and 11.6 percent to "Only wife" group. The corresponding figures for couples with no (25.4 and 6.8), one (28.6 and 8.2) and two children (36.2 and 10.4) are much lower.

corresponding set of dummies stand for one, two, three and more as well as for the presence of pre-school children. The vector of the principal parameters of interest α represents the mean effect of having an (additional) child on the employment outcome. The dummy variable standing for the presence of a preschool child allows for the capture of the effect of being the principal childcare provider for the first six years of a child's life.[16]

X_{ijt} is a vector of the individual characteristics: age and its squared term, the level of education (dummy equal to 1 if an individual has tertiary or post-secondary non-tertiary education), currently being involved in the education process and marital status. The following set of household characteristics $\left(Z_{ijt}\right)$ is added to the list of controls: the number of household members; its poverty status; and type of area of residence (rural and urban). A set of year dummies v_t captures differences in the probability of being employed across various stages of a business cycle. Provincial dummies γ_j control for the heterogeneity of regional labour market conditions (Bakhtavoryan and Dallakyan 2013). The error term ε_{ijt} stands for the remaining unobserved idiosyncratic effects.

Family economics literature suggests that a family makes a collective decision about time allocation to maximize the household's utility (Becker 1981; Jones et al. 2010; Browning et al. 2014). Moreover, partners might face different opportunity costs of withdrawing themselves from the labour market. To account for the correlation between the labour force participation decisions of partners a joint probability model is adopted for the sample of married couples.[17] The model is defined by the following reduced form with Eq. (6.2) and (6.3) standing respectively for a wife's and husband's employment outcome:

$$\Pr\left(Employed_{ijt}^{W}=1\right)=F\left(Fert_{ijt}\alpha^{W}+X_{ijt}^{W}\beta^{W}+Z_{ijt}\gamma^{W}+v_t+\gamma_j+\varepsilon_{ijt}^{W}\geq 0\right) \tag{6.2}$$

$$\Pr\left(Employed_{ijt}^{H}=1\right)=F\left(Fert_{ijt}\alpha^{H}+X_{ijt}^{H}\beta^{H}+Z_{ijt}\gamma^{H}+v_t+\gamma_j+\varepsilon_{ijt}^{H}\geq 0\right) \tag{6.3}$$

where $Fert_{ijt}$—the fertility variable—in this case, stands for the number of children the couple has through a set of binary variables (one, two or three and more, at least one preschool child). The fertility decisionis allowed to have a differential impact on a wife's and husband's labour market participation decisions (and hence employment outcome), i.e. α^{W} is not necesseraly equal to α^{H}. X_{ijt}^{W} and X_{ijt}^{H} stand for a wife's and husband's individual characteristics similar to those described for Eq. (6.1). The vectors of parameters β^{W} and β^{H} report the effect of these individual characteristics on, respectively, the employment outcome of the wife and husband. The vectors of

[16] According to Article 173 of the Labour Code of the Republic of Armenia leave for childcare is not restricted to the mother and may also be taken by the father (or stepfather) of the child or any relative who is in charge of the child. In our sample, only 2.4% of individuals reported being on official parental leave. 99% were women.

[17] The cohabiting couples are excluded from the analysis since they represent only 1% of individuals who reported being in a couple.

parameters γ^W and γ^H capture the effect of common household characteristics, Z_{ijt}. This specification allows for heterogeneity in the effect of household characteristics on partners employment outcome: i.e. γ^W is not necessarily equal to γ^H. Similar to the first specification year and province fixed effects are added to the model.

The main difference between the first and second specifications is that the second allows for the correlation between employment outcomes through unobserved factors. The key assumption is that unobserved factors that influence the wife's decision to work ε_{ijt}^W can be correlated with her husband's unobserved factors ε_{ijt}^H and vice versa. Formally, the distrubution is defined as:

$$\begin{pmatrix} \varepsilon_{ijt}^W \\ \varepsilon_{ijt}^H \end{pmatrix} \sim \mathrm{N}\begin{pmatrix} \sigma_{\mathrm{W}}^2 & \rho \\ \rho & \sigma_{\mathrm{H}}^2 \end{pmatrix}, \tag{6.4}$$

where $\rho = corr\left(\varepsilon_{ijt}^W, \varepsilon_{ijt}^H\right) \neq 0$

The parameter ρ captures the relationship between a wife's and husband's decision to work through unobserved factors. If $\rho = 0$ such unobserved factors are assumed to follow independent standard normal distributions and the parameter vectors can be consistently estimated using two univariate probit models.

The literature on family economics is concerned with the problem of endogeneity between labour market participation and fertility decisions, a two-way causality (for instance, see Francesconi 2002; Clarke 2018). The fertility decision may be affected by his/her labour market status (e.g. having a job might postpone a couple's decision to have children). The latter can be influenced by the fertility decision itself. The causal impact of employment on the fertility decision is possible to analyse only in a dynamic context, one which requires panel data (see for instance Matysiak and Vignoli 2013; Aaronson et al. 2017). This study employs a repeated cross-section. At the moment of the interview only the number of existing children and current employment status are observed for each individual. This implies that only the impact of fertility decisions in the past (number of children observed) on the current employment status of the parents can be estimated. The analysis relies on the assumption that current employment status is not affected by unobserved fertility intentions.[18] While the issue of reverse causality is not a matter of concern in this study the estimation might still be affected by other forms of endogeneity (e.g. unobserved heterogeneity, measurement error). Hence, the results should be interpreted with caution.

6.6 Estimation Results

This section reports the estimation results of the two models presented in Sect. (6.5).

[18]The outcome of the decision to have a child is observed with a time lag due to the timing of conception and the duration of pregnancy.

First, the results for the whole sample (separately for females and males in the 20–49 age group regardless of their marital status) are presented (Table 6.3). This allows a comparison of the impact of the presence of children and other individual socio-demographic characteristics on the employment outcome in gender terms. Then the sample is restricted to married couples to see how the presence of a partner affects the joint labour force participation decision (employment outcome) (Table 6.4). The reported coefficients are the computed marginal effects of the probit model. For both specifications, three sets of results are presented: the entire sample, and urban and rural subsamples. All the specifications include the same set of control variables, year and province fixed effects and follow the same structure. The reference category in Columns (1), (3) and (5) are not working women and in Columns (2), (4) and (6) not working men.

6.6.1 Whole Sample

The first set of results reported in Columns (1) and (2) of Table 6.3 suggests that the probability of being employed is a concave function of age for both males and females. Having tertiary education increases the probability of being employed; the effect is two times as high for females as for males (12.9 pp against 6.6 pp). Those enrolled in education are less likely to be employed. In general, living in urban areas is negatively associated with the probability of being employed. The effect is larger for women; those living in urban areas are 26.5 pp less likely to be employed. The estimated 'urban disadvantage' for men is about 11.3 pp.

Two factors—marital status and fertility decisions in the past (measured by the number of children)—have important differences in the way they affect employment outcomes for men and for women. For women being married decreases the probability of being employed by 9.3 pp. On the contrary, married men are 15.9 pp more likely to work compared to single men. For women, the presence of children seems not to have any significant effect on employment outcomes; the coefficients of the number of children are neither large nor significant. However, the presence of at least one child of preschool-age decreases the probability of being employed significantly (by 11.1 pp). Overall, married women with children of preschool age are about 20 pp less likely to work compared to single non-mothers, all other factors being equal.

There is a different estimated effect for marital status and children on male employment. First, for men being married is associated with a higher probability of being employed compared to unmarried men; the probability increases, indeed, by 15.9 pp. Second, the presence of children implies a positive and statistically significant increase in the probability of being employed. The magnitude of estimated coefficients increases with the number of children; the first child increases the probability of being employed by 2.7 pp, the effect doubles with the second (4.3 pp) and triples with three or more children (8.4 pp). Also having a preschool child is associated with a higher probability of being employed (3.5 pp). Overall, married men with a preschool child are 20 pp more likely to be employed than unmarried

Table 6.3 Marginal effects for probit regressions on the probability of having a job, with covariates

	Whole sample		Urban		Rural	
	Female	Male	Female	Male	Female	Male
Variables	(1)	(2)	(3)	(4)	(5)	(6)
Personal characteristics:						
Age	0.067***	0.040***	0.060***	0.051***	0.049***	0.021***
	(0.004)	(0.006)	(0.005)	(0.003)	(0.004)	(0.006)
Age^2	−0.001***	−0.001***	−0.001***	−0.001***	−0.001***	−0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Tertiary education	0.129***	0.066***	0.154***	0.071***	0.058***	0.049***
	(0.008)	(0.009)	(0.009)	(0.012)	(0.012)	(0.015)
Studying	−0.239***	−0.207***	−0.259***	−0.216***	−0.214***	−0.173***
	(0.021)	(0.013)	(0.020)	(0.008)	(0.043)	(0.030)
Married	−0.093***	0.159***	−0.124***	0.172***	−0.037**	0.136***
	(0.019)	(0.015)	(0.009)	(0.011)	(0.016)	(0.026)
Presence of children						
1 child	−0.011	0.027***	−0.038**	0.035***	0.060***	0.003
	(0.023)	(0.009)	(0.015)	(0.010)	(0.024)	(0.018)
2 children	−0.003	0.043***	−0.059***	0.041***	0.128***	0.043**
	(0.039)	(0.012)	(0.018)	(0.016)	(0.023)	(0.021)
3 or more children	0.040	0.084***	−0.080**	0.070***	0.204***	0.086***
	(0.056)	(0.007)	(0.032)	(0.010)	(0.030)	(0.015)
preschool age	−0.110***	0.035***	−0.095***	0.033***	−0.122***	0.038**
	(0.009)	(0.008)	(0.008)	(0.007)	(0.016)	(0.018)
Household characteristics:						
Number of adult members	−0.018***	−0.020***	−0.005***	−0.022***	−0.030***	−0.016***
	(0.005)	(0.002)	(0.001)	(0.002)	(0.004)	(0.003)
HH poor	−0.056***	−0.022	−0.072***	−0.053***	−0.032***	0.031*
	(0.012)	(0.021)	(0.010)	(0.017)	(0.012)	(0.019)
HH very poor	−0.122***	−0.124***	−0.134***	−0.157***	−0.090**	−0.014
	(0.017)	(0.031)	(0.018)	(0.028)	(0.039)	(0.036)
Urban area	−0.265***	−0.113***				
	(0.030)	(0.018)				

(continued)

Table 6.3 (continued)

	Whole sample		Urban		Rural	
	Female	Male	Female	Male	Female	Male
Province dummies	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	73732	70353	45192	40667	28540	29686

Notes The dependent variable is a binary indicator equal to 1 if an individual is employed and 0 otherwise. Marginal effects are reported. Standard errors clustered at province level are in parentheses. ***$p<0.01$, **$p<0.05$, *$p<0.1$

childless men. Interestingly, the magnitude of 20 pp difference for women is also there with men but with the opposite sign.

Given the suggestive evidence about different labour opportunities in urban and rural areas, Eq. (6.1) is estimated separately for the subsample of the individuals living in urban and rural areas. The estimation results are presented in Columns (3) to (6) of Table 6.3. The previously suspiciously insignificant coefficients at the set of dummy variables capturing the number of children in Column (1) become significant. They also suggest that the direction and the magnitude of the association are different for women in urban and rural areas. Having children decreases the probability of working for women living in urban areas and increases it for those in rural areas. Moreover, the magnitude of estimated cofficeients grows with the number of children and is twice as high for rural areas. These diverging patterns in the two subsamples explain the absence of any effect estimated for the whole sample as the effect was simply cancelled out. The presence of children of preschool age preserves its negative and statistically significant impact on the employment probability of women in both urban and rural areas.

The effect of tertiary education proves to be significantly higher in urban areas. For women in urban areas with a university degree the probability of being employed increases by 15.4 pp. This is more than twice as high as the estimates for men in urban areas (7.1 pp) and three times higher than for women in rural areas (5.8 pp). The impact of other individual characteristics estimated for the two subsamples is in line with those reported for the whole sample.

6.6.2 Restricted Sample

The next step of the analysis is to estimate the bivariate probit model specified in the system of Eqs. (6.2) and (6.3) for the subsample of married couples. Table 6.4 reports marginal effects. First, it is important to mention that as expected the employment outcomes of partners are related through unobserved factors. The estimated value of the correlation coefficient ρ is 0.206, and it is statistically significant. This

Table 6.4 Marginal effects for probit regressions on the probability to have a job for married couples, with covariates

	Whole sample		Urban		Rural	
	Female	Male	Female	Male	Female	Male
Variables	(1)	(2)	(3)	(4)	(5)	(6)
Personal characteristics:						
Age	0.074***	0.015***	0.065***	0.018***	0.061***	0.005
	−0.006	(0.003)	−0.008	(0.003)	−0.006	(0.006)
Age^2	−0.001***	−0.0002***	−0.001***	−0.0002***	−0.001***	−0.0006
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.0007)
Tertiary education	0.131***	0.073***	0.158***	0.075***	0.009***	0.072***
	(0.008)	(0.015)	(0.012)	(0.018)	(0.000)	(0.021)
Studying	−0.087***	−0.203***	−0.063***	−0.222***	−0.203***	−0.141*
	(0.021)	(0.037)	(0.039)	(0.031)	(0.063)	(0.076)
Presence of children						
1 child	−0.004	0.008	−0.058***	0.029	0.081***	−0.031**
	(0.033)	(0.009)	(0.021)	(0.010)	(0.028)	(0.015)
2 children	0.005	0.036***	−0.081***	0.049***	0.153***	0.016
	(0.050)	(0.012)	(0.023)	(0.013)	(0.029)	(0.019)
3 or more children	0.033	0.082***	−0.117***	0.083***	0.224***	0.061***
	(0.070)	(0.008)	(0.070)	(0.012)	(0.037)	(0.015)
preschool age	−0.069***	0.022***	−0.045***	0.023**	−0.101***	0.017
	(0.011)	(0.003)	(0.010)	(0.003)	(0.015)	(0.016)
Household characteristics:						
Number of adult members	−0.023***	−0.022***	−0.007***	−0.024***	−0.037***	−0.017***
	(0.005)	(0.003)	(0.001)	(0.009)	(0.005)	(0.005)
HH poor	−0.043***	−0.021	−0.061***	−0.054	−0.022***	0.033*
	(0.012)	(0.020)	(0.014)	(0.015)	(0.007)	(0.019)
HH very poor	−0.108***	−0.133***	−0.102***	−0.172***	−0.108**	−0.015
	(0.017)	(0.031)	(0.013)	(0.034)	(0.045)	(0.029)
Urban area	−0.300***	−0.102***				
	(0.030)	(0.017)				
Province dummies	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes

(continued)

Table 6.4 (continued)

	Whole sample		Urban		Rural	
	Female	Male	Female	Male	Female	Male
Rho	0.206		0.123		0.346	
p-values of Wald test	≈0		≈0		≈0	
Observations	38692		22568		16124	

Notes The dependent variable is a binary indicator equal to 1 if an individual is employed and 0 otherwise. Marginal effects are reported. Standard errors clustered at province level are in parentheses. ***$p<0.01$, **$p< 0.05$, *$p<0.1$

implies a positive relationship between partners' employment outcomes, perhaps due to jointly made labour force participation decisions or due to positive assortative mating. Second, the impacts of the socio-economic factors on the employment outcome for the subsample of married couples follow the pattern observed for the whole sample. This is true both in terms of direction and in terms of magnitude of estimated effects. The presence of preschool children is negatively associated with the probability of being employed for women and positive for men. In families with two and more children, the number of children remains an important factor for men's employment outcomes, but has no significant impact on women's employment.

To verify the heterogeneity detected for the effect children have on parents' employment across various types of settlement, the analysis is repeated for urban and rural subsamples. Columns (3) to (6) of Table 6.4 report the marginal effects for the estimation result of the system of Eqs. (6.2) and (6.3) for urban and rural subsamples. In both subsamples, partners' employment outcomes are correlated, but in absolute terms, the correlation coefficient is higher for rural families (0.346 against 0.123). For the urban subsample having children decreases the probability of women being employed, and increases it for men. In rural areas, the presence of children in the family is associated with a higher probability of women being employed. Among men, meanwhile, only those with three or more children have a higher probability of being employed. The fact that having children is positively associated with the employment of women in rural areas might be explained by financial constraints, not captured by the poverty indicators used. It might also point to more stable labour demand in rural as compared to urban areas. The negative effect of the presence of pre-school children on the likelihood of women being employed provides suggestive evidence of women being the principal childcare providers. The estimation results of the joint employment model confirm the positive effect of education on the employment outcomes of women, especially in urban areas. The magnitude of the effect is in line with the result obtained for the whole sample of women in urban areas (15.8 pp). The effect of tertiary education on female employment in rural areas turns out to be, on the other hand, negligible once the correlation in unobserved components (below one pp) has been controlled for. Education has a similar impact for men in urban and rural areas; it increases the probability of employment by seven pp.

6.7 Conclusions

The purpose of this chapter is to investigate employment determinants in the context of a transition economy in the South Caucasus, namely Armenia. The transition was accompanied by economic crisis and adverse demographic dynamics caused by fertility decline, population ageing and mass emigration. Another distinct feature of the transition has been the widening gender employment gap, driven, above all, by a decrease in female labour force participation. Identifying and removing the obstacles preventing more active labour force participation on the part of women would help to attenuate the adverse consequences of negative demographic dynamics on the size of the labour force.

To understand the determinants of employment in Armenia this chapter exploits the rich set of information provided by the Armenian Integrated Living Conditions Survey, from 2006 to 2016. The results point to the important role of gender in the local—urban vs rural—context in Armenia. First, while the employment rates are always higher for men than for women, this gap is significantly higher in urban areas. Second, tertiary education is an important determinant of female employment, but mostly, if not exclusively, in urban areas. For men, tertiary education is positively associated with employment outcomes with no difference being detected for urban and rural areas. Third, the results demonstrate that, yes, the presence of children is positively associated with the employment outcome of men. But, at the same time, the effect for women is negative for those living in urban areas and positive for those in rural areas. The magnitude of the effect increases with the number of children, preserving both the sign and statistical significance of the effect. Moreover, the presence of preschool children is negatively associated with the probability of women being employed both in urban and rural areas. This result is in line with recent studies (Geyer and Steiner 2007; Chirkova 2019) showing that the mother of a young child is more likely to be the main childcare provider in response to various constraints (individual preferences, restricted access to childcare, social norms, etc.). Finally, the scholarly literature provides little evidence regarding the impact that the presence of children has on male labour force participation. A few studies suggest that male employment responds positively to an increase in family sizes (Cazzola et al. 2016; Trako 2019). The results obtained in this study address this knowledge gap and demonstrate that in Armenia married men work more than single men, and that the birth of a second or a third or more children is associated with a significantly higher probability of being employed.

The study provides important policy pointers. The results suggest that living in urban areas is negatively associated with the probability of being employed, and the effect is more prominent for women. For these urban women, having children further decreases their employment prospects. The magnitude of this negative association then grows with the number of children. Also, the presence of preschool children is negatively associated with female employment. Finally, being married and having children is, for men, associated with a significantly higher probability of being employed. This evidence suggests that in urban areas fathers can be considered

as the "breadwinner", while mothers are the principal childcare providers. It might be the case that the absence of job opportunities pushes urban families towards more traditional one-earner household models, while rural families follow the "Soviet" model of dual-earner households.

The time cost of children is an important constraint on the labour force participation of mothers with preschool children. Restricted access to child-care facilities might result in longer employment breaks for women. The associated decrease of a woman's human capital leads to lower chances of finding a job and hence reinforces already existing gender imbalances on the labour market. This fact indicates that childcare, especially of preschool-age children, might be an important constraint on female labour force participation in Armenia. According to the World Bank, pre-primary enrolment in Armenia remains low; the net enrolment rate in pre-primary school for 3–6 year-old children is only 33.9% (World Bank 2012a). Therefore, one possible public policy intervention to promote female labour supply would be to reinforce the public childcare system inherited from the Soviet Union.

References

Aaronson D, Dehejia R, Jordan A, Pop-Eleches C, Samii C, Schulze K (2017) The effect of fertility on mothers' labor supply over the last two centuries, IZA Discussion Papers, No. 10559, Institute of Labor Economics (IZA), Bonn

Aguirre D, Hoteit L, Rupp C, Sabbagh K (2012) Empowering the third billion. Women and the world of work in 2012. Booz and Company

Angrist J, Evans W (1998) Children and their parents' labor supply: evidence from exogenous variation in family size. Am Econ RevAm Econ Rev 88(3): 450–477

Armstat (1994) Statistical Yearbook of Armenia 1993–1994 (in Russian). https://www.armstat.am/file/doc/99507028.pdf

Armstat (2005) Statistical Yearbook of Armenia 2005. https://www.armstat.am/file/doc/523.pdf

Armstat (2012) Social snapshot and poverty in Armenia. statistical and analytical report. Statistical Committee Republic of Armenia, Yerevan

Armstat (2017) Statistical yearbook of Armenia 2016. https://www.armstat.am/file/doc/99504348.pdf

ADB (2015) Armenia, country gender assessment. Asian Development Bank

Bakhtavoryan R, Dallakyan A (2013) Analysis of factors impacting rural women's labor force participation in Armenia. The United States Agency for International Development, Washington, DC

Becker, Gary S (1981) Treatise on the family. Cambridge, Harvard University Press

Bloom DE, Canning D, Fink G, Finley JE (2009) Fertility, female labor force participation, and the demographic dividend. J Econ Growth, 14(2): 79-101

Browning M, Chiappori P. Weiss Y (2014) Economics of the Family, Cambridge University Press

Cazzola A, Pasquini L, Angeli A (2016) The relationship between unemployment and fertility in Italy: A time-series analysis. Demogr Res 34: 1–38

Chirkova S (2019) The impact of parental leave policy on child-rearing and employment behavior: the case of Germany. IZA J Labor Policy 9

Clarke D (2018) Children and their parents: a review of fertility and causality. J Econ Surv 32(2): 518–540

Croppenstedt A, Goldstein M, Rosas N (2013) Gender and agriculture: inefficiencies, segregation, and low productivity traps. World Bank Res Obs 28(1): 79–109

Do Q, Levchenko A, Raddatz C (2011) Engendering trade, Policy Research Working Paper Series 5777, The World Bank
Eilat Y, Zinnes C (2002) The shadow economy in transition countries: friend or foe? a policy perspective. World Dev 30(7): 1233–1254
ETF (2018) Armenia education, training and employment Developments 2017. European Training Foundation
Francesconi M (2002) A joint dynamic model of fertility and work of married women. J Labour Econ 20(2): 336–380
Geyer J, Steiner V (2007) Short-run and long-term effects of childbirth on mothers' employment and working hours across institutional regimes: an empirical analysis based on the european community household panel. IZA Discussion Paper 2693, Bonn, Germany, IZA
Grigoryan A (2007) Case study of the size, causes and consequences of shadow economy (On the example of the republic of Armenia). Trends Appl Sci Res 2(5): 365–373
Heintz J (2006) Globalization, economic policy and employment: Poverty and gender implications. Geneva, International Labour Organization
Hsieh CT, Hurst E, Jones CI, Klenow PJ (2019) The allocation of talent and U.S. economic growth. Econ 87: 1439–1474
IMF (2019) Republic of Armenia: selected issues. Country Report No. 19/155 International Monetary Fund
Jones L, Schoonbroodt A, Tertilt M (2010) Fertility theories: can they explain the negative fertility-income relationship?, in demography and the economy, National Bureau of Economic Research, Inc
Karapetyan L (2018) Gender discrimination issues in the labour market of Armenia. World Sci 8(36), https://doi.org/10.31435/rsglobal_ws/30082018/6053
King E, Porter M (2012) Fertility and women's labor Force participation in developing countries. Mimeo. Department of Economics, University of Oxford
Kolosov VF (1991) The new employment policy in the USSR. Standing, Guy, éd. In search of flexibility: the new Soviet labour market. Geneva, International Labour Office: 45–62
Lalive R, Zweimüller J (2009) How does parental leave affect fertility and return to work? evidence from two natural experiments. Q J Econ 124(3): 1363–1402
Lane D (1986) Labour and Employment in the USSR. Wheats heaf Books
Lane D (2019) Soviet labour and the ethic of communism: full employment and the labour process in the USSR. Routledge
Law NO. HO-57-N of 20 May 2013 on guaranteeing equal rights and opportunities for Women and Men. https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=&p_isn=94756&p_classification=05
Loko MB, Diouf MA (2009) Revisiting the determinants of productivity growth: What's new? No. 9–225. International Monetary Fund
Lokshin MM (1999) Household childcare choices and women's work behavior in Russia. The World Bank Group
Matysiak A, Vignoli D (2013) Diverse Effects of Women's employment on fertility: insights from italy and poland: diverses conséquences de l'emploi des femmes sur la fécondité: quelques informations à partir des cas de l'Italie et de la Pologne. Eur J population=Revue Eur Demogr 29(3): 273–302. https://doi.org/10.1007/s10680-013-9287-4
Mikaelyan H (2011) Women in local administration in Armenia. Caucasus Institute Research Papers, 6. https://c-i.am/wp-content/uploads/2012-Women-in-local-administration_eng.pdf
O'Loughlin J, Kolosov V, Radvanyi J (2007) The caucasus in a time of conflict, demographic transition, and economic change. Eurasian Geogr Econ 48(2): 135–156
Priebe J. (2011) Child costs and the causal effect of fertility on Female labor supply: an investigation for Indonesia 1993–2008. Courant Research Center: Poverty, Equity and Growth—Discussion Papers
Rees R, Riezman R (2012) Globalization, gender, and growth. Rev Income Wealth 58(1): 107–117

Rodriguez-Chamussy L, Sinha N, Atencio A (2018) The economics of the gender wage gap in Armenia. Policy Research Working Paper 8931, The World Bank Group
Rosenzweig M, Wolpin K (1980) Testing the quantity-quality fertility model: the use of twins as a natural experiment. Econ 48 (1): 227–240
Rowland RH (2008) Population trends in a contested pseudo-state: the case of Nagorno-Karabakh. Eurasian Geogr Econ 49: 99–111
Semykina A, Linz SJ (2010) Analyzing the gender pay gap in transition economies: How much does personality matter? Hum Relations 63(4): 447–469
Serrière N (2014) Labour market transitions of young women and men in Armenia. International Labour Organization
Steinberg C, Nakane MM (2012) Can women save Japan? IMF Working Papers, No 12/248, International Monetary Fund
Trako I (2019) Fertility and parental labor-force participation: new evidence from a developing country in the Balkans. Policy Research Working Paper 8931, The World Bank Group
World Bank (2012a) Armenia. Early childhood development. SABER Country Report. 2012
World Bank (2012b) World development report: gender equality and Development. The World Bank Group
World Bank (2016) Migration and remitence factbook 2016. The World Bank Group
World Bank (2017) Armenia country gender assessment: poverty and equity global practice 2016. The World Bank Group
World Economic Forum (2018) The global gender gap report 2018, Geneva, Switzerland
World Economic Forum (2020) The global gender gap report 2020, Geneva, Switzerland
WHO (2006) Reproductive Health Indicators. Guidelines for their generation, interpretation and analysis for global monitoring. World Health Organization
Zaporozhets AV, Kurbatova RA (1974) The half-century road of preschool Education in the USSR (in Russian). Sov Rev 15(3): 43–59

Chapter 7
Dynamics of the Gender Wage Gap in Belarus: Are There Any Changes from 2001 to 2016?

Maryia Akulava and Alina Verashchagina

Abstract This chapter provides evidence on the gender wage gap in Belarus during the period 2001–2016—after crossing 20% in the early 2000s, there was no improvement in it; this is the main outcome of the research. The authors argue that this could be a sign of increased vulnerability of the Belarusian women, both in the labor market and within the family. It is crucial that policymakers do not neglect this issue as it can have negative implications for the accumulation and use of human capital as well as for population development. This chapter presents an analysis of the reasons behind such developments, and advocates a more gender-sensitive and sustainable approach to policymaking.

7.1 Introduction

While the gender wage gap (GWG) is narrowing in almost all developed countries, it remains comparatively high in many of the former Soviet Union (FSU) nations. In Belarus, it was documented to have increased over the first decade of transition (Pastore and Verashchagina 2011; Akulava 2016).

Data remains an issue in Belarus. The above-mentioned studies relied on the Belarusian Household Survey of Income and Expenditure (BHSIE), which, for quite some time, was the only source of microdata available to researchers. However, several important variables were dropped over the years (such as hours of work and sector of employment); thus, estimates are not strictly comparable over time. Despite these insurmountable difficulties, this chapter aims to summarize the evidence on the GWG in Belarus obtained from the BHSIE over the last two decades. The idea is to reconstruct the link with the policies implemented in the country over the period of this research.

M. Akulava
BEROC Economic Research Center, Minsk, Belarus
e-mail: akulava@beroc.by

A. Verashchagina (✉)
Department of Economics and Law, Sapienza University of Rome, Rome, Italy
e-mail: alina.verashchagina@uniroma1.it

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_7

The GWG in Belarus had more than doubled before the Great Recession, from as low as 8% in 1996 (when the first round of the BHSIE was undertaken) to more than 20%[1] in 2006 (Pastore and Verashchagina 2011); the crisis then widened it further. This chapter provides the evidence gathered between 2001 and 2016.

The reduction in women's relative wages was due to the deterioration of observed characteristics (e.g. segregation in low-wage sectors). This may be largely driven by a generous childcare policy, as per which the state provides three-year paid maternity leave. The neglect of the gender dimension when implementing policies aimed at addressing the demographic crisis in Belarus has led to a different kind of problem for policymakers—women in the labor market being underpaid when compared with men. This may have repercussions not only on female participation in the labor force but also on the accumulation and use of human capital. Unless properly addressed, this unintentional effect of family policies may have long-term implications on the growth of the Belarusian economy.

7.2 Contrasting Patterns of the GWG Across Countries

The literature on the GWG aims to explain the reasons behind the persisting differences in remuneration for men and women (see Blau and Kahn 2017 for a recent review). These can be personal characteristics, occupational and sectoral segregation, breaks in career due to childbearing, or other reasons including discrimination.

Some studies focus on the differences in remuneration because of unequal productivity and the quality of human capital. Less experience, lack of required skills and knowledge, fewer incentives to invest in education, and working overtime all explain wage disparity to an extent (Blau and Kahn 1997; Warren et al. 2001; Booth and Francesconi 2003; Amuedo-Dorantes and de la Rica 2006; Manning and Swaffield 2008; Lemieux et al. 2009). Moreover, various differences in behavior matter: networking, voluntarism, and career aspirations affect the level of remuneration (Azmat and Ferrer 2017). Card et al. (2016) showed that it is also about sorting and bargaining—that is, firm-specific pay premiums contribute to the GWG if women are less likely to work for high-paying companies, or if they negotiate poorer wage deals with their employers when compared with men.

The issue of gender segregation, by occupation and sector, has also been explored in relation to the GWG. Women often choose non-pecuniary benefits over level of remuneration for more flexibility. Having the flexibility to work part-time to spend more time with children can sometimes explain their choice of low-paying sectors (Blau and Kahn 2017; Sorensen 1990; Reilly and Wirjanto 1999; Bayard et al. 2003; Jurajda and Harmgart 2007; Triventi 2013; Matuszewska-Janica 2014). According to Fields and Wolff (1995), around 33% of the earnings differential is explained by the cumulative effects of sectors where men and women operate.

[1]These figures refer to the GWG in monthly wages. The increase would have been slightly lower if hourly wage rates had been considered.

Another factor to consider is discrimination, which accounts for the part of the GWG that cannot be explained by the observed characteristics or prices. It manifests itself in many different ways, such as lower remuneration or unwillingness to hire certain groups of workforce, or discrimination in terms of professional and educational development (Becker 1957). Depending on the country and prevailing cultural norms, it can be more or less important in driving the level of the GWG (Albrecht et al. 2004; Cudeville and Gurbuzer 2007; Livanos and Pouliakas 2012; Christofides et al. 2010; Magnani and Zhu 2012; Śliwicki and Ryczkowski 2014).

Furthermore, Goldin (2014) noted that the market itself can be blamed for the persisting GWG. The way jobs and remuneration are structured to enhance temporal flexibility is important. The author maintained that the GWG could be considerably reduced, and even eradicated, if firms did not disproportionately reward individuals working long and atypical hours. Driven by competition in many sectors, such as technology, science, and health, there are incentives for working long and atypical hours, which denies women the most lucrative jobs. It can be said that the shift to a market economy changed the nature of labor relations, and more space has been created for such practices, further widening the GWG.

The studies on FSU countries highlight a GWG of around 20–45% depending on the country, mostly due to the differences in rewards, or the unexplained component, despite the fact that female personal characteristics often outweigh male ones (Oshchepkov 2006; Ganguli and Terrell 2006; Khitarishvilli 2009). The level of the GWG varies across countries and between deciles of income distribution within countries. Much depends on the role that different institutions play and the country's social context. For example, Kazakhstan, Ukraine, Kyrgyz Republic, and Uzbekistan report the maximum GWG at the top end of wage distribution (Ganguli and Terrell 2005, 2006; Newell and Reilly 2001; Pignatti 2012; Anderson et al. 2015). The Russian Federation and Tajikistan, on the other hand, are characterized by the highest GWG in the middle of wage distribution (Paci and Reilly 2004; Atencio and Posadas 2015). For Belarus (Pastore and Verashchagina 2011), the glass ceiling effect was reported for the earlier years of transition, but from the mid-2000s onward, it was less evident.

While the majority of FSU countries managed to narrow the GWG during the transformation period, mainly by reducing the unexplained component (Khitarishvilli 2018), the few available studies on Belarus reveal quite the opposite pattern. Pastore and Verashchagina were the first to look into the reasons behind the existing GWG using the BHSIE data for 1996, 2001, and 2006 (2005, 2011). The results showed a steady increase in the GWG; the authors suggested that differences in rewards and personal characteristics were the main reasons for it—women tend to move to low-paying sectors as well as concentrate on the state sector of the economy instead of looking for jobs in the private sector; such choices result in substantial differences in the remuneration rates of women and men. Similar findings were obtained by Akulava (2016) on the basis of the 2005–2014 BHSIE data.

The recent study by Akulava and Mazol (2018) looked at the developments in the GWG in Belarus using the 2017 GGS data (UNFPA Generations and Gender Survey). The authors suggested that the glass ceiling effect is prevalent in the state

sector of the economy, but there is no evidence of it in the private sector. The reason for this could be that highly qualified female workers have started moving to the private sector. Personal characteristics of women employed in top jobs in the private sector are, in fact, substantially higher than that of their male colleagues, allowing the GWG to narrow; the situation in the state sector, however, is just the opposite. Higher level competition under which private companies have to operate force them to look for a qualified labor force irrespective of gender, while the state segment does not provide enough incentives for the professional growth of female employees. These findings are in line with the hypothesis that competition drives out discrimination (Becker 1957).

7.3 The Developments in the GWG in Belarus

Belarus stands out among the FSU countries in that its macroeconomic and financial sector reforms have been limited, and its labor market preserves the heritage of the Soviet past with state dominance (ETF 2018). Adherence to the full employment policy is behind low mobility, lack of motivation in the search for a new workplace or occupation, as well as low unemployment level.

Belarusian women are actively involved in the labor market notwithstanding the fact that the GWG has more than doubled over the last three decades. Evidence of this comes from two independent studies, overlapping in part, by Pastore and Verashchagina (2011), and Akulava (2016). The trend began back in the mid-1990s, when the GWG was 8%. Since then, it has increased to almost 30% (the estimate refers to 2016, which is the last year for which data is available).[2]

Figure 7.1 demonstrates the unconditional and adjusted GWG using the 2001–2016 BHSIE data. Two measures of logged wages are used for the analysis: net total monthly wage from the main job, and total monthly wage that includes additional payments related to the main job. The unconditional GWG is obtained by regressing wages on gender only. The conditional GWG is obtained from the Mincerian earnings equations while controlling for other factors (educational accomplishments, work experience, marital status, and region). The evidence shows that the GWG widened all through the period (from 26.7% in 2006 to 31% in 2016) (Panel A). If only full-time employees working all 12 months of the year are considered, to exclude the effect of seasonal labor (Panel B), the level of the GWG is slightly different but nevertheless growing upward, from 27% in 2006 to 32.6% in 2016.

The results of the decomposition analysis suggest that the GWG in Belarus is mainly due to the differences in economic returns. The presence of educated women in the labor force tends to reduce the size of the average GWG, with educational

[2]Comparison between the two studies should be done with caution. The most recent data lacks important information, such as hours of work, marital status, and sector of employment; hence, the results are not strictly comparable.

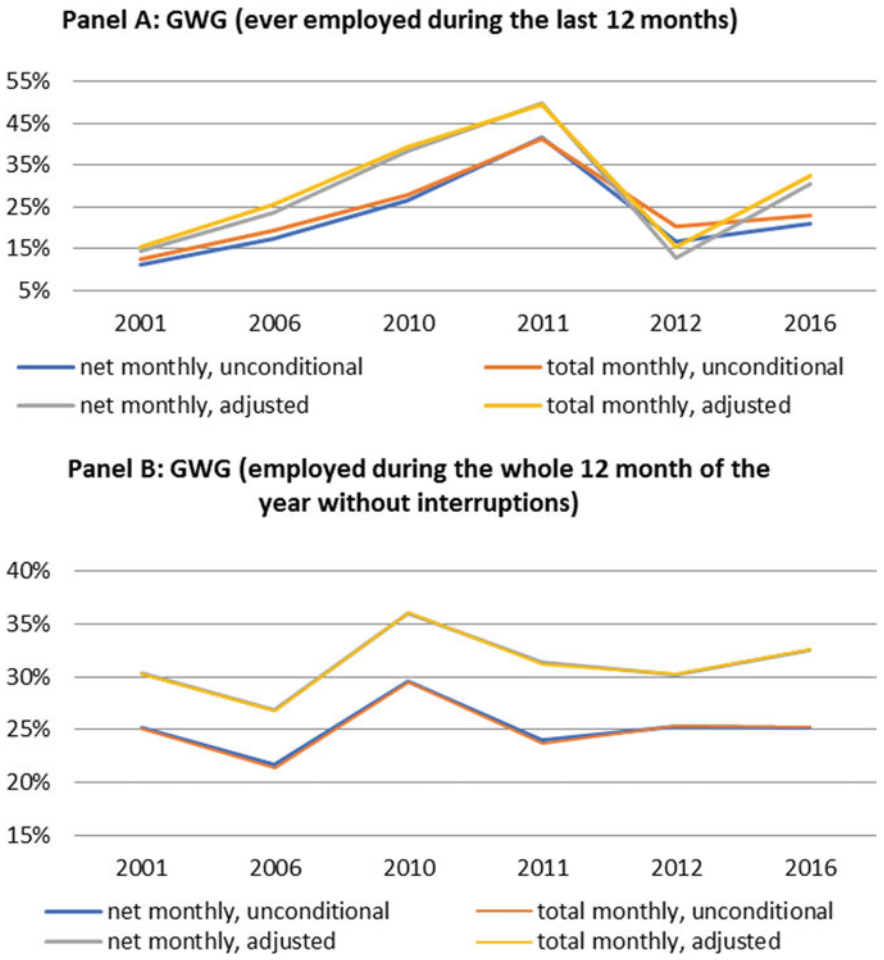

Fig. 7.1 The unconditional and adjusted GWG over time (2001–2016) (*Source* Authors' calculations using BHSIE 2001–2016 *This graph is an update for Akulava [2016], who stopped at year 2014)

accomplishments lowering the total GWG in 2016 by around 11.7% and work experience lowering it by 5.5%.[3] Controlling for personal characteristics and allowing for equal rewards between men and women could result in higher wages for female workers, especially in the private sector. However, there is not much scope for improvement as educational background, together with work experience, remains practically the only competitive advantage for women in the Belarusian labor market. Other factors do not show any explicit influence, partly because they are becoming increasingly unavailable for analysis due to restrictions imposed by the Ministry of

[3]Own estimations on the BHSIE.

Statistics on data released. In particular, the information on sector and occupation choices is lacking, which is a big limitation of this research.

The size of the GWG is likely a result of crowding women out of the most lucrative sectors of the economy and their consequent concentration in low-paying jobs, thus providing fewer opportunities for professional growth. The example of a rapidly growing IT sector in Belarus, paying by far the highest wages (Fig. 7A.1 in the Appendix), is revealing in this respect. If anything, women there are at the bottom of the occupational ladder, with only one out of 10 team or tech leaders being female. Furthermore, the GWG widens with professional experience, reaching about 1,000 USD for workers who have stayed more than seven years in the sector. The average GWG specific to the IT sector was more than 40% in 2017, which is the highest sector-wise (Belstat 2018a).

A closer look at the average wage distribution in the country reveals that the GWG is the widest at the bottom and top of wage distribution, suggesting the presence of the glass ceiling effect in the Belarusian labor market. Moreover, the growing trend touches mainly upon workers found at the two extremes. At the fifth percentile, the GWG rose from 2% in 2006 to 11.5% in 2016, and at the 95th percentile, from 23.4% in 2006 to 35.7% in 2016. Those positioned in the middle experienced a relative improvement, with the GWG for the 50th percentile narrowing from 31.1% in 2006 to 24.5% in 2016. While the glass ceiling did not seem to be in place during

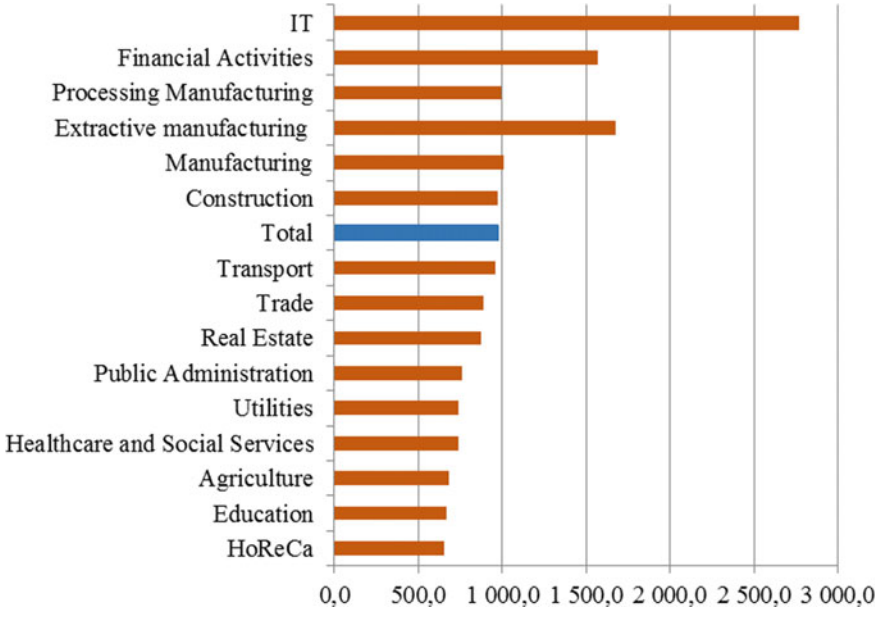

Fig. 7A.1 Average wages by sector of economy, Belarus, 2018 (BYN) (*http://www.belstat.gov.by/en/ofitsialnaya-statistika/social-sector/trud/godovye-dannye/nominal-gross-average-monthly-earnings-in-the-republic-of-belarus-since-2016/) *Source* Belstat [2019c]

the mid-2000s, it is becoming more real in recent years (2016). The largest increase in the GWG has been observed recently in the lowest deciles of wage distribution.

If one looks at the full-time employees working throughout the year (excluding the effect of seasonality), the widening GWG is less obvious (see Panel B in Fig. 7.1). However, the level of the GWG for them was already high at the beginning of the 2000s.

One of the reasons behind a sharp increase in the GWG around 2010, captured by both panels A and B in Fig. 7.1, could be the boom in the construction sector that year—this sector has been playing a significant role in the economy for quite some time now due to the implementation of the State Program on Housing Improvement.[4] In the 2000s, it showed a permanent growth, contributing 9.4% to the GDP in 2010. At the same time, it was known to be the most male-dominated sector in the economy (Belstat 2018b). In 2010, it comprised around 8.8% of the whole labor force, and the same year, its employment reached a maximum of almost 413,000 employees. The level of average salaries paid in this sector, not only in the capital city but also throughout the country, was much higher than the country's averages, by 43.5 and 23% respectively, in 2010. These differences almost disappeared over the next few years following the financial crisis that hit Belarus in 2011. The economic downturn, accompanied by the shrinkage of internal demand and consequent devaluation of the Belarusian Ruble, altered the picture substantially and resulted in serious changes within the sector and Belarusian economy at large.[5] Nevertheless, salaries in the female-dominated budget sphere—that is healthcare, education, and social services—were indexed and remained stable, as opposed to the rest of the economy. Similar outcomes were observed throughout Europe, with some female-dominated occupations showing more resilience to the economic crisis (Bettio et al. 2013).

In the aftermath of the financial crisis, the Belarusian economy experienced a series of perturbations—the 2014 oil crisis accompanied by various western economic sanctions imposed on Russia due to its military actions in Ukraine had a substantial impact on it. The low level of Belarusian market diversification, its dependence on Russian markets, and lack of reforms led to a severe economic crisis. As a result, according to Urban (2016), around 60% of SMEs (small and mid-size enterprises) reported a substantial deterioration in their 2015 economic performance compared with 2014. Decreased demand for goods and services, inter-enterprise arrears and non-payments, and shrinkage of financial resources were the three main problems requiring solutions. Labor cost-saving as one of the potential measures for short-term improvement of the financial situation was implemented by around 50.5% SMEs (Urban 2016). A tight macroeconomic policy, demographic factors, labor hoarding, and wage cuts accompanied by an inflow of labor migrants and refugees from Ukraine led to changes in the labor market.[6] The labor supply

[4] http://pravo.levonevsky.org/bazaby/org66/basic/text0779.htm.

[5] The current share of the construction sector in the GDP is around 5.3% (Belstat 2018b).

[6] http://dataportal.belstat.gov.by/.

outreached the demand for labor force, whereas the highly educated and experienced technical and IT specialists were the only group for which demand remained at the pre-crisis level.

Such high-skill and high-paying professions in Belarus have supported the high demand for education. The available estimates of returns to education in Belarus suggest that they might be high enough by international standards as well (Pastore and Verashchagina 2006). Not surprisingly, the idea prevails that the main route to a decently paying job, at the very least, is by obtaining a degree. In this respect, it is important to understand the differences between men and women vis-à-vis entry into the labor market.

7.4 Education

Belarus is among the world leaders in terms of access to education. Primary and secondary education is compulsory for both genders with the total enrollment being around 100%. The gender parity index (GPI) of the gross enrollment ratio for primary education is 1, indicating parity between the two genders (World Bank 2017[7]). The GPI of enrollment to secondary and tertiary education is 0.98 and 1.33 respectively. The latter shows disparity in favor of women in the case of tertiary education, with substantially more women enrolled in universities than men; men are more likely to choose vocational-technical education (67.6% in the 2017–2018 academic year).

In other words, women aim high, with 36.7% of female workers in Belarus having a bachelor's degree or higher. In contrast, 26.1% of working men have the same level of qualification (Belstat 2018a).[8] At the same time, there are significant differences in the major specializations by gender (Fig. 7A.2 in the Appendix). Women are choosing more humanitarian and socially oriented specialties, whereas men are more inclined toward technical ones. This reflects the existing practices of hiring workers, with the list of occupations prohibited for women due to harmful or dangerous working conditions[9] comprising 181 as of 2013. This naturally narrows down women's choices with respect to their potential future career path.[10]

[7] https://data.worldbank.org/.

[8] Similar numbers are observed in the Russian Federation (36.9% of female workers having completed higher education vs. 28.7% of male workers having done the same). For comparison, these numbers are even higher in the US labor market, where 42% of employed women (aged 25–64) had a bachelor's degree or higher in 2016 (USBLS 2017).

[9] There are 181 positions in the current list of arduous work and jobs entailing harmful and (or) dangerous working conditions, which are barred for women: http://newsby.org/documents/sovetm/pos05/sovmin05706.htm,
http://newsby.org/documents/sovetm/pos05/sovmin05706.html,
http://newsby.org/documents/sovetm/pos05/sovmin05706.html
http://newsby.org/documents/sovetm/pos05/sovmin05706.htm.

[10] An even longer list of 252 occupations forbidden to women was actually narrowed back in 2013.

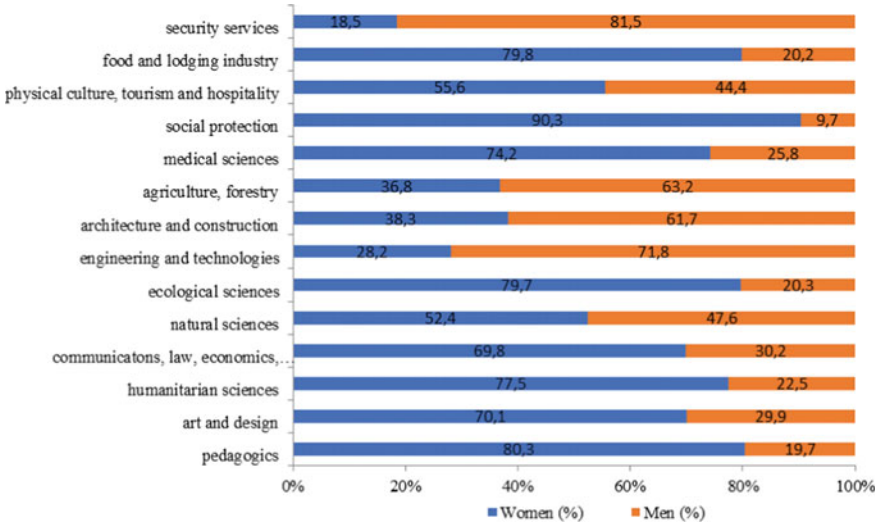

Fig. 7A.2 Graduates from higher education institutions in Belarus, by major, 2017 (*Source* Belstat [2018a])

7.5 Employment

The structure of the Belarusian labor market has changed slightly over the last few decades—21% are employed in the public sector, including healthcare, education, and government officials. The overall share of the state sector has been decreasing in recent times, from 39 down to 30% in 2018 (own estimations on Belstat 2019b). The role of the private sector, on the other hand, is growing, with around 43% of the labor force employed by private companies.[11]

One important change, which has made the Belarusian labor market quite peculiar since, occurred at the end of the 1990s—Presidential Decree Number 29 of 1999[12] allowed the use of short-term contracts. This gave an employer the right to hire workers for one to five years only. By 2003–2004, the majority of paid employees were already working on fixed-term contracts.

One of the potential reasons for such changes was the authorities' desire to keep control over the employed population and increase their level of political loyalty. The reform considerably restricted the role of trade unions, and the national campaign against short-term contracts launched by independent trade unions did not get much support from the population. The risk of unemployment, especially

[11]The cumulative share of the state and public sector according to official statistics was 45% in 2018. The actual numbers are lower than the official ones. Even the minor share of the state in a private company means the latter's decision-making process is not independent and is controlled by the state. The number of fully independent private companies is substantially lower than that given in the official statistics, after the exclusion of mixed owned companies.

[12]http://pravo.by/document/?guid=3961&p0=PD9900029.

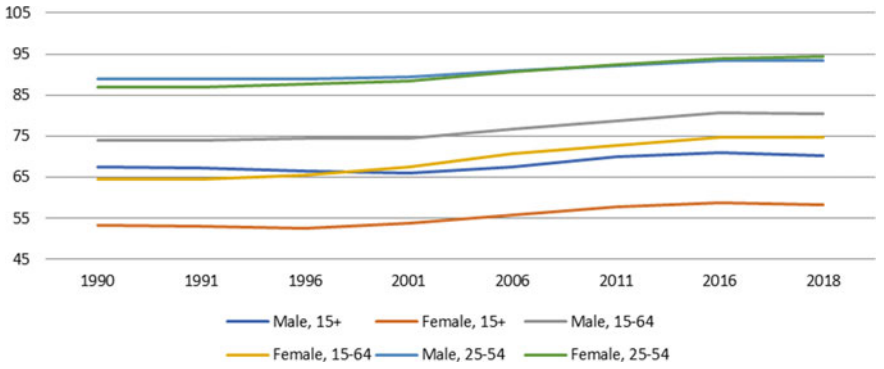

Fig. 7A.3 Labor force participation rates by gender and age in Belarus, 1990–2018 (*Source* ILOSTAT)

in regions with limited employment opportunities, precluded workers from showing any disagreement with the changes (Haiduk and Chubrik 2009).

Fixed-term contracts make employees dependent on their employers, and vulnerable in terms of job protection rights. According to the estimations of the Federation of Trade Unions, around 30% of short-term contracts are signed for a minimum of one-year period. Moreover, in 2018, out of the 260,000 officially unemployed people, around 20% lost their jobs due to their refusal to renew employment contracts without redundancy payment, while the number of officially dismissed was 13.8%.[13]

In the mid-1990s, women made up around 55% of the workforce; this number went down to 50.5% in 2017. In contrast, the labor force participation rate of women (aged 15–64) was 65.2% in 1995 and rose to 74.7% in 2018 (ILOSTAT). The same for men was 74.4% in 1995 and 80.4% in 2018[14] (Fig. 7A.3 in the Appendix).

The gendered structure of different sectors largely follows the trends observed in education. Women are mostly placed in the low-paying sectors related to the social and budget sphere (healthcare and social services, education), while men dominate in construction, transport, and manufacturing (Table 7.1). The majority of male employees are blue-collar workers (68.3%), while 12.2% are managers and executives; the majority of women, on the other hand, occupy white-collar jobs (56.5%), and among them 9.7% are in managerial positions. Overall, in 2017, 49% managerial positions were held by women.

The IT sector is considered to be one of the fastest growing ones in the economy. The share of ICT in the GDP in 2017 was 5.7%, while in 2009, it was only 2.3%. The share of ICT in employment is 2.2% (CEE Software Development Report, 2019). In 2018, ICT was third in terms of the number of vacancies, with a share of 11%. In the sector, developers are the most in number (51%), followed by QAs (13.2%), project leaders (11.4%), team leaders (5.5%), and analysts (4.5%). Women make

[13] https://1prof.by/news/in_the_country/plenum_fpb_trudovye_otnosheniya.html.

[14] The labor force participation rate of women in the age group 25–54 was 87.6% in 1995, rising to 94.5% in 2018 (ILOSTAT). The same for men was 89.0% in 1995 and 93.5% in 2018.

Table 7.1 Percentage of female workers, by sectors of economy

Sector	2010	2016
Total	53.4	55.4
Agriculture	39	39.3
Manufacturing	44.3	42.6
Construction	17.8	19.8
Trade	70.7	70.1
Transport	38.4	37.2
Financial Sphere	74.1	74.8
Education	81.4	81.7
Health and Social Services	85.1	85.7
Public Administration	57.4	57.2
IT	na	45.6

Source Belstat (2016, 2018a), Women and Men in the Republic of Belarus

up around 45% of the sector's workforce, according to official statistics. However, they are mainly employed in various non-technical roles—according to the Ernst and Young (2017) report, women are mostly hired as HR personnel/recruiters (96%), technical writers (67%), and sales or marketing staff (55%), while men are in various technical or managerial positions, such as developers (90%), project managers (83%), team leaders (90%), and QAs (64%). The sector's GWG depends on the level of professional experience, and reaches its maximum of 26.6% in the case of employees with a three- to five-year service period.

More active involvement of women in technological roles should be an additional factor positively impacting the sector's growth. In that context, popularization of STEM (science, technology, engineering, and mathematics) education among women should ease their entry into the sector and have a long-term positive effect on its sustainability.

The gender differences observed in the field of education and the public sector largely explain the distribution of men and women across the different centiles of wage distribution (Table 7.2). In this respect, Belarus follows the global trend (ILO 2019) in that, while moving from the lowest income deciles to the top, the percentage of women declines substantially. In Belarus, women made up around 62% of all waged employees in the first income decile, with their number in the 10th decile being less by half (31.2%) in the latest year considered. This distribution has actually been quite stable over time, according to the BHSIE data.

The profile of female workers is quite distinct—highly educated but underpaid (sometimes also classified as the "working poor"). This has been, and remains, the main motive for women to emigrate in search for better jobs. In fact, they represent the majority among emigrants—60%. EU countries like Poland, Spain, or Italy, with a number of work opportunities in the informal sector, are the main destinations with respect to female migration (MPC 2013).

Table 7.2 Share of men and women along the monthly wage distribution, 2001–2016

		<10%	10–25%	25–50%	50–75%	75–90%	>90%
2001	Male	49.8	46.5	40.2	45.1	54.7	70.1
	Female	50.2	53.5	59.8	54.9	45.3	29.9
2006	Male	43.5	45.2	31.4	48.8	57.7	65.9
	Female	56.5	54.8	68.6	51.2	42.3	34.1
2011	Male	30.2	40.7	37.3	47.5	55.5	69.1
	Female	69.8	59.3	62.7	52.5	44.5	30.9
2016	Male	38.5	37.5	40.2	45.1	55.5	68.8
	Female	61.5	62.5	59.8	54.9	44.5	31.2

Source Authors' calculations using BHSIE 2001–2016

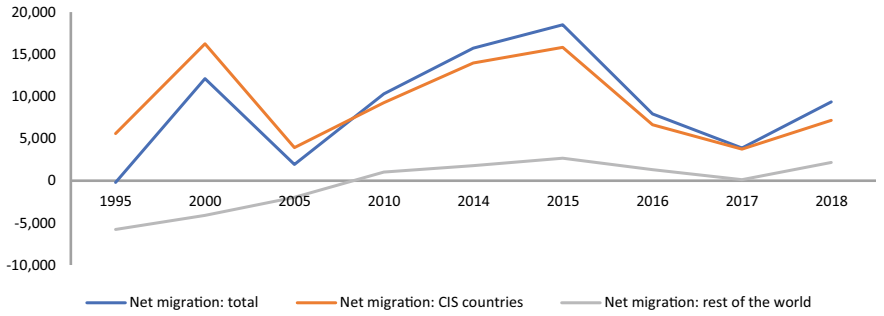

Fig. 7A.4 Net migration flows in Belarus (*Source* http://dataportal.belstat.gov.by)

7.6 Migration

Natural population decline is considered a substantial threat to the demographic security of Belarus (Shakhotska 2007). Between 1996 and 2016, Belarus' population declined by almost 600,000 people—from 10.045 million to 9.445 million (World Population Prospects 2019); therefore, growth of population has been, and remains, among the country's top policy priorities. The goal, set by President Lukashenko, is to have a population of around 15 million people. By the end of 2018, Belarus' population had reached 9.52 million.[15]

There are two potential ways to ascertain population growth: migration inflow and increase in fertility rate. According to official statistics, over the last two decades, Belarus has observed net positive migration balance, which is mostly made up of migrants from the Commonwealth of Independent States member countries, especially Russia and Ukraine (Fig. 7A.4 in the Appendix). In fact, there was a steady growth in net migration 2005 onward; the inflow reached its peak between 2014 and

[15]Meeting on demographic issues in 2017: https://www.belta.by/president/view/lukashenko-dinamiku-prirosta-naselenija-v-belarusi-neobhodimo-uvelichit-260009-2017/.

2015.[16] However, the economic stagnation and recession that followed negatively impacted the country's appeal and slowed down migration.

Russia accounts for the main share of the overall flow as well as the labor emigration flow. This is not surprising considering the common border, language, and possibility of securing a work permit without going through various bureaucratic procedures. Overall emigration to western countries (EU, USA) is around 9% of the total emigration flow, while the labor emigration flow to the EU and Poland, in particular, has grown substantially since 2016. In 2017, almost 28% of labor migrants went to Poland.[17]

It should be mentioned that the profile of emigrants and immigrants is different. According to the report by the Migration Policy Center (2013), the majority of emigrants to Europe are women with secondary and tertiary education (34 and 40% respectively). In contrast, the migration flow to Russia is mostly made up by men (around 90%) with secondary education; they are concentrated in the transport and construction sectors (Chubrik and Kazlou 2013). The immigration flow is gender neutral and mostly comprises workers with low and medium level of education (28 and 56% respectively) working in construction, agriculture, or trade sectors of the economy. Taking into account the outflow of the highly qualified and educated labor force abroad, measures to improve Belarus' appeal as a place to work and live should be addressed to prevent the brain drain. On top of that, many who stay often get stuck in low-paying jobs, which affects family planning and reproduction.

7.7 Family Policy

After the collapse of the USSR, Belarus faced a severe drop in total fertility rate (TFR)—from 1.91 in 1990 to 1.23 in 2003. Thus, raising the rate became a major issue on the existing family policy's agenda.[18,19]

In general, Belarus can be classified as a country with a pro-natalist model of family policy with mostly financial measures implemented to boost fertility (Frejka and Gietel-Basten 2016). Measures of support include a wide range of birth and child allowances (Table 7.3).

Since 2015, Belarus has run a family capital program that aims at boosting the number of families with three or more children—they are allowed to receive financial

[16]This was a period when the conflict between Ukraine and Russia was at its peak. As a result, a substantial number of labor migrants and refugees from Ukraine came to Belarus with the hope of a better life.

[17]This is partly due to the deteriorated economic conditions in Russia, as a consequence of military conflict with Ukraine. Another reason could be changes in Polish legislation that allowed Belarusians with proven Polish roots—"Karta Polaka"—to get a job without a legal work permit.

[18]The National Programme of Demographic Security of Belarus for 2007–2010, 2011–2015, and 2016–2020.

[19]Presidential Decree of January 21, 1998: "On approval of the main directions of the state family policy of Belarus.".

Table 7.3 Measures of pro-natal support

Type	Time period	Amount of payment
Prenatal allowance	One-time payment	100% of the previous earnings for 126–140 days (depending on the pregnancy's complexity)
Maternity grant	One-time payment	A lump sum payment covering 10 minimum subsistence levels for the first birth and up to 14 for the second and subsequent births[a]
Allowance for early pregnancy recording	One-time payment	1 minimum subsistence level
Allowance for children aged under three	Monthly payment	35% of the country's average salary for the first child and 40% for the second and subsequent children
Allowance for a disabled child aged under three	Monthly payment	45% of the average salary
Allowance for children aged between three and 18 in families with children aged under three	Monthly payment	0.5 minimum subsistence level
Allowance for disabled children aged between three and 18	Monthly payment	1 minimum subsistence level

[a]minimum subsistence level equals around 20.2% of the country's average salary
Source Law of the Republic of Belarus of December 29, 2012, No. 7–З On state allowances to families with children

support, the current amount of which equals around 10,000 USD. This is granted after the birth of the third child, and only in cases where there are two or more children aged under 18 in the family.

The current paid parental leave period in Belarus is three years and is the longest in the region (barring Ukraine's). At the same time, employers are obliged to keep women's positions vacant until they resume work in a role similar to what they had before going on maternity leave. As a result, most women take that opportunity and stay at home with their children until they reach the age of three. However, this is partly due to the underdeveloped daycare infrastructure for such children. According to official statistics, the current childcare capacities can admit just 39.6% of children aged under three (Belstat 2019a). Staying out of the labor market for at least three years, or even more, reduces women's human capital and diminishes their professional qualifications (Dechter 2014). At the same time, there are no programs in place to help women adapt and return to work after a break. The absence of such a mechanism, together with the traditional division of social roles (taking care of children and using sick leave are still considered as mostly female responsibilities), might also lead to a motherhood penalty in the labor market (Akulava 2016). The available data does not allow explicit identification of whether the respondent is a parent or lives with children of other household members. Still, the 2016 BHSIE

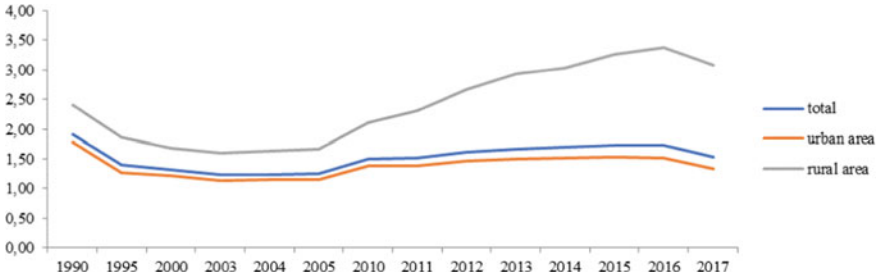

Fig. 7A.5 Total fertility rate in Belarus (*Source* http://dataportal.belstat.gov.by)

data showed that full-time (i.e. not seasonal) employed women aged 25–50[20] who have children receive around 6% less compared with women without any declared children. The motherhood penalty is substantially higher at 16.2% in the case of women employed for less than 12 months.[21]

Furthermore, one should not overlook the effect of education. Mothers with tertiary education or a technical background are more penalized compared with their childless counterparts. The presence of children reduces the wages of full-time employed women with a university or higher degree by around 20%, with a technical or vocational education by 13%, and with a secondary education or lower by almost 8% (Akulava 2016). This is in line with the hypothesis introduced by Anderson et al. (2002), who claimed that the higher the educational accomplishment, the higher the costs of staying out of work.

The state has been trying to compensate for this by introducing a range of financial measures for mothers (see Table 7.3 above). This has produced some positive effects, which translated into a slight increase in the TFR, reaching 1.54 in 2017; however, this was only observed in rural areas where the current average salary is below the level of the provided support (3.1 TFR in rural areas vs. 1.34 in urban) (Fig. 7A.5 in the Appendix). Absence of a sustainable source of living and decent salary in the rural zone acts as an additional trigger for women to have children to be able to receive financial support. In the short run, this allows maintaining a sustainable level of living, but in the long run, it increases the risk of falling into the poverty trap for families (Chubrik et al. 2018). This might also occur due to deterioration in the quality of female human capital during their period of absence from the labor market, which substantially lowers their competitiveness at the moment of reentry.

[20] According to the International Labour Organization (ILO) (2019), in most countries, the age of parenthood is considered between 15 and 50, and the prime working age between 25 and 54.

[21] The estimates lack reliability due to gaps in the data mentioned at the beginning.

7.8 Conclusions and Policy Recommendations

Despite the fact that educational accomplishments and professional experiences of working women in Belarus are similar to those of their male counterparts, the former's wages are substantially lower than the latter's. Moreover, there have been no signs of improvement in the pay conditions for wage-employed women in the last 20 years (1996–2016). The overall GWG has been relatively stable since the beginning of the 2000s, after peaking at almost 30%, from as low as 8% in the mid-1990s, when the transition to market economy had just started.

Despite Belarusian authorities' declared adherence to gender equality, the reality is far from expectations. Substantial vertical and horizontal segregation of women limits their possibilities in the labor market and prevents them from improving their living standards both for themselves and their families. This has been recognized as a global problem (ILO 2019), driven by the fact that women are less likely to choose technological subjects as their major. Admittedly, the STEM subjects are providing better professional opportunities with higher remuneration compared with the traditional female-dominated professions. Thus, more active development of STEM programs for girls and young women might be beneficial for reducing the GWG and diversifying professional pathways for women. In this regard, careful reconsideration of occupations forbidden to women might also be called for as such restrictions often reduce professional opportunities for women and strengthen existing stereotypes. At the same time, measures to involve more men in female-dominated sectors could have a counterbalancing effect, leading to further equalization in the labor market. This should not only spread to the professional environment but also in the family context.

The existing family policies mainly target women who have traditionally been the main caregivers, be it for children or elderly members of the family. These measures include financial support for mothers, which often translates into lower labor market involvement on their part. This is a short-sighted view, as growth in fertility rate should not be achieved by sacrificing female employment and, as a result, supporting the persistent GWG.

The acceptable level of allowances for children is often above the average wage level in the area, and basically pushes less-qualified women toward having multiple children. In the short run, it allows families to maintain a sustainable standard of living; however, in the long run, it has a severe negative effect on the quality of female professional development, and makes women more vulnerable by increasing their risk of being forced into poverty, besides widening the GWG.

This also happens due to the continuing traditional division of social roles in society. Household chores and taking care of children are still considered as mostly female responsibilities, resulting in the so-called "double burden" for women. According to current statistics (Belstat 2018a), Belarus' women spend around two hours more per day on various types of housework. In this regard, certain policies and reforms aimed at transforming the existing perception of gender roles could lead

to a more equal division of domestic responsibilities. This would be beneficial for women and increase the level of their labor market attachment.

Promotion of more equal parental leave and division of care responsibilities, too, will ease women's return to work after maternity leave, improve employer's attitude toward women of childbearing age, and raise female career prospects. Together with the development of childcare facilities and daycare services, it has the potential to become an effective measure for decreasing the level of motherhood penalty[22] and the GWG in general in the economy.

Appendix

See Figs. 7A.1–7A.5

References

Akulava M (2016) Current gender trends in Belarusian labor market: wage gap, child penalty and marriage premium. BEROC WP no. 38

Akulava M, Mazol A (2018). What forms the gender wage gap in Belarus?, BEROC WP no. 55

Albrecht J, van Vuuren A, Vroman S (2004) Decomposing the gender wage gap in the Netherlands with sample selection adjustment, IZA DP no. 1400

Amuedo-Dorantes, de la Rica S (2006) The role of segregation and pay structure on the gender wage gap: Evidence from matched employer-employee data for Spain, Contributions to Economic Analysis and Policies. Berkeley Electron Press JS 1

Anderson D, Binder M, Krause K (2002) The motherhood wage penalty: which mothers pay it and why? Am Econ Rev 92(2): 354–358

Anderson KH, Esenaliev D, Lawler EC (2015, July) Gender earnings inequality after the 'Roza' revolution: evidence from the life in Kyrgyzstan surveys, 2010–2013. Paper presented at the First World Congress of Comparative Economics, Hannover, Germany

Atencio A, Posadas J (2015) Gender gap in pay in the Russian Federation: Twenty years later, still a concern, Policy Research WP no. 7407. World Bank, Washington DC

Azmat G, Ferrer R (2017) Gender gaps in performance: evidence from young lawyers. J Polit Econ 125(5): 1306–1355

Bayard K, Hellerstein J, Neumark D, Laisney F (2003) Measuring selectivity-corrected segregation and sex differences in wages for matched employee-employer data. J Labor Econ 21(4): 887–922

Becker G (1957) The Economics of Discrimination. Chicago, University of Chicago Press

Belstat (2016) Women and Men in the Republic of Belarus. statistical bulletin. Minsk: National Statistical Committee of the Republic of Belarus. (in Russ.)

Belstat (2018a). Women and Men in the Republic of Belarus. Statistical bulletin. Minsk: National Statistical Committee of the Republic of Belarus. (in Russ.)

Belstat (2018b). Statistical Yearbook of the Republic of Belarus. Statistical bulletin. Minsk: National Statistical Committee of the Republic of Belarus. (in Russ.)

Belstat (2019a). Education in the Republic of Belarus. Statistical bulletin. Minsk: National Statistical Committee of the Republic of Belarus. (in Russ.)

[22]The 2016 BHSIE data showed that women aged 25–50 who have children receive around 6% less compared with women without any declared children. However, this estimation lacks reliability.

Belstat (2019b). Main results of the state-owned companies in January-December, 2018. Statistical bulletin. Minsk: National Statistical Committee of the Republic of Belarus. (in Russ.)
Belstat (2019c). Labor and Wages, Labor Costs of Organizations in the Republic of Belarus in 2018. Statistical bulletin. Minsk: National Statistical Committee of the Republic of Belarus. (in Russ.)
Bettio F, Corsi M, D'Ippoliti C, Lyberaki A, Samek Lodovici M, Verashchagina A (2013) The impact of the economic crisis on the situation of women and Men and on Gender equality policies. External report commissioned by and presented to the EU Directorate-General for Justice, Unit D1 'Equality between women and men'
Blau F, Kahn L (1997) Swimming upstream: trends in the gender wage differential in the 1980s. J Labor Econ 15: 1–42
Blau F, Kahn L (2017) The gender wage gap: extent, trends, and sources. J Econ Lit. 55(3): 789–865
Booth AL, Francesconi M (2003) Union coverage and non-standard work in Britain. Oxf Econ Pap 55(3): 383–416
Card D, Cardoso A, Kline P (2016) Bargaining, sorting, and the gender wage gap: quantifying the impact of firms on the relative pay of women. Q J Econ 131: 633–686
CEE Software Development Report in Ukraine, Poland, Belarus and Romania (2019) Capital Times, AVentures Capital and Aventis Capital. Available at: https://software-development-cee-report.com/.
Christofides LN, Polucarpou A, Vrachimis K (2010) The gender wage gaps, 'sticky floors' and 'glass ceilings' of the European Union', IZA DP no. 5044. Institute for the Study of Labor, Bonn, Germany
Chubrik A, Haiduk K (2009) Social contract: employed workers. Chapter in Social Contracts in Contemporary Belarus. St. Petersburg, Nevskij Prostor
Chubrik A, Kazlou A (2013) Costs and benefits of labour mobility between the EU and the Eastern partnership partner countries: belarus country study, CASE, Warsaw
Chubrik A, Scherbina N, Shymanivich G (2018) *Бедность и социально уязвимые группы населения в Беларуси. Поддержка семей с детьми и её эффект.* IPM Research Center. Available at: http://www.research.by/webroot/delivery/files/poverty2018.pdf on 04.10.2018
Cudeville E, Gurbuzer L (2007) Gender wage discrimination in the Turkish labour market. CES WP no. 67
Dechter EK (2014) Maternity leave, effort allocation, and postmotherhood earnings. J Hum Cap 8(2): 97–125
Ernst, Young (2017) The IT Industry in Belarus: 2017 and Beyond. EY Report
ETF (2018) Belarus: Education, training and employment. Developments 2017. European Training Foundation
Fields J, Wolff E (1995) Interindustry wage differentials and the gender wage gap. ILR Review 49(1): 105–120
Frejka T, Gietel-Basten S (2016) Fertility and family policies in Central and Eastern Europe after 1990. Comp Popul Stud 41(1): 3–56
Ganguli I, Terrell K (2005) Wage ceilings and floors: The gender gap in Ukraine's transition. IZA DP no. 1776. Institute for the Study of Labor, Bonn, Germany
Ganguli I, Terrell K (2006) Institutions, markets and men's and women's wage inequality: evidence from Ukraine. J Comp Econ 34(2): 200–227
Goldin C (2014) A grand gender convergence: its last chapter. Am Econ Rev 104(4): 1091–1119
ILO (2019) Global Wage Report 2018–2019. Geneva, ILO
Jurajda S, Harmgart H (2007) When do female occupations pay more? J Comp Econ 35(1): 170–187
Khitarishvilli T (2009) Explaining the gender wage gap in Georgia. Levy Economics Institute of Bard College, WP no. 577
Khitarishvilli T (2018) Gender pay gaps in the Former Soviet Union: A review of evidence. Levy Economics Institute of Bard College, WP no. 899
Lemieux T, MacLeod W, Parent D (2009) Performance pay and wage inequality. Q J Econ 124(1): 1–49

Livanos I, Pouliakas K (2012) Educational segregation and the gender wage gap in Greece. J Econ Stud 39(5): 554–575
Magnani E, Zhu R (2012) The gender wage differentials among rural-urban migrants in China. RegNal Sci Urban Econ 42(5): 779–793
Manning A, Swaffield J (2008) The gender gap in the early-career wage growth. Econ J 118(530): 983–1024
MPC (2013). MPC migration profile: belarus. Migration Policy Center, European University Institute, Robert Shuman Center for Advanced Studies
Matuszewska-Janica A (2014) Wages inequalities between men and women: Eurostat SES metadata analysis applying econometric model. Quant Methods Econ 15(1): 113–124
Newell A, Reilly B (2001) The gender gap in the transition from communism: some empirical evidence. Econ Syst 25(4): 287–304
Oshchepkov A (2006) Gender wage gap in Russia. Ekonomicheskiy zhurnal VShE 10(4): 590–619 (in Russian)
Paci P, Reilly B (2004) Does economic liberalization reduce gender inequality in the labor market: the experience of the transition economies of Europe and Central Asia. Report. World Bank, Washington DC
Pastore F, Verashchagina A (2006) Private returns to human capital over transition. a case study of belarus. Econ Educ Rev 25(1): 91–107
Pastore F, Verashchagina A (2011) When does transition increase the gender wage gap? an application to Belarus. Econ Transit 19(2): 333–369
Pignatti N (2012)Gender wage gap dynamics in a changing Ukraine. IZA J Labor Dev 1(7): 17–20
Reilly KT, Wirjanto TS (1999) Does more mean less? The male/female wage gap and the proportion of females at the establishment level. Can J Econ 32(4): 906–929
Shakhotska L (2007) Снижение рождаемости как главный из вызовов демографической безопасности Республики Беларус'ь. Вопросы статистики, No. 10. Available at: http://www.demoscope.ru/weekly/2008/0327/analit02.php, accessed on 29.06.2020
Śliwicki D, Ryczkowski M (2014) Gender pay gap in the micro level—case of Poland. Quant Methods Econ 15(1): 159–173
Sorensen E (1990)The crowding hypothesis and comparable worth issue. J Hum Resour 25(1): 55–89
Triventi M (2013) The gender wage gap and its institutional context: a comparative analysis of European graduates. Work, Employ Soc 27(4): 563–580
Urban D (2016) The estimate of labor market conditions in terms of economic crisis by representatives of small and medium businesses. IPM Research Center, 16.03.2016. Available at: http://www.research.by/webroot/delivery/files/pdp2016r03.pdf
USBLS (2017). Women in the labor force: a databook. US Bureau of Labor Statistics, Report no. 1071
Warren T, Rowlingson K, Whyley C (2001) Female finances: gender wage gaps and gender assets gaps. Work, Employ Soc 15(3): 465–488
World Population Prospects: The 2019 Revision (2019). United Nations, Department of Economic and Social Affairs. Available at: http://population.un.org/wpp

Chapter 8
Gender Wage Gap and Gender Attitudes in Ukraine

Kseniia Gatskova

Abstract This chapter provides a comprehensive analysis of the gender inequality on the labor market in Ukraine focusing on the two aspects: the gender wage gap and gender attitudes of people. An extensive survey of the previous literature on gender inequality in Ukraine is provided and the main trends on the labor market in the country and dynamics of the gender wage gap, are discussed. The analysis of the ULMS panel data 2003–2012 using the Oaxaca-Blinder decomposition technique allows assessing the gender wage gap in each of the available survey years. Furthermore, analysis of the European Values Study 2008 and the Factorial study 2009 gives some insights into gender attitudes of the population. The raw gender wage gap in Ukraine remained at a relatively high level of 27–33% in 2003–2012 and only a small part of it is a result of the differences in endowments (education, work experience, economic sector etc.) between men and women. The discriminatory practices may be nurtured by the respective gender attitudes. Although the population of Ukraine holds moderately traditional gender attitudes and to some extent accepts the egalitarian views, people generally consider lower wages for female employees as justified.

Keywords Gender wage gap · Ukraine · Gender attitudes · Factorial survey

8.1 Introduction

Despite high policy relevance of the gender inequality issue and a large academic and public attention to its diverse aspects, the actual gender wage gap in many countries remains an unresolved problem. Within the process of European integration, Ukraine adopted an ambitious strategic goal of implementing gender equality policies and achieving equal pay and employment opportunities for men and women. However, previous studies suggest that post-Soviet countries, including Ukraine, considerably lag behind the EU countries' progress with respect to the efficacy of the gender

K. Gatskova (✉)
Department of Economics, Leibniz Institute for East and Southeast European Studies, Regensburg, Bayern, Germany
e-mail: gatskova@ios-regensburg.de

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_8

equality policies and as a result gender pay gaps in the region are above the levels of those found in advanced economies (Khitarishvili 2019). Ganguli and Terrell (2005) compared mean gender wage gap in Ukraine with the estimates for eleven European countries and found out that while in private sector the difference in earnings of men and women in Ukraine was comparable to the gap in European countries, in public sector the gap was much larger. Women in Ukraine received much lower wages than men compared to European countries.

Achieving gender equality on the labor market is one of the key developmental goals of modern societies. The elimination of gender inequality (including inequality on the labor market) is connected to successfully addressing many policy challenges such as ensuring economic growth, solving demography problems or poverty reduction.

There is a strong economic motivation lying behind the enhancement of female labor force participation and elimination of the gender pay gap. For instance, studies on poverty indicate that labor force participation of women is an important driver of the economic growth (Verick 2018). This driver is especially important in the poor countries, where, as a rule, a large potential of female labor force remains unused. Enhancing the share of working women and raising their level of earnings to the one of their male counterparts would significantly improve overall wealth and financial wellbeing of the population. In addition, a significant aspect of combatting the poverty in countries such as post-Soviet states is to find a solution for the problem of vulnerability to poverty of elderly people. The risks of poverty after entering retirement are, among others, associated with the modern demographic challenges such as population ageing and decline in birthrates. These processes lead to a necessity of transformation of the classic solidarity-based pension system, for example, transition to individual cumulative pension funds. However, such reforms may be realized only under the condition of extensive individual employment of population, including both, men and women. Gender inequality in income opportunities results in the gender gap in pensions, affecting the quality of women's life in old age (World Bank 2016). Implementation of the equal pay for equal work will positively affect poverty reduction since female pensioners are disproportionately represented in the population group most vulnerable to poverty.

Finally, apart from the economic reasoning, there is also a reasoning originating from social justice standards. Inequalities in earnings are traditionally addressed by the social scientists and philosophers within a broad range of social justice theories. Distributive justice issues have concerned people throughout the history of humankind. Such questions as "Who should get what?" or "Based on what principles should wealth be distributed in a society?" occupied many theorists and researchers. While some inequalities in earnings found justification and were accepted as meaningful, other inequalities, for instance, those based on characteristics such as race, nationality, appearance etc. were counted as discrimination. In this sense, gender inequality is fundamentally different in its nature from inequalities in earnings due to differences in educational attainment or skills. In the latter case, the earnings differentials between highly skilled and unskilled workers are seen justified, because human capital increases economic productivity. According to the meritocratic justice

principle, more productive workers deserve higher earnings. By contrast, gender of a person is not related to economic productivity and, hence, earnings differentials originating from gender differences constitute a case of unfair treatment. Therefore, the gender wage gap is a highly relevant issue on the agenda of the modern societies that strive to build sustainable democratic systems free of any kinds of discrimination.

This chapter aims at description of the trends in and assessing the extent of the gender wage gap as one of the aspects of gender inequality on the labor market in Ukraine. Ukraine is one of the largest economies in the post-Soviet space and it is ranked 59 among 153 countries on the gender parity scale, which is computed using the three underlying aspects of the gender gap: educational attainment, economic participation and opportunity, and political empowerment (Global Gender Gap Report 2020). According to the Global Gender Gap Report 2020, Ukraine is performing relatively well compared to the other post-Soviet countries. Higher values on the gender parity scale were ascribed only to Baltic states, Moldova and Belarus. At the same time, the progress in closing the gender gap is not equally advancing across all three dimensions. While gender gap in education may be considered as closed in Ukraine—women and men have fairly equal access to education—economic and political participation of women is still much restricted. Given the official political strategy of Ukraine aiming at the EU integration and democratic development, the elimination of the gender wage gap should be an important task of the government.

Based on a literature review and analysis of the Ukrainian Longitudinal Monitoring Survey (ULMS) a systematic overview of the inequality in earnings of men and women in Ukraine is provided. Using Oaxaca-Blinder decomposition technique, the analysis focuses on the observed labor market characteristics of employees and estimates the explained and unexplained parts of the gender wage gap. In the second part of this contribution, the unexplained part is in focus. Using survey data from the European Values Study 2008 and Factorial study 2009 gender attitudes are explored. The latter study uses a quasi-experimental research design to examine the distributive justice attitudes of people in Ukraine. Finally, a theoretically and empirically based explanation of why women in Ukraine still get lower wages than men for the equal work is proposed.

8.2 Trends in Gender Inequality Over the Last Decades

Under the state socialism in the Soviet Union, women's economic and political rights were actively promoted by the state. Even in early stages of the communist regime, but especially after the Second World War, when the male labor force experienced sizeable shortage, women were strongly encouraged to work outside home and to participate in political life. Enhancement of the female labor force participation was targeted through various mechanisms, such as developing childcare infrastructure, generous maternity leaves, relatively high minimum wages, legislative guarantee of the right of equal pay for equal work, ideological campaigns etc. (see Selezneva 2017). As a result, the share of working women began to grow rapidly in the early

1930ies and by 1989 reached very high levels (around 80%) by international standards for that time (Brainerd 2000). Newell and Reilly (2001) point out that the labor market participation of women in the Soviet Union was higher and the wage gaps were relatively lower in comparison to many Western economies. At the same time, women remained horizontally segregated, being overrepresented in low-income sectors such as education and health sector and received lower wages than men. In 1989, the female/male wage ratio in Ukraine was about 69% (Brainerd 2000), which means that on average women's earnings were almost by one third lower than that of men.

After the independence of Ukraine in 1991, the market reforms were introduced. Among others, the centrally-planned wage-setting system was abandoned. While in the Soviet Union the wages were defined based on a tariff wage grid for each job category, after the implementation of market reforms, enterprises were able to establish wage levels based on organization-level negotiations. Wage decentralization lead to a general widening of the wage structure in Ukraine and since women disproportionately occupied positions in the lower part of the wage distribution, their relative losses from transition were higher. Despite this generally negative outcome of transition for women, scholars point to an advancement in returns to observed skills that contributed to a slight improvement of female wages relative to male wages, although this improvement was more than offset by a widening of the wage structure (Brainerd 2000). N. Pignatti (2012) studied the evolution of the gender wage gap in the period between 2003 and 2007 and found that while in the very bottom of the wage distribution the gender wage gap increased, it reduced in the upper deciles. The authors stress that in general, the gender wage gap remained substantial in all subsamples including private and public sectors as well as formal and informal employment (Pignatti 2012).

In general, female labor force participation rate in Ukraine is comparable to the average EU indicator, although there is a large variation in the group of European countries. The employment rate of women in Ukraine is higher than in most of the South and East European countries, but lower than in West and Nordic countries such as Germany, Sweden, Finland, Denmark, and the Netherlands (Libanova et al. 2012). Over the last decades, the female labor force participation rate in Ukraine declined from 67% in 1991 to 61% in 2019 (World development indicators 2020). However, many Ukrainian women engaged in international labor migration in the recent years, which might have affected the internal trend.

The progress in the gender equality policies in Ukraine had a fluctuant character over the last decades. Following the Orange revolution in 2004-2005, the new government strengthened the legislation aimed at encouraging gender equality in the labor market. Several regulations were adopted, for example, the Presidential decree No. 1135 on improvement of activity of national and regional executive power bodies in ensuring equal rights and opportunities of men and women; the Law of Ukraine on ensuring equal rights and opportunities to women and men; the State program for ensuring gender equality in Ukrainian society up to 2010 and others (Kupets 2010; Martsenyuk 2016). The leading role in developing and implementation of the gender equality policies was attributed to the Ministry for Family, Youth and Sports.

However, in 2010, when the new president V. Yanukovych came to power, the political and economic strategy changed dramatically. European integration lost priority at the expense of the pro-Russian vector of development. The Ministry for Family, Youth and Sports was transformed into the State Service of Youth and Sports and the gender policy was left in the background. The new wave of the gender policy revival came after the Euromaidan revolution in 2014, which brought to power political elites that fostered pro-European reforms. The institutions and regulations designed to promote gender equality gained again a priority on the political agenda. The EU-Ukraine Association Agreement signed in June 2014 mentions gender equality and non-discrimination in the chapter 21 "Cooperation on employment social policy and equal opportunities".

The adoption of the regulations, however, did not automatically mean the implementation of the new rules. In spite of the high labor market participation rate of women in Ukraine, their career paths still encounter multiple barriers in earnings and opportunities of advancement compared to men (Gerasymenko and Maksymenko 2016). Though Ukraine succeeded in establishing the legal and institutional framework for equal opportunities, gender-based discrimination and gender inequality on the labor market persist due to gender stereotypes. Women remain vulnerable to multiple forms of discrimination such as in access to employment, career advancement and remuneration (Chepurko 2010).

The concentration of women in the low paid sectors and jobs points to a "sticky floor" phenomenon. In other words, relatively few women make careers in high-income economic sectors or reach highly paid job positions. The majority of women persist to occupy positions in the bottom of the wage distribution. Previous studies on the gender pay gap across the wage distribution suggest that the gender wage gap was larger in the top deciles of the wage distribution compared to the lowest deciles (Pignatti 2012). In addition, Ganguli and Terrell (2005) used the data from 1986, 1991, and 2003 and found that the "glass ceiling" was steady over time. This indicates that the "glass ceiling" was inherited from the Soviet Union and did not disappear after the transformation.

8.3 Data and Methodology

The data used in this contribution comes from the Ukrainian Longitudinal Monitoring Survey (ULMS). This panel survey of private households in Ukraine was conducted in 2003, 2004, 2007 and 2012. The survey is based on a statistically representative sample of the Ukrainian population aged between 15 and 72 years, which was drawn from the December 2001 Ukrainian Census and stratified by age, gender, city/town, and regional structure (Lehmann et al. 2012). A detailed description of the sample, questionnaire, attrition, and an overview of major research papers published using the ULMS was presented in the paper of Lehmann et al. (2012).

The estimation sample of employees used for the analyses in this chapter comprises persons who work full time and are aged between 18 and 55 years.[1]

In the analyses presented below, a logarithm of monthly wages is used as a dependent variable. Endowment-related explanatory variables include gender, level of education, economic sector, employee's position and a proxy for work experience measured as years since a person graduated or left the formal education. The level of education was measured using four categories: primary education or less; secondary education; vocational education; higher education. Ten economic sectors include: agriculture, hunting and forestry; manufacturing and mining; electricity, gas and water supply; construction; wholesale and retail trade, repair of motor vehicles and motorcycles, hotels and restaurants; transport, storage and communication; financial intermediation, real estate, renting and business activities; public administration and defense; education, health and social work; other community, social and personal service activities; and other activities. Employee's position was measured using the following ten categories: legislators, senior officials, managers, and self-employed; professionals; technicians and associate professionals; clerks; service workers and shop and market sales workers; skilled agricultural, forestry, and fishery workers; craft and related trades workers; plant and machine operators and assemblers; elementary occupations; armed forces.

8.4 Labor Market Segregation and Gender Wage Gap in Ukraine

The distribution of male and female employees across economic sectors and positions suggests that there is a pronounced horizontal and vertical gender segregation at the labor market. Women clearly dominate in the low-income sectors such as education or health and make up to 80% of employed in these sectors. On the other hand, women are severely underrepresented in the sectors with higher wages, such as, for instance, the construction sector, where around 90% of employed are men. Other male dominated sectors include transport sector; industry; water, gas and electricity supply as well as agriculture and forestry.

Women disproportionately more often occupy white-collar jobs, while men are dominating in the blue-collar jobs. Many women work as high- and middle-skill specialists and service sector workers. At the same time, they are less represented among qualified manual and agricultural workers than men. The ULMS data suggest that men are more often occupying managerial positions, while shares of men and women in the unqualified job positions are roughly the same. At the same time, the share of women occupying managerial positions is slowly increasing (on average it made up 42% over the period covered by the data).

[1]The authors define full time workers as employees working at least 40 h per week but not more than 98 h. The age span of 18-55 refers to the adult working age population.

Table 8.1 Gender wage gap across years in Ukraine

	2003	2004	2007	2012
Raw gender wage gap	27.4%	32.7%	32.8%	27.5%
Explained part	8.6%	10.3%	4.8%	6.7%
Unexplained part	18.7%	24.1%	24.6%	18.9%
Interaction	n.s.	n.s.	3.3%	2%
N	2134	1903	1796	2059

Data ULMS 2003–2012

Economic sector and occupational position are important factors predicting the level of earnings. Among other endowment-related factors are educational attainment and work experience, both known to increase productivity and, according to the human capital theory, leading to the higher level of earnings. In order to draw conclusions about the wage differential between men and women it is important to decompose the raw gender wage gap into two parts. The first part can be explained by the differences in mean endowments between men and women. The second part is a residual part that reflects the group differences in unobserved predictors and is usually interpreted as the level of gender discrimination. Although the endowments are expected to increase earnings, they may increase it to a different extent for men and women. Therefore, an interaction between endowments and gender is also an informative element of the results of decomposition.

As a first step of the analysis, the mean difference in monthly log wages of men and women was estimated. The decomposition of the gender wage gap was performed using the classical Oaxaca-Blinder decomposition technique. The estimation results are presented in Table 8.1.

The human capital related variables in the regression—referred to as the "explained part" in the Table 8.1—comprise level of education, economic sector, employee's position and a proxy for work experience (years since a person graduated or left the formal education). The unexplained part reports the gap which cannot be explained by the difference in the endowments and is interpreted as the gap due to different treatment of men and women, i.e. gender discrimination.

The results suggest that the gender wage gap was substantial in Ukraine over the whole period covered by the data. The raw gender wage gap ranged from 27% to 33%. In other words, women generated up to one third of earnings less than men. At the same time, the decomposition of the gender wage gap in Ukraine suggests that the difference in productive characteristics—such as, for example, education, job position etc.—accounts approximately for one third of the gender gap in 2003 and 2004 and explains only a small part (15–25 percent) of the variation in 2007 and 2012. This suggests a decreased role of the productive characteristics for the explanation of the gender wage gap in the more recent years. The largest part of the gender wage gap, however, remains unexplained. This means that on average, around 19 to 25% of the difference between male and female wages may be attributed to the different treatment of employees depending on their gender. Moreover, in the later

years the returns to endowments were unequally important for men's and women's labor remuneration, creating more inequality in earnings of the two sexes.

Assessment of the gender wage gap at means and its decomposition are first steps to understanding the gender situation on the labor market in a country. However, for the implementation of the efficient gender policies it is crucial to explain the origin of the gender discrimination. In other words, to understand why do societies discriminate women and what mechanisms underlie the discriminatory practices? The answers to these questions may be provided after a thorough analysis of gender attitudes in conjunction with justice attitudes prevailing in a society.

8.5 Gender Roles and Attitudes: How just Is the Gender Wage Gap?

People tend to reproduce social structures and relationships that they perceive as normal or "just". During the socialization, they internalize the understanding of gender roles that determine the appropriate behavior for men and women and these shape their gender attitudes. That is why studying attitudes of people allows to reveal the norms commonly accepted and supported in a society.

The European Values Study 2008 measured gender attitudes using a list of statements that uncovered different aspects of people's views on the responsibilities and appropriate behavior of men and women. Table 8.2. presents the degree of agreement or disagreement to these statements in Ukraine.

In general, gender attitudes of Ukrainian people are moderately traditional. On the one hand, the overwhelming majority of respondents is in favour of the working women and believe that a working mother can establish just as warm and secure a relationship with her children as a mother who does not work (90.2%), on the other hand, most of them agree that a pre-school child is likely to suffer if his or her mother works (71.1%). In addition, one third of the population believes that when jobs are scarce, men have more right to a job than women.

The answer patterns suggest that people expect both partners to be involved in house work (Men should take as much responsibility as women for the home and children—98.3%) and to be active on the labor market (both the husband and wife should contribute to household income—93.8%). However, the questionnaire does not allow to assess the relative shares of time spent on housework and childcare as well as relative contributions to the household budget of men and women. Overall, men and women in Ukraine have very similar ideas of the gender roles, although comparison of attitudes of men and women reveals that men tend to overestimate the willingness of women to devote themselves to housework and children and to underestimate the meaning of work for women.

89.1% of respondents think that fathers are as well suited to look after their children as mothers and 80.8% agreed that having a job is the best way for a woman

Table 8.2 Gender attitudes in Ukraine, 2008, in %

	All		Men		Women	
Do you agree or disagree with the following statements?	Agree	Disagree	Agree	Disagree	Agree	Disagree
A working mother can establish just as warm and secure a relationship with her children as a mother who does not work	90.2	9.8	89.8	10.2	90.4	9.6
A pre-school child is likely to suffer if his or her mother works	71.1	28.9	71.9	28.1	70.6	29.4
A job is alright but what most women really want is a home and children	87.9	12.1	92.0	8.0	84.7	15.3
Being a housewife is just as fulfilling as working for pay	65.7	34.3	71.7	28.3	61.1	38.9
Having a job is the best way for a woman to be an independent person	80.8	19.2	74.7	25.3	85.5	14.5
Both the husband and wife should contribute to household income	93.8	6.2	91.2	8.8	95.9	4.1
In general, fathers are as well suited to look after their children as mothers	89.1	10.9	91.5	8.5	87.2	12.8
Men should take as much responsibility as women for the home and children	98.3	1.7	98.8	1.2	97.9	2.1
When jobs are scarce, men have more right to a job than women	33.3	66.7	41.6	58.4	26.6	73.4

Source author's computations
Data European Values Study 2008 [EVS 2010]. The following answer categories were combined: "Agree strongly" and "agree"; "disagree strongly" and "disagree"

to be an independent person. These statements may uncover inclination to egalitarian modern gender values. However, since a powerful discourse in modern states tackles the gender discrimination topic, many people who are aware of the gender inequalities may declare a support of the "modern" egalitarian views. Nevertheless, when it comes to very concrete situations, such as, for example, wage negotiations or job promotion, where people take decisions based on multiple factors, some can unintendedly discriminate certain groups of population (e.g., women) unconsciously applying justice principles internalized during the socialization period.

The accuracy of the attitudes measurement depends, among others, on the willingness of people to reveal their preferences, especially those concerning sensitive topics such as discrimination. Sociology has developed many different techniques to collect information on such topics or to uncover the true attitudes in the situations that induce respondents to demonstrate usual patterns of socially approved behavior. The factorial survey method is one of the innovative methods that allows to reveal the "hidden" preferences and attitudes of respondents (more on factorial survey can be found in Auspurg and Hinz 2015). This method uses a quasi-experimental approach, combining the elements of an experiment and a survey. Its main idea is to ask a

respondent to judge a certain amount of situations or objects using a defined scale. The description of the situation or object (called vignette) includes a number of systematically varying factors that are deemed relevant for respondents' judgments. The data collected using factorial survey approach allow to assess the importance of every factor for respondent's judgment. For example, one can compare the relevance of educational attainment with the relevance of gender or family status of an employee for the level of "fair" wages. Using factorial survey approach it is possible to uncover the typical patterns of judging the levels of just earnings for men and women and in this sense to find out if people are likely to treat men and women differently ceteris paribus.

A factorial survey design was applied in Ukraine in 2009 to explore the income justice attitudes of people and, among others, permitted to explore the gender attitudes. An extensive description of the study and detailed discussion of findings is presented in Gatskova (2015, 2013).

An array of 21549 vignette evaluations of just wages was collected from 1797 respondents representative of the Ukrainian population. The survey was conducted by the Institute of Sociology of the National Academy of Sciences of Ukraine. Every respondent evaluated 12 vignettes from one of the 20 decks. Each vignette included information on demographic characteristics of a fictitious employee, family status, education, job, work performance, and characteristics of an enterprise apart from the gender. A sample vignette had a following form:

A 35-year-old woman with higher education works as a journalist in a state organization that receives high revenues. She does the work better than her colleagues. She is married with a working spouse and has no children. Her monthly salary is **15000** UAH (before taxes).

How just or unjust do you think this salary is?

The salary is …

Too low					Just				Too high	
−5	−4	−3	−2	−1	0	1	2	3	4	5

By providing the assessments of just wages of the given salaries respondents were guided by their understanding of "who should get what". The scale allowed to measure the injustice in the direction of under—or overpayment and the analysis of the collected judgments permitted estimation of the effect of each characteristic, including gender, on the amount of just wages. The analysis revealed that controlling for the age, occupation, education, work performance, financial status of enterprise, private or state sector, marital status and number of children the effect of the gender significantly affected the evaluation of fair wages by the Ukrainian respondents in the expected direction. Respondents of both sexes tended to ascribe lower "just wages" to women. A difference in just male and female wages made up about 10%.

Moreover, a test for comparison of means in judgments about just earnings revealed a significant difference not only in the just earnings for men and women, but also a difference in judgments of male and female respondents. It appeared that

Ukrainian female respondents were discriminating women even more than Ukrainian male respondents did. While men believed that women should earn less than men, their amount of just earnings ascribed to women was still significantly higher than that defined as just by female respondents.

In sum, the factorial study in Ukraine revealed a "just" gender wage gap prevailing in the mind of Ukrainian population. Both men and women evaluated male employees as more deserving of higher wages than female employees for the same jobs. Interestingly, Ukraine is not a unique country with respect to these findings. Factorial survey studies were able to uncover the "just" gender wage gaps also in a number of developed countries (e.g., see Auspurg et al. [2017] for Germany and Jann [2003] for Switzerland).

8.6 The Origin of Gender Attitudes

If the gender discrimination practices originate from people's gender attitudes, how do gender attitudes develop and what shapes them during life? Why do people consider men as more eligible to get higher wages? Why do women have more humble aspirations with respect to their earnings?

The answers to these questions are crucial for understanding the origins of discrimination and for design and implementation of efficient policies to improve the situation. In this case, empirical analysis may be fruitfully supported by sociological theory. A synthesis of the arguments from the socialization, adaptation and reference group theories provides an elegant explanation of the origin of gender attitudes.

Social psychologists argue that the justification patterns of the social inequalities are acquired during childhood through the socialization process. Individuals learn to accept earnings inequalities when they internalize the differentiating criteria between people, such as, for example, education or gender. Children learn how reality works by observing it and by grasping the explanations implied by their social environment. Actual social mechanisms of wealth distribution in a society have a normative power over the idea of just inequalities. If parents explain to their child why a husband and a wife have unequal contributions to the household budget by stating that a husband's main task is to be a breadwinner, while a wife should focus more on housekeeping and childrearing, and even more by demonstrating such behavioral patterns, a child is likely to accept these traditional role models. As a result, this child would be able to justify income inequalities between men and women based on own experience in the family and from the position of the typical social roles in the society. Traditionally established social practices transform into habitual actions that are continually reproduced without deep reflection every time. As justice theories put it, what "is" ultimately determines people's attitudes towards what "ought to be" (Homans 1973; Berger et al. 1972).

While socialization theory states that people learn how to justify inequalities as a natural process of growing up and collecting the knowledge about social structures and interactions between people, the adaptation theory stresses that individuals may

adapt to the existing order even if their formative experiences shaped different beliefs and values. Even if a child grew up in an egalitarian setting, being exposed to an environment where traditional gender norms are dominating may lead to adaptation of gender attitudes. This mechanism is reinforced by individual's comparisons to a reference group.

People tend to compare themselves to those, who are similar to them and constitute their reference group. Employees having similar positions or those with the same qualifications are likely to judge about the justice of own earnings based on the information about the situation of each other. For example, if a young female worker starts to work in a female-dominated low-paid sector, in her mind the expected income would be lower than an expected income of a man, who works in a high-income sector. In this case, the expectations about the level of wages are formed based on the typical level of earnings in a reference group. That is why horizontal and vertical gender segregation greatly contribute to the formation of different expectations about the just level of earnings in these two groups. This may also explain the finding that women in Ukraine are justifying lower wages in general compared to men.

8.7 Conclusion and Policy Recommendations

In the Soviet Union women were actively encouraged to participate in the labor market and the female employment rates reached highest levels in the world. Despite these achievements inequality on the labor market persisted and took form of vertical and horizontal segregation as well as the gender wage gap. Female labor participation rate in the modern Ukraine is higher than in the majority of post-Soviet states and countries of the Southern and Eastern Europe, but it is considerably lower than in the Western and Northern developed European countries. Despite various legislative attempts to decrease the gender inequality in the country, the gender wage gap remained at a relatively high level of 27–33% in 2003–2012. The decomposition of the gender wage gap revealed that the larger part of this gap may not be explained by a difference in endowments such as educational attainment, work experience, economic sector and job position of male and female employees. Adjusting women's endowments to the level of men's endowments in Ukraine would close up to one third of the gender wage gap. The remaining gap is not related to the difference in productive characteristics. This suggests that the discrimination practices on the labor market in Ukraine are still present.

Many female employees are segregated in low-income economic sectors. Moreover, women often occupy low-status positions and their earnings belong to the lower part of the income distribution. At the same time, those women, who make it to the top-managerial positions face a larger amount of gender discrimination—the gender wage gap in higher deciles of income distribution is larger.

Actual discrimination practices are interconnected with the respective gender attitudes. Although the gender attitudes of Ukrainian people are only moderately traditional and there is a certain degree of acceptance of the egalitarian values in

the society, a factorial survey experiment revealed that people in Ukraine are guided by discriminatory justice attitudes when evaluating the justice of earnings. Both male and female respondents were likely to ascribe higher just incomes to men, controlling for education, work performance, profession, age, type and profitability of an enterprise, as well as family status of fictitious employees. Moreover, female respondents considered even lower earnings for other women as just compared to the earnings defined as just by male respondents. These findings are explained in the light of socialization, adaptation and reference group theories. People not only learn the typical widespread traditional gender role models during the socialization period but also adjust their attitudes in accordance with the actual inequality and situation on the labor market. In addition, gender segregation in specific sectors and lower status positions of female employees contribute to the formation of the lower expectations about the just earnings, since employees compare their earnings with the earnings in their reference group.

How can the situation of the gender inequality on the labor market in Ukraine be improved? There are many ways to foster gender parity through different channels. Gender neutral educational programs at schools and educational programs specially designed to increase female specialists in certain fields of high-income economic sectors, information campaigns on mass media, introduction of gender quotas for managerial positions etc. all contribute to the enhancement of the gender equality. Best world practices show that programs creating opportunities for both men and women to achieve a better family-work balance and enable men to take more responsibility for home and children increase women's chances to participate in the labor market. Access to high quality childcare facilities enables women to have smaller career interruptions due to childbirth. On the other hand, parental leaves accessible to young fathers can make career interruptions be less gender related feature of professional paths. As a result, more men taking parental leaves to care for children can bring about a change in gender attitudes, since gender of an employee would not be associated with career interruptions and, consequently, would lose its validity as a criterion hindering job promotion. Finally, strengthening the rule of law in the country is a global goal and a primary task of the government which ensures protection of rights of people in the country and permits to fight gender discrimination in the courts. Successful implementation of the non-discrimination legislation is an effective tool to change the public perception of the gender norms.

Acknowledgements I would like to express my gratitude to Dr. Barbara Dietz, who has provided her thoughtful comments and valuable suggestions to the chapter.

References

Auspurg K, Hinz T (2015) Factorial survey experiments. Quantitative applications in the social sciences. Los Angeles, SAGE Publications

Auspurg K, Hinz T, Sauer C (2017) Why should women get less? Evidence on the gender pay gap from multifactorial survey experiments. Am Sociol Rev 82: 179–210
Berger J, Zelditch M, Anderson B, Cohen BP (1972) Structural aspects of distributive justice: a status value formulation. In: Berger et al. (eds.). Sociological Theories in Progress, Volume 2. Boston, Houghton Mifflin
Brainerd E (2000) Women in transition: changes in gender wage differentials in Eastern Europe and the Former Soviet Union
Chepurko G (2010) Gender equality in the labour market in Ukraine. International Labour Office, ILO Decent work technical support team and country Office for Central and Eastern Europe. Kyiv, ILO
EVS (2010) European values study 2008: Ukraine (EVS 2008). GESIS Data Archive, Cologne. ZA4781 Data file Version 1.1.0, https://doi.org/10.4232/1.10174
Gerasymenko G, Maksymenko K (2016) Country gender assessment for Ukraine. The World Bank. Available at http://documents.worldbank.org/curated/en/128891470822320083/pdf/107673-PUB-P156988-ADD-ISBN-PUBLIC-SoltisBookENweb.pdf, retrieved on 30 March 2020
Ganguli I, Terrell K (2005) Wage ceilings and floors: the gender gap in Ukraine's transition. IZA DP No. 1776
Gatskova K (2015) Income justice in Ukraine: a factorial survey study. Newcastle upon Tyne, Cambridge Scholars Publishing
Gatskova K (2013) Distributive justice attitudes in Ukraine: need, desert or social minimum? Communist Post-Communist Stud 46(2): 227–241
Global Gender Gap Report (2020) World Economic Forum. Available at: https://www.weforum.org/reports/gender-gap-2020-report-100-years-pay-equality, retrieved on 17 March 2020
Homans GC (1973) Social behavior: its elementary forms. London, Routledge & Kegan
Jann, B. (2003). Lohngerechtigkeit und Geschlechterdiskriminierung: Experimentelle Evidenz. ETH Zürich.
Newell A, Reilly B (2001) The gender pay gap in the transition from communism: some empirical evidence. Econ Syst 25(4): 287–304
Khitarishvili T (2019) Gender pay gaps in the former Soviet Union: a Review of the evidence. J Econ Surv. https://doi.org/10.1111/joes.12321
Kupets O (2010) Gender mainstreaming at the labour market of Ukraine and role of the public employment service. ILO, Kyiv
Lehmann H, Muravyev A, Zimmermann KF (2012) The Ukrainian longitudinal monitoring survey: towards a better understanding of labor markets in transition. IZA J Labor & Dev 1(9). https://doi.org/10.1186/2193-9020-1-9
Libanova EM, Makarova OV, Gerasymenko GV, Aksyonova SYu, Maidanik IP, Tkachenko LG, Lysa OV, Reut AG, Otkydach MV (2012) Analytical research on women's participation in the labour force in Ukraine. UNFPA, Kyiv
Martsenyuk T (2016) Gender equality situation in Ukraine: challenges and opportunities. In: Gender equality policies and EU integration—experience of Visegrad for EaP Countries, pp 203–225. Available at: http://ekmair.ukma.edu.ua/bitstream/handle/123456789/9364/Gender_Policies_and_EU_Integration%20%282%29.pdf?sequence=1&isAllowed=y, retrieved on 17 March 2020
Pignatti N (2012) IZA J Labor & Dev 1(7). https://izajold.springeropen.com/track/pdf/10.1186/2193-9020-1-7
Selezneva E (2017) Population policies in Soviet and modern Russia. In: Karabchuk T, Kumo K, Selezneva E (eds) Demography of Russia. From the past to the present. pp 63–113. London, Palgrave Macmillan
Verick S (2018) Female labor force participation and development. IZA World of Labor, 87v2
World Bank (2016) Country gender assessment for Ukraine, 2016. Kyiv, World Bank
World development indicators (2020) https://databank.worldbank.org/source/world-development-indicators, retrieved on 3 May 2020

Chapter 9
"Glass Ceiling" and "Sticky Floor" in Estonian Public and Private Sectors

Marge Unt, Magda Rokicka, Kadri Täht, and Triin Roosalu

Abstract This chapter scrutinizes the gender wage gap by sector across the wage distribution in Estonia, a country with a very high labor market participation by women. A unique dataset comprising the Structure of Earnings Survey linked to the registries is used, which enables accounting for human capital, including previous employment history, job position, enterprise characteristics, and parenthood. It is estimated whether the gender wage gap widens toward the top and at the bottom of the wage distribution, and to what extent characteristics "explain" the gap at different points of the distribution. The results highlight that the magnitude of the gap varies considerably across the wage distribution, and while most of the gap is attributable to gender differences in occupations and industries at the bottom, this information explains only a small part at the top. Which are the sectors where women face explicit disadvantages? The gap widens toward the top in the public sector, both at state and municipality levels, as well as in foreign-owned private companies, indicating the so-called "glass ceiling" effect. This effect is not visible in the Estonian-owned private companies with majority of workplaces. Only in the public state sector the gap systematically widens at the bottom, indicating the so-called "sticky floor" phenomenon for women, as our data does not reveal this tendency in other sectors. Floors may still be (not) sticky and ceilings (not) made of glass when considering career paths in individual organizations within these sectors.

Keywords Gender wage gap · Eastern Europe · Glass ceiling · Sticky floor · Wage distribution

9.1 Introduction

After regaining independence in 1991, Estonia opted for a radical liberal path and went through triple transformation in the political, social, and economic spheres. Currently, its labor market regulations are more flexible than those in the other OECD

M. Unt (✉) · M. Rokicka · K. Täht · T. Roosalu
Tallinn University, Tallinn, Estonia
e-mail: marge.unt@tlu.ee

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_9

(Organisation for Economic Co-operation and Development) countries, and the level of social expenditure is below the EU (European Union) average, thus resembling the liberal welfare regime (Unt et al. 2020). At the same time, Estonia has one of the most generous and longest parental leave systems in Europe, covering 100% of the previous earnings for 435 days, which is not usual for liberal countries elsewhere (ibid.).

Women's presence in the labor market is less than men's across the EU, but the employment gap varies significantly. Estonia has one of the highest employment rates of women in the EU—76.3% in 2019, compared with 84% of men (Eurostat 2020). There is an employment gap of 7.7% points among the 20–64-year-olds, but it decreases considerably and even reverses in older age groups (ibid.). The high activity in the labor market, however, does not guarantee a favorable position—women's hourly wage differs drastically from men's. The gender wage gap (GWG) in Estonia is in the top three among all high-income countries in the world, according to the International Labour Organization (ILO) (2018). On average, this means that women earned one quarter (25.2%) less per hour than men in 2017 (ibid.). By 2018, Estonia's GWG had decreased to 22.7% but remained among the largest in the EU (Eurostat 2020; for historical information, see Brainerd 2000; Newell and Reilly 2001). A high GWG manifests in bigger constraints in everyday life but also has the important long-lasting implication of lower pension entitlement.

The reasons for the GWG are manifold and differ across the pay scale. Blau and Kahn (2003, 2017) concluded in their literature review that human capital factors play a relatively small role in the GWG, but differences in women's occupations and industries remain important, as do gender roles and gender division of labor at home. Women's work life interruptions and shorter hours remain significant in high-skill positions. In addition, discrimination cannot be discounted. Over the last decade, the focus on studying gender inequality in wages has shifted from medium wage earners to investigating the whole wage distribution, to provide a more detailed view of gender inequality. Studying the distribution enables us to account for the differentials among medium wage earners, and gender equality at the top and bottom of the wage distribution.

The GWG is a manifestation of various inequalities that women face in ensuring career progression and getting rewards. In cases where women face more obstacles and are more likely to be discriminated against, thus preventing them from reaching high-paying positions in organizations, the GWG among the high earners is wide—it is the so-called "glass ceiling." At times, when women are "stuck" in low-wage jobs, the widening of the GWG at the bottom is called the "sticky floor" phenomenon. Previous analysis of high-income countries has shown that the GWG tends to widen at the top, and the sticky floor is less prevalent (Arulampalam et al. 2007).

It is relevant to address the issues of "glass ceiling" and "sticky floor" across sectors, as wage setting mechanisms in public and private sectors differ in most countries. Wage setting in the public sector is usually more constrained by regulations (see ILO 2018) as it is more open to fostering equal-pay legislation, transparent procedures for wage setting, and pay comparability. Private sector decision-making,

on the other hand, is harder to enforce with anti-discrimination legislation, and there is usually lower coverage of collective wage agreements.

Thus, this chapter aims to outline how much of the GWG can be explained across the wage distribution in Estonia and how it differs by sector, to provide information for more informed policy interventions. Overall, the GWG is unadjusted and gives a comprehensive picture of gender pay inequality; thereafter, the decomposition analysis aims to measure if there is equal pay for equal work, or whether a considerable part of the GWG is "unexplained," referring to possible discrimination.

First, the unadjusted GWG is decomposed to show to what degree it can be explained in the wage differences and by what factors. We then ask (following Albrecht et al. 2003), do women encounter the "glass ceiling" and "sticky floor" in Estonia, i.e. if the GWG is wide toward the top and at the bottom of the wage distribution in all sectors or in the private sector only.

9.2 Institutional Context

Gender wage inequality is situated in a broader context; the most important dimensions are participation in the labor market, labor market segregation, division of unpaid tasks within the family, and labor market and family policies.

Currently, Estonia has one of the highest employment rates in the EU—76.3% in 2019 among 20–64-year-olds; the employment gap in favor of men was 7.7% points. A crucial contributor to the workforce is the high labor market activity of older workers in Estonia; especially high is the employment rate of women aged over 55. Based on Statistics Estonia data (Raid 2018), the employment rate of childless women and men is equal (86% in 2017). Mothers are less likely to work, and, in contrast, fathers are more likely to be employed. Only women with children aged under six have a clear drop in activity rate, their participation rate (56%) is lower than the EU average. In 2018, only 10.5% of the workforce worked part-time, a rate that is considerably lower than the EU average (18.5%) (Eurostat 2019). Thus, women in the 25–49 age group mostly work full-time (87.7% of all the employed) or stay at home full-time (ibid.).

A high employment rate and dominance of full-time working does not automatically mean equally valued work and career opportunities. The roots of strong labor market segregation lie in different educational pathways. In cohorts born in the 1960s, women had a greater chance of pursuing higher education. The main sorting mechanisms during the Soviet educational system took place (and continue to) at the secondary level; women were more likely to complete their secondary education in a general secondary school, in contrast with men who were more likely to attend vocational schools (see details Saar et al. 2015).

In Estonia, almost one fourth of working professionals are employed in the public sector, with the share of employment by state and municipality being nearly the same (12.2% and 11.2% respectively of all the employed in 2018, Statistics Estonia). The

remaining are employed in the private sector—56.9% in enterprises owned by Estonian nationals and 19.7% in those owned by foreign nationals, under private law. Women are twice as likely to be employed in the public sector: every third woman and only every sixth man are employed by the public sector. However, examining this sector, divided by state and municipality levels, reveals a strong concentration of women in jobs governed by municipalities. This reflects the high gender segregation in education and social services. At the same time, gender stratification is not prevalent in the public sector governed by state: 10.9% of all men and 13.5% of all women were employed by the state in 2018 (ibid.). One in every five working professionals is employed in companies with foreign ownership, and men outnumber women by only 2% points. As municipality jobs are female-dominated but state jobs are not, the public sector is divided into municipalities and states.

In most countries, civil service is the most regulated part of the public sector. The discourse on the "thin" state and high expectations of minimal regulations in Estonia has legitimized using private sector concepts in public sector human resource management (Pesti and Randma-Liiv 2018). In Estonia, human resource management in civil service is characterized by the decentralization of public sector recruitment, training, and pay, which diversifies the practices adopted (ibid.). Despite the high overall diversity, public sector companies have more regulations for in-house human resource practices, including a minimum salary level for certain types of occupations, compared with the private sector.

It can be assumed that parents' labor market behavior is closely related to Estonia's generous parental leave policies, which encourage one parent to stay out of the market after childbirth for an extended period of at least 1.5 years—compensation for this period is based on average wage, up to a maximum of three-time Estonian mean gross wages (Social Insurance Board 2020). The majority of parental leaves are taken by mothers, while fathers make up only 9% of parental leave-takers (Statistics Estonia 2019); thus, this long career break mainly affects women. There is little flexibility in combining early childcare and work due to the almost non-existent formal childcare for children aged below 1.5 years. However, all children between the ages of 1.5 and seven years are guaranteed a place in a kindergarten, it is a legal responsibility of the municipality. Because kindergarten fees cannot exceed 20% of the minimum wage, it is affordable. However, in reality, the main bottleneck is the availability of early childcare, and there is a scarcity of slots for children between the ages of 1.5 and three years. Therefore, only 28% of Estonian children aged less than three received formal childcare in 2018 compared with the EU average of 35% (Eurostat 2020). In contrast, from three years onward, the majority of children (93.5%) have access to formal childcare. It is also noteworthy that the share of children receiving formal childcare of 30 hours or more is one of the highest in the EU (ibid.). Thus, in general, the childcare system is relatively well developed and affordable, but slots for those aged below three are scarce, resulting in a remarkable drop in the employment participation of women with small children. As mentioned above, once in the labor market, prime age workers rarely take up part-time work.

The roots of gender inequality are closely intertwined with general time use, including work-life balance. According to time use survey data for respondents aged

15–64 years, for every hour a woman in Estonia spends running her household, a man spends half of it (33 minutes). The biggest burden of housework is reported by women aged 25–44 years, who spend a total of 284 minutes per week on household tasks, while men of the same age group spend just about half of it—150 minutes per week (Põder 2011). The double workload at home sharply contrasts the fact that the hours spent on paid work in Estonia are quite similar for both men and women (ibid.). In short, in Estonia, women, a majority of whom are working professionals, carry a double burden that includes household chores.

In sum, Estonia has a specific mix of policy regimes that is not easy to classify. Its labor market regulations are similar to those in liberal countries, and the level of social expenditure is below the EU average, which also resembles the liberal welfare regime. At the same time, Estonia has one of the most generous and longest parental leave systems in Europe, not usual for liberal countries elsewhere.

9.3 Previous Findings and Hypotheses

As Estonia has the largest GWG in the EU (Eurostat 2020), gender inequality has received wide attention—the most seminal are three detailed reports from 2010, 2014, and 2019 (Anspal et al. 2010; Espenberg et al. 2014; Täht 2019). Each study used the most detailed dataset at the time to disentangle the main drivers of gender wage inequality. As datasets are different, the results are not directly comparable, but it is possible to compare the findings on a more general level.

According to Eurostat (see Leythienne and Ronkowski 2018), the decomposition of the mean GWG revealed the three main explanatory factors as economic activity, occupation, and education (the last having a negative sign as women are more educated, on average), with the rest contributing less than 1% to the GWG. Overall, this set of variables (besides age, tenure, employment contract, working time, enterprise size, and control) explained slightly more than one quarter of the unadjusted GWG in Estonia. More detailed country analyses (Anspal et al. 2010; Espenberg et al. 2014; Täht 2019) demonstrated that the unadjusted GWG increases rather dramatically along the distribution in Estonia. At the bottom, wage inequality is mainly driven by the different labor market positions of men and women (ibid.), but it is much less possible to show what drives the higher wage inequality at the top. Furthermore, there was an evident "jump" in the GWG in the highest deciles in the analysis, indicating a "glass ceiling" for women in Estonia (Espenberg et al. 2014; Täht 2019). Previous analysis of GWG distribution did not find evidence of the "sticky floor" phenomenon—it is related to the minimum wage that will bring up the bottom of the distribution (Anspal et al. 2010; Espenberg et al. 2014; Täht 2019).

There is much less evidence on drivers and wage distribution of the GWG in different sectors. On average, the female disadvantage is considerably lower in the public sector than in the private sector in most countries (ILO 2018 for the widest country coverage). As an exception, in Estonia, the GWG in the public sector is not remarkably narrower than in the private sector. In fact, Estonia stands out as having the

world's largest GWG in the public sector among high-income countries (ibid.). Public sector workers are more likely to be covered by collective wage agreements, and hiring is more formalized across this sector than in the private sector. Comparisons of public and private sector workers have so far relied only on average earnings data (ILO 2018), and do not analyze the GWG across the wage distribution by sector (Anspal et al. 2010; Espenberg et al. 2014; Täht 2019), but the wage distribution may significantly differ by sector.

Based on the above, we expect to observe a narrower GWG in the lower segments due to the presence of minimum salary, and especially in the public sector due to the more regulated hiring and promotion practices. Thus, **the sticky floor phenomenon is not expected, especially in the public sector.** However, it is assumed that the GWG widens for both the public and private sectors at the upper end of the wage distribution due to the dominance of private-sector-style practices, which might have a particularly high impact on hiring in top positions. Furthermore, models are not expected to adequately explain the GWG among high earners compared with median earners by their human capital, job, and employer characteristics. In short, **the glass ceiling is expected to be present for women in both the public and private sectors.**

9.4 Data and Methods

For analysis, data from the Estonian Structure of Earnings Survey (SES) collected from enterprises in 2015 and covering information from 2014 has been used. SES is collected in a four-year interval; its target population is all enterprises in Estonia, with the original sample comprising approximately 10,000 enterprises from all sectors and approximately 125,000 workers. The statistics of the Estonian SES are also representative for enterprises with less than 10 employees operating in all areas of the economy. The SES data provides detailed information on the relationships between the level of remuneration and workers' individual characteristics (sex, age, occupation, length of service, highest educational level attained, etc.) and those of their employer (economic activity, size, and enterprise location). The education, industry, and occupation variables are all coded according to standard internationally comparable definitions.

As Estonian capital-owned and foreign companies may have different hiring and promotion strategies, the private sector is divided into local- and foreign-owned companies in the later analysis.

Data on the industrial sector is categorized according to the EU's Classification of Economic Activities in the European Community (2-digit NACE Rev 2.0), and occupation defined using the International Standard Classification of Occupations (2-digit ISCO-88). Education levels are defined according to UNESCO's International Standard Classification of Education (ISCED, 2011). The following categories are differentiated: education completed till the lower secondary stage (ISCED 0–2), upper secondary education (ISCED 3), and post-secondary or tertiary education (ISCED 5–7).

The SES employer-employee database is linked with numerous other registries' data, with the main ones being Tax and Customs Board data on labor income, Public Employment Office data on unemployment and census data on personal information to account for, in addition to the tenure in the given enterprise available in the SES, other indicators of labor market attachment (LMA) as the periods unemployment and employment during the last five years. Furthermore, disability status is used as an explanatory variable in decomposition analysis, besides the number and age of children. As we had an employer-employee database, we also calculated some enterprise level variables to capture additional dimensions of labor market segregation, namely the average salary in enterprises and percentage of women. We do not have information on labor union membership, but as the union coverage is very low, it has not been important to explain the mean GWG in Estonia previously.

The dependent variable is the log of the average hourly wage, excluding extra numerations.

Methodologically, we went beyond the mean effects with quantile regressions. For instance, a higher education might be more valued by high-income workers as their positions require such an educational level, but may be less so among low-income workers as it might go beyond the need of most jobs in this salary range (Fournier and Koske 2012). We followed the unconditional quantile regression method proposed by Firpo et al. (2009) to evaluate the impact of changes in the distribution of the explanatory variables on quantiles of the unconditional (marginal) distribution of an outcome variable. The proposed method applies a regression of the recentered influence function (RIF) of the unconditional quantile on the explanatory variables; it enables the interpretation of the coefficients of potential determinants on all parts of earnings inequality. Throughout, we estimated our models for five subsamples of data—first, a combined sample comprising both private and public sector workers, and then, four subsamples, comprising two separate models for the public sector by local government and that by state, and two for the private sector under Estonian and foreign ownership.

As we analyzed the whole wage distribution, it enabled us to test if women are especially disadvantaged at the lower and upper ends of the wage distribution. Operationalization of a "glass ceiling" is not straightforward as there is little agreement upon a definition (Jackson and O'Callaghan 2009); the same holds for the "sticky floor" phenomenon. In this chapter, we have used the definitions applied by Arulampalam et al. (2007)—a glass ceiling is said to exist if the 90th percentile wage gap exceeds the reference gap (90–all gaps, 90–70, or 90–50 difference) by at least two points; a sticky floor is said to exist if the 10th percentile wage gap exceeds the reference wage gap (10–50 or 10–20 difference) by at least two points.

Based on the combined sample, we decomposed the GWG. In the model, we first included **human capital** characteristics of education, tenure, and LMA (LMA is measured over the last five years, specifically the number of days in registered unemployment, number of months receiving wages, number of months receiving payments as a company board member, number of months having a temporary contract, number of sick leave days, number of annual leave days, disability, age, ethnicity, and mother tongue). Second, the model also included **job position** as measures by occupation

(2-digit ISCO, 39 categories), work time (full- or part-time), and type of contract (permanent or temporary). Third, **enterprise characteristics** were included, namely industry (NACE 81 categories), enterprise ownership (public—state, public—local government, private—Estonian owned, private—foreign owned), and enterprise size. Fourth, we added information about **children**, namely number and age (0–2, 3–6, 7–12). Finally, we took advantage of the employer-employee data, and calculated some more characteristics describing the **enterprise in context**, namely the percentage of women and average wage in the enterprise.

9.5 Results

We first present the descriptive results showing the salary levels by gender in different sectors. Thereafter, the GWG across the wage distribution is presented, also showing how much of wage differentials could be explained by differences between men and women. Thereafter, the results from the RIF models are summarized to assess whether an existing glass ceiling or sticky floor can be detected for women in the Estonian labor market.

Figure 9.1 shows the estimates of wages in Estonia by sector. The highest wages are in public sector jobs governed by the state, followed by private sector jobs owned by foreigners. Half of all men earn a salary, as opposed to only every fourth woman, in all sectors, except in public sector jobs at the municipality level. In sum, women

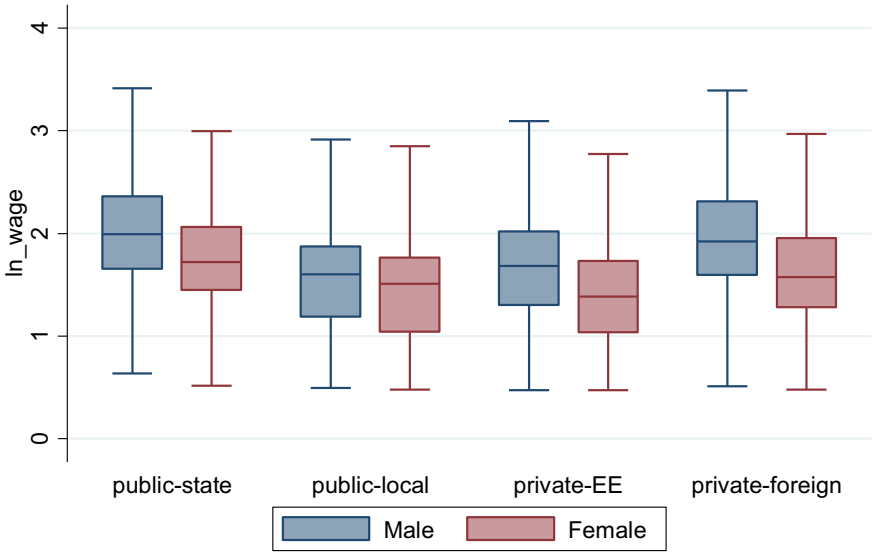

Fig. 9.1 Average hourly wage (ln) by gender in Estonia in different sectors (*Source* Structure of Earnings Survey, 2014, and linked registries)

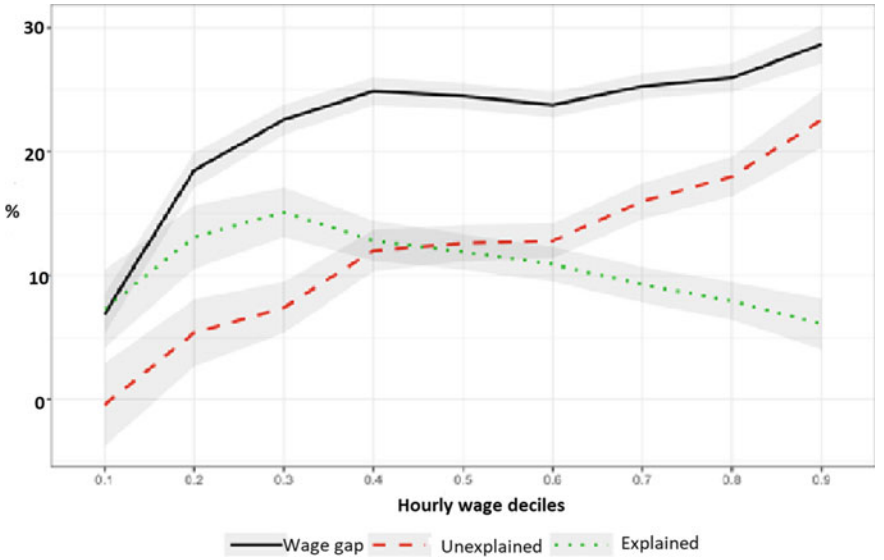

Fig. 9.2 The gender wage gap, its explained and unexplained part by deciles (*Note* Full details of RIF models can be obtained from the authors upon request)
(*Source* Structure of Earnings Survey, 2014, and linked registries)

are disadvantaged in all sectors, but the GWG is the largest in private sector jobs in foreign ownership companies. Public sector jobs in local governments have the lowest salary levels accompanied by the smallest wage differentials.

Next, Fig. 9.2 presents the unadjusted GWG, and how much of it we are able to explain and how much of it remains unexplained after including the wide set of indicators (see Table 9.1). The sum of the explained and unexplained parts is the unadjusted GWG. It can be seen that the GWG is wider at the top and considerably narrower at the bottom. In other words, the men at the top of the wage distribution drive gender wage inequality. It is also noteworthy that it is possible to "explain" almost all of the GWG at the bottom. Thus, once human capital, job position, and characteristics of workplace and family information are taken into account, there are no wage differences between men and women at the bottom of the wage distribution. This means there is equal pay for equal work. However, from these results, it is not possible to conclude that there is also equal pay for work with equal value at the bottom, as activities related to care responsibilities tend to be less valued than other activities. At the median, around 40% of the GWG can be explained, but toward the top, it widens, and at the same time, the detailed information cannot adequately explain it. This might indicate that indirect and direct discrimination is also present at the top.

What explains the GWG? While detailed results can be obtained from the authors upon request, below is a short summary. First, human capital characteristics, in addition to education, provide detailed information about LMA over the last five

Table 9.1 Measurement of the micro-variables

Variable	Measurement
Dependent variable	
Average hourly wage (ln)	Log of the average hourly wage, excluding extra numerations
Independent variables	
Education	Three categories according to ISCED: 1 = ISCED 0–2, 2 = ISCED 3,4 3 = ISCED 5–7.
Tenure	Years in current workplace
Unemployment experience	Number of days in registered unemployment over the last five years
Employment history	Number of months receiving wages over the last five years
Board member status	Number of months receiving payments as a company board member over the last five years
Temporary contract	Number of months having a temporary contract over the last five years
Sick leave	Number of sick leave days over the last 12 months
Annual leave	Number of annual leave days over the last 12 months
Disability	Having formally attributed disability status
Age	In years
Ethnicity	Three categories: 1 = Estonian, 2 = Russian, 3 = Other
Mother tongue	Three categories: 1 = Estonian, 2 = Russian, 3 = Other
Occupation	2-digit ISCO, 39 categories
Work time	Two categories: 1 = full-time, 2 = part-time
Type of current work contract	Two categories: 1 = permanent, 2 = temporary
Industry	NACE, 81 categories
Ownership of the enterprise/sector	Four categories: 1 = public – state, 2 = public – municipality, 3 = private – Estonian owned, 4 = private – foreign owned
Size of the enterprise	Number of employees
Children	Three categories: Has kids aged 1 = 0–2, 2 = 3–6, 3 = 7–12
Gender segregation	Percentage of women in the company
Salary level in a company	Average wage in the enterprise

years, and along with age, disability, ethnicity, and mother tongue, they marginally explain the GWG. Actually, the explained part is negative, hinting that given these characteristics, women should earn more than men, and the actual GWG is even larger if we compare men and women with similar education and other characteristics. Thus, even if we take into account the gaps in career next to the level of education, women perform better than men but get paid less.

The biggest driver of gender inequality is related to the industry, sector, and size of the enterprise, hinting that the strong horizontal segregation in the labor market is behind the substantial part of wage differentials. Occupational differences play a smaller role than horizontal segregation. The information on children does not improve the explanatory power. It might be that the cross-sectional approach in the current analysis is not the best to capture the effect of children. Finally, the GWG could be further explained by the fact that men tend to concentrate on companies with higher average salary, and the GWG is further exacerbated in female-dominated companies.

Next, the calculation of the GWG enables us to evaluate whether a sticky floor, a glass ceiling, or both are present, and how it differs by sector. Therefore, we take a more detailed look at wage differentials by sector, concentrating on the decomposition of the GWG at the lower and upper ends of the wage distribution.

As Table 9.2 shows, the overall GWG is the smallest at the lower end of the wage distribution in all sectors. This is expected as there is a minimum wage set in Estonia. With the exception of the public state sector, over 90% of a narrow GWG can be explained by women concentrating on fields with lower salaries, and other characteristics included in the full model. However, it is noteworthy that the public state sector is an exception, as the GWG there is wider at the lower end, highlighting that women are "stuck" in low-paying jobs, indicating the presence of the "sticky floor" phenomenon.

Overall, we see a clear increase in gender inequality at the top of the wage distribution across all sectors except the private sector under Estonian ownership. At the top, gender inequality is the highest in the private sector under foreign ownership—there, men earn on average 42% more per hour than women. It is also very illuminating to scrutinize the wage differentials in enterprises owned by Estonians in the private

Table 9.2 Estimated wage gap [and the percentage of the raw wage gap explained by different returns]

Percentile	Public: local/municipality		Public: state		Private: EE		Private: foreign	
10	0.00	[102]	0.33[b]	[65]	0.12	[96]	0.25	[94]
20	0.12	[51]	0.26[b]	[45]	0.25	[70]	0.30	[71]
30	0.16	[39]	0.19	[49]	0.29	[63]	0.34	[52]
40	0.11	[104]	0.24	[27]	0.30	[61]	0.34	[47]
50	0.09	[117]	0.27	[24]	0.30	[51]	0.35	[38]
60	0.10	[104]	0.27	[25]	0.29	[45]	0.35	[32]
70	0.10	[19]	0.29	[30]	0.28	[35]	0.34	[27]
80	0.15[a]	[38]	0.29	[34]	0.27	[26]	0.37[a]	[17]
90	0.22[a]	[61]	0.36[a]	[25]	0.25	[7]	0.42[a]	[7]

Source Structure of Earnings Survey, 2014, and linked registries

[a]A glass ceiling is said to exist if the 90th percentile wage gap exceeds the reference gap (90–all gaps, 90–70, or 90–50) by at least two points. The sectors where it could be detected are highlighted in color in the table

[b]A sticky floor is said to exist if the 10th percentile wage gap exceeds the reference wage gap (10–50 or 10–20) by at least two points. The sectors where a sticky floor could be detected are highlighted in color in the table

sector. There, the GWG is the widest around the median, and even narrows at the upper end. However, across the private sector, it is common that the higher up in wage distribution, the lesser the possibility of detecting the drivers of gender inequality. Between 38 and 51% of the GWG at the median is explained mainly by horizontal segregation in the private sector, but only a small part of it is explained by the same set of indicators among the highest deciles.

The public state sector also has high gender inequality at the top: men earning over one third more than women in the highest decile, and only a quarter of it could be explained by differences in male and female characteristics. The GWG is rather narrow across the wage distribution in the public municipality sector—for instance, women earn 9% less on average; furthermore, at the municipality level, gender inequality increases at the top, but differently from other sectors—the wage differentials are mostly bound (61%) to the different labor market positions of men and women. Compared with municipality jobs, in all other sectors, it is not as clear what drives gender inequality at the top despite the rich set of indicators.

Is there a "glass ceiling" over all sectors or just the private sector? In this chapter, a glass ceiling is said to exist if the 90th percentile wage gap exceeds the reference gap (90–all gaps, 90–70, or 90–50 difference) by at least two points. As indicated previously and shown in Table 9.2, the top of the wage distribution widens sharply in all sectors except the private sector under Estonian ownership regardless of the reference gap used. In sum, glass ceiling is observable especially in the public sector, both at the state and municipality levels. Also, in the private sector under foreign ownership, the increase in gender inequality at the top indicates the barriers for women. Contrary to our expectations, no glass ceiling was detected based on the above definition in the private sector under Estonian ownership, probably due to the larger variation there across industries and entreprises.

9.6 Conclusions

This analysis shows that equal pay at the mean alone should not be the aim; equality across the whole wage distribution should be the goal. To plan policy measures to tackle the wide GWG at the bottom and top of the wage distribution, it would be important to provide additional evidence on whether the "sticky floor" and "glass ceiling" are prevalent only in the private sector or also in the public sector.

This chapter systematically examines the GWG and its determinants over the whole wage distribution in Estonia, which has the largest GWG in Europe. In Estonia, the employment rate of both men and women is high, and part-time jobs are still infrequent, making their labour market participation relatively similar. Methodologically, we applied a regression of the RIF of the unconditional quantile on the explanatory variables, as the conventional Blinder-Oaxaca decompositions focusing on the mean can hide important differences and do not capture the considerable heterogeneity in the labor market. In addition, we conducted an analysis by labor market sectors, as the wage setting mechanism can differ in the public and private sectors.

What was found from the decomposition analysis of the GWG? Rather uniquely, we included detailed information on work history, making extensive use of registry data, which allowed us to track work history data for the last five years. Yet, information about employment, unemployment, sick leave, and annual holidays over the last five years did not help us explain the gender wage differentials.

Does horizontal and vertical gender segregation explain the majority of the GWG as expected? Vertical gender segregation does not play a major role, as job position—that is occupation, work time, and type of contract—only marginally explains Estonia's GWG. It is mainly driven by horizontal segregation—that is, by the field of industry, sector, and size of the enterprise. In addition, our results indicate that it is important to account for other enterprise level information. Further indicators of the feminization of the workforce and average salary levels in a given company also drive part of the GWG. This indicates the concentration of men in companies with higher salaries as well as better chances for them in firms with predominantly female employees.

In addition, it is important to note that despite the overall GWG increasing steadily across the wage distribution, the wider it is, the less we are able to explain it. The above-mentioned characteristics are the triggers of the GWG at the lower end of the wage distribution, explaining almost the entire GWG of low earners. Around 55% of the GWG around the median is explained by the above-mentioned characteristics, but less than one third of the wage differentials could be explained at the upper end of the wage ladder.

Can we detect the "sticky floor" and "glass ceiling" in different sectors? Previous analysis of GWG distribution for Estonia did not find evidence of the "sticky floor" phenomenon, and the results have been related to the minimum wage that will bring up the bottom of the distribution (Anspal et al. 2010; Espenberg et al. 2014, Täht 2019). However, while analyzing the wage distribution across sectors, it is possible to detect the increase in gender inequality at the bottom in the public state sector. It indicates the presence of "sticky floor" in the public state sector, a phenomenon that is not revealed at the total labour market level nor in any other sector. These results contradict our expectations, as the public state sector should be more regulated in principle. They also call for further investigation of this sector's wage setting practices and for clearer regulations at the lower end of the wage distribution. Blau and Kahn (2003) have shown that encompassing collective bargaining agreements providing relatively high-wage floors are especially beneficial to prevent women from being "stuck" in low-wage jobs. This practice has been introduced in Estonia in the case of teachers, a large group of public sector employees, where the sector-level collective agreement has pushed teacher's salaries closer to the national average (Ministry of Education 2019), possibly responsible for "cleaning up" the sticky floors in the local level public sector that teachers belong to. We may thus suggest that at the local municipality level the public sector acts more like traditional public sector, e.g. in terms of salary regulations; it is also possible that this is due to the overall lower wage level at the local level.

In addition, our results indicate that women are especially disadvantaged at the upper end of the wage distribution—we interpret the widening of the GWG here

as the "glass ceiling," especially as the GWG's unexplained component is widening too. While examining by sector, the results indicate that women face more obstacles, or are more likely to be discriminated against, thus preventing them from reaching high-paying positions in organizations, especially in the public sector and private sector under foreign ownership. There have been initiatives in the public sector, such as greater transparency in payments, but these have not been effective enough. Therefore, these results call for policy interventions also in the public sector.

At the same time, we observe no "glass ceiling" in the private sector under Estonian ownership, likely due to larger variation across the larger number of workplaces in the sector, since the biggest drivers of GWG are related to the industry and enterprise level characteristics (Täht 2019).

Last but not the least, the results indicate that we are able to explain over 90% of the GWG at the lower end of the wage distribution in Estonia. However, this does not automatically mean fair wage differentials. Because pay structures and job classification systems can be biased, the jobs done by most women tend to be valued less and classified at lower levels. Male premium and especially managerial male premium seem to be more explicit at the public sector and foreign private sector level, since these have the highest share of unexplained GWG. However, in the private sector, just 7% of GWG is explained at the 10^{th} decile, while 26% at the 9th decile. This indicates that GWG here is even less justified, relative to lower income groups, thus there might appear a certain type of "glass ceiling" effect, whereas men at the top seem to be even less likely to have earned their higher wages relative to women. Equal pay for work of equal value is not assessed here.

Acknowledgements This research was funded by Estonian Research Council from National Programme for Addressing Socio-Economic Challenges through R&D (RITA), which is supported by the Estonian Government and European Regional Development Fund.

References

Albrecht J, Bjorklund A, Vroman S (2003) Is there a glass ceiling in Sweden? J Labor Econ 21(1): 145–177

Anspal S, Kraut L, Rõõm T (2010) *Sooline palgalõhe Eestis: empiiriline analüüs. Uuringuraport.* Tallinn: Eesti Rakendusuuringute Keskus CentAR, Poliitikauuringute Keskus PRAXIS, Sotsiaalministeerium

Arulampalam W, Booth AL, Bryan ML (2007) Is there a glass ceiling over Europe? Exploring the gender pay gap across the wage distribution. Ind Labor RelatS Rev 60: 163–186

Blau FD, Kahn ML (2003) Understanding international differences in the gender pay gap. J Labor Econ 21(1): 106–144

Blau FD, Kahn ML (2017) The gender wage gap: extent, trends, and explanations. J Econ Lit 3, 55: 789–865

Brainerd E (2000) Women in transition: changes in gender wage differentials in Eastern Europe and the former Soviet Union. Ind Labor RelatS Rev 54(1): 138–162

Espenberg K, Aksen M, Lees K, Puolokainen T (2014) *Palgaerinevuste statistika parem kättesaadavus. Soolise palgaerinevuse analüüs.* Tartu, Tartu Ülikooli sotsiaalteaduslike rakendusuuringute keskus RAKE

Eurostat (2019) Database. https://ec.europa.eu/eurostat/home? accessed 13 March 2020

Eurostat (2020) Gender pay gap statistics. https://ec.europa.eu/eurostat/statistics-explained/index.php/Gender_pay_gap_statistics accessed 13 March 2020

Firpo S, Fortin NM, Lemieux T (2009) Unconditional quantile regressions. Econometrica 77(3): 953–973

Fournier J, Koske I (2012) Less income inequality and more growth—are they compatible? Part 7. The drivers of labour earnings inequality—an analysis based on conditional and unconditional quantile regressions. OECD Economics Department Working Papers, No. 930. https://www.oecd-ilibrary.org/economics/less-income-inequality-and-more-growth-are-they-compatible-part-7-the-drivers-of-labour-earnings-inequality-an-analysis-based-on-conditional-and-unconditional-quantile-regressions_5k9h28s354hg-en accessed 13 March 2020

ILO (2018) Global wage report 2018/2019: What lies behind gender pay gaps. International Labour Office. https://www.ilo.org/wcmsp5/groups/public/—dgreports/—dcomm/—publ/documents/publication/wcms_650553.pdf accessed 13 March 2020

Jackson J, O’Callaghan E (2009) What do we know about glass ceiling effects? A taxonomy and critical review to inform higher education research. Res High Educ 50(5): 460–482

Leythienne D, Ronkowski P (2018) A decomposition of the unadjusted gender pay gap using Structure of Earnings Survey data. Eurostat Statistical Working Papers. https://ec.europa.eu/eurostat/documents/3888793/8979317/KS-TC-18-003-EN-N.pdf/3a6c9295-5e66-4b79-b009-ea1604770676 accessed 13 March 2020

Ministry of Education (2019) Press release 27.9.2019: Õpetajate palkade läbirääkimistel rõhutati töötasude kasvatamise jätkuvat vajalikkust [During teachers’ wage negotiations the need for continuous increase in salaries was emphasised]. https://www.hm.ee/et/uudised/opetajate-palkade-labiraakimistel-rohutati-tootasude-kasvatamise-jatkuvat-vajalikkust

Newell A, Reilly B (2001) The gender pay gap in the transition from communism: Some empirical evidence. Econ Syst 25(4): 287–304

Pesti C, Randma-Liiv T (2018) Towards a managerial public service bargain: the Estonian civil service reform. NISP Acee J Public Adm Policy 11(1): 135 – 154. https://doi.org/10.2478/nispa-2018-0006

Põder K (ed) (2011) *Mehe kodu on maailm, naise maailm on kodu?* Tallinn, Statistikaamet

Raid K (2018) Lapsevanemaks olemine mõjutab rohkem naiste tööhõivet. https://blog.stat.ee/2018/05/24/lapsevanemaks-olemine-mojutab-rohkem-naiste-toohoivet/ accessed 15 November 2019

Saar E, Täht K, Unt M (2015) Segregated worlds of male and female labour market entrants in Estonia during the last decades? In: Blossfeld P, Skope J, Triventi M, Buchholz S (eds) Gender, education and employment: an international comparison of school-to-work transitions. Frankfurt am Main, Edward Elgar Publishing, pp 325–345

Social Insurance Board (2020) *Kinds of family allowances.* Tallinn, Sotsiaalkindlustusamet

Statistics Estonia (2020) Database. https://www.stat.ee/database accessed 13 March 2020

Täht K (ed) (2019). *Soolise palgalõhe kirjeldamine ja seletamine—esmased tulemused*. Tallinn, Tallinna Ülikool

Unt M, Kazjulja M, Krönström V (2020) Estonia. In: ÁN Léime, J Ogg, M Rašticová, D Street, C Krekula, M Bédiová, I Madero-Cabib (eds) Extended working life policies: International gender and health perspectives. New York, Springer, pp 241–249

Chapter 10
Gender Pay Gap in Russia: Literature Review and New Decomposition Results

Aleksey Oshchepkov

Abstract This chapter is dedicated to the gender pay gap (GPG) in Russia. First, it provides a review of the existing literature, covering key studies published in international and Russian academic journals. This investigation distinguishes between studies examining GPG in the 1990s and those analyzing the later period, briefly describing their focus and key findings regarding traditional economic explanations of GPG: differences in the amount of human capital between genders, family factors, industrial and occupational employment segregation, and discrimination. Second, this chapter presents and discusses the results of the standard Oaxaca-Blinder decomposition of GPG during the period from 1994 to 2018, by using RLMS-HSE microdata. Finally, it formulates a few stylized facts and conclusions concerning the size, evolution, and sources of GPG in Russia and outlines some promising avenues for future research.

Keywords Gender pay gap · Oaxaca-Blinder decomposition · RLMS-HSE · Russia

10.1 Introduction

Gender asymmetry in the labor market exists in all countries. Labor force participation and employment rates, hours of work and earnings of women are typically lower than those of men (e.g., see recent reports by ILO 2018 or UNDP 2019). This asymmetry suggests that female labor is underutilized, which is wasteful when many countries are suffering from ageing and depopulation. Further, it may reflect discrimination against women, which is currently as morally unacceptable as racial discrimination (ILO 2011). Therefore, it is not surprising that hundreds of economic and non-economic studies worldwide are trying to understand the reasons behind the unequal positions of men and women.

A. Oshchepkov (✉)
National Research University Higher School of Economics, Moscow, Russia
e-mail: aoshchepkov@hse.ru

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_10

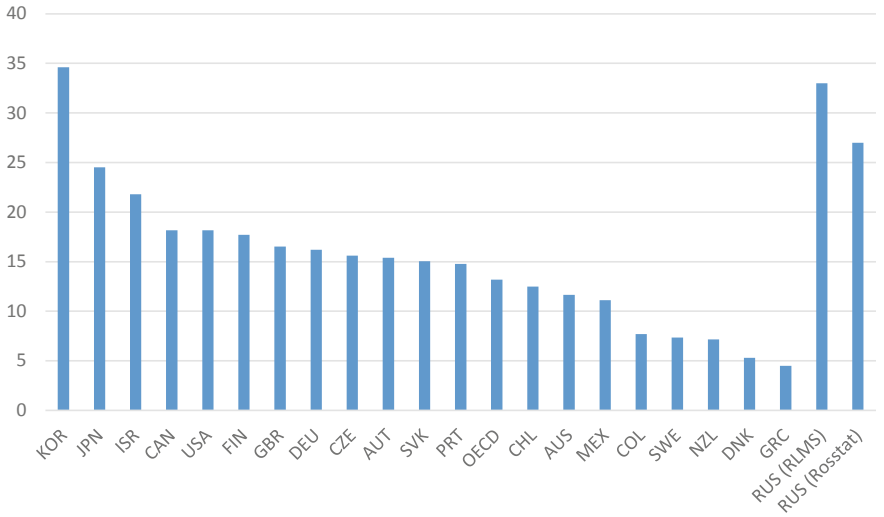

Fig. 10.1 Gender gap in monthly earnings across OECD countries and in Russia in 2017 (*Notes* The gender wage gap is defined as the difference between median earnings of men and women, relative to median earnings of men. Data refer to full-time employees, excluding self-employed individuals. The source of data for all countries, except Russia, is OECD Employment Database (2020), Gender wage gap (indicator). https://doi.org/10.1787/7cee77aa-en (Accessed on 16 January 2020). Estimations for Russia are made by author using RLMS-HSE and Rosstat micro-data of 2017)

One of the key aspects of the gender asymmetry is Gender Pay Gap (GPG). Although GPG has been decreasing over the last decades (see Ortiz-Ospina and Roser 2020), it is still prevalent in many countries. As Fig. 10.1 shows, in 2017 the raw GPG in median monthly earnings across OECD countries ranged from 34.5% in South Korea to 4.5% in Greece with the average OECD level at about 13% (percentage from the median earnings of men).

Extensive economic literature distinguishes among a few broad explanations of GPG: differences in the amount of accumulated human capital between genders, family factors (marriage and children), and employment segregation by gender, i.e., the uneven distribution of men and women across different industries and occupations. However, in many countries, a substantial part of GPG cannot be explained by such variables. While traditional economic approach implicitly attributes all unexplained differences to discrimination of women (in pay as well as in hiring and promotion), more recent economic literature is increasingly relying on adjacent social disciplines and explaining such differences, for instance, through social norms or differences in psychological attributes and non-cognitive skills between sexes (see Blau and Khan 2017).

This chapter is dedicated to GPG in Russia, the largest post-socialist economy. The size of GPG in the country is big by international standards. In 2017, the gap in median monthly earnings was about 30%, which substantially exceeded the OECD average and gaps existing in most developed countries, including Israel, USA, and

any Western European country (see Fig. 10.1). The high GPG is accompanied with other gender related gaps, such as the motherhood wage penalty (see Chapter 11 in this volume or e.g., Biryukova and Makerentseva 2017; Karabchuk et al. 2012) and fatherhood and male marriage premiums (Aistov 2013; Aswin and Isupova 2014; Oshchepkov 2020), reflecting the prevalence of strong traditional gender roles in the country (White 2005).

There are dozens of published studies examining GPG in Russia, but to the best of the author's knowledge, none has systematized existing evidence. This chapter fills this gap and reviews what is known about GPG in Russia, highlighting issues that need more focused research in the future. First, it presents a review of the existing literature on GPG in Russia, covering key articles published in international and Russian academic journals. Second, it provides and discusses the results of the standard Oaxaca-Blinder decomposition of GPG during the period from 1994 to 2018, by using the RLMS-HSE micro-data.

This study may be viewed as a country-specific extension of the literature reviewing gender asymmetry in the labor market in post-socialist countries (Khitarishvili 2019; Perugini and Selezneva 2015). While such literature provides a useful perspective, it is inevitably too general and omits important national specifics. In this regard, this study is similar to that of Pastore and Vereshagina (2011) which focused on Belarus, or Khitarishvili (2009) which focused on Georgia, and to studies presented in the other chapters of this book (e.g., see Chapters 7 and 8).

The chapter is organized as follows. The second section briefly describes Russia's macroeconomic background and traces the evolution of the raw GPG during 1994–2018. The third section presents the literature review. The fourth section provides and discusses the results of the standard Oaxaca-Blinder decomposition of GPG during 1994–2018. The fifth section derives general conclusions and outlines prospects for future research.

10.2 Macroeconomic Background and the Evolution of the Raw GPG During 1994–2018 in Russia

Since the early 1990s, Russia has come a long way from being the major republic of the USSR to an independent country with a market economy. Figure 10.2 traces the evolution of the country's key economic and labor market indicators, since 1993.

Transition from planned to market economy started in the beginning of 1990s, with political instability and deep-seated economic crisis that reached its peak by 1998 when the real GDP decreased by 30% from its 1992 level, while the Russian government defaulted. The labor market adjusted to these shocks through the reduction of real wages, which halved by 1998, while the reaction of the total employment

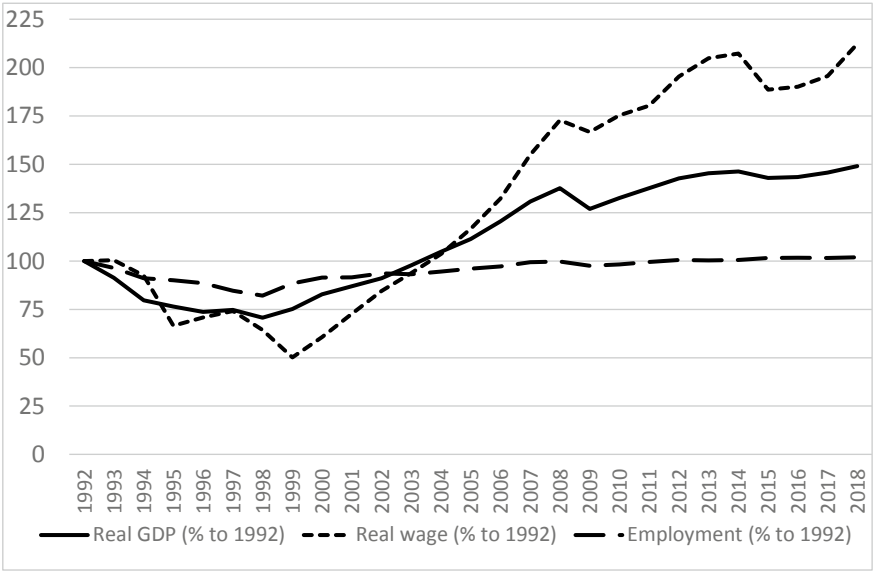

Fig. 10.2 The dynamics of Russia's real GDP, real wages, and employment in 1993–2018 (*Source* the author's calculations by using Rosstat data)

was relatively modest, exhibiting only a 18% decrease by 1998. The rise in unemployment was modest as well: in 1998 the unemployment rate reached 13.3% and has been steadily declining thereafter.[1]

The 2000s in Russia were characterized by political stabilization under the second (and current at the time of writing this chapter) Russian president Vladimir Putin, along with a strong economic recovery which had already started in 1999, when the economy grew by about 6.3%. The economic growth continued afterwards with 5–10% yearly rates until the World financial crisis of 2008–2009. Real GDP growth was accompanied with rising real wages, which were growing, on an average, by around 15% per year. The reaction of employment was modest, increasing by 1–2% per year. The economic boom ended in 2009 when real GDP fell by 7.8%.

The third decade (ongoing at the time of writing this chapter) was characterized by declining rates of economic growth. While in 2010 real GDP grew by 4.5%, by 2014 the rate of growth had already plummeted to around zero. The slowdown ended in 2015 with a 2.3% economic decline at the background of falling oil prices, ruble depreciation, and sanctions (and contra-sanctions) imposed after the accession of the Crimea. Similar to 2008–2009, the Russian labor market adjusted to these shocks mostly through the real wages which fell by 9% in 2015, while employment and

[1] The strong reaction of real wages and weak reaction of employment and unemployment are the key features of the Russian model of the labor market adjustment to economic shocks (see Gimpelson and Lippoldt 2000; Gimpelson and Kapelyshnikov 2011; Kapelyushnikov 2001), similar to the transition experiences of some other post-socialist countries.

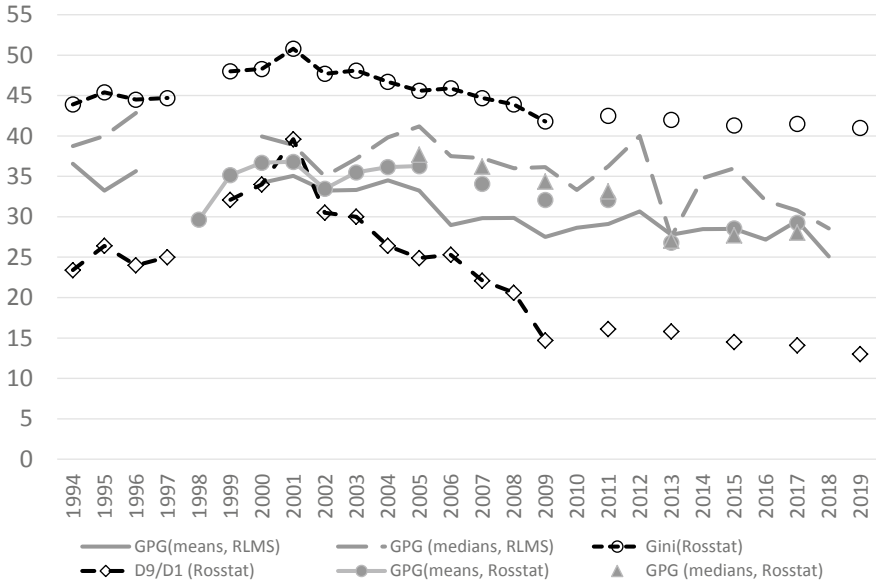

Fig. 10.3 The dynamics of GPG in monthly wages over 1994–2018 (*Source* the author's estimations using Rosstat and RLMS-HSE data)

unemployment rates were rather stable. The rest of the decade was characterized by weak economic and real wages growth and stable employment.

Figure 10.3 traces the dynamics of the raw GPG in Russia during 1994–2018, estimated by using data from different sources. RLMS-HSE[2] is the only source that provides data for the entire period (with the exceptions of 1997 and 1999 when the survey was not conducted). According to these data, GPG in mean monthly wages was about 35% (percentage from men's average wages) during 1990s,[3] which declined to about 30% during 2000s and remained below 30% in 2010s. GPG in median wages was generally higher than that in mean wages (by 1–10 p.p.) but exhibited a similar pattern over time.

Another source of data that allow for estimating GPG in Russia are regular surveys of large and medium enterprises conducted by Rosstat. Although this source of data is quite different from RLMS-HSE, which is a population survey, the size and dynamics of GPG that it provides are quite similar to those obtained by using RLMS-HSE.

[2]"Russia Longitudinal Monitoring survey, RLMS-HSE" is conducted by National Research University "Higher School of Economics" and OOO "Demoscope" together with Carolina Population Center, University of North Carolina at Chapel Hill and the Institute of Sociology of the Federal Center of Theoretical and Applied Sociology of the Russian Academy of Sciences. (RLMS-HSE web sites: http://www.cpc.unc.edu/projects/rlms-hse, http://www.hse.ru/org/hse/rlms).

[3]Newell and Reilly (1996) reported the estimate of the raw GPG in mean monthly earnings for 1992 when the first wave of RLMS was conducted. Their estimate was 30%, which is close to the 35% level observed since 1994.

According to the Rosstat data, GPG in mean and median monthly wages ranged between 30 and 35%, slightly declining over time.

Figure 10.3 also presents the dynamics of the overall wage inequality measured by using Gini and D9/D1 decile ratio. Wage inequality was on the rise during the 1990s, peaking at the beginning of the 2000s, then declining during the 2000s and being stable in the 2010s. The evolution of GPG was generally in line with such dynamics, which suggests that rising (or declining) wage differentiation could be one of the factors driving GPG during the period.

10.3 Literature Review

The literature on GPG in Russia may be divided into two waves. The first wave of studies, conducted mostly by Western scholars, was spurred by the tremendous interest on Russia as the major communist country that has begun the transition from a planned to a market economy. These studies examined GPG and some related issues mostly in 1990s. A gradual decline in Western economists' interest in Russia and the appearance of domestic economic research marked the emergence of the second wave of studies, many of which were conducted by Russian-speaking authors who analyzed GPG in 2000s and 2010s.

10.3.1 First-Wave Studies

Most first-wave studies analyzing GPG in Russia in the 1990s regarded this issue in the context of the country's transition from planned to market economy. They were aimed at determining how the transformation process influenced the relative position of women in the labor market and paid less attention to the sources of GPG.

To understand changes in GPG during the transition better, the gender inequality that existed in USSR should be considered. Labor force participation of Soviet women was high by international standards (Gunderson 1989). Soviet women's high labor force participation before WWII was needed to support massive industrialization, while after WWII, it was required to compensate the tremendous decrease in men's labor supply. According to some authors, 89% of women were in full-time employment or study (e.g., see Shapiro 1992). In addition, Soviet women, like women in other countries, were responsible for housekeeping and caregiving. To reconcile employment with family responsibilities they were forced to attend jobs with more flexible working arrangements, shorter working hours, which, in turn, supported occupational and industrial segregation of employment by gender and contributed to GPG.

Reviewing several studies conducted on the Soviet period, Khitarishvili (2019) concludes that "Soviet women earned between 65–75% of men's pay" (p. 1258). Right before the beginning of the transition, differences in pay between the sexes in

the USSR and CEE countries were lower than in most Western countries. In 1989–1990, the average monthly wage of women in the RSFSR was approximately 71% of men's average monthly wage, 74% in Bulgaria and 76% in Poland, whereas, for example, in Britain it was only 60% (see Maltseva and Roschin 2006). However, existing studies have different opinions on the impact that the transition process had on the relative wages of Russian women.

On the one hand, according to Brainerd (2000), the relative position of women has declined due to the rapid growth of wage differentiation, since the percentage of women employed in relatively lower paid jobs was higher than that of men. This conclusion is in line with the estimates obtained by Newell and Reilly (1996): by 1996, in most CEE countries, relative women's wages were nearly the same, while in some countries they grew in comparison with the levels observed prior to the reforms; but as far as Russia was concerned, these wages dropped to a level of less than 70% of average men's wages.

On the other hand, according to Reilly (1999) who decomposed changes in GPG from 1992 to 1996, the increased wage dispersion was "a modest agent for the widening of the gap in Russia." (p. 245). This conclusion echoes results of Newell and Reilly (2001) who noted that "the adjustment process itself appears, heretofore, to have been approximately neutral to the average pay position of women relative to men. This is perhaps most surprising for Russia and other countries of the Former Soviet Union where there have been large increases in wage inequality. It seems that in these countries, contrary to expectation, the relative pay position of women has not deteriorated." (p. 302).

Some studies that examined GPG in the 1990s analyzed its sources by applying the Oaxaca-Blinder decomposition.[4] Of those, one of the first was that of Newell and Reilly (1996). Using micro-data from the first wave of RLMS-HSE (conducted in 1992) the authors estimated the raw GPG in mean wages equal to 30%. According to their estimations, only about 11% of the gap could be accounted for by differences in productive characteristics (endowments) between sexes, while the remaining, almost 90%, were due to differences in returns of those characteristics. Occupational segregation accounted only for a small part of GPG (information on industrial affiliation of jobs was not available in RLMS-HSE at that time). The authors also noted the poor performance of the Mincerian equation "in marked contrast to its successful application when fitted to data for numerous capitalist economies," which "highlights the role exerted by unobservable factors in the wage determination process for both gender groups in Russia."

[4]There are few known quantitative studies on GPG in USSR. Ofer and Vinokur (1992) analyzed data from a survey of workers who had emigrated from the Soviet Union in the 1970s. Their analysis shows that, on an average, women in USSR earned less than two-thirds of men's wage. About 49.3% of this gap can be explained by differences in returns to characteristics (such as human capital and occupations), while the rest of GPG, according to the authors, may be attributed to discrimination. Katz (1997) used data from a survey conducted in Taganrog in 1989. The Oaxaca-Blinder decomposition of GPG in hourly wages has shown that the main factors driving GPG were family variables and employment segregation. Around 48% of the GPG was unexplained.

Glinskaya and Mroz (2000) examined GPG by using RLMS-HSE data from 1992 to 1995. In contrast to Newell and Reilly (1996), they found that occupational segregation of employment by gender was able to account for substantial part of GPG. When the female reward structure was used a base in the Oaxaca-Blinder decomposition, the explained part of the gap was about 20%, while the contribution of occupational segregation was 25%. When the male reward structure was used as a base, the explained part constituted about 5% with the 7% contribution of occupational segregation. In addition, both variants of the decomposition have shown that differences in educational endowments between sexes tended to reduce GPG by 2–5%.

According to Ogloblin (1999) who studied GPG by using 1994–1996 RLMS-HSE data the role of occupational segregation by gender was even more important, accounting for almost 50% of the gap. The next factor was industrial segregation which accounted for about 30%. Therefore, occupational and industrial employment segregation by gender together accounted for more than 80% of GPG (jointly with ownership type). Human capital variables—education and experience—reduced the gap by about 3.5% each, close to the estimates obtained by Glinskaya and Mroz (2000). Finally, a correction for selectivity was able to reduce the unexplained part of the gap by about 11 pp.[5] In sum, the explained part of the gap in this study constituted about 86.5%, which is the highest level attained among all published studies applying the standard Oaxaca-Blinder decomposition for the Russian case.

Deloach and Hoffman (2002) focused on the role of housework is generating GPG. Using 1994–1996 RLMS-HSE data, the authors found that Russian women spend substantially more time doing housework and less time on the job than Russian men. However, according to the authors, this did not lead to relatively low wages of women. Instead, low wages motivate women into doing more housework.

One issue specific to the 1990s is wage arrears. According to existing studies, wage arrears affected men to a larger extent than women (Lehmann and Wadsworth 2001). Gerry et al. (2004) re-examined GPG in 1994–1998 taking into account wage arrears and found that they attenuated the gap in mean earnings by about 7 p.p., which is close the 10 p.p. estimate reported by Lehmann and Wadsworth (2001).

Overall, a relatively large unexplained part of GPG was inherent to almost all studies that applied the standard Oaxaca-Blinder decomposition of GPG in the Russian case (except for Ogloblin 1999). However, the authors did not suggest any explanations or offer any interpretations to this unexplained portion, and they were reluctant to interpret it in terms of discrimination.[6] Instead, they were trying to find

[5]This is in line with results by Arabsheibani and Lau (1999) who used the RLMS-HSE data of 1994 and found that selection was significant for females (and not significant for males) and the explained part of the gap increases by about 10 p.p., after a Heckman correction. However, Gerry et al. (2004) found no evidence that either the male or female wage equations exhibited selectivity bias in RLMS-HSE data of 1994–1998.

[6]The key reason seems to be that the Oaxaca-Blinder decomposition does not allow direct estimation of the extent of discrimination and implicitly attributes the whole unexplained part to discrimination. However, this interpretation is problematic as the unexplained part absorbs all not controlled differences in productivity between males and females, which can exist not only due discrimination.

some external evidence on it. For instance, Ogloblin (1999), builds his previous discussion of discrimination on studies by Standing (1994, 1996), indicating that discrimination on the part of employers was insignificant in Russia, at least at the beginning of transition.

10.3.2 Second-Wave Studies

The 2000s in Russia were characterized by political stabilization and strong and persistent economic growth (until 2009). The size of GPG has stabilized at the 30% level of the men's average wage. In research, the focus has shifted to the sources of the gap, paying more attention to possible discrimination against women.

Oshchepkov (2006) made the standard Oaxaca-Blinder decomposition of GPG by using the NOBUS data of 2003 and explained half of the GPG through traditional economic variables. The key factor contributing to the gap was occupational and industrial segregation (about 45%, jointly with ownership), followed by human capital variables (minus 9.4%) and family factors (about 3.5%). The author also analyzed the distribution of the unexplained part across the overall wage distribution and within different groups of workers and found that the unexplained part was largest among workers of 25–29 and among those with short tenures, indicating statistical discrimination of women.[7]

Ogloblin (2005), by using RLMS-HSE data of 2000–2002, has also found that the employment segregation by gender was the key factor in GPG, accounting for about 75% of the gross differential in monthly earnings. Differences in human capital endowments had the offsetting effect, reducing the gap by about 8%.

Ogloblin and Brock (2005) examined the underpayment gap in Russia's urban labor markets due to monopsony. Using RLMS-HSE data of 2000–2002, the authors found significant differences in the degree of monopsony underpayment between men and women, with a lower degree of underpayment among female workers. These results suggest that the monopsonistic underpayment could be one of the factors reducing GPG in the Russian case, but this issue was abandoned in the subsequent literature.

Kazakova (2007) analyzed the impact of economic growth on GPG in early 2000s by using RLMS-HSE data of 1996–2002. The author found that a temporal increase

---

The underestimation of the extent of discrimination is also possible because part of industrial and occupational segregation may be caused by discrimination.

[7] Statistical discrimination is based on the assumption that different groups of workers have different average levels of productivity. If members of one group are on average more productive than members of another group, and if it is costly to determine the actual productivity of an employee, employers may find it profitable to pay workers based on data on average levels of productivity. Therefore, even when hiring a woman with a high personal level of productivity, employers can still offer her a lower wage. It should be noted that from the point of view of economic theory, statistical discrimination can eventually exist, only if the inter-group differences in average levels of productivity are real and do not just exist in the minds of economic agents.

in GPG in 2000 was due to reduction in the extent of wage arrears. In line with the results of previous studies, the key source of GPG was occupational segregation of employment by gender, explaining 30–60% of GPG. Human capital variables (education and experience) reduced GPG by about 10%.

While the issue of discrimination became more popular among scholars in the 2000s than it was in the 1990s, the quantitative evidence on discrimination was still rare,[8] and researchers relied mostly on qualitative evidence, case studies, or interviews. For instance, Roshchin and Zubarevich (2005) analyzed job announcements placed by employers. They found that a large percentage of them was non-neutral in terms of gender. Employers preferred women as accountants and secretaries, but they preferred men as programmers, lawyers, and engineers.

A report by the Moscow-Helsinki Group (Moscow-Helsinki Group 2003) considered three forms of discrimination against women in the labor market: in hiring, in pay, and throughout career growth. Based on focus groups organized across 20 Russian regions, the following results were obtained: at the time of hiring, men were preferred to women mostly in situations where women either already have children or may have children in the future. Regarding pay, statistical discrimination is widespread: employers are of the opinion that women, on an average, are less productive than men, because women think more about family and children due to which they tend to dedicate less time and effort to work. In terms of career growth, available data clearly certify the insufficient representation of women in directors' positions in comparison with that of men (e.g., see Roshchin and Solntsev 2006). Nevertheless, there are no clear estimates that show how far such insufficient representation of women is a consequence of discrimination, or that of distribution on the basis of meritocratic principles.

Another trend in the literature in the 2000s is an emerging interest in differences in psychological traits and non-cognitive skills between sexes and their possible role in explaining GPG. Although evidence on such differences is still scarce in Russia as well as in other post-socialist countries (see Khitarishvili 2019), existing results suggest that these differences contribute to GPG to a much lesser extent than traditional economic factors (see Linz and Semykina 2008, 2009; Semykina and Linz 2007, 2010). This interest intensified in the 2010s; in 2016, RLMS-HSE measured respondents' psychological traits within the Big-5 framework. While published articles using these data are still rare, few existing studies indicate that men and women expectedly differ in psychological traits, which may affect their earnings and slightly reduce the portion of GPG unexplained by traditional economic variables (Maksimova 2019; Rojkova 2019).

Yet, the literature examining GPG in the 2000s, and particularly in the 2010s, typically used more sophisticated econometric techniques than studies focused on the

[8] Khitarishvili (2019) in her review of GPG in the post-soviet countries mentioned very little quantitative evidence on discrimination. She referred to Asali et al. (2017) who examined discrimination at the hiring stage in Georgia by using an experiment with fictitious resumes and found no evidence of such discrimination.

early transition period. In 2010s, conducting the standard Oaxaca-Blinder decomposition of GPG in mean earnings became clearly not enough for publishing in a peer-reviewed journal, partly because GPG was rather stable over time, and its chief driving factor—occupational and industrial employment segregation by gender—and chief offsetting factor—human capital endowments—were well understood. The popular methodological extension is to analyze GPG not only at the mean but also at different parts of the wage distribution. Following this way, Atencio and Posadas (2015) examined GPG by using the methodology of Fortin et al. (2011), which allows the estimation of the contribution of each covariate included in the wage equation on the wage structure and composition effects along the earnings distribution. Analyzing RLMS-HSE data of 1996, 2002, and 2011, the authors found that the raw GPG varies considerably along the earnings distribution, being lower toward its center. In addition, the contribution of wage structure components (differences in returns to characteristics) was increasing with the position in the wage distribution, while the largest unexplained gap was found at the top of the distribution, indicating toward glass-ceiling effect.

Finally, it should be mentioned that the possible impact of events specific to the 2000s and 2010s, including doubling the minimum wage in 2007 and 2009 (see Lukyanova 2011; Muravyev and Oshchepkov 2013) and sanctions and contra-sanctions imposed from 2014 has been left almost unexamined in the existing literature on GPG, which could be an engaging avenue for future research.

10.4 Sources of GPG in Russia: Oaxaca-Blinder Decomposition During 1994-2018 by Using RLMS-HSE Data

10.4.1 RLMS-HSE Data: A Brief Description

RLMS-HSE is the key source of data to study GPG and many other labor market issues at the individual level in Russia. The survey provides representative micro-data for each year since 1994 (except for 1997 and 1999). It allows the measurement of the rich set of individuals' socio-demographic and employment characteristics, including age, education, wage, tenure, occupation, etc. The analysis presented in this chapter uses RLMS-HSE data from 1994 to 2018.

10.4.2 Methodology

To analyze the sources of GPG in Russia, the author employs the standard Oaxaca-Blinder decomposition (Oaxaca 1973; Blinder 1973), developed in subsequent studies by Neumark (1988), Oaxaca and Ransom (1994, 1999), and Newman and

Oaxaca (2004). At the first stage, mincerian-type wage equations are estimated separately for men and women:

$$\ln(\text{Wage}_i) = \alpha + \beta_1 * \text{HC}_i + \beta_2 * \text{Fam}_i + \beta_3 * \text{Job}_i + \beta_4 * \ln(\text{Hours}_i) + \beta_5 * \text{Controls}_i + \varepsilon_i \quad (10.1)$$

where *Wage* is monthly wages; *HC* is the set of individual human capital characteristics (age and age squared to proxy labor market experience, education, tenure, and tenure squared); *Fam* is the set of family characteristics (marital status and children of different ages); *Job* contains job-related characteristics, including occupation, industry, enterprise size, and ownership type; *Hours* is monthly working hours; *Controls* include settlement type and regional dummies; ε is the conventional error term.

Monthly wages have been used on LHS of Eq. (10.1) because hourly pay is not common and institutionalized in the Russian labor market. Most workers are paid monthly and, for instance, the minimum wage is set on the monthly base. The inclusion of working hours to RHS allows the adjustment of differences in monthly wages to differences in working hours along with the estimation of the contribution of differences in working hours between men and women to the overall gender gap in (monthly) wages. Moreover, as Eq. (10.1) suggests, a simple division of monthly wages by the number of hours worked is correct, only if β_4 is close to one. (Looking ahead, the estimations show that β_4 is around 0.3 in the Russian case).

When estimating Eq. (10.1) for men and women, one should consider a possible sample selection. Generally, if a probability of inclusion to the sample is lower (higher) for low-paid workers, then the average wage will be (under-) overestimated. If men and women differ in direction and/or magnitude of that selection, it should have an impact on GPG. To adjust for this, the standard Heckman procedure is used (Heckman 1979). (However, the estimations show that the Heckman's correction almost does not affect the estimates of coefficients in wage equations for men and women, while ρ is insignificant in both cases, which is in line with earlier studies by Gerry et al [2004] and Oshchepkov [2006]. Therefore, this factor is not discussed in the empirical section where the results of the Oaxaca-Blinder decompositions are presented and discussed).

At the second stage, the difference in the average logarithms of wages between men and women is decomposed into four components:

$$\ln \overline{W}_m - \ln \overline{W}_w = \overline{X}_m \widehat{\beta}_m - \overline{X}_w \widehat{\beta}_w = \overline{X}_m (\widehat{\beta}_m - \beta*) + \overline{X}_w (\beta * - \widehat{\beta}_w) + (\overline{X}_m - \overline{X}_w)\beta * + (\lambda_m \widehat{\beta}_m - \lambda_w \widehat{\beta}_w) \quad (10.2)$$

,

where $\overline{W}_m$ и $\overline{W}_w$ are a geometric means of men's and women's wages, respectively;$\widehat{\beta}_m$ and $\widehat{\beta}_w$ are vectors of the estimated coefficients from the wage equation estimated separately for men and women, respectively; $\overline{X}_m$ и $\overline{X}_w$ are sets of average values of worker and job characteristics for men and women, respectively;

$\beta*$ coefficients of worker and job characteristics in the absence of discrimination in pay (see below); $\widehat{\beta}_m\lambda_m$ and $\beta_w\lambda_w$ are the elements which correct for possible gender differences in the sample selection (λ are the inverse Mill's ratios received from the Heckman procedure).

The key aspect of this decomposition is how to define $\beta*$. Generally, in the absence of discrimination, the structure of wages lies between the actual earnings structures of men and women. Following Oaxaca, many authors assume $\beta* = \beta_m$ or $\beta* = \beta_w$. Hence, they receive two estimates for the unexplained part of GPG (see Oaxaca 1973). However, there are many examples when a difference between these two estimates is quite large, and it is not clear which of them should be used. Moreover, this approach does not consider the existing gender composition of employment. For instance, if female workers constitute 90% of total employment, it is difficult to think that the earnings structure in the absence of discrimination is close to men's earnings structure.

Neumark (1988) proposed estimating $\beta*$ in the following way:

$$\beta*_j = \frac{W_{mj}M_j + W_{fj}F_j}{M_j + F_j} \tag{10.3}$$

,

where M_j and F_j are quantities of men and women among workers of type j. In other words, in the absence of discrimination, wages are the weighted average of wages of men and women under discrimination. In practice, $\beta*$ can be obtained from an estimation of the joint wage equation by using pooled sample of males and females.

Following Neumark (1988), we take $\beta*$ as an earnings structure obtained from the estimation of the wage equation jointly for men and women.[9] Hence, the first term of the decomposition (2) is the difference between actual men's wages and wages that they would receive, if their wage structure was the same as $\beta*$ (e.g., in the absence of positive discrimination of men). The second term is a difference between actual women's wages and the wages they would receive, if their wage structure was the same as $\beta*$ (e.g., in the absence of discrimination of women). Together, these terms constitute the unexplained part of GPG. The third term is supposed to reflect the difference in wages due to differences in endowments (Xs) between men and women. The fourth term represents wage differentials due to the varying direction and/or magnitude of selection of samples of men and women workers. Together, the last two terms constitute the explained part of GPG.

The key indicator of interest is the share of the explained part, i.e., the part of GPG which can be explained by differences in endowments (and selection) between sexes. As the explained part is a simple sum over the contributions of individual factors, it can be easily decomposed further to identify the contribution of each factor (endowment). The decomposition of the unexplained part is less straightforward as the contributions of factors to the unexplained part may depend on arbitrary scaling

[9]This approach was used earlier in a few studies on Russia (e.g. Gerry et al. 2004; Ogloblin 1999; Oshchepkov 2006).

decisions, if the predictors do not have natural zero points (see Jann 2008). In addition, the contributions of categorical predictors depend on the choice of the omitted base category. A possible solution is to transform the coefficients estimated at the first stage of men's and women's wage equations, so that they reflect deviations from the grand mean, which makes the results independent of the choice of the base category (see Jann 2008 for more details).

This study decomposes the overall GPG to the explained and unexplained parts and further decomposes both into contributions of different factors. These decompositions are made for each year during the period 1994–2018, which allows for tracing the evolution of the (un)explained part as well as the relative contributions of different factors to GPG over time. All decompositions were performed in Stata by using—*oaxaca*—module (Jann 2008).

10.4.3 Variables and Measurement

To measure individual monthly wages (at the primary job), we use answers to the following question: "*How much money did you receive in the last 30 days from your primary job after taxes? If you received all or part of the money in foreign currency, please convert that into rubles and report the total.*" To mitigate the role of outliers and decrease the probability of errors, all reported wages which are less than bottom 0.5% and greater than top 99.5% of the wage distribution for each year are recoded to missings.

Education is measured as the highest educational level attained by using already constructed variable provided with the dataset.

The length of tenure is measured as a difference between the calendar date of the survey and the date of the beginning of work at the current job. As in Oshchepkov (2016), the author first measures the tenure in months and then divides it by 12. In cases when the month of the job start was not provided, it was assumed to be June to keep observations.

To measure monthly working hours at the primary job, answers to the following question are used: "*How many hours did you actually work at your primary job in the last 30 days?"* All values exceeding 360 hours were recoded to missing values.

Marital status was measured by using the already constructed variable provided with the dataset. The parental status of workers was constructed by using information from the family ties section of the household questionnaire, which allows for counting the number of children and their age. (A direct question on the number of children appeared in RLMS-HSE only in 2004, and it allows for distinguishing children of different ages, which may be crucial for the understanding of the influence of children on men's and women's wages.) We distinguish between children of four age groups: 0–2, 3–6, 7–17, and 18+ .

Job characteristics include occupation (according to Russian OKZ which is equivalent to ISCO-88), enterprise ownership (state or private), industry (according to Russian OKVED which is equivalent to NACE), and size. As the industry variable

is available in the RLMS-HSE data only since 2004, two series of decomposition results are conducted: one is for the whole period 1994–2018 without the industry variable, the other one is for the period 2004–2018 with the industry variable. The size of enterprise is measured as a categorical variable distinguishing six grades: 10 and less employees, 11–50, 51–100, 101–500, 501–1000, and 1000+.

Following most previous papers on Russia and other post-soviet countries (e.g., Atencio and Posadas 2015; Kazakova 2007; Pastore and Vereshagina 2011) the author excludes self-employed from the sample as principles and factors of the determination of their incomes may be quite different from wage determination of employees. Employees in military forces are also excluded.

10.4.4 Main Findings

To begin with, we present the results of the Oaxaca-Blinder decomposition for the available period, from 1994 to 2018, based on the estimated wage equations which do not consider the industry variable. Figure 10.4 presents the size of explained and unexplained parts of the gap measured in absolute terms (in log points, left scale) and the relative size of the explained part measured in percentages of the overall GPG (right scale).

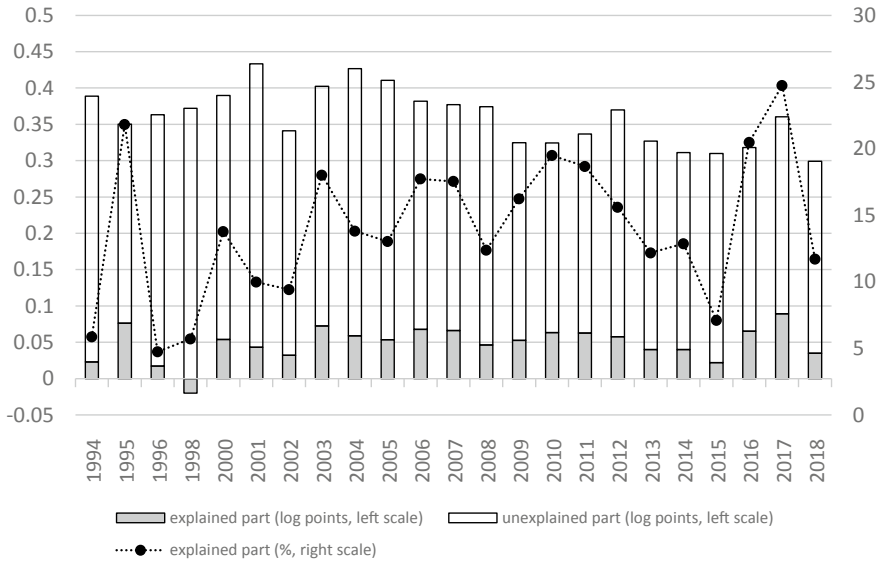

Fig. 10.4 The size of the explained and unexplained parts of GPG after the Oaxaca-Blinder decomposition in 1994–2018 (decomposition results without industries) (*Source* the author's estimations using RLMS-HSE data)

The share of the explained part varied over time—from less than 5% (in 1996) to 25% (in 2017)—and never reached the share of the unexplained part. No clear trend in the dynamics of explained part is visible; its time pattern was quite irregular and not related to macroeconomic conditions and wage inequality. In 1998, the explained part was even negative in absolute terms, suggesting that traditional economic variables were helpless in explaining GPG in that year. The average value of the explained part over the entire period was about 14%.

Figure 10.5 shows decomposition results for the period 2004–2018, when the information on industrial affiliation of jobs was available in the RLMS-HSE data. Taking industries into account raises the explained portion of the gap by 1.5–2 times. The maximum value of the explained part reaches 32% (in 2017), while its minimum value rises to about 15% (in 2015). The average value of the explained part over 2004–2018 exceeded 25%. These results clearly suggest that the industrial segregation of employment by gender is an important factor of GPG in Russia, in line with conclusions of most previous studies.

Next, the structures of the explained and unexplained parts of GPG are analyzed. As industrial segregation of employment by gender makes a large contribution to GPG, the analysis is continued for the period 2004–2018, when the industry variable is available. Figure 10.6 shows the structure of the explained part for this period.

In any year, employment segregation by gender was clearly the key factor generating GPG. Its contribution varied from about 23% of the total GPG (in 2018) to more than 35% (in 2007), while its average value over time was about 30%. These estimates are quite akin to those of previous studies in Russia.

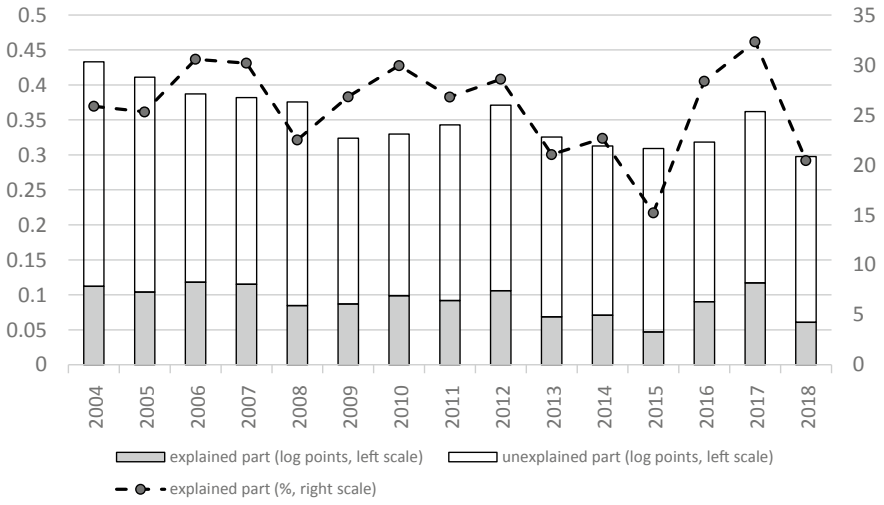

Fig. 10.5 The size of the explained and unexplained parts of GPG after the Oaxaca-Blinder decomposition in 2004–2018 (decomposition results with industries) (*Source* the author's estimations using RLMS-HSE data)

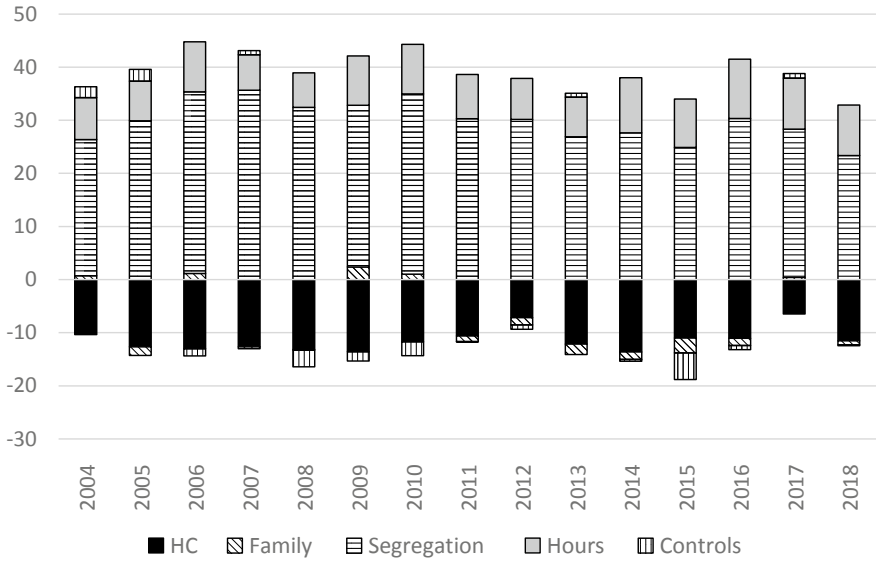

Fig. 10.6 The structure of the explained part of GPG (in % of total GPG) in 2004–2018 (*Source* the author's estimations using RLMS-HSE data)

The second largest contribution comes from the human capital variables. The joint contributions of age, education, and tenure was 6–13% of GPG, with the average value of more than 11%. The contribution of these variables to GPG was, however, negative. Human capital variables tended to reduce GPG, as women, on an average, have larger human capital endowments than men. If women would not have that advantage, GPG would be larger. This result is also completely in line with the results of all previous studies.

The contribution of working hours fluctuated from 6.5 to 10% over time, with the average value of 8.5%. The positive contribution of this factor to GPG in monthly wages is quite expected as women traditionally work less hours than men in the labor market. Once this difference is controlled, the overall gap shrinks.

The contribution of family characteristics varied in the range from +2.5% to − 2.5% from year to year, with the average value over the period close to zero. Such a weak contribution of the family factor is related to the natural fact that differences in marital and parental statuses between men and women, on average, are quite small.

The joint contribution of the group of control variables, including the settlement type and region, was also quite small. However, in certain years it reached 5% of GPG. Therefore, the uneven distribution of men and women across urban and rural areas and regions should be taken into account when performing the standard Oaxaca-Blinder decomposition of GPG using RLMS-HSE data.

The structure of the unexplained part of GPG over time is presented in Fig. 10.7. In most years, the largest contribution to the unexplained part came from the difference in constant terms of wage equations estimated separately for men and women. Its

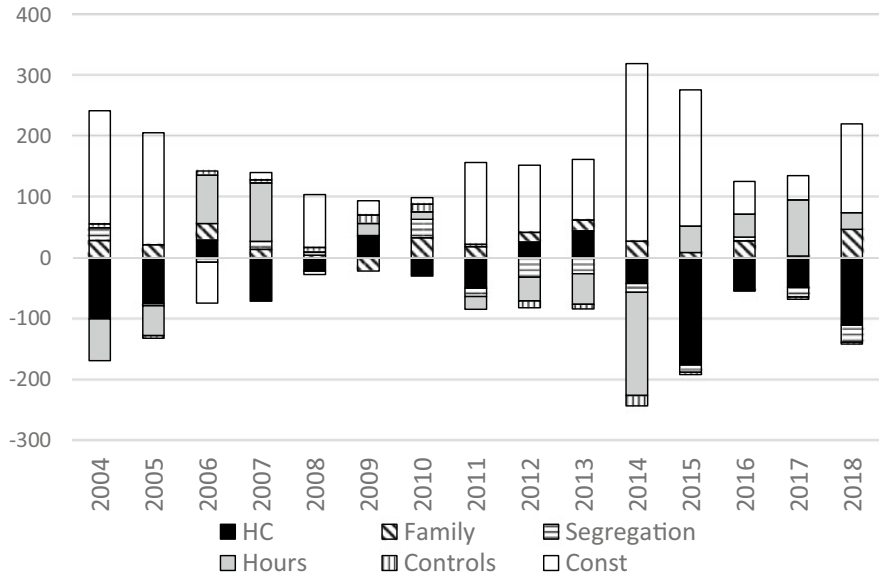

Fig. 10.7 The structure of the unexplained part of GPG (in % of the total GPG) in 2004–2018 (*Source* the author's estimations using RLMS-HSE data)

contribution often exceeded 100% of GPG. Although the large contribution of the constant term is typical for the results standard Oaxaca-Blinder decomposition, it does not have clear interpretations because it reflects wage differentials between sexes due to unobserved factors.

The next largest contribution comes from variables reflecting human capital. Differences in returns to human capital endowments (age, tenure, and education) shorten the gap, like the differences in the human capital endowments, as previously mentioned. On an average, their joint contribution was about 45%. The underlying reason is that women tend to receive higher returns to returns to human capital (formal education and experience) than men. (For instance, in 2018 the return to higher education relative to the secondary education was about 30% among women and only 20% among men.)

Family characteristics (marital status and children) take the third place among factors driving the unexplained part of GPG. Their joint contribution was, on an average, about 18.5%. While family characteristics themselves do not differ much between men and women, estimated coefficients of these characteristics in gender-specific wage equations, generally differ. While women experience motherhood penalties (e.g., Biryukova and Makerentseva 2017), men get marital and fatherhood premiums (Aistov 2013; Oshchepkov 2020).

Employment segregation by gender takes only the fourth place in this ranking of factors contributing to the unexplained part. While the average contribution of this factor over time was minus 5.5%, it exhibited a large variation from year to year,

ranging from plus 30% to minus 31.5%. The reason is that occupational and industrial wage structures among women differ from the wage structures existing among men (for instance, the estimation of wage equations show that women tend to receive higher wage premium than men when working as professionals, while men receive higher wage premium than women when working in elementary occupations), and these differences may play either in favor of women, reducing GPG, or against them.

The contribution of working hours was also quite irregular over time. While the average contribution of this factor during 2004–2018 was just about 1%, it ranged from almost plus 100% to minus 170%. Such fluctuations are related to the fact that the elasticity of monthly wages, with respect to working hours (reflected in coefficient β_4), was changing from year to year. While in some years this elasticity was greater among women than men (as in 2014), in other years it was less than that among men (as in 2007). Unfortunately, these yearly changes do not have clear substantive explanations and are likely related to changes in the composition of the yearly RLMS-HSE samples.

10.5 Conclusion

This chapter is dedicated to the gender pay gap in Russia. First, it reviews the existing literature, covering key studies published in international and Russian academic journals peer-reviewed journals. Second, it provides results of the standard Oaxaca-Blinder decomposition of GPG by using RLMS-HSE micro-data for the period from 1994 to 2018. This analysis allows for formulating a few stylized facts and conclusions concerning the size, evolution, and sources of GPG in Russia and highlighting some promising avenues for future research.

Firstly, the raw GPG in Russia is large compared to most developed countries. Population surveys (RLMS-HSE) and enterprise statistics (Rosstat) agree that its value was rather stable over the entire period of observation, ranging between 30 and 35% of men's average wage.

Secondly, all studies applying the standard Oaxaca-Blinder decomposition agree in that the main factor generating GPG in Russia is occupational and industrial employment segregation by gender. Decompositions during the period 2004–2018 show that this segregation may account for 20–35% of the raw GPG in mean monthly wages, depending on the year when the decomposition is conducted. Another stylized fact is that the differences in human capital endowments between sexes, particularly in educational attainments, tend to offset GPG, reducing it by about 6–13%. The fact that women usually work for lesser hours in the labor market than men widens GPG in mean monthly wages by 6.5–10%. Differences in family endowments—marital status and children—almost do not affect GPG, while the contribution of such variables as settlement type and region is marginal as well.

Thirdly, the major part of GPG in Russia cannot be explained by traditional economic variables including human capital, employment segregation, family characteristics, and working hours. Therefore, the key challenge to future quantitative

studies in Russia is to find explanations for the large unexplained part. While the standard Oaxaca-Blinder approach implicitly assumes that all unexplained differences in pay reflect discrimination of women, this explanation is clearly not satisfactory due to methodological limitations of this approach. Moreover, existing quantitative, qualitative, or experimental evidence on discrimination in Russia is scarce.

Fourthly, the analysis of the structure of the unexplained part may provide useful insights to the sources of the unexplained part of the gap. Although the largest relative contribution to the unexplained part comes from the difference in constant terms of the gender-specific wage equations, which does not have a clear substantive interpretation, examining contributions of other factors seems to be informative, indicating interesting avenues for future research. Decompositions made in this study show that a relatively large portion of GPG in Russia exists due to the gender differences in wage returns to human capital and family characteristics. Therefore, explaining these differences could help in understanding the overall GPG. Some insights can be made relying on the results of studies that analyzed marital and parenthood wage premiums and penalties. These results show that most differences between sexes are attributed to (self)selection of men and women with different individual productivity-related characteristics to marriage and parenthood (e.g., see Aistov 2013; Oshchepkov 2020). This heats the further interest on psychological attributes and non-cognitive skills and their role in wage formation and generating GPG in Russia, which emerged in the late 2000s.

Finally, the Oaxaca-Blinder decomposition results during the period from 1994 to 2018 presented in this chapter illustrate how the overall size of the explained part of GPG as well as the contributions of different factors may vary over time, differing even between two consecutive years under similar macroeconomic conditions. This suggests that any conclusions derived from examining data only for one particular year should be considered with caution. Therefore, a "good" practice could be to replicate results obtained for one year by using data on consecutive years.

Acknowledgements The author is grateful for the financial support provided by the Russian Academic Excellence Project '5–100' within the framework of the HSE University Basic Research Program.

References

Aistov A (2013) Supruzheskaya premia [Marital Wage Gap]. Appl Econ 31(3), 99–114. (in Russian)

Arabsheibani G, Lau L (1999) 'Mind the gap': An analysis of gender wage differentials in russia. Labour 13(4), 761–774

Asali M, Pignatti N, Skhirtladze, S. (2017) Employment discrimination in Georgia: evidence from a field experiment. Working Paper #04–17. Tbilisi, International School of Economics in Tbilisi

Aswin S, Isupova O (2014) "Behind every great man…": The male marriage wage premium examined qualitatively. J Marriage Fam 76(1), 37–55

Atencio A, Posadas J (2015) Gender gap in pay in the Russian federation, world bank policy research Working Paper No. 7408

Biryukova S, Makerentseva A (2017) Ocenki shtrafa za materinstvo v Rossii [Estimates of the Motherhood Penalty in Russia]. Popul Econ 1(1), 50–70. (in Russian)
Blau F, Kahn L (2017) The gender wage gap: extent, trends, and explanations. J Econ Lit 55(3), 789–865
Blinder A (1973) Wage discrimination: reduced form and structural estimates. J Hum Resour 8(4), 436–455
Brainerd E (2000) Women in transition: changes in gender wage differentials in Eastern Europe and the Former Soviet Union. Ind Labour RelatS Rev 54(1), 138–162
Deloach S, Hoffman A (2002) Russia's second shift: is housework hurting women's wages. Atl Econ J 30(4), 422–432
Fortin N, Thomas L, Sergio F (2011) Decomposition methods in economics. In: Ashenfelter O, Card D (ed) Handbook of labor economics, Vol 4A. San Diego, Elsevier North Holland, pp 1–102
Gerry C, Kim B-Y, Li C (2004) The gender wage gap and wage arrears in Russia: evidence from the RLMS. J Popul Econ 17(2), 267–288
Gimpelson V, Kapelyushnikov R (2011) Labor market adjustment: is Russia different? IZA DP 5588
Gimpelson V, Lippoldt D (2000) The Russian labour market: between transition and turmoil. L., Roman & Litlefield
Glinskaya E, Mroz T (2000) The gender wage gap in wages in Russia from 1992 to 1995. J Popul Econ 13(2), 353–386
Gunderson M (1989) Male-female wage differentials and policy responses. J Econ Lit 27(1), 46–72
Heckman J (1979) Sample selection bias as a specification error. Econometrica 47(1), 153–161
ILO (International Labor Organization) (2011) Equality at work: the continuing challenge. Geneva, International Labour Organization
ILO (International Labour Organization) (2018) Global wage report 2018/2019. Geneva, International Labour Organization
Jann B (2008) The Blinder-Oaxaca Decomposition for Linear Regression Model, Stata Journal 8(4), 453–479
Kapelyushnikov R (2001) The Russian labor market: adjustment without restructuring. Moscow, NRU HSE University—Higher School of Economics (in Russian)
Karabchuk T, Nagernyak M, Suhova S, Kolotova E, Pankratova M (2012) Zhenshchini na rossiyskom rynke truda posle rozhdenia rebenka [Women in the Russian labor market after childbirth]. Vestnik RLMS-HSE 2, 66–94. (in Russian)
Katz K. (1997) Gender, wage and discrimination in USSR: a study of a Russian industrial town. Camb J Econ 21(4), 431–452
Kazakova E (2007) Wages in a growing Russia. Ha is a 10 per cent rise in the gender wage gap is a good news? Econ Transit 15(2), 365–392
Khitarishvili T (2009) Explaining the gender wage gap in Georgia. The levy economics institute Working Paper No. 577
Khitarishvili T (2019) Gender pay gap in the former Soviet union: a review of the evidence. J Econ Surv 33(4), 1257–1284
Lehmann H, Wadsworth J (2001) Wage arrears and the distribution of earnings in Russia IZA DP. 410
Linz S, Semykina A (2008) Attitudes and performance: an analysis of Russian workers. J Socio Econ 37(2), 694–717
Linz S, Semykina A (2009) Personality traits as performance enhancers? A comparative analysis of workers in Russia, Armenia and Kazakhstan. J Econ Psychol 30(1), 71–91
Lukyanova A (2011) Effects of minimum wages on the Russian wage distribution. HSE Working Paper in Economics series, No. 09
Maltseva I, Roschin S (2006) Gender segregation and labour mobility in the Russian labour market (Gendernaya segregatsia i trudovaya mobil'nost' na rossiiskom rinke truda), HSE
Maksimova M. (2019) The return to non-cognitive skills on the Russian labor market. Appl Econ 53, 55–72 (in Russian)

Moscow-Helsinki Group (2003) Discrimination against women in modern Russia. the right to be promoted (Diskriminacia zhenshin v sovremennoi Rossii. Pravo na prodvzhenie v doljnosti), Report (in Russian). Available at http://www.owl.ru/rights/women2003/discr-main.html
Muravyev A, Oshchepkov A (2013) Minimum wages, unemployment and informality: evidence from panel data on Russian regions. IZA DP. No. 7878
Newell A, Reilly B (1996) The gender wage gap in Russia: some empirical evidence. Labour Econ 3(3), 337–356
Newell A, Reilly B (2001) The gender gap in the transition from communism: some empirical evidence. Econ Syst 25(4), 287–304
Newman S, Oaxaca R (2004) Wage decompositions with selectivity-corrected wage equations: a methodological note. J Econ Inequal 2(1), 3–10
Neumark D (1988) Employers' discriminatory behavior and the estimation of wage discrimination. J Hum Resour 23(3), 279–295
Oaxaca R (1973) Male-female wage differentials in urban labour markets. Int Econ Rev 14(3), 693–709
Oaxaca R, Ransom M (1994) On discrimination and the decomposition of wage differentials. J Econ 61(1), 5–21
Oaxaca R, Ransom M (1999) Identification in detailed wage decomposition. Rev Econ Stat 81(1), 154–157
Ofer G, Vinokur A (1992) The Soviet household under the old regime: economic conditions and behaviour in the 1970s. Cambridge, Cambridge University Press
Ogloblin C (1999) The gender earnings differential in the Russian transition economy. Ind Labour RelatS Rev 52(4), 602–627
Ogloblin C (2005) The gender earnings differential in Russia after a decade of economic transition. Appl Econ Int Dev 5(3), 5–26
Ogloblin C, Brock G (2005) Wage determination in urban Russia: underpayment and the gender differential. Econ Syst 29(3), 325–343
Ortiz-Ospina E, Roser M (2020)— Economic inequality by gender. Published online at OurWorldInData.org. Retrieved from: https://ourworldindata.org/economic-inequality-by-gender
Oshchepkov A (2006) Gender wage gap in Russia. HSE Econ J 10(4), 590–619. (In Russian)
Oshchepkov A (2016) The pitfalls of measuring employment tenure with the RLMS—HSE data. HSE Working paper WP3/2016/04. (In Russian)
Oshchepkov A (2020) The fatherhood wage premium in Russia. HSE Econ J 24(2), 157–190. (In Russian)
Pastore F, Verashchagina A (2011) When does transition increase the gender wage gap? An application to Belarus. Econ Transit 19(2), 333–369
Perugini C, Selezneva E (2015) Labour market institutions, crisis and gender earnings gap in Eastern, Europe. Econ Transit 23, 517–564
Reilly B (1999) The gender pay gap in Russia during the transition, 1992–1996. Econ Transit 7(1), 245–264
Rojkova K (2019) The return to noncognitive characteristics in the Russian labor market. Vopr Ekon (11), 81–107. (In Russian)
Roshchin S, Solntsev S (2006) Who Breaks the 'Glass Ceiling'? Vertical Gender Segregation in the Russian Economy (Kto preodolevaet "steklyanni potolok"? Vertikal'naya gendernaya segregatsia v rossiiskoi ekonomike). HSE Working Paper WP4/2006/03
Roshchin S, Zubarevich N (2005)Gender equality and the extending of rights and opportunities of women in Russia, in the context of millennium development objects (Gendernoe ravenstvo i rasshirenie prav i vozmojnostei zhenshin v Rossii v kontekste celei rasvitia tysyacheletia), UNDP report, 2005
Semykina A, Linz S (2007) Gender differences in personality and earnings: Evidence from Russia. J Econ Psychol 28(3), 387–410
Semykina A, Linz S (2010) Analyzing the gender pay gap in transition economies: how much does personality matter? Hum RelatS 63(4), 447–469

Shapiro J (1992). The industrial labour force. In: Buckley M (ed) Perestroika and Soviet Women. Cambridge, UK, Cambridge University Press
Standing G (1994) The changing position of women in Russian industry: prospects of marginalization. World Dev 22(2), 271–283
Standing G (1996) Russian unemployment and enterprise restructuring: reviving dead souls. NY, St. Martin's Press
UNDP (United Nations Development Program) (2019) Human development report. NY, United Nations Development Program
White A (2005) Gender roles in contemporary Russia: attitudes and expectations among women students. Eur-Asia Stud 57(3), 429–455

Chapter 11
Motherhood Wage Penalty in Russia: Empirical Study on RLMS-HSE Data

Tatiana Karabchuk, Tatiana Trach, and Varvara Pankratova

Abstract The chapter is dedicated to the analysis of monthly and hourly wages of mothers and non-mothers in Russia. Russian Longitudinal Monitoring Survey HSE is used for the data basis to estimate the motherhood wage penalty between working women without children and working mothers. The study discloses 11% penalty for mothers in their hourly wages on average in Russia in the period of 2000–2015. Despite same level of education, tenure, qualification women with two and more children are paid considerably less than women without children. The small age of the youngest child affects the working hours which reduce the monthly wage considerably, but it does not impact the hourly wage penalty. The chapter shows that the motherhood wage penalty in Russia is lower than in Germany, UK or the US especially for the mothers with pre-school age children.

Keywords Women · Monthly wages · Hourly wage rate · Motherhood wage penalty · Russia

11.1 Introduction

Within last two decades the job opportunities for women across the world became bigger and richer. More and more women are taking leading positions in the fields which were always considered to be men's domains. One can put here such examples as recent changes in the Global political arena: females were appointed/elected as Prime Minister of Finland, Prime Minister of New Zealand, President of Slovakia, Kanzler in Germany and many more. Russia as well experienced more women

T. Karabchuk (✉)
Department of Government and Society, United Arab Emirates University, Al-Ain, United Arab Emirates
e-mail: tkarabchuk@uaeu.ac.ae

T. Trach
Johnson & Johnson, Moscow, Russia

V. Pankratova
Prosveshcheniye Publishing, Moscow, Russia

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_11

appearing in the top managerial positions and even ministers' positions. However, the wages of women as CEOs are considerably lower than men's salaries as CEOs.

The gender pay gap is widely discussed in the world and Russian academic literature (Zhitnikova 2010; Zelenskaya 2010; Oshchepkov 2007; Roshchin and Solntsev 2006). This book sheds light on the contemporary gender differences in wages in several post-soviet countries (see Chapters 7–9). But gender pay gap is not the only issue that women face in the labor market. There is also maternity wage penalty which is less discussed in the literature but deserves high attention from researchers, policy makers and societies.

It was shown that motherhood wage penalty significantly affects the continued retirement and standard of living of women after working age (Möhring 2017). Women who have children, especially young ones, face difficulties in their career and professional development as well as they are paid less than the women without children (Nizalova 2017; Nizalova et al. 2016; Kahn et al. 2014; Napari 2007; Nielsen et al. 2004; Anderson et al. 2003; Avellar and Smock 2003; Budig and England 2001).

Young mothers remain the most vulnerable category of workers among all women despite a recent increase in the female labor participation rates due to part-time employment growth. The share of mothers who return to the labor market after the childbirth varies greatly across countries and depends on the national labor market conditions, childcare availability and legislation, as well as measures taken by states to support motherhood and childhood. Thus, the female employment rate falls by 60 percentage points in Germany in the first year after the childbirth, by 30 percentage points in the UK, by 16 percentage points and 6 percentage points in Denmark and Italy respectively (Sommerfeld 2008).

Women who worked before the childbirth face many difficulties when returning to the labor market. Often the job opportunities for women with small children are reduced to the jobs with lower qualifications, jobs with lack of career growth, jobs with lower working hours or less paid jobs (Neumark and Korenman 1994; Waldfogel 1998a; Anderson et al. 2003). Young mothers are in a less favorable position when looking for a full-time job, as it is not profitable for employers to hire them. As a result, women with small children are discriminated firstly in hiring and job opportunities, and secondly, in payment, which means that they receive lower wages than men and women without children while having same level of qualification. Moreover, in the modern world, the concepts of "ideal employee" and "caring mother" are increasingly moving away from each other (Corinaldi 2019).

Employers give preference to men or women without children, explaining it by the fact that young mothers have on average lower productivity than other workers (Anderson et al. 2002; Napari 2007). It is argued, that due to the break in their working life for childbirth and maternity leave, women often lose in their productivity, experience, and specific human capital. But at the same time, even if their labor productivity does not differ from other categories of workers, mothers still receive lower wages (Napari 2007; Anderson et al. 2002, 2003; Budig and England 2001; Waldfogel 1997).

There is a definite shortage of studies devoted to motherhood wage penalty in Russia. Therefore, the goal of this chapter is to identify differences in wages between

mothers and non-mothers and to disclose the determinants affecting the wages. How much less are mothers paid than women without children in Russia in comparison with Western countries?

The chapter consists of the following sections: first, it provides the theoretical background and review of existing studies on motherhood wage penalty in the world. Second, it provides the empirical analysis of the situation in Russia, based on the RLMS-HSE survey data, describing first methodology and variables to be used and then the results of the analysis. The results present the dynamics of changes in women's wages after the childbirth; disclosure of the factors affecting the wages of mothers and non-mothers; and estimation of the motherhood wage penalty.

11.2 Why Do Mothers Get Lower Wages? Theoretical Explanation

Over the past two decades researchers started to pay more attention to gender gaps in employment opportunities, wages, and career growth. Less research was dedicated to maternity and paternity labor market outcomes. Never the less previous studies clearly showed the motherhood wage penalty for most European and Western countries ranging from 4% to 23% on average across OECD countries (Budig and England 2001; Anderson et al. 2002, 2003; Avellar and Smock 2003; Nielsen et al. 2004; Napari 2007; Kahn et al. 2014; Nizalova et al. 2016; Nizalova 2017). Detailed research on the US longitudinal data speaks for the clear increase of the wage penalty for the number of children: from 5% per one child to 17% for three children and more (Kahn et al. 2014; Waldfogel 1998a, b). The message from the growing body of research is very clear: women who gave birth to children at their younger ages and those who have more than two children suffer the most from the wage penalty (Miller 2011; Kahn et al. 2014; Nizalova et al. 2016; Nizalova 2017).

Mothers due to their maternity breaks in work loose possible opportunities for accumulating human capital and develop their careers (Aisenbrey et al. 2009; Anderson et al. 2003). They have to balance between family responsibilities and work. Often the amount of time and efforts they can dedicate to work is less than non-mothers do. The human capital[1] that is measured as accumulated education, skills, and work experience for working mothers affects productivity and that serves often as main explanation of differences in wages (Budig and England 2001; Gangl

[1]Harry Becker's theory of human capital explains, first the existence of a gender pay gap due to the uneven distribution of men and women by industry and occupation (Becker 1964; Mincer and Polachek 1974). In accordance with this approach, women occupy positions in those sectors of economics and give preference to those professions that require less investment in human capital, since the period during which they pay off is shorter than that of men (women spends less time on labor market than men). Companies, for their part, can also give preference to men and avoid hiring women (especially with young children), to places where the presence and application of a large amount of specific skills is required (since women may also have interruptions in work due to the birth of children).

and Ziefle 2009). Mothers receive less than women without children, because having children they lose their skills and do not accumulate work experience (Budig and England 2001). Another reason can be that when mothers do not work, they do not invest in human capital, also they do not use skills or do not practice what they learned earlier (in educational institutions, on further training, etc.), then received human capital begins to deteriorate. It is expected that mothers will take more sick days or reduce their working hours, so employers compensate for low performance with lower salaries. Less experienced due to the childbirth breaks working mothers get less paid in comparison with the non-mothers who were constantly employed without any breaks (Napari 2007). However, recent studies explicitly showed that these wage differences remain strong and significant even after the human capital indicators are controlled (Kahn et al. 2014).

Qualification and skills level play an important role in the motherhood wage penalty. Women with young children receive less than 10–20% on the periphery of the labor market[2] (Kahn et al. 2014; Napari 2007). Many women with small children are forced to take jobs in the periphery of the labor market where specific knowledge, high level of education and extensive experience are not required and at the same time lower salaries are paid. However, the recent studies proved that the more qualified women receive lower penalty for motherhood than the less qualified mothers, in some cases even the premium for motherhood is fair for the first group (England et al. 2016; Lutter and Schröder 2019). In the case of highly qualified women, the first child creates the least severe penalty for motherhood, most often even a premium for motherhood (Lutter and Schröder 2019; Doren 2019). The pay penalty for motherhood becomes severer with the second or third child, depending on the level of qualification of the woman (Kahn et al. 2014; Doren 2019). Today, we can confidently say that the level of qualification of a working mother affects negatively the size of the motherhood wage penalty.

Another explanation for the wage gap between mothers and non-mothers could stem from the theory of compensating differences, it is assumed that wage differences exist due to the objective characteristics of the work itself - at more risky, harmful enterprises, a "bonus" is paid for less comfortable working conditions, that is, the attractiveness of this workplace is enhanced by higher wages (Rosen 1987; Goldberg 1982). Building on this theory, women with children (especially small ones) are more likely to be found in those jobs and in those sectors of the economy where there is no great physical exertion, but there are shorter working hours or social package. This means that mothers tend to work on jobs with more comfortable conditions, in terms of combining work and motherhood. Thus, they choose to work part-time, with a more flexible schedule, which provides social guarantees and/or good social package, with paid leave. And for this comfort they have to "depart" with part of their salary.

[2]The periphery of the labor market refers to jobs with low wages, poor working conditions and limited opportunities for career advancement (for example, Napari 2007; Lindbeck and Snower 2002; Doeringer and Piore 1971).

The relation between the type of work of a woman and the motherhood wage penalty was also revealed. Employees whose work is more isolated and less associated with interacting with the teamwork experience a lower pay penalty for motherhood and vice versa (Yu and Kuo 2017).

However, in addition to the cause-effect relations between efforts and wages, there is also an unobservable heterogeneity (selection effect), which considers various characteristics within a certain group that can affect lower wages. For example, lower-income women are more likely to have children (Budig and England 2001). Then the observed effect of children on income is not causal, but exogenous. Even women with the same qualifications can potentially have different wages, if their motivation to work depends on whether they have children or not. Women can differ in their internal and psychological attitudes regarding work and wages. It is important to consider this fact; otherwise, the influence of children on women's wages can be overestimated.

11.3 Wage Determinants and Motherhood Wage Penalty in Empirical Studies

Table 11.1 gives an overview of the results from previous studies on motherhood wage penalty in different countries. The research was concentrated mainly in such countries as the US and UK, not that much was tested in the post-socialist countries or post-soviet space. The information allows to make the following statements: (1) the wage penalty varies from 4 to 20% across the countries. (2) The wage penalty is higher for two and more children than for one child. (3) The wage penalty is higher for working mothers with small children, when the children grow up the differences in wages become smaller (see Table 11.1 for more details).

The following determinants of female wages and motherhood wage penalty were discovered from the systematic literature review:

- *Marital status and the income of husbands or income of other family members*: marriage can both increase the wage penalty (Budig and England 2001) and decrease it (Avellar and Smock 2003). The higher the husband's income, the greater the wage penalty for motherhood (Anderson et al. 2003).
- *Number and age of children:* Women with more children have lower salaries (Budig and England 2001; Avellar and Smock 2003). Also, the number of children directly increases the wage penalty: it is 2–10% for one child and 5–15% for two and more children (Anderson et al. 2003; Kahn et al. 2014). However, the wage gap decreases as children grow older (Anderson et al. 2003; Kahn et al. 2014).
- *The number of working hours and the type of employment*: for temporary and part-time employment, the gap is greater than for permanent full-time work (Budig and England 2001; Anderson et al. 2002).
- *Duration of work interruption*: the longer the break after giving birth, the lower the salary when returning to the labor market (Anderson et al. 2003).

Table 11.1 Previous studies' results on the motherhood wage penalty

Study	Data set (Year, country, data)	Results: wage penalty in %
Waldfogel (1997)	1968–1988, USA, NLS-YW	4% for one child 12% for two or more children
Waldfogel (1998a)	1980s–1990s, USA, NLSY	17% at age 30 in 1980 25% in 1991
Waldfogel (1998b)	USA and UK, NLSY 79 and NCDS	20% for US at age 30 20% for UK at age 33
Budig and England (2001)	1982–1993, USA, NLSY	7% per child 5% if control for work experience
Datta Gupta and Smith (2001)	1980–1995, Dennmark, Danish panel data	6–7% Disappeared by the age of 40
Kunze and Ejrnaes (2004)	1975–1997, IABS, West Germany	10–20% after first child
Viitanen (2004)	UK NCDS	19–22% 10–13% after selection correction
Almuendo-Dorates and Kimmel (2004)	NLSY 79	6.3% for one child 12.5% for two or more children
Nivorozhkina and Nivorozhkin (2008)	2003, Survey of Household Welfare and Participation in Social Programs (NOBUS), Russia	4% on average 8% in the public sector
Gangl and Ziefle (2009)	UK, Germany, USA	9–18% with highest in Germany
OECD (2012)	OECD countries	Gender pay gap between males and females with children: from 2 to 24% across OECD countries. The wage penalty is higher for mothers living in the countries without any family policies
Kühhirt and Volker (2012)	1985–2007, GSOEP, West Germany	14% for one child 24% for two children and more
Nizalova and Sliusarenko (2013)	1997–2004, Ukraine, ULMS	6.5% for one child 13.3% less for two or more children
Kahn et al. (2014)	2003, USA, NLS-YW (cohort who is 50s in 2003)	5% for one child 12% for 2 children and 17% for 3 children; controlling for age: 2–3% for one child; 4–6% for 2–3 children in 30 s and 40s
Nizalova et al. (2016)	1997–2007, Ukraine, ULMS	7.8% for one child 12% for two or more children

(continued)

Table 11.1 (continued)

Study	Data set (Year, country, data)	Results: wage penalty in %
Biryukova and Makarentseva (2017)	2014, RLMS-HSE, Russia	9.7% average wage penalty 4.5% with controlling factors
Yu and Kuo (2017)	1997–2013, National Longitudinal Survey of Youth, USA	11% for each child
Cukrowska-Torzewska and Matysiak (2018)	European Countries	4.5% per child in Anglo-Saxon countries, Belgium and France 8–10% in Post-Soviet European Countries and Germany

- *Level of education*: the greatest difference in the salary of women without children and women with children is determined by the level of education (Anderson et al. 2003; Nizalova and Sliusarenko 2013).
- *Social class:* lower wage penalty was discovered for middle-class women (Avellar and Smock 2003)
- *Woman's age*: With age, the motherhood wage penalty narrows down (Avellar and Smock 2003; Kahn et al. 2014).
- *Business entity form*: if women work in a state-owned enterprise, then the motherhood wage penalty increases and if in private companies it decreases (Domenech 2005; Nivorozhkina and Nivorozhkin 2008).
- *Scope of work*: motherhood penalty is less in such economic sectors as education and research and much higher in service and commercial sectors (England et al. 2016; Kelley et al. 2020; Lutter and Schröder 2019).

There is lack of empirical studies on Russian mothers and their wages. A few studies could be listed as those analyzing the motives of combining work and motherhood (Savinskaya 2011; Sinyavskaya et al. 2007); life strategies for women with children (Savinskaya 2011); labor mobility of women after giving birth (Savinskaya 2011; Gorbunova et al. 2012); those revealing the factors affecting female employment after childbirth (Karabchuk and Nagernyak 2013; Payet and Sinyavskaya 2011; Rzhanitsyna 1997); and finally those analyzing job and life satisfaction after childbirth (Pankratova 2013). A few studies were dedicated to the relation between decisions of women on employment and reproductive behavior (Sinyavskaya et al. 2007); Karabchuk and Nagernyak 2013). There were only a couple of papers published on the motherhood wage penalty and analysis of the effects of children on females' wages on the data of 2003 and 2014 (Nivorozhkina and Nivorozhkin 2008; Biryukova and Makarentseva 2017). The panel regression empirical analysis for 2000–2015 years in this chapter below fills this gap.

11.4 Hypotheses to Test

Based on a literature review above the following hypotheses will be tested in the chapter:

Hypothesis H1. *Women with children are less paid than the women without children, controlling for their education, work experience, place of living, and marital status*. It means both monthly and hourly wages of mothers are lower than those of women without children.

Hypothesis H2. *The number of children negatively affects the size of wages of women*. The more children a woman has the lower is her wage. Women need more time to care for and raise a child, so they choose more comfortable working conditions to combine work and motherhood, and in accordance with the theory of compensating differences, they get lower wages (Rosen 1987). In addition if a woman has many children, she has less work experience, so her salary is lower (Becker 1964, 1971; Budig and England 2001; Avellar and Smock 2003).

Hypothesis H3. *The age of children is correlated with mothers' wages: the younger is the child, the lower is the wage of the mother.* This is due to the need to spend more time with a small child (Anderson et al. 2003). Newborns, children of preschool age and primary school students are the reason for a much higher wage penalty for motherhood than children of middle and higher school age (Nizalova and Sliusarenko 2013; Zhao 2018).

The next section describes the data and methodology that is used here.

11.5 Data and Analytical Strategy

The data for empirical analysis was built from the RLMS-HSE individual survey for the period of 2000–2015. The yearly files were merged to create more observations of women who gave birth to children as the data reveals 150–250 birth cases per year. We restrict the sample to women of 18 to 45 years old. The age interval was defined by several facts: (1) it is the reproductive age of Russian women on average and we do not see any childbirth cases for women above 45; (2) the chapter is aimed to analyze wages of mothers especially with small children (under 7 years old which is the age for the school), who are the most vulnerable according to the previous studies (Nizalova and Sliusarenko 2013; Zhao 2018); (3) women aged 50 and above mostly do not have huge differences in wages according to the cohort longitudinal studies from US and other countries (Anderson et al. 2003; Kahn et al. 2014). Moreover, regression analysis was applied to employed women only. By employed women we define those who have a paid job last week, including those who were on paid sick leave or unpaid sick leave.

For our analysis we define several groups of women with children depending on the age of the youngest child. In Russia working women can take paid and unpaid maternity leave till the child is three years old, after that mothers are supposed to come

back to their working place. According to the labor legislation the workplace is kept for a mother during all three years and she cannot be fired unless she quits herself. Thus, when child is three years old a mother should either come back to her previous workplace or quit for changing the job or becoming a housewife. Three years old is also the time for a child when he/she is admitted to the nursery to stay there until seven years old. At seven a child is admitted to primary school and at 11 years old a child transfers to secondary school. The female groups below correspond to these important life-course events of children in Russia.

- non-mothers or women without children
- mothers with children under 3 years old
- mothers with children from 3 to 6 years old
- mothers with children from 7 to 10 years old
- mothers with children from 11 to 17 years old

The dependent variable is wage. It was constructed with the help of the question to those who answered they had a paid job (only employed): "How much money did you receive during the last thirty days at your main job deducting all taxes from it. Tell the total sum in Russian rubles, please". The wage included the money only from the main job but not from any other jobs or additional earnings. Both monthly wage and hourly wage was calculated for descriptive statistics and econometric models. The hourly wage rate was calculated with the help of the question: "How many hours did you work on the main job this month?" The wage variables were adjusted to the prices of 2000 year as a point for comparisons with the help a deflator to have comparability in the dynamics.

The hypotheses were tested with the help of regression modeling based on Mincer's Wages Equation to disclose the wage differences between mothers and non-mothers and identify the wage predictors for working women in Russia.

The Mincer's Wage Equation (Mincer and Polachek 1974) was adjusted to the Russian working women case and looks as follows:

$$\ln w = \beta^{*}(\mathrm{x_i}) + \mathrm{u}^{*}, \quad \text{where}$$

ln w natural logarithm of monthly wage/hourly wage rate;
β estimated parameters of model;
x_i matrix of employee characteristics (age, age squared, education level, specific tenure[3] and specific tenure squared; marital status, logarithm of income of other family members, place of living, year dummies, unemployment in the region, average wage in the region, number of children and age of the youngest child);
u* unobserved effects

Three models were estimated: model one tests the dummy variable of being a mother on the wages of women aged 18–45 years old in Russia; model two contains

[3]Number of years a person works at the same company/firm/organization.

the number of children as dummy variables (0, 1, 2, 3, 4 and more); model three contains additionally age of the youngest child in grouped dummies (under 3 years old, 3–6 years old, 7–10 years old, 11–17 years old). Both OLS regressions on pooled data and fixed effects (FE) panel regression models to control for unobserved individual heterogeneity applied following Nizalova and Sliusarenko (2013). The results of the complete models' estimations are reported in the Annex in Tables 11.4 and 11.5. Here in the text, readers could find the estimated motherhood wage penalties in percentages from those FE models.

11.6 Results of the Study

To start the results section, it is worth to mention that the employment level among the females is quite high in Russia (around 53–55%). Moreover, Russia is in the group of country-leaders in the share of mothers among the employed females. It accounts over 75%, similar to the numbers in such countries as Norway, Sweden and Denmark. The employment level of working women with children under one year old is about 40% in the USA (Budig and England 2001). In Russia, the employment rate of women with children of similar age is 48% (but many of them are taking parental leave with keeping their workplace, which is not available in the USA).

As for the differences in wages between mothers and non-mothers with average wages of men in Russia, it is interesting to discuss the next two figures. The first figure demonstrates the differences or gaps in average monthly wages between mothers and non-mothers, between mothers and men, and between non-mothers and men over the period of 2000–2015. Both men and women were taken of same age group 18–45 years old. The constant negative sign of the differences could speak that women in Russia are facing motherhood wage penalty. If we compare average monthly wages of women with children and women without children, we will see the variation between −17 and −4% gap (Fig. 11.1.). If we compare mothers' monthly wages with average male monthly wages, we will see that gap varies form −44 to −29%. The differences of monthly wages between non mothers and men are a bit smaller and vary from −39 to −25%.

Women tend to work fewer hours to combine work and motherhood comfortably (Klerman and Leibowitz 1999). That is why the comparison of only monthly wages might be misleading. The RLMS-HSE data allows to control for hours of work and estimate the hourly wage rate. Figure 11.2 provides the dynamics of the average hourly wage differences between same groups of the Russian population of 18–45 years old: men, mothers, and non-mothers. At different time within the fifteen years period the difference in average hourly wage rate between mothers and males varied from −44 till −15%. The gap between women without children and men is a bit smaller. The wage gap in hourly earnings between mothers and non-mothers was not stable during the period and fluctuated from −15 to +15%. On average, the hourly wage differences are smaller than monthly differences. There is a clear trend

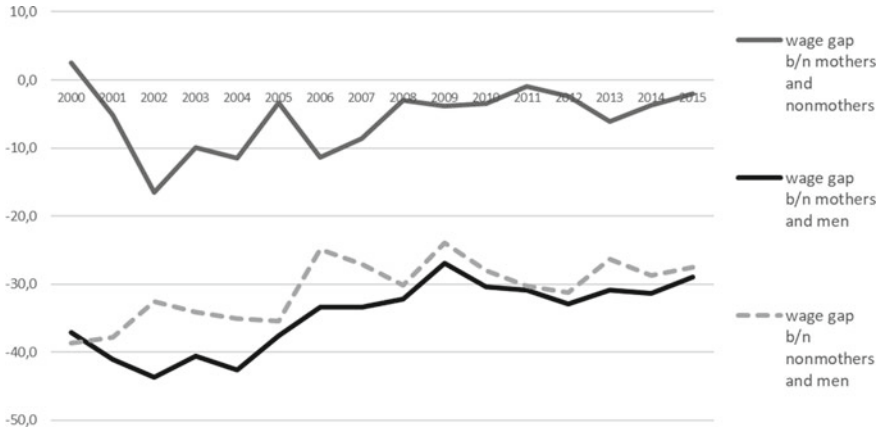

Fig. 11.1 The differences in average monthly wages in Russian labor market in 2000–2015, RLMS-HSE

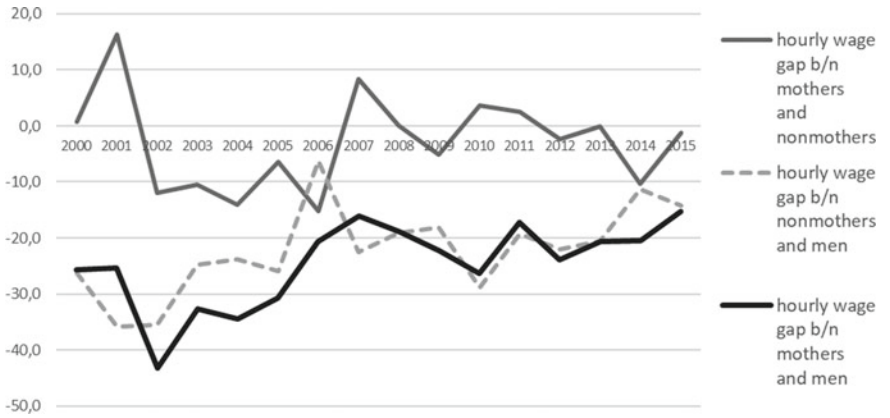

Fig. 11.2 The differences in average hourly wages in Russian labor market in 2000–2015, RLMS-HSE

of shrinking the gender wage gap and motherhood wage penalty from 2000 to 2015. That is true both for monthly and hourly wages.

Table 11.2 sheds light on the average wage difference between women without children and women with children in accordance to the age of the youngest child. The average differences are taken for three years of 2003–2005 and 2013–2015 to compare the beginning and end of the period. Women with pre-school children have higher both monthly and hourly wage differences with women who do not have children than mothers on average or mothers with school age children. We must admit that the data is controversial and fluctuates a lot across the fifteen-year period.

The simple comparison of average wages would be a very rough estimation of motherhood wage penalty as it does not allow to control for human capital, age,

Table 11.2 Average wage differences between mothers and nonmothers depending on the age of the youngest children, 2003–2005 and 2013–2015 in Russia, %

	Monthly wages		Hourly wages	
	2003–2005	2013–2015	2003–2005	2013–2015
b/n mothers and nonmothers	−8.3	−3.9	−10.4	−3.9
b/n mothers with 0–2 years old children and nonmothers	−1.2	−4.4	−7.7	−1.6
b/n mothers with 3–6 years old children and nonmothers	−16.1	−5.5	−15.3	−4.4
b/n mothers with 7–10 years old children and nonmothers	−4.3	−4.6	−6.6	−6.6
b/n mothers with 11–17 years old children and nonmothers	−2.5	−2.5	−8.8	−8.0

Source Authors calculations based on the RLMS-HSE data, 2003–2005 and 2013–2015

family income and marital status. That is why OLS and FE panel regression models were estimated to control for observed and unobserved individual heterogeneity. The complete results of regression coefficients are presented in Tables 11.4 and 11.5 in the annex. Here there is a summary with the penalties in percentages from those model estimations (significant coefficients of FE panel regression).

The mothers receive on average 11% less per hour than non-mothers in Russia, controlling for the age, education, experience, marital status, logarithm of income of other family members, and place of living. Thus, monthly wage penalty is higher and equals to 17% for mothers on average (Table 11.3). The first hypothesis is confirmed, indeed Russia is facing the motherhood wage penalty and it is significant.

The results showed that situation on motherhood wage penalty in Russia is very close to the one in Ukraine and USA (Nizalova and Sliusarenko 2013; Kahn et al. 2014). The wage differences are not significant for mothers with one child but turned to be significant with the number of children. Thus, two children give 4% motherhood wage penalty while mothers with 3 children and more earn from 10% to 30% less per hour than women without children (Table 11.3). The second hypothesis is also confirmed: the number of children increasing the wage penalty for the mothers.

The findings confirm that only the monthly wage gap is reducing with the age of children. The hourly wage rate varies between 3 and 4% in accordance with the age of the youngest child (Table 11.3). That means that women with children under three years old tend to work less hours and earn less per month than women without children. It is quite expected and seems to be fair if mothers with small children get less paid for less working hours. We did not find the significant confirmation of the bigger hourly wage penalty for mothers with pre-school children in Russia. Thus, there is stable wage penalty for mothers with small children of about 3–4% and it is not higher than for the mothers with older children. In this case, the third hypothesis could be hardly confirmed. The age of the youngest children does not increase or decrease the hourly wage gap between mothers and non-mothers, it remains same

Table 11.3 Wage penalty for motherhood (based on the RLMS-HSE panel data 2000–2015, FE analysis), %

	Monthly wages (%)	Hourly wages (%)
Being a mother	−17	−11
One child under 18 years old	not sig.	not sig.
Two children under 18 years old	−4	−4
Three children under 18 years old	−14	−10
Four children under 18 years old	−32	−30
Child under 3 years old	−11	−3
Child of 3–6 years old	−4	not sig.
Child of 7–10 years old	−5	−4
Child of 11–17 years old	−3	−3

Source: Authors calculations based on the RLMS-HSE data, 2000–2015. The percentages were calculated from the results of Tables 11.4 and 11.5, FE models on ln of monthly and hourly wages with the help of the formula: (EXP(coefficient) −1)

and equals to 3–4%. Similar results of about 4% motherhood wage penalty were obtained by previous studies done by Biryukova and Makarentseva (2017) in 2014 and by Nivorozhkina and Nivorozhkin (2008) in 2003 in Russia.

11.7 Conclusions

The chapter analyzes the motherhood wage penalty in Russia in the period of 2000–2015. It provides empirical analysis based on the RLMS-HSE data set as well as a systematic review of the previous research conducted in other countries.

The main finding of the study is that Russia is facing motherhood wage penalty. It increased sharply at the beginning of 2000s with its peak in 2002 according to the RLMS data and then it slowly decreased by 2015. On average wages of mothers are 11% lower than of non-mothers. The wage penalty in Russia is not that big as in Germany, for example, where it reaches 18% (Gangl and Ziefle 2009). The pay penalty is increasing with the number of children and this is a very important outcome for the family policy that are aimed at improvement of fertility rates. The age of the youngest child does not affect the size motherhood wage penalty in Russia. At any age of the youngest child mothers will receive 4% less per hour. The results of this study are in line with the previous research on Russian data (Nivorozhkina and Nivorozhkin

2008; Biryukova and Makarentseva 2017) but contradicting with the evidence from the USA, UK and some European countries, where pre-school children increase the motherhood wage penalty in comparison with the older school-aged children (Anderson et al. 2003; Kahn et al. 2014).

This study could serve as a ground for further detailed exploration of the motherhood wage penalty in different economic industries or private/public sector or occupations. Another interesting aspect to enlarge the research here is to investigate the differences between motherhood wage penalty and fatherhood pay benefits which is neglected in Russia. Recent studies highlight the asymmetric attitude towards parenting of women and men in the societies (Petersen et al. 2011, 2014). There is a difference in the effect of birth and parenting on the well-being of women and men. This difference is primarily justified by the different positioning of having a child by men and by women. At work, women prefer not to talk about the lives of their children, while men, on the contrary, mostly talk about the successes of their children and their own managerial participation in them (Luhr 2020). Another important point in the justification of the differences is the impact of penalties for motherhood and fatherhood on the human behavior: these are men, on average, who invest less time, put less efforts and priorities in raising a child that to their other affairs compared to women (Mu and Xie 2016).

It would be interesting to enrich the research from socio-cultural perspective. There is a huge cultural influence on a woman's life than the general standard of living in the country or economic development (Budig et al. 2012). This statement is confirmed by several observed patterns. Thus, the average motherhood wage penalty in countries with developed family policies and more job security for the women is rather low of about 3–7%. The highest motherhood wage penalties are seen in Central and Eastern Europe while the smallest penalties are in Scandinavian countries of Northern Europe (Van Bavel and Klesment 2017; Cukrowska-Torzewska and Matysiak 2018). The size of the motherhood wage penalty could depend also on the population structure of the country (Bedi et al. 2018).

Annex

See Tables 11.4 and 11.5.

Table 11.4 Coefficients of the regression models on natural logarithm of monthly wages of working women in Russia for the period of 2000–2015, RLMS-HSE data

	OLS regression, pooled			Fixed effects panel regression		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Being a mother	−0.0157			−0.187***		
Having no children is the reference category						
One child below 18 years old		0.00767			−0.00141	
Two children below 18 years old		−0.0470			−0.0418*	
Three children below 18 years old		−0.195**			−0.149**	
Four children below 18 years old		−0.103			−0.381**	
No children is the reference category						
Child under 3 years old			−0.0538			−0.122***
Child of 3–6 years old			−0.0220			−0.0357**
Child of 7–10 years old			−0.0319*			−0.0535***
Child of 11–17 years old			−0.0139			−0.0272**
Age	0.0531***	0.0600**	0.0582***	0.0920***	0.0685***	0.0815***
Age squared	−0.000750***	−0.000853**	−0.000817***	−0.00145***	−0.00137***	−0.00132***
Education: below secondary is the reference category						
Education: completed secondary	0.0897*	0.0851*	0.0861*	0.0492*	0.0314	0.0408*
Education: secondary + professional	0.191***	0.201***	0.192**	0.0968***	0.0619*	0.0861***
Education: higher	0.466***	0.502***	0.467***	0.179***	0.0951*	0.175***
Specific tenure	0.0137**	0.0122**	0.0125**	−0.00347	−0.00221	−0.00484*
Specific tenure squared	−0.000478**	−0.000408**	−0.000439**	0.0000148	−0.0000204	0.0000338
Married or Have partner	−0.0379	−0.0923*	−0.0340	0.0229	0.00427	0.0308*

(continued)

Table 11.4 (continued)

	OLS regression, pooled			Fixed effects panel regression		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Ln of income of other family members	0.0824**	0.0835**	0.0846***	−0.00948	−0.0111*	−0.00348
Living in urban area	0.200	0.214	0.215	−0.0219	−0.0653	−0.0313
Regional unemployment rate	0.0226	0.0231	0.0269			
Regional average wage	0.0000257***	0.0000262***	0.0000260***			
Working hours	0.00323***	0.00325***	0.00333***	0.00224***	0.00219***	0.00227***
_cons	4.688***	4.792***	3.472***	8.167***	8.940***	5.111***
N	27,881	27,881	27,881	27,881	27,881	27,881
r^2	0.537	0.540	0.690	0.568	0.560	0.697
r^2_a	0.537	0.539	0.690	0.356	0.361	0.573
r^2_w				0.568	0.560	0.697
r^2_o				0.356	0.303	0.579
r^2_b				0.316	0.267	0.565
rho				0.742	0.780	0.719
F_f				5.961	6.407	5.653

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Source Calculated by authors, based on the RLMS-HSE individual and household data, merged files of 2000–2015 years-waves. Models included year dummies

Table 11.5 Coefficients of the regression models on natural logarithm of hourly wages of working women in Russia for the period of 2000–2015, RLMS-HSE data

	OLS regression, pooled			Fixed effects panel regression		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Being a mother	−0.00148			−0.121***		
Having no children is the reference category						
One child below 18 years old		0.0183			−0.0102	
Two children below 18 years old		−0.0222			−0.0388*	
Three children below 18 years old		−0.0905			−0.110*	
Four children below 18 years old		−0.0698			−0.350**	
No children is the reference category						
Child under 3 years old			0.0236			−0.0282**
Child of 3–6 years old			0.00500			−0.00108
Child of 7–10 years old			−0.0137			−0.0374**
Child of 11–17 years old			−0.0136			−0.0270*
Age	0.0395**	0.0449*	0.0429***	0.0767***	0.0418	0.0667***
Age squared	−0.000564**	−0.000644*	−0.000595***	−0.00131***	−0.00118***	−0.00115***
Education: below secondary is the reference category						
Education: completed secondary	0.0832*	0.0834*	0.0850*	0.0313	0.0219	0.0369
Education: secondary + professional	0.184**	0.199**	0.188**	0.0506	0.00366	0.0595*
Education: higher	0.476***	0.525***	0.476***	0.0584	−0.00259	0.0978**
Specific tenure	0.0152**	0.0134**	0.0148**	−0.0000173	0.00122	−0.000236
Specific tenure squared	−0.000549**	−0.000466**	−0.000540**	−0.000101	−0.000130	−0.000120
Married or Have partner	−0.0182	−0.0686	−0.0222	0.0269	0.0116	0.0288*

(continued)

Table 11.5 (continued)

	OLS regression, pooled			Fixed effects panel regression		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Ln of income of other family members	0.0823**	0.0822**	0.0847***	−0.0101	−0.0115	−0.00146
Living in urban area	0.194	0.209	0.209	−0.134	−0.140	−0.141
Regional unemployment rate	0.0289	0.0287	0.0346			
Regional average wage	0.0000272***	0.0000276***	0.0000275***			
_cons	4.688***	4.792***	3.472***	8.167***	8.940***	5.111***
N	27,881	27,881	27,881	27,881	27,881	27,881
r^2	0.537	0.540	0.690	0.568	0.560	0.697
r^2_a	0.537	0.539	0.690	0.356	0.361	0.573
r^2_w				0.568	0.560	0.697
r^2_o				0.356	0.303	0.579
r^2_b				0.316	0.267	0.565
rho				0.742	0.780	0.719
F_f				5.961	6.407	5.653

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Source Calculated by authors, based on the RLMS-HSE individual and household data, merged files of 2000–2015 years-waves. Models included year dummies

References

Aisenbrey S, Evertsson M, Grunow D (2009) Is there a career penalty for mothers' timeout? A comparison of Germany, Sweden and the United States. Soc Forces 88(2):573–606

Almuendo-Dorates C, Kimmel, J (2004) Themotherhood wage gap for women in the United States: the importance of collage and fertility delay. Working Paper E2004/07

Anderson D, Blinder M, Krause K (2002) The motherhood wage penalty: which mothers pay it and why? Am Econ Rev 92(2):354–358

Anderson D, Binder M, Krause K (2003) The motherhood wage penalty revisited: experience, heterogeneity, work effort and work-schedule flexibility. Ind Labour Relat Rev 56(2):273–294

Avellar S, Smock PJ (2003) Has the price of motherhood declined over time? A cross-cohort comparison of the motherhood wage penalty. J Marriage Fam 65(3):597–607

Becker G (1964) Human capital: a theoretical and empirical analysis, with special reference to education. University of Chicago Press, Chicago

Becker G (1971) The economics of discrimination. The University of Chicago, Chicago

Bedi A, Majilla T, Rieger M (2018) Gender norms and the motherhood penalty: experimental evidence from India. IZA Discussion Paper No. 11360, Bonn, Germany

Biryukova & Makarentseva 2017. Estimations of motherhood penalty in Russia, population and economics. Popul Econ 1(1):50–70 (in Russian)

Budig M, England P (2001) The wage penalty for motherhood. Am Sociol Rev 66:204–225

Budig M, Misra J, Boeckmann I (2012) The motherhood penalty in cross-national perspective: The importance of work–family policies and cultural attitudes. Soc Polit: Int Stud Gend, State & Soc 19(2) (Summer):163–193. https://doi.org/10.1093/sp/jxs006

Corinaldi M (2019) Motherhood in the workplace: a sociological exploration into the negative performance standards and evaluations of full-time working mothers. Philol 11(1):13–16

Cukrowska-Torzewska E, Matysiak A (2018) The motherhood wage penalty: a meta-analysis. Vienna Institute of Demography Working Papers, 08/2018

Doeringer PB, Piore MJ (1971) Internal labor markets and manpower analysis. ME Sharpe, New York

Domenech M (2005) Employment after motherhood: a Europeen comparison, Labour Econ 12:99–123

Doren C (2019) Which mothers pay a higher price? Education differences in motherhood wage penalties by parity and fertility timing. Sociol Sci 2019(6):684–709

England P, Bearak J, Budig MJ, Hodges MJ (2016) Do highly paid, highly skilled women experience the largest motherhood penalty? Am Sociol Rev 81(6):1161–1189

Gangl M, Ziefle A (2009) Motherhood, labor force behavior, and women's careers: an empirical assessment of the wage penalty for motherhood in Britain, Germany, and the United States. Demography 46(2):341–369. https://doi.org/10.1353/dem.0.0056

Goldberg M (1982) Discrimination, nepotism and long-run wage differentials. Q J Econ 92(2):307–319

Gorbunova E, Karabchuk T, Sukhova A, Nagernyak M, Pankratova V, Pankratova M (2012) Women in the Russian labor market after the birth of a child. In: Bulletin of the Russian Monitoring of the Economic Situation and Public Health of the Higher School of Economics (RLMS-HSE). Vol. 2 (in Russian)

Gupta ND, Nina S (2001) Children and career interruptions: the family gap inDenmark. Economica 69(276):609–629. London School of Economics and Political Science

Kahn JR, García-Manglano J, Bianchi SM (2014) The motherhood penalty at midlife: long-term effects of children on women's careers. Fam Relat 76:56–72. https://doi.org/10.1111/jomf.12086

Karabchuk T, Nagernyak M (2013) Determinants of employment for mothers in Russia. J Soc Policy Stud 11(1):25–48 (in Russian)

Kelley H, Galbraith Q, Strong J. (2020) Working moms: motherhood penalty or motherhood return? J Acad Libr 46(1)

Klerman JA, Leibowitz A (1999) Job continuity among new mothers. Demogr 36:145–155

Kühhirt M, Ludwig V (2012) Domestic work and thewage penalty form otherhood in West Germany. J Marriage Fam 74(1):186–200. Hoboken, NJ
Kunze A, Matte E (2004) Wage dips and drops around first birth. IZA Discussion Paper No. 1011
Lindbeck A, Snower DJ (2002) The insider-outsider theory: a survey. IZA Discussion paper series. 534
Luhr S (2020) Signaling parenthood: managing the motherhood penalty and fatherhood premium in the U.S. service sector. Gend & Soc 34(2):259–283
Lundberg S, Rose E. (2000). Parenthood and the earnings of married men and women. Labour Econ (7):689–710
Lutter M, Schröder M (2019). Is there a motherhood penalty in academia? The gendered effect of children on academic publications in German Sociology. Eur Sociol Rev 36:442–459
Möhring K (2017) Is there a motherhood penalty in retirement income in Europe? The role of life course and institutional characteristics. Ageing Soc 38:2560–2589
Miller A (2011) The effects of motherhood timing on career path. J Popul Econ 24(3):1071–1100. Retrieved December 3, 2020, from http://www.jstor.org/stable/41488341
Mincer J, Polachek S (1974) Family investment in human capital: earnings of women. J Polit Econ 82(2):S76–S108
Mu Z, Xie Y (2016) 'Motherhood penalty' and 'fatherhood premium'? Fertility effects on parents in China. Demogr Res 35:1373–1410
Napari S (2007) Is there a motherhood wage penalty in the Finnish private sector? ETLA, Elinkeinoelämän Tutkimuslaitos, The Research Institute of the Finnish Economy, Helsinki
Neumark D, Korenman S (1994) Sources of bias in women's wage equations: results using sibling data. J Hum Resour 29:379–405
Nielsen HS, Simonsen M, Verner M (2004) Does the gap in family-friendly policies drive the family gap? Scand J Econ 106:721–744
Nivorozhkina L, Nivorozhkin A (2008) The wage costs ofmotherhood: whichmothers are better off and why. (IAB Discussion Paper: Beiträge zum wissenschaftlichen Dialog aus dem Institut für Arbeitsmarkt- und Berufsforschung, 26/2008). Nürnberg: Institut für Arbeitsmarkt- und Berufs forschung der Bundesagentur für Arbeit (IAB). https://nbnresolving.org/urn:nbn:de:0168-ssoar-307627
Nizalova OY, Sliusarenko T (2013) Motherhood wage penalty in times of transition. IZA Discussion Papers 7810, Institute of Labor Economics (IZA)
Nizalova OY, Sliusarenko T, Shpak S (2016) The motherhood wage penalty in times of transition. J Comp Econ, Elsevier 44(1):56–75
Nizalova OY (2017) Motherhood wage penalty may affect pronatalist policies. IZA World of Labor, Institute of Labor Economics (IZA), pp. 359–359, May
OECD (2012) Closing the gender gap: act now. OECD Publishing, Paris. https://doi.org/10.1787/9789264179370-en
Oshchepkov A (2007) Gender differences in wages, wages in Russia. Evolution and differentiation. HSE Publishing House, Chapter 5 (in Russian)
Payet A, Sinyavskaya O (2011) Employment of women in France and in Russia: the role of children and gender attitudes. Demoscope (449) (in Russian)
Pankratova M (2013) Satisfaction of Russian women with children and without children with work and life. Econ Sociol 14(2):88–110 (in Russian)
Petersen T, Penner AM, Høgsnes G (2011) The male marital wage premium: sorting vs. differential pay. ILR Rev 64(2):283–304. https://doi.org/10.1177/001979391106400204
Petersen T, Penner A, Høgsnes G (2014) From motherhood penalties to husband premia: the new challenge for gender equality and family policy, lessons from norway. Am J Sociol 119(5):1434–512. https://doi.org/10.1086/674571
Rosen S (1987) The theory of equalizing differences. In: Ashenfelter O, Layard R (eds) BT Handbook of labor economics vol 1, Issue 12. Elsevier, pp 641–692. https://econpapers.repec.org/RePEc:eee:labchp:1-12

Roshchin S, Solntsev S (2006) Who overcomes the “glass ceiling”: vertical gender segregation in the Russian economy/preprints. High School of Economics. Series WP4 “Sociology of markets” (03) (in Russian)

Rzhanitsyna L (1997) There is no way to overcome the crisis without solving the “female issue”, women and the labor market. Library of union activist. M., Profizdat (6) (in Russian)

Savinskaya O. (2011) Caring for the children of working Muscovites. Sociol Stud (1) (in Russian)

Sinyavskaya O, Zakharov S, Kartseva M. (2007) Behavior of women in the labor market and childbearing in modern Russia/Parents and children, men and women in the family and society/Under the scientific, T Malevoy, O Sinyavskaya (eds). Independent Institute for Social Policy. M.: IISP (in Russian)

Sommerfeld K (2008) Older babies - more active mothers?: How maternal labor supply changes as the child grows, No 143, SOEP papers on multidisciplinary panel data research. DIWBerlin, The German Socio-Economic Panel (SOEP). https://EconPapers.repec.org/RePEc:diw:diwsop:diw_sp143

Yu W, Kuo JC (2017) The motherhood wage penalty by work conditions: how do occupational characteristics hinder or empower mothers? Am Sociol Rev 82(4):744–769

Van Bavel J, Klesment M (2017) Educational pairings, motherhood, and women’s relative earnings in Europe. Demogr 54(6):2331–2349

Viitanen T (2004) The impact of children on female earnings in Britain. Discussion Paper. DIW Berlin and University of Warwick

Waldfogel J (1997) The effect of children on women’s wages. Am Sociol Rev 62(2):209–217

Waldfogel J (1998a) The family gap for young women in the United States and Britain: can maternity leave make a difference? J Labor Econ 16:505–545

Waldfogel J (1998b) Understanding the ‘family gap’ in pay for women with children. J Econ Perspect 12:137–156

Zelenskaya LM (2010) Problems of gender inequality in wages in the Russian labour Market. 542 Manger 5–6(9–10):72–73. (in Russian). Зеленская Л. М. 2010. Проблемы гендерного равенства в оплате труда на российском рынке труда. Управленец. 5–6(9–10):С. 72–73.

Zhao M (2018) From motherhood premium to motherhood penalty? Heterogeneous effects of motherhood stages on women’s economic outcomes in urban China. Popul Res Policy Rev 37:967–1002

Zhitnikova EA (2010) Gender discrimination and its peculiarities in Russia. Sci Note. Orel. GIET2. (in Russian). Житникова Е. А. 2010. Гендерная дискриминация и особенности ее проявления в России. Научные записки ОрелГИЭТ. 2. http://www.orelgiet.ru/monah/75jk.pdf

Chapter 12
Entrepreneur or Group Member? Women in Science and Career Strategies in Russia and Germany

Anna Khanukaeva and Lili Di Puppo

Abstract STEM is traditionally viewed as a male-dominated academic field that is less open and accessible to women scientists. In order to gain entry and pursue a career in this field, women can choose to adopt a specific gendered professional identity as a career strategy. When it comes to the adoption of gendered professional identities and perceptions of career success, how do Russia and Germany compare? What career strategies are being pursued by women scientists in these two countries? On the basis of semi-structured interviews with women in STEM disciplines at the NRU Higher School of Economics (Moscow, Russia) and the University of Tübingen (Germany), we analyse differences and similarities between these two groups of scientists. Further, we show how work environments and academic cultures can explain differences with regard to career strategies and perceptions of success. In Russia, women scientists tend to adopt more collective or group-oriented identities, while in Germany, professional identities are based more on the model of the individualistic, entrepreneurial scientist. We identify two main career strategies: blending in (Russia and Germany) and challenging (Germany). Russian women scientists' perceptions of career success suggest the need to investigate alternative views of academic careers that are not limited to the model of the entrepreneurial scientist.

Keywords Gendered professional identities · Women in STEM · Work-life balance · Perceptions of career success · Female leadership · Slow science

12.1 Introduction

Science, technology, engineering and mathematics (STEM) form an academic field that has traditionally suffered from a deficit of women insofar as it is viewed as

A. Khanukaeva (✉)
Uppsala University, Uppsala, Sweden
e-mail: anna.khanukaeva@soc.uu.se

L. Di Puppo
National Research University Higher School of Economics, Moscow, Russia
e-mail: ldipuppo@hse.ru

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_12

being more hospitable to male scientists. The dominance of male scientists in STEM is a tendency that can be found in every country. Countries such as Germany and Russia have different institutional and cultural contexts, different laws and policies, which have given rise to specific work environments. In this chapter, we will analyse how these different work environments and academic cultures influence the way in which women scientists in STEM construct their career trajectories on the basis of gendered professional identities. How do they perceive the STEM field, and how do they perceive career success?

In Russia, women's relationship to the workplace is influenced by the Soviet legacy. In Soviet times, women were officially considered equal to men and encouraged to pursue professional occupations. They were also involved in family and childcare more than men, however, and were expected to handle both their professional occupations and caring for their families (Gordon and Klopov 1975). West Germany used to be more traditional in matters of family and gender but currently adheres to a narrative of gender equality in the workplace. Positive discrimination has been adopted in order to encourage women's involvement in the sciences. Thus, extra opportunities and additional laws and committees protect women's and family rights. Women have the option of taking official maternity leave without affecting the validity of their employment contracts, for example, which allows them to receive financial help. Equality committees supporting women in their careers exist in universities, and women are encouraged to take part in conferences and to apply for grants. Russia and Germany constitute different academic contexts. In Russia, the academic context is changing as a result of the Bologna process but is still influenced by the Soviet legacy. In Germany, the academic model is competitive and influenced by the Western corporate university model, with certain measures in place to support women in their careers.

In the following, we analyse how women in STEM in Russia and Germany adopt particular professional identities to succeed in the field, how they understand success, and whether they experience conflict between different identities (inside and outside of work).

12.2 STEM as a Gendered Academic Field and the Construction of Professional Identities

The process of professional identity construction is related to the specificities of the work environment and the norms and practices that define it. McNeil (2007) observes that our relationship to technology is integral to the constitution of male and female subjectivity (see also Haraway 1997). Butler (1990) further suggests that, rather than viewing science and technology as gender neutral, we ought to understand them as a gendered field. She argues that gender should not be viewed as a stable identity trait but as corresponding to a process of constant construction (Butler 1990). By viewing science and technology as a gendered field that reflects masculine ideals,

we can understand the problematic of the lack of women in STEM as corresponding to certain symbolic associations that govern the field. What we mean when we say that an academic field such as STEM is not gender neutral is that certain qualities traditionally viewed as "masculine" are associated with ideals of science and the successful scientist. These qualities, *perceived* as "masculine", include assertiveness, competitiveness, self-confidence, drive and toughness. By contrast, qualities that are traditionally perceived as "feminine" (such as softness, sociability and having a caring attitude) tend not to be associated with the ideal of the scientist (Butler 1990; Ong 2005; Williams 2010; Ridgeway 2011; Bayer and Rouse 2016; Brescoll 2012).

Inequalities in the workplace have been studied through the lens of gender. Acker (1990) identifies the following mechanisms as explaining gender differences in the workplace: social structures, symbolic representations, face-to-face interactions, gender identity and work culture. Ridgeway (2011) approaches gender differences at work as the result of cultural frames that shape our perception of certain professional positions. The existence of gendered frames in socialisation makes girls (who objectively have the same potential as boys in mathematics) subjectively evaluate themselves as less qualified (Ridgeway 2011). If STEM is defined as a gendered field, this means that the norms and ideals governing the field give a comparative advantage to male scientists. Women scientists will be allowed to enter the field but will not reach the same professional outcomes, even if their performance is objectively similar to that of their male counterparts. The gendered qualities that are associated with the ideal of the successful scientist determine the career strategies that women choose to pursue. This career strategy can be understood as the adoption of a gendered professional identity as a condition of achieving success in the STEM work environment.

Identity studies show how group membership shapes our perceptions and experiences (Ely 1995). Identity can be understood as a set of meanings that define who people are in terms of their roles, their group or category memberships (social identities), or as individuals (personal identities) (Stets et al. 2016). The perception of group membership as compared to other groups is central to the formation of an individual's social identity in a given setting. Individuals who perceive themselves as belonging to a low-status group will usually adopt strategies for moving up the ladder. The identity of being a woman is an aspect of one's social identity, and its meaning is attached to the category "female". Identification with this identity and with a particular group will generate negative, positive or ambivalent feelings as a consequence of differentiating this group identity from a male group identity in various settings. Work environments also shape women's professional identities. However, women's identities are not simply positioned or shaped by a dominant gender discourse, as they can also position themselves by accepting, resisting and transforming this discourse (Raddon 2002). A further central aspect of identity is the fact that the meaning that is derived from a particular identity is reflected in behaviour. Thus, an individual who identifies as a scientist will act in a way that translates this meaning to others and to herself.

In our study, we explore whether women scientists experience conflict between their gendered professional identities in the workplace and their identities as women

outside of work (Brescoll 2012). Identities are typically connected with personal experiences and can be linked to gendered practices in the work environment. The particularities of the work environment, its norms and practices, which vary from one cultural context to the next, contribute to the construction of particular identities (Settles et al. 2016; Abele and Spurk 2011; Settles 2004). Conflicts between one's professional and personal identities (defined outside of the work environment) can be explained in part by the existence of social roles, such as being a mother or a wife. Indeed, certain qualities that society and women themselves perceive as necessary for being a successful scientist may not be considered appropriate to the role of mother or wife.

The literature on gender and work further outlines different types of professional strategies adopted by women: distancing from women's problems and discourses; adapting to the work environment via the adoption of "masculine" qualities; resisting the adaptation process and focusing on feminine behaviour or viewing the professional field as neutral (which may lead to a denial of structural problems) (Dryburgh 1999; Ely 1995; Jorgenson 2002; Rhoton 2011; Bayer and Rouse 2016). Women scientists attach certain meanings to their own positioning in the academic field; they view the scientist identity through a certain prism (Ridgeway 2011). Analysis of the way in which women position themselves in the field of academia helps us to understand how they perceive their identities, as individuals or as part of a collective. The act of positioning oneself involves taking a particular position within a field, adopting it as an identity, and then speaking from the perspective of that position (Jorgenson 2002).

In the following, we analyze the strategies that women choose to adapt to the male-dominated field of STEM and how they construct particular professional identities to succeed in this field. We focus on the two academic environments of Russia and Germany. Anna Khanukaeva conducted semi-structured interviews from 2016 to 2017 with women in STEM disciplines at the NRU Higher School of Economics in Moscow and at Karl Eberhard University in Tübingen, Germany (she conducted 10 interviews with women and 2 with men to gain a further perspective from the position of male interviewees). The group of female interviewees included assistant and associate professors, postdoctoral researchers, and PhD and masters students. The age range of the interviewees was 26–36, and they had different family statuses. Some of the interviewees in Germany originally came from other countries, but all interviewees in the German group had spent a significant amount of time in the German academic environment (more than five years for employees and at least three years for PhD students). In Russia, the interviewees had studied at Russian universities, which can be considered "classical" in the sense that they follow the Soviet educational tradition. Nevertheless, they all worked at the Higher School of Economics—one of the universities in Russia that follows the Bologna process and has adopted an internationalisation strategy.

The semi-structured interviews provided the necessary space for interviewees to reflect on their career trajectories by covering a range of topics that included their perceptions of their career paths thus far (obstacles and successes), their experiences and views on the issue of work–life balance, their relationships with colleagues,

their work experiences, their perceptions of STEM as an academic field, and their perceptions of career success. The interviewees were not asked about gender specifically during the interviews in order to give them the space to talk (or to refrain from talking) about this dimension. In some interviews, interviewees adopted the lens of gender when talking about their family and their identities as mothers at the beginning. Other interviewees did not refer to their families and did not adopt the lens of gender when talking about the qualities needed to be a scientist. In such cases, specific questions about gender were asked at the end of the interview. The space given to the interviewees to refer (or to refrain from referring) to gender allowed for analysis of the differences between Russia and Germany when it comes to this phenomenon.

12.2.1 Blending In *and* Challenging *as Career Strategies in Russia and Germany*

As discussed above, women attach certain meanings to the category "female" and perceive how this category functions in their professional fields in different ways. As STEM is traditionally a male-dominated academic field, how do women view and negotiate their identities in this field? Do they view the field through the lens of gender? If they do, how do women position and view themselves in this field? What strategies do they choose to succeed in their careers, in the sense of adopting a particular professional identity?

Interviews with women scientists in Russia and Germany reveal two different ways of relating to and positioning oneself in the work environment: *blending in* and *challenging*. These two strategies are linked to different perceptions of the qualities needed to be a successful scientist. While some women adopt qualities that they perceive to be gender neutral to succeed, others emphasise the fact that qualities perceived as "feminine" can also lead to professional success. Thus, they try to develop alternative paths to success by using "female" qualities that are not conventionally associated with the image of the successful scientist. By contrast, the strategy of *blending in* consists in not questioning dominant norms, practices, and perceptions of success in the work environment, viewing "female" qualities or "female" behaviour as potentially inadequate. Some interviewees in Russia and Germany perceived the field as gender neutral and thus did not consider the differences between male and female scientists to be consequential:

> I just think that science or engineering is a field in which there should be no barriers or discrimination on the basis of nationality, religion or gender… If a person works well and is a professional in this field, gender does not matter. (Assistant professor in electronic engineering, Russia)

> It does not matter if my colleagues are female or male; it depends on the person. (Masters student in physics, Germany)

Interviews also reveal that "feminine" qualities may be viewed as inappropriate to scientific environments. A German interviewee observed the following, for example, on the inappropriateness of a girlish behaviour:

> I do not think that you have to act like a man, but I do not know any female physicist who is girly or has a girlish type. By girlish I mean all pink and cliché; it has to do with the way you dress. Toughness does not have to be a male quality. You shouldn't be a girl who is afraid of everything. (PhD student in physics, Germany)

This interviewee does not treat "toughness" exclusively as a male quality and explains that a women scientist does not need to "act like a man". At the same time, she identifies certain "feminine" qualities, such as having a girlish appearance, as uncommon in STEM fields. Thus, she adheres to a certain idea of the successful scientist and views certain types of female behaviour as inappropriate to the field. The same interviewee also refers to "niceness" as a female trait that may hinder the building of professional relationships in the field:

> I have a colleague. I enjoy talking to her. She is a nice person, but I think that sometimes she is too nice… She brings them [colleagues] cake. You shouldn't do that too often or you just become this woman who brings cakes. You shouldn't go to that level. (PhD student in physics, Germany)

She mentions "*going to that level*" in terms of a potential threat to being viewed as professional in the eyes of colleagues and the external attribution of a female identity as "*the woman who brings cake*". Further references to qualities viewed as "female" as potentially undermining one's identity as a professional scientist can be found in the context of talks given at conferences. The same PhD student mentions a lack of self-confidence among women scientists: "*One woman was sitting playing with her hair, and wow, that does not look very self-confident!*". A Russian interviewee also refers to "female" traits such as "being emotional" as a hindrance in the context of talks, outlining strategies on how to manage emotions:

> We girls can sometimes worry a little about how the talk will go, whether people will like it; we are more emotional, we worry more about it. For me, that is the moment when I tell myself that I should worry less. At the end of the day, I usually talk about the field I work in. I should switch off the perception that it can be an aggressive field and just focus on my questions and professional tasks. (Assistant professor in electronic engineering, Russia)

Another Russian interviewee relates "being emotional" to a lack of confidence among women scientists in the context of laboratory experiments: "*We are more emotional about negative results. There is nothing wrong with something's not turning out as expected. We will think and worry about it, and they (men) will conduct a new experiment*" (Associate professor in mathematics, Russia). By contrast, qualities perceived as "masculine", such as confidence and risk-taking abilities, are viewed as better suited to being a professional scientist and to leadership:

> Men are more confident, calm. Maybe this is why they take on managerial tasks. I think women are more inclined to think about risks, to think about possible consequences; we

> rarely take responsibility for risks if we have even the smallest doubt that we can manage it. I will reject an idea, even if it's interesting, or the prospect of doing something, if I am not sure I can complete it to a high standard. (Assistant professor in electronic engineering, Russia)

These quotes show that in both Russia and Germany, certain qualities commonly attributed to women, such as "being emotional", "nice" and "girly", are viewed negatively, as a potential hindrance in a professional context, while qualities that are associated with being professional, such as "confidence" and risk taking, are attributed to male scientists. These perceptions thus tend to reinforce the status quo of STEM as a male-dominated professional field in which women scientists must renounce or manage certain behaviours, for example "being emotional", if they want to succeed. Although professional qualities such as "confidence" and "being tough" may be discussed as gender neutral by some interviewees, they are still set in opposition to qualities perceived as "feminine", in particular uncontrolled "emotional" behaviour. While a Russian interviewee also mentions "emotions" in relation to male scientists, she refers to it in a positive way: "*I'm a really emotional person, but it turns out that male mathematicians can be even more emotional; they can sparkle and have a great sense of humour*" (Professor in applied mathematics, Russia).

The majority of Russian interviewees tend not to view the STEM field as an unwelcome environment for women, even if they acknowledge that it is male dominated and competitive. As one interviewee remarks: "*I really like being a woman working in STEM. It involves almost constantly working in a male collective. There were times when I worked in a lab as the only girl, and I would say that it's impossible to dislike it*" (Associate professor in mathematics, Russia). Another interviewee says: "*All men in mathematics are really clever; it is really nice talking to them, and they are always happy that there are a few women in their company. For them it's great*" (Professor in applied mathematics, Russia). In these quotes, the lack of women in STEM is not challenged; being the only woman in a male collective can even be viewed as a benefit. One interviewee also says: "*We had enough [female] colleagues in our field before; there are still a lot of them working here now. I won't say that we are a majority, but we've always been here, have always worked and will always work*" (Assistant professor in electronic engineering, Russia). The interviewees in Russia further emphasise the importance of being professional and tend to believe in rewards based on personal merit, irrespective of gender. The field is thus perceived as gender neutral.[1]

By contrast, most of the interviewees in Germany see the field as gendered and refer to the privileges enjoyed by male scientists. As one interviewee observes, for example: "*I know cases of other women who had problems, and one of the problems is that as a woman, you have to show that you are better than your male colleagues, as you are observed more closely. What I mean is that if a male colleague does*

[1]The Russian interviewees did not spontaneously refer to gender during their interviews; they only addressed the issue when a specific question was asked about it. By contrast, interviewees in Germany referred to gender from the beginning, bringing up the gender dimension of STEM on their own.

a certain job, everybody will agree, 'you are right, we believe you'. If a female researcher does the same work, they will check it in a more critical manner. So you have to be more convincing. Not being taken seriously happens a lot. Minimising the importance of the work we do or the questions we ask; not really trusting women's work; being surprised when you know how to do something – they underestimate your skills" (Postdoctoral researcher in physics, Germany). The interviewee refers to the problem of having to "prove oneself" and of having one's work scrutinised while the scientific credentials of male colleagues are less questioned. While some interviewees note a change towards more or less equal conditions for women in STEM, they still view the field as a largely "male environment". This tendency is particularly evident in leadership positions, as noted by two interviewees:

> The higher up you go in your career, the fewer the women around you. You have a lot of meetings where you are in a minority, and it is not really nice. (Professor of computer science, Germany)

> Another problem in science degrees is that there are very few women in top positions in the universities. One of the issues, which I know of, is that when professors are chosen there are committees for choosing the candidate, and those committees are all male because there are more men in these positions. And this thing happens: when you are choosing someone and you know that they are going to be a new colleague, you tend to choose someone who is similar to you – in this case, another male. (Postdoctoral researcher in physics, Germany)

Given the recognition that they must assert their position in the field in order to succeed in it and pursue an academic career, challenging the idea of male leadership is central for certain interviewees in Germany. In these efforts to define what success (in terms of rising to the higher echelons of an academic career) may mean for women scientists, we observe a certain uneasiness around the notion of "being strong" or "tough" as potential leadership qualities. As one interviewee remarks:

> If you are a woman and you've made it to the top, you really have to demonstrate that you are really strong and things like that. When this happens, you are creating these problems as well, because you are showing that you behave in the same way as your male supervisor. (Postdoctoral researcher in physics, Germany)

Another interviewee also reveals her uneasiness with the notion of "toughness" as a professional quality in the academic world to the extent that it can be associated with a selfish attitude. In her view, this attitude does not come naturally to women. At the same time, the same PhD student defined "toughness" in a quote above as not being an exclusively male quality, revealing a certain ambivalence in her perception of how women relate to this quality.

> You have to invent this kind of toughness. You have to be either very lucky or very tough. Many women can't define themselves anymore if they get too tough. At some point, you have to be selfish. Women aren't tough in that way. (PhD student in physics, Germany)

A postdoctoral researcher in physics also attributes the need to be "very strong" to inequality with regard to how male and female researchers are treated. The quality of "being strong" is thus seen more in terms of a necessary correction to this unequal treatment than as a positive professional quality that can lead to success.

> Because you might be treated differently, and I know cases of women, which… you know… they are not treated equally to their male colleagues just because they are women… It is a very competitive field (science), and then you have to achieve a balance between family and work and still be competitive among your colleagues. So you have to be very strong. (Postdoctoral researcher in physics, Germany)

In an attempt to define what successful leadership might mean for women scientists, some interviewees in Germany draw a distinction between the qualities that women and men possess. Differences are believed to matter not at the start of one's career but in higher positions, where variations may exist in the way leadership is understood.

> The conditions for success are the same, and this is the problem. We have other skills as women, and the criteria that are applied are the same, while our way of doing things and personalities are different. (Postdoctoral researcher in biochemistry, gender equality committee member, Germany)

From these perspectives, both the differences between men and women and the diversity of their paths to success are highlighted. Female qualities are seen as having the potential to contribute to success in academia, and qualities such as "leadership" are viewed as taking different forms. The notion of "female leadership" as a path to success is emphasised. Attention is also given to qualities that both men and women possess but that are traditionally not valued in academia. As the above quotes indicate, several interviewees point to the fact that leadership positions are not easily accessible to women. This difficulty is viewed as a hindrance to success and as explaining, in part, why STEM does not offer an environment that encourages women to remain in the profession. Certain women scientists in German academia thus emphasise alternative ways of achieving success. Qualities that are conventionally viewed as "female", such as collaborative skills, communication and social skills and having a caring attitude, are redefined as leadership qualities that can lead to professional success. As a gender equality committee member and postdoctoral researcher observes, for example, qualities such as being team oriented can be beneficial for leadership, even if they are not acknowledged as such:

> If you have a person who is more team oriented, more soft-spoken, he or she will not appear dominant. This person can easily come across as not being a strong leader. I am sure that these types of people can be good leaders, but the general perception is that they are not. The general perception is that these people do not know what they want, and their self-esteem is not high enough. Quite generally, if you compare these groups by gender, you will include females in this soft-spoken class and more men in the dominant one. But I think this has to do with the fact that when a committee is appointing someone, we have a certain rigid idea of what qualities the person must have, and these qualities (of being dominant) are more often encountered. (Postdoctoral researcher in biochemistry, gender equality committee member, Germany)

An assistant professor (*Junior professor*) in computer science in Germany remarks: "*Women in STEM have the capacity to do it; women are good with social skills; they bring these communication skills to the working atmosphere*". Skills such as communication, social and collaborative skills, which can be considered "female",

are thus redefined as professional assets on an academic career path. A postdoctoral researcher also emphasises the importance of networking skills: "*Professionally, you also need to be very good at networking. This is important; most of the time, it (the academic work) is about speaking with people, going to conferences*" (Postdoctoral researcher in physics, Germany).[2]

Another interviewee refers to the existence of women-only conferences as an innovative step to further female academic careers.

> There are some conferences just for women. It is nice for female students to see female professors. It isn't really different from ordinary conferences; the only difference is that there are a lot of career topics, talks about career issues, how to act, how to sell yourself, develop self-selling qualities. You would never have that at normal conferences. (PhD student in physics, Germany)

While the concept of women-only conferences can be seen as a strategy for challenging male leadership by encouraging female careers in academia, the qualities that the PhD student who attended these conferences emphasises are still conventional in Western academia. Hence, the student refers to the necessity of learning the skills needed to sell oneself and one's academic work.

Blending in and *challenging* are the two main strategies in STEM fields adopted by women scientists in Russia and Germany. In Russia, *blending in* (as a way of positioning oneself in the field) equates to a tendency to accept the prevailing norms of the field by viewing that field as gender neutral and emphasising a merit-based approach to success. *Blending in* in both Germany and Russia corresponds to a view of female behaviours, for example "being emotional", "being nice" and having a girlish appearance, as not appropriate to the professional field, whereas qualities that are conventionally perceived as belonging to men, such as "leadership", "toughness" and "self-confidence", are viewed as leading to professional success. In Germany, we also encounter the strategy of *challenging*. This strategy consists of perceiving the field as male dominated and challenging existing ideals of the successful scientist by proposing alternative models. The idea of female leadership, which values certain qualities such as collaborative and social skills, and the existence of women-only conferences to promote female careers in academia represent attempts to define alternative models of successful professional behaviour.

12.3 Definitions of Success and Perceptions of Work–Life Balance in Different Academic Environments

Perceptions of STEM fields influence the way women scientists position themselves in them. The adoption of particular professional identities—for example the gender-neutral scientist who *blends in* (managing her "emotional behaviour" and possibly

[2] As we discuss later, the need to maintain a life–work balance renders networking more difficult for women scientists.

adopting an attitude of "toughness"), or the woman scientist who accentuates her positive "female" qualities (*challenging*)—corresponds to different career strategies. The way women see themselves, the field and their own position in it thus influences the strategies they choose. In the following, we analyse how women scientists in Russia and Germany balance career success with their lives outside of work, what success means for them, and how they define their professional and personal identities.

Comparative analysis of the interviews in Russia and Germany reveals that women scientists in Russia tend to refer more to their professional identities as part of a group. Scientists in Germany tend to refer to the ideal model of the entrepreneurial scientist, even if some of them seek alternatives to this model and point to its shortcomings. According to a Russian assistant professor in mathematics, for example: "*It is important to have the opportunity to talk to people who share a similar interest in my results and their results. Collaboration is important; I'm not a loner mathematician like Lobachevski [a 19th-century male Russian mathematician]. Community is important, where my results can be shared and evaluated*" (Assistant professor in mathematics, Russia). This interviewee emphasises the centrality of collaboration and distances herself from the image of the "lone mathematician". She can be regarded as challenging the model of the individual, competitive scientist, just like certain women scientists in Germany. Another interviewee also views the model of the entrepreneurial scientist, which sets as criteria of success publication activity and self-advertising, as favouring male over female scientists:

> We can't talk about science in an abstract way; it is not as if you write something and everyone admires you. You have to publish your work in a good journal; you have to give talks at 10 conferences, and people have to be talking about you in the news. In this sense, I think that men are favoured. I know cases of articles by three female co-authors that were met with questions and doubts. (Professor in applied mathematics, Russia)

While, like their counterparts in Germany, women scientists in Russia emphasise the importance of collaboration as a skill belonging to leadership, some of them still appear to be more accepting of leadership roles being given to their male colleagues. On collaboration and leadership, one interviewee observes: "*I won't say that we are not leaders; we are just more used to working on leadership with someone, to collaborating. And the supervisors are men: respectable, high-status men. So men make the decisions on certain global issues, solve certain strategic questions. And women do take part; they take care of other technical, managerial questions, but such questions aren't any less about leadership. These questions are also crucial*" (Assistant professor in electronic engineering, Russia). In this quote, the less visible technical and managerial tasks carried out by women scientists are viewed as a component of good leadership. This acceptance, but also simultaneous positive re-evaluation, of apparently subordinate roles can also be seen in the case of teaching. Women in Russia tend to emphasise the importance of "being valuable to others" as a central criterion in their perception of success. Teaching can be viewed as an important dimension of an academic career, as these women place value on the benefits for others of the work they do. As the assistant professor in electronical

engineering explains: "*The greatest success for me is when my students can do things. And it's even better when I see that they have assimilated what I taught them at the beginning and have developed it, so that they now do it better than me. This is top; this is my main goal.*" Another interviewee refers to teaching in the context of connecting success to notions of happiness and harmony.

> Success… For me this is the thing I've never aimed at. I didn't aim to be a successful person. I think it is way more important to be happy than successful. Because what is success? People can look and say yes, that person is successful; he might have all the attributes of a successful person. That does not mean that inside, this person feels right, happy, and harmonious. For success you need many attributes, and for harmony you do not need much. I aim to get that, to have this harmony. Especially when you work with other people; you are in a way a public person – your harmony is important. And success, maybe it is important for someone, but for teaching, for students, my harmony is way more important than success. They do not care if I drive a car or take the metro; for them, what is more important is how our class goes. (Professor in applied mathematics, Russia)

Narratives about happiness and harmony in response to questions about success do not figure in interviews with German scientists. These narratives in Russia may indicate a more holistic understanding of success that is not confined to professional success, an understanding that can be linked to the fact that women scientists in Russia can more easily separate their professional lives from their lives outside of work. As another interviewee observes regarding success: "*Success? I don't know. For me, it's more like feelings; I mean, we are girls. So by feelings I mean what causes the most positive emotions. For me, such positive emotions are caused by the fact that I do my job well. I can find a technical solution. And the most important part is that I see that it's useful. I am never going to do something that I'm not interested in or that I do not see as valuable*" (Assistant professor in electronic engineering, Russia). Success is viewed through the lens of "positive emotions" and personal happiness, the satisfaction of doing one's job well and being useful.

The tendency for women in Russia to adopt a group-oriented identity can also be found in the context of the externalisation of gender discrimination or the attribution of gender discrimination to other groups, departments or disciplines in STEM fields. As one interviewee observes: "*I have never encountered these difficulties that some people might have, the obvious ones like [someone saying] 'there is no place for women in physics'. Maybe because at the university (PhysTech) where I studied, we never had them*" (Associate professor in mathematics, Russia). An assistant professor defends her former male colleague by underplaying his statements about women as 'jokes': "*I had a classmate who as a joke – I know he didn't really mean it – talked to his girlfriend like 'women, you should be in the kitchen'*" (Assistant professor in electronic engineering, Russia). One interviewee attributes gender prejudices to academics outside of her own university: "*I went to defend my thesis and had to deal with harsh academics who were not from HSE and who yelled at me because I am doing a man's job and have to behave as men do. And I was really nervous and could have cried, and they were like 'why are you crying, what kind of female sentiments are these'? And I understood that there is something wrong going on there*" (Assistant professor in computer science, Russia). The externalisation of gender discrimination

can also be found among German interviewees, as the following quote from a masters student shows: "*It's a big problem in other groups; people think that they [women] cannot do the same things. I didn't have any experience like that*" (Masters student in physics, Germany).

A further characteristic of women scientists in Russia that reveals a tendency to view oneself and one's identity as part of a group is identification with the roles of mother and family member. In contrast to German interviewees, women in Russia tend to separate their professional identity from their identity outside of work as a family member, and their identity as a mother can also appear predominant. They tend to view their scientific work as a job, separate from their personal lives, and do not necessarily identify themselves primarily as scientists. One interviewee remarks, for example: "*I want to believe that I'm a physicist, but I'm not ready. Maybe at some point I will be one*" (Associate professor in mathematics [statistical physics], Russia). Another interviewee explains how her two "worlds" as scientist and as family member are separate:

> Sometimes you have the feeling that you go into a different world, the scientific one. I wouldn't say that it's a locked room with a bunch of formulas, where you have your own rules. But it's a separate world, and it's abstract compared to the casual, ordinary world. Nothing is bothering you. You sit, work and then you go home; your world and you are a different person. Nothing is bothering you there either. You are not a scientist; nobody needs your analytical skills, which were needed in the scientific world. You have to separate it; it's abstract. This is one thing, that is another. (Professor in applied mathematics, Russia)

In this quote, the two worlds of *science* and *home* are kept separate; the scientific world is viewed as "abstract", as different from the ordinary world. The interviewee adopts two different identities to navigate these two worlds; her analytical skills are not needed at home. Another interviewee views science as a job: "*I think that computer science is just a standard job… I would identify myself as part of a social unit – part of my family, daughter of my parents, girlfriend of my boyfriend. I wouldn't talk about professional identification*" (Assistant professor in computer science, Russia). This interviewee does not refer to a professional identification as being primary and views herself through the lens of her ties to loved ones. The professor in applied mathematics quoted above also talks about a "mother's calling":

> Before I had many hobbies; now I have a small child, and all my interests and hobbies are connected to my child. I think that I have my work, my professional sphere, but I also have a mother's calling, and that takes most of my time now. All my personal interests have faded into the background. (Professor in applied mathematics, Russia)

The "mother's calling" is of primary importance to this interviewee and appears to dominate her professional life. The reference to teaching in some of the interviews in Russia can thus be explained by the fact that this occupation makes it easier to have both children and a professional career. The role of teacher, which is traditionally seen as more "feminine" and is not as highly valued as the role of researcher, is invested with positive associations in terms of success.

In Germany, interviewees tend to place emphasis on their professional careers as a primary identification, and they define success more through the lens of the Western

academic model, even if they identify the difficulties created by this model. The quotes above on the necessity of "being strong" show that German interviewees are seeking ways to adapt to the demands of neo-liberal academia. They tend to adhere to a notion of success that emphasises rising to the echelons of an academic career and seeking leadership positions, but, like certain interviewees in Russia, they also seek to redefine the qualities needed for leadership by placing emphasis on collaborative skills. The interviewees in Germany do not refer to ideas of personal happiness and harmony in reference to "success", and they do not refer to teaching as a valued or primary occupation. The references by interviewees to the importance of selling one's work and of "being strong" point to the competitive dimension of the Western academic environment, an environment that poses difficulties in terms of achieving a work–life balance. Hence, interviewees in Germany refer to the issue of work–life balance in terms of a struggle, something that it is difficult to achieve. They do not separate their identities like their Russian counterparts do to the extent that they cannot let their identity as mother or family member dominate, at the risk of having to abandon their professional identity. They have a more holistic understanding of themselves as both professionals and family members but experience conflict when trying to reconcile both sides of these identities as women professionals. In the following quotation, for example, an interviewee talks about the social expectations placed on women and the choice that must often be made between having a family and having a career.

> Many women have the perception that they have to choose between having a family and work, and I think that it's inherent to the society we live in. Because women are expected to do so [have a family], they used to do that, and in West Germany it's like that: women are expected to be responsible for childcare. It used to be different in East Germany, when it was socialist. And in the whole country now, society expects women to do all the child work, take care of the children. Women encounter this negative reaction and perception that if they want children, they should be there for them all the time. (Postdoctoral researcher in biochemistry, gender equality committee member, Germany)

Other interviewees describe their professional identity as being dominant and refer to the necessity of "efficient planning" in order to maintain a work–life balance:

> My professional identity is really important… I really want to be good professionally in my job, but on the other hand, I also want to spend time with my children, and you have this crazy balance in your head, trying to figure out how to handle everything. (Postdoctoral researcher in physics, Germany)

> I have two kids and not very much free time, but I engage in activities to attract young women to computer science. Mentorship relations with other women, answering questions and solving problems… Actually, I do not cut anything from my work; I love my work. I do not need to motivate myself to do the work. Yes, it's a very big challenge to combine kids and career. I have a lot of help, a babysitter; I outsource a lot of my work. My time needs to be efficiently planned. (Professor in computer science, Germany)

With regard to the difficulties faced when trying to achieve a work–life balance, women scientists also refer to the more privileged position of their male colleagues, who can better adjust their time to engage in professional activities. This imbalance

also concerns the activity of networking, which is identified as an important aspect of having a career and a domain in which women could theoretically excel, given their social and communication skills (mentioned in interviews above in reference to female leadership):

> Most of the people in charge are men, and there is an implicit assumption that there is a reason for this… The older generations, which are in charge and are mostly male, are aware of this [the problem of childcare]; they are in the majority – they are aware, but they still vote for the 5 pm meetings because it suits them better. (Postdoctoral researcher in biochemistry, gender equality committee member, Germany)

> Most of my colleagues care more about children, but we who are juggling everything, we are in the minority. When you have a family, you have to organise your time efficiently. You cannot spontaneously go out for a beer and network. Sometimes you feel like you are stuck. (Professor in computer science, Germany)

Women scientists in Germany tend to adopt a more individualistic perspective in their definitions of success, as they must adapt to the fast-paced academic world by prioritising their careers following their PhD degrees. The time following the PhD is perceived as a crucial period in which decisions are made about one's future career. As one postdoctoral researcher remarks, for example: "*I think that if I wanted to have a baby, the best time was when I simply studied. Now I am too busy. It is hard to fit in*" (Postdoctoral researcher in biology, Germany). For this postdoctoral researcher, it would be difficult to "fit" having children into the busy time following her PhD. The academic field is perceived as dynamic and constantly changing, and the field's dynamism makes it difficult to balance working life with family life.

The differences between the two groups of interviewees—a conflict of identities in Germany, and an attempt to separate identities in Russia—can be connected to their different academic environments, legacies and models. Hence, women scientists in Russia also view the academic field as constantly changing, but some appear to believe that it is possible to put their careers on hold (following a certain level of qualification) and to achieve success once they have started a family. Belief in the possibility of having a career later in life can be linked to the persistence of certain patterns in academia dating from the Soviet period. In Soviet times, advanced age among scientists and researchers was associated with possessing skills and experience. Many professors at Russian universities are relatively old, and younger scientists may view them as role models. As one Russian interviewee remarks about an older female professor, for example:

> An amazing woman; she is 80 years old. She has achieved a lot in the physics of polymers. She continues to do research; she has a great family. I was amazed. This is an example of a woman who has made a solid contribution to science, and despite her age, she is still working. (Associate professor in mathematics, Russia)

Most of the professors and teachers in Russia are graduates of Soviet universities, and the new generation of academics tends to view them as examples of professional success. This different perspective on the time required to build a career may explain the more "relaxed" approach that Russian interviewees take toward their careers. As

one professor observes: "*Some people think that for a scientist, being 50 years old is like a sunrise, a new step in life. The children have grown up; you have a lot of free time. So you can do science, make a breakthrough*" (Professor in applied mathematics, Russia). The fact that women in Germany experience more of a conflict between their professional and personal identities can be seen as reflecting the demands of contemporary academia, where the model of the entrepreneurial scientist dominates. The Western academic field is too dynamic and competitive to allow for career delays.

In the Soviet scientific environment, even if they were allowed and encouraged to conduct research, women rarely occupied well-paid or prestigious positions in faculties such as physics and mathematics. The presence of female scientists in academia does not necessarily imply their inclusion in the power structures and leadership positions that are still largely occupied by males (Hirshfield 2017). In post-Soviet Russia, even though women are not unique cases in STEM fields, few occupy leadership positions as they mostly work as teachers. In the German context, which is comparatively a better environment for women scientists, the power balance is also still in favour of men. Historically, East and West Germany held different values. East Germany was closer to Soviet gender equality ideals, while traditional values tended to dominate more in West Germany. At the same time, Germany now supports the values of gender equality. There is currently greater awareness of women and minority rights in Germany, and measures for combatting discrimination have been put in place. Nevertheless, as pointed out by a member of a gender equality committee above, there are still not enough women in leadership positions and at the decision-making level in German universities.

12.4 Conclusion

Comparative analysis of interviews with women scientists in Russia and Germany reveals that the adoption of gendered professional identities as a career strategy and definitions of career success are related to one's particular academic context. Women scientists' views in Russia are shaped by the post-Soviet academic environment in which they build their careers, in which greater emphasis is placed on the collective and on being part of a group. In Germany, women scientists play by the rules of the neo-liberal university (albeit sometimes reluctantly), but they may also challenge current models by trying to redefine the ideal of the successful scientist.

Women scientists in Germany tend to place greater emphasis on their professional identities as scientists. Certain interviewees also adopt career strategies that can be understood as challenging the predominant norms and ideals of STEM fields. As the above quotations show, they generally try to emphasise qualities in their work as scientists, such as communication and collaborative skills, that they view as "feminine" and as beneficial to achieving high academic positions. Although some of the interviewees are striving to develop alternative visions of the successful scientist and point to the shortcomings of the entrepreneurial model of scientific activity, the perceptions of success that we find in Germany are still in line with

a conception of universities as corporations and competitive environments (Giroux 2009; Nussbaum 2010). German interviewees tend to view their work and lives in a more holistic manner; they do not separate their professional and personal identities. They also tend to have a more individualistic perspective on their careers as they respond to the demands of contemporary academia, in which careers must begin directly following one's PhD and cannot be postponed. They experience more of a conflict of identities compared to the Russian interviewees and refer to their struggle to maintain a work–life balance.

The identity that women scientists develop in Russia as a career strategy is more closely related to ideals of collective and group work in academia; thus, they tend not to identify with the ideal of the individualist scientist. They appreciate the value of their work in its usefulness to the community in which they find themselves, to colleagues and students. At the same time, Russian interviewees also tend to separate their professional identities from their personal identities as family members. They do not view their professional identities as dominant. In Russia, being a mother is viewed as a success; it is treated as an important part of a woman's identity.

Seen from the perspective of the Western academic model, Russian interviewees could be viewed as lacking ambition and self-confidence, for example in their choice to pursue teaching over research and in their acceptance of lower-paid positions. At the same time, this perspective does not take into consideration the necessity of viewing definitions of success as context bound and of understanding such definitions from the perspective of the women themselves. Indeed, women in Russia still view their career strategies from the perspective of the legacy of Soviet academia, which allowed for the postponement of one's career. Even though they may tend not to acknowledge existing discriminatory practices, they also challenge current norms in contemporary academia to the extent that they accord value to typical "feminine" positions such as teaching. In this sense, they do not accept prevailing norms that tend to devalue such positions. Furthermore, they develop their own conceptions of professional success by rejecting the idea of sacrificing their work–life balance to a professional career. These perspectives add nuance to current debates about women scientists, which tend to be centred on Western academic environments and on the neo-liberal university. Identity construction as a career strategy for women scientists needs to be studied further by paying attention to different scientific contexts and academic traditions. By doing so, we can add further nuance to our understanding of career success in academia and acknowledge other visions.

In terms of the emphasis put on qualities that challenge the model of the individualistic and entrepreneurial scientist, there is a certain amount of common ground between interviewees in Germany and Russia. Indeed, Russian interviewees emphasise working with others and the necessity of viewing oneself as part of a team, as being "helpful". They also talk about "happiness" and "harmony" as notions that need to be introduced to the vocabulary of professional success. These narratives promote alternative notions of professional success through the re-evaluation of certain positions and behaviours in the academic field. In conclusion, both the preoccupations of women scientists in Russia and the alternative model of the successful scientist in Germany can contribute to recent debates in the literature on gender and academia, in

particular the "slow science" debate (Mountz et al. 2015). In this debate, "feminine" qualities are viewed as central to reconceiving success in contemporary academia.

Acknowledgements We would like to thank the Baden-Württemberg-STIPENDIUM foundation for providing support during the data collection for this paper at the Eberhard Karls University of Tübingen in Germany.

References

Abele A, Spurk D (2011) The dual impact of gender and the influence of timing of parenthood on men's and women's career development: longitudinal findings. Int J Behav Dev 35(3):225–232

Acker J (1990) Hierarchies, jobs, bodies: a theory of gendered organizations. Gend & Soc 4(2):139–158

Bayer A, Rouse CE (2016) Diversity in the economics profession: a new attack on an old problem. J Econ Perspect 30(4):221–242

Brescoll VL (2012) Who takes the floor and why: gender, power and volubility in organizations. Adm Sci Q 56(4):622–641

Butler J (1990) Gender trouble: feminism and the subversion of identity. Routledge, London

Dryburgh H (1999) Work hard, play hard: women and professionalization in engineering—adapting to the culture. Gend & Soc 13(5):664–682

Ely RJ (1995) The power in demography: women's social constructions of gender identity at work. Acad Manag J 38(3):589–634

Giroux HA (2009) Neoliberalism, youth, and the leasing of higher education. In: Hill D, Kumar R (eds) Global neoliberalism and education and its consequences. Routledge, New York, pp 30–53

Gordon LA, Klopov EV (1975) Man after work: social problems of daily life and leisure time, based on the surveys of workers' time budgets in major cities of the European part of the USSR. Progress Publishers, Moscow

Haraway D (1997) *Modest_Witness@Second_Millennium.Female Man_Meets_Oncomouse*. Routledge, New York

Hirshfield LE (2017) I don't know everything, but Ethan would know: language, expertise, and the cultural mismatch for women scientists. NASPA J Women High Educ 10(1):118–137

Jorgenson J (2002) Engineering selves: negotiating gender and identity in technical work. Manag Commun Q 15(3):350–380

McNeil M (2007) Feminist cultural studies of science and technology. Routledge, London

Mountz A et al (2015) For slow scholarship: a feminist politics of resistance through collective action in the neoliberal university. ACME: Int J Crit Geogr 14(4):1235–1259

Nussbaum MC (2010) Not for profit: why democracy needs the humanities. Princeton University Press, Princeton and Oxford

Ong M (2005) Body projects of young women of color in physics: intersections of gender, race, and science. Soc Probl 52(4):593–617

Raddon A (2002) Mothers in the academy: positioned and positioning within discourses of the 'successful academic' and the 'good mother'. Stud High Educ 27(4):387–403

Rhoton LA (2011) Distancing as a gendered barrier: understanding women scientists' gender practices. Gend & Soc 25(6):696–716

Ridgeway LC (2011) Framed by gender: how gender inequality persists in the modern world. Oxford University Press, New York

Settles IH (2004) When multiple identities interfere: the role of identity centrality. Pers Soc Psychol Bull 30:487–500

Settles IH, O'Connor RC, Yap SCY (2016) Climate perceptions and identity interference among undergraduate women in STEM: the protective role of gender identity. Psychol Women Q 40(4):488–503

Stets JE, Philip SB, Burke PJ, Serpe RT (2016) The science identity and entering a science occupation. Soc Sci Res 64:1–14. Elsevier

Williams J (2010) Reshaping the work-family debate: why men and class matter. Harvard University Press, Cambridge, MA

Chapter 13
Online Platform Work in Russia and Ukraine: Gender Differences in Earnings and Work Satisfaction

Mariya Aleksynska, Andrey Shevchuk, and Denis Strebkov

Abstract Work through online labour platforms, which match freelancers and clients located anywhere, gained prominence in Russia and Ukraine over the past decade. Using survey data of online freelancers in Russia and Ukraine, this chapter inquiries into gender specifics of online work. It shows that some important structural gender differences in online work exist in both countries. These differences are primarily manifested by gender segregation into different sectors of activity. These structural gender differences, along with gender differences in online tenure, working hours, and family responsibilities, translate into persisting gender differences in earnings in both countries. Despite this, women seem to be happier with online work than men (in Russia), or at least as happy as men (in Ukraine). The chapter discusses the reasons and potential policy implications of these findings.

Keywords Online platforms · Freelancers · Self-employment · Gig economy · Digital economy

13.1 Introduction[1]

Since the early 2000s, labour markets of Russia and Ukraine witnessed an emergence of a new phenomenon mediated by technological developments—online freelancing. Online freelancing consists in accomplishing various tasks and projects through

[1] In this chapter, the terms "online freelancer" and "platform worker" are used interchangeably. Also, "online work" and "platform work" are used as synonyms.

M. Aleksynska
OECD Development Center, Paris, France

A. Shevchuk (✉) · D. Strebkov
National Research University Higher School of Economics (HSE University), Moscow, Russia
e-mail: shevchuk@hse.ru

D. Strebkov
e-mail: strebkov@hse.ru

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_13

online labour platforms that match workers (usually independent contractors or freelancers) and distant clients. Online freelancing is most popular with programmers and developers, designers, artists, writers, translators, engineers, architects, lawyers, as well as providers of simple digital skills, such as data entry. The development of the online freelancing became possible thanks to the rise of online labour platforms, which allow clients to post tasks and workers to find tasks that they can execute. These platforms and this new mode of work mediated by the technology are at the heart of important labour market transformations. They spark vivid research interest and policy debates all over the world (Berg et al. 2018; Graham et al. 2017; Hong and Pavlou 2013; Kässi and Lehdonvirta 2018).

Various estimates suggest that Russia and Ukraine appear to be among the global leaders of online platform work. In 2013–2017, Ukraine and Russia occupied the fourth and the fifth place in the world, respectively, in terms of the amount of financial flows and the number of tasks executed on English-language online platforms (Graham et al. 2017; OLI index, described in Kässi and Lehdonvirta 2018). Both countries also rank first in Eastern Europe in "IT freelance" (Topsdev 2017). More recent estimates show that by 2018, Ukraine and Russia were among top-10 world leaders in online work, and the leaders in the European continent (AnalyticsHelp 2018; OLI 2019). These global rankings account only for the work performed by Ukrainians and Russians on international English-speaking platforms. National research in these countries shows that, in addition, there is a very important local and regional dimension of digital labour markets in both countries, as Ukrainian and Russian freelancers also work on nearly a hundred of Russian- and Ukrainian-language platforms (Shevchuk and Strebkov 2015; Aleksynska et al. 2018).

The development of online labour markets has profound implications for traditional modes of work, such as wage employment or traditional self-employment for offline physical clients. It carries a promise of reducing entry barriers to labour markets, alleviating unemployment pressures on the local labour markets, and allowing for a better skill match by permitting clients to draw from a worldwide pool of workers (Graham et al. 2017). The emergence of labour platforms was also hoped to have substantial implications for gender parity in the labour market, because work for online clients at any time and any place may allow women to have a better access to labour markets, combine work with family responsibilities, and overcome cultural barriers and discrimination.

Yet, the nascent literature on the topic of gender balance in online labour markets has been rather disheartening, so far. It documents substantial gender differences in earnings which reflect the persistence of structural gender gaps in the world of work generally (ex.: Cantarella and Strozzi 2018; Andjelkovic et al. 2019). While online platforms do not purposefully create additional discriminatory effects, the gender differences in earnings are not remedied by the platforms either, because women continue having a disproportionate burden of domestic responsibilities (Adams and Berg 2017). If anything, because online freelancing allows working from home, uneven share of domestic responsibilities may even aggravate these gender differences, because women self-select into particularly "fast-to-execute" lowest-paid tasks that allow juggling platform work and care duties in the home (ibid.).

Given the importance of online freelancing in both Russia and Ukraine, this chapter inquires into whether gender differences also exist in online labour markets of these countries. Analysis draws on the survey data of online freelancers in both countries. The chapter first demonstrates that, as online freelancing becomes a more widespread phenomenon in Russia and Ukraine, more women join online labour markets. The chapter further describes general gender differences in terms of shares of men and women working online, tenure of online freelancing, gender differences in occupations, and in work for local or for foreign labour markets. Finally, the chapter closely examines the gender differences in earnings and work satisfaction. In both countries, women online freelancers suffer from lower earnings as compared to men. In contrast, the situation with work satisfaction is reversed: women are at least as satisfied as men with the online work in Ukraine, and more satisfied than men in Russia. The chapter concludes by discussing potential policy implications of these findings.

13.2 Development of Online Labour Markets in Russia and Ukraine

The distinctive feature of online labour markets is that they can operate across spatial and national borders. In Russia and Ukraine, the take-off of online work started in the early 2000s, with better and more widespread access to digital technologies, the development of online labour platforms, and the development of entrepreneurship culture more generally. In 2003, the first successful Russian-language digital labour platform Weblancer.net was found, which was Ukrainian-based and initially oriented towards the Information Technology (IT) sector. By now, Weblancer.net is one of the most influential regional platforms, counting over one million users. In 2005, the Russian-based platform FL.ru (former Free-lance.ru) was founded and very soon became the leading Russian-language platform with over 1.6 million registered users. In the same year, the Ukrainian Freelancehunt.com was launched. By now, it is considered being the largest Ukrainian platform and an important regional market player.

The global economic recession of 2008–2009 fostered the development of online labour markets in Russia and Ukraine. Businesses started to increasingly rely on outsourcing as a new business model, and more workers started to consider new modes of employment such as online freelancing. The number of online labour platforms rose, including those with a narrow focus on specific sectors and activities.

The years 2013–2014 marked the deepest political changes in Ukraine. These changes had immediate economic repercussions: a rise in unemployment, freezing of salaries, a significant decline in GDP growth (ILO 2016). Some evidence also suggests that the conflict between the two countries also led to the outflow of Ukrainian freelancers from Russian-based platforms. As a result, Ukrainian-based platforms have been witnessing a significant expansion ever since and more

Ukrainians started looking for work on global English-language platforms. A new economic recession also developed in Russia in 2014. It manifested itself notably in dramatic currency depreciation, which meant that the work for clients from the US and Europe became particularly attractive for Russians.

It is very difficult to generate a precise count of workers involved in online work in Russia and Ukraine. Overall, several dozen online labour platforms operate now in each of the two countries. New platforms constantly emerge, and others lose their prominence or 'die'. They differ considerably in the number of registered users, business models, scope of occupations and skills. In 2018, at least half a million workers were registered on the six largest Ukrainian platforms alone, which represented about 3% of the employed population (Aleksynska et al. 2018). Around the same time, four leading Russian-based platforms had over 1 million users each, totalling about 6.5 million users. It should be noted that adding up the number of websites' users does not provide accurate information about the total population of platform workers because individuals usually have profiles on several platforms and may become inactive over time. But even if these figures should be treated with caution, they indicate a growing interest in online platform work in Russia and Ukraine.

13.3 Methods

13.3.1 Data Collection and Sample

The analysis of this chapter draws on the quantitative data from surveys of online freelancers in Russia and Ukraine. Both surveys have common features, such as overlapping and often similarly phrased questions. At the same time, the survey methods and some question wordings are quite different. Thus, the two surveys complement each other, allowing to confirming general common patterns in both countries with respect to online work.

When researching online freelancers, standard sociological methods based on probability sampling cannot be applied. This is because this group of workers is rather heterogeneous, has vast geographic distribution across spatial and national borders, and represents a tiny fraction of the general population. Thus, both data collections featured venue-based sampling, which is typically used to research populations that are geographically scattered, but who use certain spaces for regular meetings and congregations (Lee et al. 2014). In the case of Russian and Ukrainian online freelancers, this involved conducting online surveys on particular web platforms that are regarded as key venues of the target audience.

The Russian survey was conducted among users of one of the eldest leading Russian-based and Russian-language platform for online work, FL.ru. The sampling assumed that regardless of whether freelancers were registered on other similar websites, workers tended to use the largest and the most developed infrastructure for freelance contracting on the Russian-language Internet as represented by FL.ru.

To date, four waves of this survey have been conducted within the framework of the monitoring research project 'Russian Freelance Survey' (2009, 2011, 2014 and 2019). All waves featured a common methodology for collecting and analysing data, with many questions unchanged between the waves (for details, see Shevchuk and Strebkov 2015). This provides an opportunity to analyse the dynamics of key indicators in a ten-year time perspective. To recruit participants, FL.ru administrators sent to registered users e-mails with invitations to answer the questionnaire, and advertised the survey on social media. The questionnaires, which included from 40 to 54 items, covered a wide range of topics, including various measures of objective and subjective well-being. Participation in the study was voluntary. In this chapter, most of the analysis is based on the latest wave of the survey deployed from December 2018 to January 2019. The analytic sample includes only active genuine freelancers who performed their work through online platforms, completed at least two work projects in 2018, and for whom online work is the only source of earnings.[2] For comparability with the Ukrainian data, only Russian-based workers are retained for the analysis. After excluding freelancers with incomplete and unreliable data, the sample includes 670 respondents: 369 men and 301 women. In the descriptive part of the chapter, this data is complemented with the data of the previous waves of Russian survey, in order to highlight the dynamics in selected indicators.

The Ukrainian survey was conducted among Ukrainian-based freelancers operating on any online platform. To recruit the participants for this survey, three methods were used. The first method involved cooperation with some leading online platforms (Freelancehunt.ua, Kabanchik.ua, and the Ukrainian representation of Upwork.com). Administrators of these platforms were asked to send invitations to registered users to participate in the survey, they also posted links to the survey on the front page of each respective platform. Second, invitations to take part in the survey were sent to the individuals listed in an online panel, InPoll, which contains a representative all-Ukraine sample of active users of the Internet, and serves for regular recruitment of participants of other surveys conducted by the Kyiv Institute of Sociology. Third, snow-ball techniques were also used. The survey was conducted in December 2017 (with some post-survey checks taking place in January 2018), targeting respondents of the age 18 and older, and identifying themselves as workers performing work through at least one internet platform for pay in the 12 months preceding the survey (for details, see Aleksynska et al. 2018). Being a one-off survey, the collected data represents only a snapshot of current developments in the Ukrainian online labour market, which is best compared to the latest wave of the Russian survey. The analytical sample presented in this chapter includes 473 respondents, 245 men and 228 women.

[2]Technically, genuine freelancers in Russian survey are those who opted "I'm a freelancer and it's my only source of income" answering the question "Do you currently work as a freelancer (that is, as an independent professional working for various clients)? If yes, do you have other sources of income?".

13.3.2 Dependent Variables

The common approach to studying gender differences suggests using hourly rather than monthly earnings. However, in the Russian survey, online freelancers reported their monthly earnings and working hours in an ordinal form. Therefore, hourly earnings cannot be calculated and the analysis of this chapter is performed on monthly earnings. Earnings variable in the Russian sample is measured by responses to the question: 'What was your total monthly earnings (in RUB) in 2018' with eight response categories. As there were too few responses in some categories, the responses were aggregated to five intervals: earnings below 200 USD, from 200 to 399 USD, from 400 to 799 USD, from 800 to 1499 USD, and 1500 USD and above.[3] This five-scale variable is used as a dependent variable in the earnings regression in the Russian sample. The estimation method most appropriate for this dependent variable is ordered probit.

In Ukraine, survey participants were first offered a choice of currency in which they receive most of their earnings (Ukrainian hryvnia, Russian rouble, or US dollar), and then they were asked to report their average weekly earnings. The exact survey question is: "In a typical week over the past 12 months, how much have you earned from platform work?". For this chapter, the obtained answers are converted into monthly earnings in USD, by using the exchange rates prevalent at the time of the survey, and assuming that there are 4 weeks in a month. Further, to allow for the consistency of the regression analysis, and a better comparability with Russian results, this variable was also transformed into a five-scale variable. Because earnings in the Ukrainian sample are lower than in the Russian sample, the intervals for this new variable were chosen not based on the same USD brackets, but such that ensure a similar share of workers in each interval, as compared to the Russian sample. Five obtained intervals are: earnings below 50 USD, from 200 to 399 USD, from 400 to 799 USD, from 800 to 1499 USD, and 1500 USD and above.

These two five-scale variables (Russian and Ukrainian) are used as dependent variables in the earnings regressions (in two samples separately). When they are also used as control variables in the work satisfaction regressions, each of them is transformed into four dichotomous variables, with the lowest income category serving as a reference group.

The chapter also investigates the gender differences in work satisfaction among online freelancers. Work satisfaction is measured in both countries on a 5-point scale ranging from 1 (very dissatisfied) to 5 (very satisfied). It is used as a dependent variable in the work satisfaction regressions in both samples (estimations, again, are done separately). The chosen estimation method is ordered probit.

[3] In 2018 the average exchange rate was 62.7 rubles per USD. The authors round it to 60 rubles per USD.

13.3.3 Independent and Control Variables

Commonalities in Russian and Ukrainian questionnaires allow constructing regression models that include almost identical independent and control variables. Appendix A shows the exact definition of each variable in each sample. Appendix B presents selected summary statistics.

All models include a standard set of socio-demographic characteristics: sex, age and its square to capture possible non-linear effects, marital status, parenthood status, two dichotomous variables reflecting the education level (no university education serving as a reference group), tenure of online platform work, and the weekly hours of work. In addition, the authors control for specialization in the online work. Both surveys contained rich information about the types of tasks that freelancers do online. Those were grouped into five large thematic categories—websites and computer programming; graphic design and creative arts; photography, audio and video; writing, editing and translating; business services (advertising, marketing, consulting etc.). These constructed categories reflect standard job categories at online platforms for freelancers. In the Russian sample multiple choice question was used. Thus, each item is considered as a separate variable. In the Ukrainian sample, 'other tasks', including microtasking (low-skilled tasks of short duration, such as writing customers reviews, or filling in online questionnaires) served as a reference group. Regressions also include control variables for the type of clients that online workers deal with (local or foreign).

13.4 Structure and Dynamics of Gender Differences: Similarities and Differences Between the Two Countries

Before turning to the regression analysis, it is instructive to inquire into the structural features of online labour markets in a descriptive manner. The primary interest here is to see the extent of participation in the online freelancing by men and women and into gender differences in online occupations. Demographic and labour market characteristics of male and female online freelancers are also compared.

The Russian surveys allow tracking the evolution of these structural features over the past ten years. They show that, while the gender disparity was particularly pronounced at the times when online work was only emerging, a gradual alignment of the gender structure has also been happening. In 2009, the share of men working online as freelancers was one and a half times more than the share of women (60% vs. 40%). Ten years later, the disproportion decreased: by 2019, there were 55% of men vs. 45% of women among Russian online freelancers. The present situation in the online labour market compares well to what is observed in the traditional labour market. According to Rosstat, the share of women among all Russian workers was

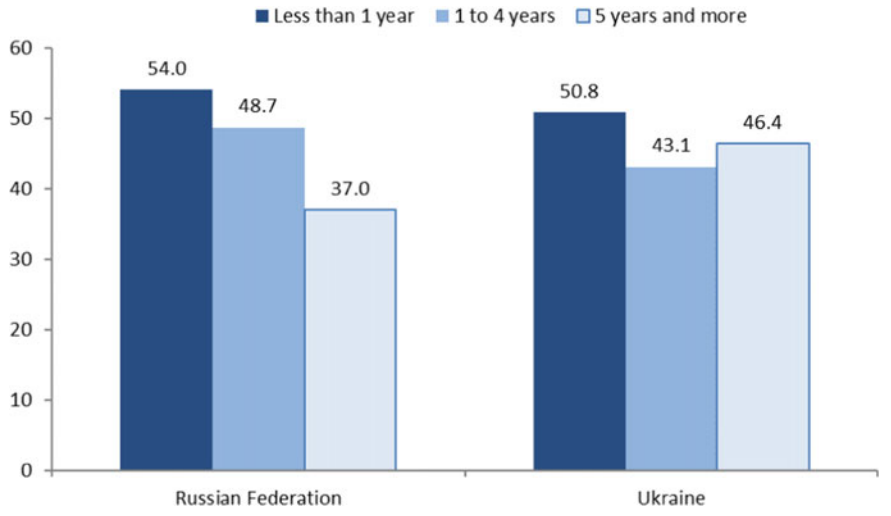

Fig. 13.1 Share of women in online labour markets, by tenure (in per cent) (*Source* Own computations based on the Russian survey [2019] and the Ukrainian survey [2018] of online workers)

49% in 2019 as well as in 2009.[4] Thus, it seems that men pioneered the development of online freelancing, but as this work generalized, women also started up-taking online jobs more actively, and the online labour market started progressively resembling the general labour market.

Similarly, in Ukraine, by 2018, there were 52% of men vs. 48% of women among Ukrainian online freelancers. This resembles the general situation in the labour market: the share of women among all workers in 2017 was estimated at 47% (ILO STAT).

These same dynamics can also be partially traced by looking at the share of men and women by their experience, or 'tenure', of general freelance work and of online work specifically (Fig. 13.1). In both countries, among the newcomers (those who started working as a freelancer, or as a platform worker less than a year ago), the share of women is higher than among more experienced workers. In fact, it already exceeds the share of men, accounting for 54% of newcomers in Russia and 51% in Ukraine.[5] In Russia, comparisons with earlier waves allow to see significant outflow of women from the group of freelancers over time. In 2019 among workers with over 5 years of online tenure, the share of women is much lower than it was actually observed in the 2014 sample (37% vs. 49%). This is probably due to the fact that women with small children, for whom freelance is the only type of earnings, eventually return to

[4] https://www.gks.ru/labour_force.

[5] There is some difference in wording of these questions, however. In Russia, the question was "In what year did you begin working as a freelancer?", while in Ukraine it was "For how long have you done platform work?". In other words, the answers in the Russian questionnaire potentially capture also those workers who started freelance activities in the traditional offline economy before they started online freelancing.

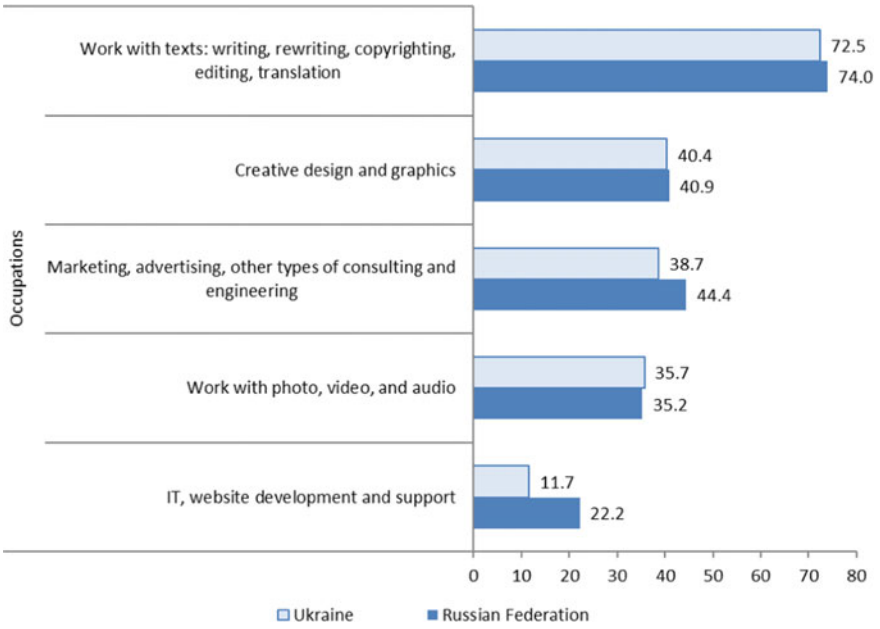

Fig. 13.2 Share of women in online labour markets, by occupation (in per cent) (*Source* Own computations based on the Russian survey [2019] and the Ukrainian survey [2018] of online workers)

work in organizations as employees. Nevertheless, there are good reasons to believe that the share of women in the online freelance market will continue to grow in the future.

Despite the growing share of women, important differences in both countries are observed by the type of work that women and men do online as freelancers. If men dominate the IT and web-development sector in both countries, women are largely over-represented in working with texts. Copywriting, editing and translating, are the only sectors where the share of females is higher than the share of males (Fig. 13.2). Russian data for ten years suggests that the share of women has particularly grown among IT-specialists (from 17.4 to 22.2%) and copywriting, editing and translating workers (from 64.9 to 74.0%). Noteworthy, that in Russia the share of females in online IT freelance (22.2%) is now twice as high as in Ukraine (11.7%).

Other studies in this field also confirm the low presence of women in very technical sectors. For example, a survey of the IT sector of Ukraine, including online freelancers working in IT, confirms that in 2017 there were only 20% of women in Ukrainian IT in general (Ippolitova 2018). As in Russia, the share of women has been growing rather rapidly, increasing by 13 percentage points between 2011 and 2017 (ibid.). Yet, even within this sector, women are actually over-represented in lowest-paid non-technical occupations: 75% of all workers in IT human resources, program managers, or sales are women, while the top-paid occupation of senior software engineers is male-dominated (90% are male: ibid.). Another survey, aimed at specifically

discerning gender differences in Ukrainian IT work, links these gender inequalities to cultural stereotypes of what a "female job" is, to the fact that women more rarely choose technical degrees, to lower self-esteem of women that impedes their career development, and also to a higher drop-out rate of women from IT because of family responsibilities (Makarova 2016).

Another important difference between men and women working online is the number of hours that they put into this work. In the Russian sample, men work, on average, 48 h per week online, while women work 43.7 h. In Ukraine, differences are somewhat more attenuated: on average, men work 23.9 h online, while women work 20.8 h.[6] These differences inevitably translate into differences in monthly earnings.

Twice as many Russian freelancers (two thirds) are working exclusively for the local market as compared to Ukrainian ones (one third). The latter result, however, should be also considered jointly with the fact that among those Ukrainians who work with foreign clients, 11% actually work with Russian clients. Moreover, the Russian local market is substantially greater in size than the Ukrainian one. Nevertheless, 15% of Russian freelancers also worked in 2018 with clients from Ukraine.

Looking at the demographic characteristics of online freelancers, there is no significant difference in marital and parenthood statuses between men and women in Russia. However, in Ukraine, more women working online report having children as compared to men (53% vs. 40%), and slightly more women do not have a partner (42% vs. 39% for men: see Appendices A and B). This indicates that single-parent women, and women with children in Ukraine are turning to online work more often than others. Also, in the Ukrainian sample, there are two times fewer women with no university education as compared to men (11% vs. 20%), but there are more female online freelancers holding PhD and MA degrees as compared to men (60% vs. 51%). In the Russian sample, those differences are more attenuated, even if there are also more female than male freelancers with PhD and MA degrees (54% vs. 46%). Despite these high levels of education, women in both countries tend to be over-represented in online occupations requiring a relatively low level of skill. This indicates that, possibly, women, especially in Ukraine, experience a sizeable skill mismatch in the online labour markets.

13.5 Gender Pay Differences in Online Work

This chapter investigates whether, in addition to the differences in online labour market participation, working hours, tenure, occupations, and other socio-economic characteristics reported above, there are also differences in earnings between men and women working online, in Russia and Ukraine. In the two samples, the surveys'

[6] Across the samples, the differences in working hours are explained as follows. In the Russian sample, only freelancers with online work as the only source of income are included into the analysis. In the Ukrainian sample, the pool of freelancers includes those, for whom online freelance is the only activity, and also those, who combine it with other economic activities.

answers regarding earnings are not directly comparable. Thus, in what follows, the cases of Russia and Ukraine are presented separately. Rather than comparing the outcomes between countries, the interest lies in seeing whether similar tendencies can be observed with respect to the gender earnings differences.

Figure 13.3 shows the distribution of average monthly earnings of Russian male and female online freelancers. From this figure, it is apparent that the share of men with relatively high earnings (over 1500 USD per month, or 90,000 RUB) is two times higher than the share of highly paid women (22% vs. 9%). Ten years earlier, despite lower average earnings of online freelancers in absolute terms, this ratio was approximately the same: there were 17% highly paid men vs. 7% highly paid women. Thus, even if more men and women access better earnings through online freelancing, the earnings differences between males and females in the Russian online labour market persists. Different number of working hours and differences in tenure (not accounted for in this figure) are plausible explanations of this result. But in addition, it is the specific types of work that probably matter, too. As shown above, men dominate the IT sector, which is both more skill-intensive and pay more. In contrast, women are overrepresented in working with texts and other "lighter" activities, which are less skill-intensive and pay less. The regression analysis of the next session corroborates these hypotheses.

In the Ukrainian sample of online freelancers, men are over-represented among higher-end online earners only (those earning above 400 USD). Along the rest of the income distribution, there are substantially more women than men. In fact, there are two and a half times more men earning over 400 USD as compared to women (33.2% vs. 12.8%) (Fig. 13.4). If average hourly earnings from online work are considered, they are almost twice as high as the average hourly earnings in the traditional offline Ukrainian economy, though the latter reflects gross wages (before taxes), while survey respondents in Ukraine usually report net wages (after taxes). Since for the majority of workers, earnings from online work represent a complementary source of earnings, these earnings are sufficiently important and attractives.

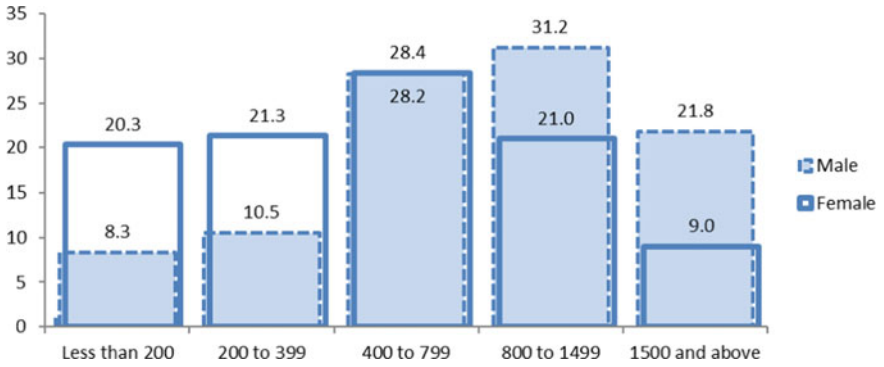

Fig. 13.3 Distribution of monthly earnings among Russian online freelancers, percentage by sex, in USD (*Source* Own computations based on the Russian survey)

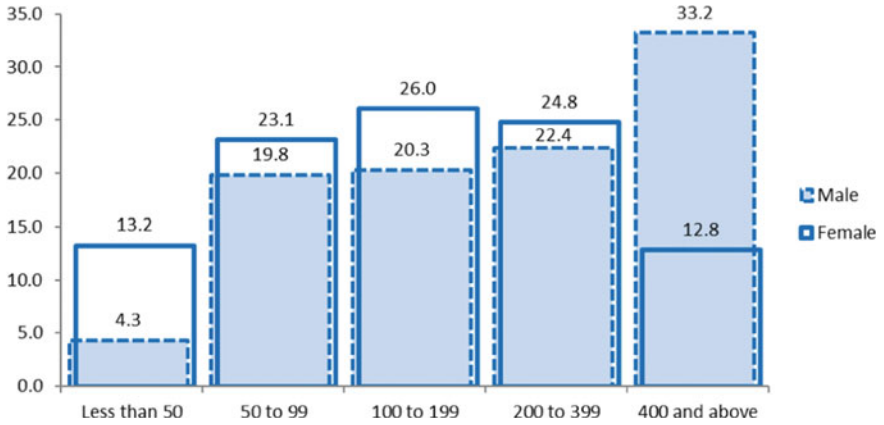

Fig. 13.4 Distribution of monthly earnings among Ukrainian online freelancers, percentage by sex, in USD (*Source* Own computations based on the Ukrainian survey)

The gender differences in earnings in the online labour market, however, are higher than the gender differences in the offline Ukrainian economy. The offline gender earnings difference is estimated at 23.7% (ILO 2016), while the observed gender difference in the online market in the sample of Ukrainian freelancers is 41%. Possibly, as in Russia, the gender segregation into different types of activity may at least partly explain this gap. Indeed, as in Russia, more men than women are found in IT, which in addition is highly oriented towards foreign markets that pay more. In contrast, women, especially those doing writing, rewriting, or editing, are more oriented towards the local and regional market which pays less. Another reason is that women work fewer hours online, as compared to men. Yet another reason is that in the Ukrainian sample more single-parent women are turning to online work to complement their earnings. It is likely that, being more vulnerable in the labour market, and having more domestic responsibilities, they are also ready to accept easier lower-paid tasks.

13.6 Predictors of Earnings and Work Satisfaction

13.6.1 Results of the Regression Analysis: Earnings

This section goes one step further in examining the material well-being of freelancers, measured in terms of their earnings from online activities. The main interest is to understand whether differences in earnings between the two genders remains even when various demographic and labour market characteristics of freelancers are accounted for.

Table 13.1 summarizes the results of the regression analysis, performed separately

Table 13.1 Regression coefficients for earnings and self-reported work satisfaction

	Earnings equations				Work satisfaction equations			
Variables	Russian Federation		Ukraine		Russian Federation		Ukraine	
	(1)		(2)		(3)		(4)	
	B	S.E.	B	S.E.	B	S.E.	B	S.E.
Gender (female—ref. group)	.48	.09***	.36	.10**	−.24	.10*	−.01	.11
Age	.08	.03**	.07	.03*	.01	.03	.05	.03*
$Age^2/100$	−.12	.04**	−.09	.04*	−.02	.04	−.07	.04*
Family status (single/divorced/widow—ref. group)	.45	.09***	.07	.11	.17	.09	−.07	.12
Parenthood status (no children—ref. group)	−.12	.10	−.27	.11**	.09	.10	−.01	.11
Education status (no university education—ref. group)								
Specialist, MA, PhD	.35	.12**	.01	.15	−.19	.12	−.35	.16*
Unfinished university degree and bachelors	.22	.12	.08	.16	−.32	.12**	−.42	.17*
Freelance tenure	.06	.01***	.13	.03***	−.01	.01	−.01	.03
Working hours per week	.004	.002*	.010	.001***	−.001	.002	.002	.002
Primary area for work (microtask—ref. group for Ukraine)								
Websites/Computer programming	.38	.11***	.52	.18***	−.02	.11	−.23	.18
Graphic design, creative arts	−.24	.10*	.36	.24	−.08	.10	.20	.28
Photography/Audio/Video	−.01	.13	−.03	.22	.10	.13	.14	.23
Writing/Editing/Translating	−.26	.11*	−.05	.12	−.12	.11	.06	.13
Business services	.33	.10**	.05	.16	−.18	.11	−.09	.16
Clients from abroad	.27	.09**	.21	.11*	.02	.09	.10	.11
Monthly earnings (first group—ref. group)								

(continued)

on two samples. Columns (1) and (2) contain regression outputs for the earnings equations.

In both countries, the association between earnings and being a male is strong, positive, and significant. While direct comparisons of coefficients are not appropriate, it can be seen that, in both samples, earnings increase with age, though at a decreasing rate. They are lower for workers with children as compared to workers without. Longer experience of freelancing translates into higher earnings. Regressions confirm that the IT specialists have the highest earnings. Finally, those who work exclusively with local clients earn substantially less than those who work with clients from other countries.

Table 13.1 (continued)

	Earnings equations				Work satisfaction equations			
Variables	Russian Federation		Ukraine		Russian Federation		Ukraine	
	(1)		(2)		(3)		(4)	
	B	S.E.	B	S.E.	B	S.E.	B	S.E.
Second group					.36	.15*	.04	.179
Third group					.84	.14***	.48	.18***
Fourth group					1.29	.15***	.32	.17*
Fifth group					1.69	.18***	.67	.18***
Number of observations	670		473		670		473	
Likelihood Ratio Chi–Square (df)	219 (15)***		100 (15)***		164 (19)***		41 (19)***	

Note B: ordered probit; S.E.: standard error; df: degrees of freedom. *p < .05; **p < .01; ***p < .001. Cut points and constants also estimated where appropriate

Some differences across the two regressions are also observed. In Russia, married individuals, as well as those with university degree above the bachelor level earn more than others. These results are not relevant for Ukraine. With regards to education, it is possible that in Ukraine, freelancers have a poorer skill match in online platforms, which downplays the role of education (education variables are insignificant).

Taken together, results indicate that men indeed have higher earnings online, as compared to women, other demographic and work characteristics being equal. Moreover, in both regressions, the magnitude of the gender effect is almost the same in a more parsimonious versions of the models (not reported), which include only demographic characteristics. This suggests that work-related controls, such as tenure, occupation, and working hours, play only a limited role in reducing the role of the gender ("male") variable. It is possible that other different unobservable characteristics, such as skill match, objective level of professionalism, a better positioning of oneself in the labour market, different domestic responsibilities or other unobservable characteristics may matter. For example, other researchers indicated that, even in online markets, women tend to have a lower confidence than men and position themselves at a lower end of requested rates for the same online tasks as men (Barzilay and Ben-David 2017; Dubey et al. 2017; Howcroft et al. 2019).

To gain a better understanding of these earnings' differences, a series of additional models is also performed. Those include various interaction terms, such as adding to the base model interactions of gender variable with marital and parenthood status, as well as with the type of market served (results available on request). These additional models show that among Russian online freelancers, married men have the highest earnings in comparison with other groups. For female freelancers, earnings do not depend on their marital status. The presence of child(ren) in the household, in turn, decreases wife's odds of having higher earnings, especially if these children are under 3 years of age. But for men, earnings do not depend on their parental status. These

results confirm findings from other studies, which attribute this effect to unequal sharing of care duties within the household (Adams and Berg 2017). Professional characteristics of freelancers also affect the association between gender and earnings. The higher men's workload (measured as working hours per week), the greater is their earnings. This regularity is not found for female freelancers. For both men and women, earnings increase with freelance tenure, though for men the effect is stronger.

The most interesting result in the Ukrainian sample is obtained when gender is interacted with the market served (result available on request). It shows that the gender earnings differences disappear for men and women who have access to foreign markets. In contrast, it deepens further for those who work for the local market exclusively. In other words, it seems that online platforms through which foreign clients are accessed, help to overcome differences in earnings between men and women. It is also possible that women who work with foreign clients through online platforms are also the ones who manage to better position themselves in the market, and better match their skills. Additional investigation, however, is needed to better understand this result.

13.6.2 Results of the Regression Analysis: Work Satisfaction

Finally, Table 13.1 columns (3) and (4) contain regression outputs for the work satisfaction equation. Interestingly, men seem to be less satisfied with their online work than women in Russia, holding all other conditions equal. However, it seems that there are no apparent differences in work satisfaction between male and female online freelancers in Ukraine. The only variables that have consistent effects in the two samples are earnings: higher earnings increase the odds of being more satisfied with work everywhere.

In both countries, negative predictors of work satisfaction are education controls: better education, either at bachelors' level or above, is associated with a lower level of work satisfaction. This result is again consistent with the idea that freelancers may actually have a poor skill match in the online labour market. For example, as shown in Shevchuk et al. (2015), horizontal skill mismatch has a particularly detrimental effect on women's work satisfaction, while no such effect is found for men. It is possible that vertical skill mismatch has similar effects. It is also possible that higher-educated workers feel more constrained to turn to the online labour market in the absence of decent work opportunities in the traditional labour market.

Additional models (not reported) show that marital and parenthood statuses moderate the association between gender and work satisfaction. Married women, as well as women with children, are actually more likely to be satisfied with work than married men, possibly because they manage to remain in the labour market.

13.6.3 Predicted Probabilities

In addition to regression coefficients, it is possible to compute predicted probabilities to fall into a particular earnings and work satisfaction interval, for men and women, in both countries. For this, all other variables are set to their mean or mode value. Thus, in the Russian sample, the reference group is persons of 32 years of age, with a life partner, without children, with a diploma of specialist, master degree, or PhD, with 5 years of freelance tenure, working 45 h per week as a graphic designer or and creative artist, only for the local market (no clients from abroad). In the Ukrainian sample, such reference person is 33 years old, with a life partner, without children, with a diploma of specialist, master degree, or PhD, with 1.4 years of freelance tenure, working 22 h per week as a writer or translator, and with clients from abroad.

Regression models predict that, within such reference groups, with all other conditions being equal, men working as online freelancers have a higher probability to have the highest level of earnings than women (1500 USD per month in Russia and 400 USD per month in Ukraine). In Russia, these figures are .18 for men and .08 for women, in Ukraine — .31 and .15 respectively (Table 13.2).

According to the second set of regression models with all other conditions being equal, the probability to have the highest level of work satisfaction among online freelancers in Russia is .10 for men and .14 for women. In the original sample, men are approximately at the same level of work satisfaction as women (15.1% vs. 14.8%) because of their higher incomes, but now one can see that if the incomes were equal, women's satisfaction would be higher. In Ukraine, the probability to have the highest level of work satisfaction among online freelancers is .11 for men and .09 for women (12.0% vs. 10.0% in the original sample).

13.7 Conclusions

The analysis of this chapter has shown that there are important gender differences in online work. If the share of women working online has been growing over time (for example, from 40% in 2009 to 45% in 2019 in Russia), some structural differences persist. These structural differences mainly relate to the workers' field of specialization. Men segregate into technical sectors, such as IT (39.1% of all Russian male freelancers are in this sector, in contrast to 13.6% of women; the figures are 20.0% and 2.9% for Ukraine). In contrast, women are choosing "lighter" sectors, such as notably work with texts (12.5% of all Russian male freelancers are in this sector, in contrast to 43.5% of women; the figures are 12.3% and 35.6% for Ukraine). Currently, women also have a lower tenure of online work (1.5 years difference in Russia, .2 years difference in Ukraine). These differences finally result in lower online earnings of women as compared to men (in both countries the share of men with relatively high earnings is 2–2.5 times higher than the share of highly paid women). If it is reasonable to expect that female earnings will increase as they become more experienced, it is harder to

Table 13.2 Predicted probabilities of monthly earnings and work satisfaction by gender

	Russia		Ukraine	
	Men	Women	Men	Women
Monthly earnings				
First group (low)	.06	.13	.05	.12
Second group	.11	.19	.16	.27
Third group	.30	.34	.21	.25
Fourth group	.35	.26	.27	.21
Fifth group (high)	.18	.08	.31	.15
Work satisfaction				
Not satisfied at all	.04	.02	.01	.01
Rather not satisfied	.14	.10	.02	.03
Neither satisfied nor dissatisfied	.37	.32	.38	.41
Rather satisfied	.36	.41	.48	.46
Very satisfied	.10	.14	.11	.09

Note All other variables set to their mean or mode value

expect that women and men will change radically their specialization. Indeed, the share of women in very technical fields has been growing, but at a slower rate than the total share of women in online work. Moreover, other studies in the field suggest that even within technical fields, women may be specializing in "softer" occupations. In addition, it seems that women suffer from a worse skill mismatch as compared to men: while they are often more educated, they overwhelmingly work with simpler tasks.

The regression analysis confirms also that these structural differences translate into substantial gender earnings differences of online workers. Moreover, it seems that women with children are particularly penalized. At the same time, when Russian and Ukrainian freelancers manage to transcend the national borders and use digital platforms to access international clients, they may be more successful in securing higher earnings. Work with international clients also has the potential to diminish the earnings differences between men and women.

Despite the general gender earnings differences, women seem to be happier with online work than men (in Russia), or at least as happy as men (in Ukraine). For women in Russia, having a family life in addition to work is one of the explanations of this effect. Possibly, they are happy that online markets allow them to remain in the labour market generally, despite low earnings. Earnings online also allow both men and women to generally improve their material well-being as compared to working (only) in the traditional labour market. These earnings represent an important determinant of work satisfaction.

The findings of this chapter complement the findings of earlier studies, such as Adams and Berg (2017), who focus on microtasking on English-speaking internet

labour platforms. In this chapter, a wider pool of platform workers in terms of occupations is considered, and in countries that were not analysed previously. Yet, the findings are similar to Adams and Berg (2017). As such, these findings reinforce the idea that, as the platform work generalizes, and as more women enter the online labour market, it would be important to ensure that differences between men and women decrease rather than accentuate. This especially concerns the higher presence of women in technical occupations, their better skill utilization, and their better self-positioning in the labour market in general. Policies that encourage more women to study in technical fields and decrease stereotypes of what is a male or a female profession can be helpful to achieve this. Provision of better care facilities, especially for very small children, and more equal sharing of domestic responsibilities between and women will also be important in this regard. Lastly, wider use of part-time, temporary transfer of both men and women with small children to part-time work, and practice of adjusted work schedules at the firm level should be encouraged. After all, women with small children do not seem to be ready to drop out of the labour market altogether. Rather, women use online labour markets because they allow having work hours more adapted to their circumstances.

Acknowledgements Support from the Basic Research Program of the National Research University Higher School of Economics (HSE) for the second and the third author is gratefully acknowledged.

Appendix A

See Table 13.3.

Appendix B

See Table 13.4.

Table 13.3 Variables' definitions

Variable	Russian sample	Ukrainian sample
Gender (female—ref. group)	Dichotomous variable equal to 1 if male, 0 if female	Dichotomous variable equal to 1 if male, 0 if female
Age	Self–reported age	Survey year minus reported year of birth
$Age^2/100$	Age squared, divided by 100	Age squared, divided by 100
Family status	1 if married or cohabiting with a partner, 0 otherwise	1 if married or cohabiting with a partner, 0 otherwise
Parenthood status	1 if have any children below the age of 16; 0 otherwise	1 if have any children below the age of 18; 0 otherwise
Education status		
No university education	1 if incomplete secondary education (school), or full secondary education, or full technical vocational education; 0 otherwise	1 if incomplete secondary education (school), or full secondary education, or qualification diploma of technical specialist; 0 otherwise
Unfinished university degree and bachelors	1 if incomplete university education (less than 2 years), or bachelor degree from institute, university; 0 otherwise	1 if degree of junior specialist of a technical college; or bachelor degree from institute, university; 0 otherwise
Specialist, MA, PhD	1 if diploma of specialist or master degree, or MBA, or candidate of sciences, or doctor of sciences, or PhD; 0 otherwise	1 if diploma of specialist or master degree, or candidate of sciences, or doctor of sciences; 0 otherwise
Freelance tenure	Survey year minus reported year of start of working as a freelancer	Number of years of work on online labour platforms. Answers obtained in interval form: less than 1 months, 1–6 months, 7–12 months, 1–2 years, 3–4 years, 5+ years. Recoded to reflect the average year in the interval. Takes on values of .08; .25; .5; 1.5; 3.5; 7 years
Working hours per week	Self–reported average number of hours spent on all paid activities, including work online, per week. Interval variable	Self–reported average number of hours spent on paid work online, per week. Continuous variable
Primary area for work	Multiple choice possible	"Other tasks", including microtask—serves as a reference group

(continued)

Table 13.3 (continued)

Variable	Russian sample	Ukrainian sample
Websites/Computer programming	1 if work is in IT, web creation, web support, 0 otherwise	1 if work is in IT, web creation, web support, 0 otherwise
Graphic design, creative arts	1 if work in graphic, object design, printing, art, 0 otherwise	1 if work in graphic, object design, printing, art, 0 otherwise
Photography/Audio/Video	1 if work with photo, video, audio; 0 otherwise	1 if work with photo, video, audio; 0 otherwise
Writing/Editing/Translating	1 if work with texts: writing, editing, copywriting, rewriting, translating; 0 otherwise	1 if work with texts: writing, editing, copywriting, rewriting, translating; 0 otherwise
Business services	1 if work in sales and customers search, advertisement, collection of information, consultancy, engineering etc.; 0 otherwise	1 if work in sales and customers search, advertisement, collection of information, consultancy, engineering etc.; 0 otherwise
Clients from abroad	1 if work is done partly or exclusively for foreign clients; 0 if has only local clients	1 if work is done partly or exclusively for foreign clients; 0 if has only local clients
Monthly earnings	Self–reported average monthly earnings, converted in USD, according to predefined survey intervals:	Self–reported average monthly earnings on platforms, converted in USD:
First group	1 if earnings less than 200 USD; 0 otherwise	1 if earnings less than 50 USD; 0 otherwise
Second group	1 if earnings between 200 and 399 USD; 0 otherwise	1 if earnings between 50 and 99 USD; 0 otherwise
Third group	1 if earnings between 400 and 799 USD; 0 otherwise	1 if earnings between 99 and 199 USD; 0 otherwise
Fourth group	1 if earnings between 800 and 1499 USD; 0 otherwise	1 if earnings between 199 and 399 USD; 0 otherwise
Fifth group	1 if earnings are 1500 USD or above; 0 otherwise	1 if earnings are 400 USD or above; 0 otherwise
Work satisfaction	5—scale answers to the question “How satisfied or dissatisfied are you with your work in general?”, with 1—not at all satisfied, 5—very satisfied	5—scale answers to the question “How satisfied or dissatisfied are you with working as a platform worker?”, with 1—not at all satisfied, 5—very satisfied

Table 13.4 Selected summary statistics: variable means, total count (for dichotomous variables), standard deviation (for continuous variables)

Variable	Russian sample				Ukrainian sample			
	Males		Females		Males		Females	
	Mean	Count/St.dev.	Mean	Count/St.dev.	Mean	Count/St.dev.	Mean	Count/St.dev.
Age	32.1	9.5	32.2	8.5	33.8	9.8	32.2	9.6
Freelance tenure	5.4	5.3	3.9	4.5	1.5	1.8	1.3	1.8
Working hours per week	48.0	24.8	43.7	24.1	23.9	14.7	20.8	15.1
Family status: Married or with partner (single/divorced/widow—ref. group)	60.7	229	64.5	200	60.8	321	58.4	281
Parenthood status: Have children (no children—ref. group)	34.4	130	40.2	125	39.7	210	52.6	253
Education status (No university education—ref. group)								
Specialist, MA, PhD	45.8	173	53.9	167	51.8	150	60.7	138
Unfinished university degree and Bachelors	31.2	118	26.8	83	28.4	274	28.7	292
Primary area for work (microtask—ref. group)								
Websites/Computer programming	39.1	147	13.6	42	20.0	106	2.9	14
Graphic design, creative arts	41.5	156	35.1	108	5.8	31	4.4	27
Photography/Audio/Video	15.2	57	10.1	31	6.8	36	4.2	20
Writing/Editing/Translating	12.5	47	43.5	134	12.3	65	35.6	171
Business services	26.2	99	25.4	79	14.3	76	9.9	48
Clients from abroad	44.3	167	37.2	115	68.6	166	69.7	146
Monthly earnings								
First group (ref.)	8.3	31	20.3	63	4.0	10	13.0	32

(continued)

Table 13.4 (continued)

Variable	Russian sample				Ukrainian sample			
	Males		Females		Males		Females	
	Mean	Count/St.dev.	Mean	Count/St.dev.	Mean	Count/St.dev.	Mean	Count/St.dev.
Second group	10.5	39	21.3	66	19.0	46	23.0	56
Third group	28.2	105	28.4	88	20.0	47	26.0	63
Fourth group	31.2	116	21.0	65	22.0	52	24.0	60
Fifth group	21.8	81	9.0	28	33.0	77	12.0	31
Work satisfaction								
Not satisfied at all	5.3	20	4.2	13	1.0	15	1.0	13
Rather not satisfied	13.0	49	14.1	44	4.0	19	6.0	26
Neither satisfied nor dissatisfied	27.6	104	36.3	113	38.0	191	39.0	181
Rather satisfied	39.0	147	30.5	95	45.0	238	44.0	211
Very satisfied	15.1	57	14.8	46	12.0	65	10.0	50

References

Adams A, Berg J (2017) When home affects pay: an analysis of the gender pay gap among crowdworkers. SSRN Electron J

Aleksynska M, Bastrakova A, Kharchenko N (2018) Work on digital labour platforms in Ukraine: issues and policy perspectives. ILO, Geneva

AnalyticsHelp (2018) Global Internet Freelance Market Overview for 2018. Available at: https://analyticshelp.io/blog/global-internet-freelance-market-overview-2018/. Accessed: September 2019.

Andjelkovic B, Sapic J, Skocajic M (2019) Digging into gig economy in Serbia: who are the digital workers from Serbia and why do they work on global platforms? Report. Public Policy Research Centre

Barzilay A, Ben-David A (2017) Platform inequality: gender in the gig-economy. Seton Hall Law Rev 47(2):2

Berg J, Furrer M, Harmon E, Rani U, Silberman S (2018) Digital labour platforms and the future of work: towards decent work in the online world. ILO, Geneva

Cantarella M, Strozzi C (2018) Labour market effects of crowdwork in the US and EU: an empirical investigation. IZA Conference proceedings

Dubey A, Kumar A, Hamilton M, Kass A (2017) Analyzing gender pay gap in freelancing marketplace. SIGMIS-CPR Conference proceedings. https://doi.org/10.1145/3084381.3084402

Graham M, Hjorth I, Lehdonvirta V (2017) Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods. Transfer 23(2):135–162

Hong Y, Pavlou PA (2013) Online labor markets: an informal freelancer economy. The IBIT Report. Philadelphia, PA: Institute for Business and Information Technology

Howcroft D, Mumford C, Bergvall-Kareborn B (2019) Gendered platforms? Exploring women's experiences of crowdwork. Regulating for Decent Work Conference Proceedings. ILO: Geneva

ILO (2016) ILO decent work country programme for Ukraine 2016–2019. Available at: https://www.ilo.org/budapest/countries-covered/ukraine/WCMS_467704/lang–en/index.htm. Accessed: September 2019

Ippolitova I (2018) In Russian: Женщины в IT: портрет, планы, мотивация. Women in IT: portrait, plans, motivations. Survey Results published at DOU.UA. Available at: https://dou.ua/lenta/articles/it-woman/. Accessed: September 2019

Kässi, O. and V. Lehdonvirta (2018) Online Labour Index: measuring the online gig economy for policy and research. Technological Forecasting and Social Change, 137:241-8.

Lee S, Wagner J, Valliant R (2014) Recent developments of sampling hard-to-survey populations: An assessment. In: Tourangeau R (ed) Hard-to-Survey Populations. Cambridge University Press, Cambridge, pp 424–444

Makarova O (2016) In Russian: Женский вопрос: гендерные стереотипы в украинском ИТ. Работа. Female question: gender stereotypes in the Ukrainian IT. work. Survey Results published at DOU.UA. Available at: https://dou.ua/lenta/articles/women-work/. Accessed: September 2019

OLI (2019) Available at: https://ilabour.oii.ox.ac.uk/online-labour-index/ Accessed: September 2019

Shevchuk A, Strebkov D (2015) The rise of freelance contracting on the Russian-language internet. Small Enterp Res 22(2–3):146–158

Shevchuk A, Strebkov D, Davis S (2015) Educational mismatch, gender, and satisfaction in self-employment: the case of Russian-language internet freelancers. Res Soc Strat Mobil 40:16–28

Topsdev (2017) In Russian: Рынок ИТ-фриланс-аутсорса Восточной Европы в 2016 году. Market of IT freelance outsourcing of Eastern Europe in 2016. Available at: http://topsdev.org/blog/obzor-rinka-freelance-2016.htm Accessed: September 2019

Part III
Women's Political Empowerment, Gender Equality Attitudes, Family Income and Well-Being

Chapter 14
Women's Voices: Work-Life Balance and Power Relationship in the Household in Tajikistan

Noriko Igarashi and Kazuhiro Kumo

Abstract This chapter examines Tajik women's attitudes towards family life, employment and power relationship in a household. For investigation the authors conducted a small survey on 40 Tajik women. The authors also utilized large-scale surveys on women in the country for generalization of findings and those in Central Asian States for comparison. There was no research like the authors where they look not only at the gender situation in Tajikistan but at the balance of the gender roles in the workplace and in family life based on surveying of, though a limited number of respondents, this country and numerous surveys. The chapter aims at filling this gap in the research field. Although Tajik women stick to traditional gender role values and household power relationship with their partners, and gender equality is hard to be attained in the near future, the effects of education attainment level on women's attitude toward gender issues are positive and enhancing educational level of girls likely result in positive impacts on Tajik women's situations.

Keywords Tajikistan · Gender · Micro history survey · Micro-data

14.1 Introduction

Almost 30 years has passed since the break-up of the Soviet Union, and the former Soviet republics are following their own paths as independent nations. As a result, the gender situation in the countries of the former Soviet Union can be expected to be diverse. This study attempts to explore the characteristics and future outlook for the gender situation in Tajikistan, which was one of the Central Asian republics. Our analysis is based on the results of interviews with small samples in the country as well as data from a large survey conducted by the United Nations Children's Fund (UNICEF 2005 and 2006).

N. Igarashi
Department of Area Studies, Tenri University, Nara, Japan

K. Kumo (✉)
Institute of Economic Research, Hitotsubashi University, Tokyo, Japan
e-mail: kumo@ier.hit-u.ac.jp

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_14

It is widely known that Tajikistan has sent out huge numbers of international migrants (Olimova and Bosc 2003; Kumo 2012). In 2008 the value of remittance from abroad reached almost 50% of GDP, the highest ratio in the world (Kumo 2012). When studying diversification in gender role patterns in former Soviet republics since the break-up of the Soviet Union, trends concerning the status of women in Tajikistan may provide hints for observing the gender power relations or work-life balance in the former Soviet republics of Central Asia, which have a large scale labor out-migrants: lack of male adult partners may affect the behaviour and attitude of women towards gender relations. While Tajikistan is likely to exhibit many of the norms of the Islamic world, large scale international migration means that in not a small number of households there have no adult men of working age. According to micro-data, labor migration from Tajikistan has a specific patterns as follows: over 90% of migrants are young men of working age (Kumo 2012; Gang et al. 2018).

In order to analyse the gender situation in present-day Tajikistan, this study also considers possibilities for achieving work/life balance in Tajikistan, where many adult women have experience of working full time, and with a focus on the relationship between the gender situation and ethnic factors, touches on trends that are likely to shape the future. Likewise, gender power balance may change given the situation that many adult male are leaving home for a certain period to work abroad. These are the issues to be dealt with in this chapter.

Research of gender changes in post-Soviet and post-communist countries has been reviewed in sociological work from different angles (Funk and Mueller 1993; Laslett and Brenner 1989; Ashwin 2002). Among them, to research the work/life balances in the family and at workplace there was developed a contract model (Ashwin 2002; Temkina 2008). Psychological contract can affect women's attitude towards work and power relationship in the household, and this is the motivation why the authors are focusing on this aspect. The contract is described as rules of engagement, rights and responsibilities defining the division of labour in the sphere of production and reproduction based on gender and mutually-responsible relations between men and women including those of persons of different generations (Temkina 2008).[1]

In these contexts, the publicly recognized gender contract for women is the working mother. This psychological contract includes the state-induced women's labor and maternity as civic duties. There were internal controversies and tensions related to the publicly accepted psychological contract but the traditional gender role view-based family policy, which the contract was formed on, had been applied to the majority of Soviet citizens. According to the rules and norms of the Soviet society, the woman should combine her work and family duties (Temkina 2008; Selezneva 2017). But at the same time there existed a hidden gender contract which included the rules, norms and practices beyond the public state regulations formed in response to the rigid state institutions.

[1]This is especially relevant to the case of Tajikistan, because many of the people live in multi-generation households. According to the micro-data, the average size of households in Tajikistan was composed by 6 persons (Kumo 2012).

Previous works on this subject were limited, and described the situation in the socialist countries, the USSR or the post-Soviet states. To the authors' knowledge researches which deal with work-life balance of women and power relationship in the household in Tajikistan based on micro-survey were very scarce. This chapter fill this gap in this field by using, though a limited number of respondents, micro-history survey, and large-scale household survey conducted by the UNICEF.

The authors interviewed women in Tajikistan on matters relating to gender. In addition, the World Bank and UNICEF conduct large-scale surveys of households and women in Tajikistan and other former Soviet republics such as Kazakhstan, Kyrgyz, Georgia, and Ukraine, and the data from these surveys are publicly accessible.[2] Although the data of the latter was used and referred to in this study as well, our aim was to perform a descriptive, qualitative survey that could supplement the large-scale micro data and reveal realities that could be hidden within large surveys. Despite the huge information obtainable by the large-scale surveys of UNICEF, there is still lacking information on personal views on work by female which were not collected. The authors fill this gap by their small scale survey on personal views collected from women in Tajikistan.

Our survey was conducted in June–August 2010. The authors prepared a tentative questionnaire in May 2010. The authors and a professor at the Institute of Socio-Political Research of the Russian Academy of Sciences (RAS),[3] then discussed the questionnaire, made revisions, and put together a final version in June 2010.[4]

Forty women were surveyed. Twelve of them (30%) were interviewed in Dushanbe and 28 (70%) in Khujand, both in Tajikistan. Of the subjects in Khujand, four were from the Bobodzhon Gafur area, three were from Spitamen, two were from Dzhabbor Rasul, five were from Kanibodam, three were from Isfar, five were from Asht, three were from Rudak, one was from Istaravshan, and two from Ganchin, which gives a total of 28. In addition, 28, or 70%, of the subjects were from rural areas. This is a similar percentage to that of the rural population of Tajikistan as a whole.[5]

The large numbers of labour migrants going to Russia from Tajikistan may be having an impact on division of labour within households. To explore this possibility, the authors grouped the subjects as follows. The sample selection method used was purposive sampling, therefore it needs to be borne in mind that this does not guarantee that they are representative of the population. The component of respondents were not designed, but eventually the authors obtained forms returned from the respondents as the followings:

---

[2] See "*Basic Information Document: Tajikistan Living Standards Measurement Survey 2007*", World Bank, July 2008, "*Tajikistan Living Standards Survey 2009: Notes for Users*", World Bank, May 2010, and UNICEF Website, http://www.childinfo.org/mics3_surveys.html.

[3] The authors express a debt of gratitude to Professor Sergey Ryazantsev, who helped us in conducting the survey plan.

[4] Professor Mavlon Azimov of Khujand State University in Tajikistan helped carrying out the survey. The survey was then conducted by him, some of his female graduate students at Khujand State University, and the authors. The authors are grateful for their contribution.

[5] Urban population occupies 26.5 and 27.1% of total population in 2008 and 2018, respectively (World Bank Development Indicators Data).

i. Women who have never worked abroad, but whose husbands are currently doing so or have done so for at least one month since June 2009. There were 14 such women (35%).
ii. Women who have never worked abroad and whose husbands have never done so, either. There were 13 such women (32.5%).
iii. Women who are currently working abroad or have done so for at least one month since June 2009 and whose husbands are also currently working abroad or have done so for at least one month since June 2009. There were 6 such women (15%).
iv. Women who are currently working abroad or have done so for at least one month since June 2009 but whose husbands have never worked abroad. There were three such women (7.5%).
v. Women who are divorced or widowed. There were 4 such women (10%).

Regarding the ages of the subjects, 19, or 47.5%, were under 30 years old, with the remaining 21, or 52.5%, 30 years old or over. Age ranges from 22 to 60. Questionnaire is in Appendix of the chapter.

In addition, to make the results a more objective reflection of realities, the authors also interviewed a number of experts and professionals. They included staff in charge of gender issues and ideology at the Jamoat office, the head and staff of the Education Academy of Tajikistan, the First Deputy Minister and head of analysis at the Republic of Tajikistan's Ministry of Labour and Social Protection.

14.2 Changes in the Division of Labour in Society and within Households and Attitudes among Tajik Women

In the Soviet Union, it was normal for each household to have more than one wage earner. In other words, households in which both the husband and wife worked were common (Tishkin 1995; Temkina 2008). In the Tajik Soviet Socialist Republic, however, the proportion of working women was always low compared with other Soviet republics. This may have been because Islamic norms were deeply rooted or because there were few working opportunities outside the home. Since the year 2000, following the collapse of the Soviet Union, the proportion of women with jobs has been rising, which is probably due in part to changes in the attitudes of women towards division of labour in the home and changes in the way they view work.

14.2.1 Female Employment

Before the October Revolution in 1917, hardly any women in Central Asia worked. Later, during the Soviet era, however, the proportion of working women increased.

However, in Uzbekistan during the 1970s, for example, the proportion of working women was small, and only Slavic women had skilled jobs, while local women mainly performed unskilled work.[6]

Table 14.1 shows women as a proportion of all workers in Soviet countries from 1940 to almost the present day. To put the work situation of women in Tajikistan into context, the table also gives data for Russia as well as Uzbekistan and Kazakhstan in Central Asia. According to these data, in 1940 women made up under 30% of the total labor force in Tajikistan, and between 30 and 40 or even over 40% seen in the other countries. The Second World War, however, led to a decline in the male population, which resulted in women playing more active economic roles and a rise in the proportion of working women. During the 1950s, women made up over 50% of the labour force in Russia and the other European republics. However, in Kazakhstan and Kyrgyz Republic, Central Asian countries with large Slavic populations,[7] the proportion of women was around 50%, and in Tajikistan it always remained below 40%.

Following the break-up of the Soviet Union, the ratio of men and women in the total labour force in Russia reversed. This happened in 1991, when women as a percentage of all working people, which had hitherto been higher than that of men, dipped below 50%. In Tajikistan, on the other hand, the proportion of working women in total labor force increased. This is what Table 14.1 shows.

It is clear from population censuses that Muslim women bore large numbers of children during the Soviet era. Anecdotal evidence also suggests that it was difficult for women to play active roles or make social progress because society remained patriarchal. This could well be the reason why the proportion of women in the labour force was lower than in other Soviet republics.[8] Following the break-up of the Soviet Union, however, and particularly from the second half of the 1990s, the proportion of women in the labour force in the Central Asian countries increased to a level comparable with European ones such as Russia (Table 14.1).

The interview survey also showed that this led to a major change in the local gender situation. Of the 40 women surveyed, 31 (77.5%) were working. Even this figure represents an extremely high proportion of working women given the generally low rates of employment among Muslim women.[9]

The high proportion of working women seen in Table 14.1, which showed that almost half of labor force was occupied by female at the time when the survey was conducted, is likely to be related to the economic situation in Tajikistan. It is therefore necessary to consider the possibility that the temporary migration of workers from Tajikistan to countries such as Russia is having an impact.[10]

---

[6]Lubin (1981, pp. 183–186).

[7]For example, in 1989, the total of Slavic (Russian, Ukrainian and Belorussian) population occupied 44% of total population in Kazakhstan. The percentage share of Kazakh population in the same year in Kazakhstan was 40.0% (according to the 1989 Soviet census).

[8]Lubin (1981).

[9]Kurosaki (2006).

[10]On 18 August 2010, Mr. Sanginov, the first deputy minister at the Republic of Tajikistan's Ministry of Labour and Social Security, speaking to the authors at his office, said that while the Russian police

Table 14.1 Percentage share of women in total labour force (in percent)

Country/year	1940	1945	1950	1960	1970	1980	1990	1995	2000	2005	2006	2007	2008	2009
Soviet Union	39	56	47	47	51	51	51	–	–					
Russia	41	59	50	50	53	53	52	48	48	49	49	49	48	49
Uzbekistan	31	49	40	39	41	41	43	43	44	48	49	49	49	49
Kazakhstan	30	51	40	38	47	49	49	47	48	48	48	49	49	49
Tajikistan	29	48	39	37	38	39	39	41	46	46	46			

Source Prepared by the authors from Pockney (1991) and Statkomitet, various years

Taking into account both micro and macro data, in 2009 a little under 500,000 people had left Tajikistan to go and work abroad, and 90% of them were men (Kumo 2012; World Bank 2009). More than 80% of them were sending money home. Obviously, some households can probably survive comfortably on these remittances alone, while others likely struggle to make ends meet even with the remaining family members working.[11] In addition, there are cases where the remittances have stopped coming, and the woman is forced to go out to work. It is also possible to foresee cases where women have taken jobs because they were free to do so after their husband had gone abroad to work, having been unable to do so before due to his opposition. It would be interesting to find out what kind of effect temporary male migration has had on female employment. Our survey asked women about the connection between independence and work. A summary of respondents' characteristics is shown in Table 14.2.

14.2.2 Views of Work Among Tajik Women

As one has seen in Table 14.1, the proportion of working women in Tajikistan has remained high since the year 2000 (around 46% of total labor force have been occupied by women), and at the end of the 2000s even women who have been forced into work due to economic pressures hold positive views about women working and the way it makes them economically better off:

> It feels good to see women with profession. If a woman is working, she would not need to rely on someone else. To work is the best way for a woman to be self-sufficient. If a woman is working, she may solve any kind of problems. Anything can be solved if you have money, nowadays. (Temirova, 22 year old, shop seller)

> I don't have a job. I used to help my husband with his work, but now he is the only one who earns money in this household. But I think it is best if both of us were working. We women need to work, in order to become self-sufficient. Having a job enables us to have enough money. (Makhina, 23 years old, housewife)

> Women should have a job outside the home, too, in order to become independent. By earning money, women may satisfy their own demands. (Gavkharoi, 22 years old, housewife)

> In order to make our living better, both my husband and I must keep working. (Shakhodat, 44 years old, bakery)

The above comments show that many women believe that women become independent by working, and that it is a good thing both economically and for their families. Nevertheless, some women disagree:

---

treat Tajik men extremely harshly, they are kinder to women, and that this has resulted in women more frequently moving to Russia to work. He also told the authors that while work in places like restaurants is available all year round, work typically done by men such as street cleaning and construction can only be performed at certain times of the year in Russia.

[11] Temkina (2008, p. 108). According to the micro-data (Tajikistan Living Standard Survey), in 2009 remittance occupied 14% of total household income on average in Tajikistan. And the poorer the household, the larger the ratio remittance occupied in total household income (Kumo 2012).

Table 14.2 Summary of respondents' characters

Respondent number	Have you ever moved (yes = 1, no = 0)	Age	Educational attainment (secondary = 1; secondary special = 2; university and higher = 3)	Religion (Muslim = 1; others = 0)	Frequency of worship (constantly = 1; not often = 0)	Household work (per week. Full time is assumed to be 35 h)	At Work (yes = 1, no = 0)	Work(ed) abroad (yes = 1, no = 0)	Working hour (per week; Fulltime is regarded as 8*5 h)
1	0	31	3	1	1	31.5	1	0	40
2	0	52	1	1	1	35	0	0	–
3	0	47	3	1	0	–	1	0	40
4	1	29	1	1	0	35	0	0	–
5	0	32	3	1	0	24.5	1	0	40
6	0	22	1	1	1	28	1	0	77
7	0	29	2	1	1	38.5	0	0	–
8	0	28	3	1	1	27.5	1	0	48
9	0	28	3	1	0	28	1	0	–
10	0	54	1	1	1	–	1	0	48
11	0	34	1	1	0	31.5	1	0	12
12	0	57	1	1	–	20	1	0	65
13	0	48	1	1	0	–	1	0	–

(continued)

Table 14.2 (continued)

Respondent number	Have you ever moved (yes = 1, no = 0)	Age	Educational attainment (secondary = 1; secondary special = 2; university and higher = 3)	Religion (Muslim = 1; others = 0)	Frequency of worship (constantly = 1; not often = 0)	Household work (per week. Full time is assumed to be 35 h)	At Work (yes = 1, no = 0)	Work(ed) abroad (yes = 1, no = 0)	Working hour (per week; Fulltime is regarded as 8*5 h)
14	0	30	3	1	–	22	1	0	–
15	0	23	1	1	0	–	0	0	–
16	0	25	1	1	0	35	1	1	30
17	0	22	3	1	–	–	1	0	8
18	0	45	1	1	–	–	1	0	–
19	0	52	3	1	0	–	1	1	60
20	0	22	1	1	1	31.5	1	0	30
21	0	42	3	1	1	–	1	0	18
22	0	42	1	1	1	–	1	1	–
23	0	44	1	1	0	–	1	0	77
24	0	47	1	1	1	–	1	0	45
25	0	54	3	0	0	–	1	0	22
26	0	22	3	1	0	31.5	0	0	0
27	0	26	2	1	1	36	0	0	0
28	0	27	2	1	0	–	1	1	–

(continued)

Table 14.2 (continued)

Respondent number	Have you ever moved (yes = 1, no = 0)	Age	Educational attainment (secondary = 1; secondary special = 2; university and higher = 3)	Religion (Muslim = 1; others = 0)	Frequency of worship (constantly = 1; not often = 0)	Household work (per week. Full time is assumed to be 35 h)	At Work (yes = 1, no = 0)	Work(ed) abroad (yes = 1, no = 0)	Working hour (per week; Fulltime is regarded as 8*5 h)
29	0	24	3	1	0	–	0	0	0
30	0	44	1	1	0	–	1	0	67.5
31	0	37	1	1	0	–	1	0	52.5
32	0	46	3	1	1	–	1	0	–
33	0	51	2	1	1	–	1	0	30
34	1	26	2	1	0	21	1	1	–
35	0	26	1	1	1	35	0	0	0
36	0	28	3	2	0	31.5	1	0	20
37	0	44	2	1	1	–	1	0	40
38	1	30	3	1	0	24.5	1	0	40
39	0	43	1	1	1	24.5	1	0	16
40	0	39	2	1	0	21	0	0	0

(continued)

Table 14.2 (continued)

Respondent number	Married (yes = 1, not married = 0, divorced or widowed = 9)	How get acquainted with the husband	Age of the husband	Main breadwinner (husband = 1; both husband and wife = 2; other than husband and wife = 0, wife = 9)	Husband works abroad (yes = 1, no = 0)	Number of children	Desired number of children	Usage of contraception	Who decided the number of children (husband = 1; wife and husband = 2; wife = 3
1	1	On the day of marriage	33	2	1	4	4	0	1
2	1	Classmate	52	1	1	4	4	0	2
3	1	Introduced by parents	50	2	1	3	3	0	2
4	1	–	43	1	1	3	3	0	2
5	1	Will of parents	–	1	1	2	2	0	2
6	9	Introduced by parents	25	2	0	0	4	0	–
7	1	On the day of marriage	30	1	0	2	2	1	1
8	1	Introduced by a friend	31	2	0	1	–	0	2
9	1	Friend at a school	28	2	1	2	2	0	2

(continued)

Table 14.2 (continued)

Respondent number	Married (yes = 1, not married = 0, divorced or widowed = 9)	How get acquainted with the husband	Age of the husband	Main breadwinner (husband = 1; both husband and wife = 2; other than husband and wife = 0, wife = 9)	Husband works abroad (yes = 1, no = 0)	Number of children	Desired number of children	Usage of contraception	Who decided the number of children (husband = 1; wife and husband = 2; wife = 3
10	1	Introduced by a relative	57	1	1	3	3	0	2
11	1	Childhood friend (relative)	35	1	1	4	5	0	2
12	1	Childhood friend (relative)	60	2	0	3	–	0	2
13	1	Childhood friend (Relative)	51	1	0	4	4	0	2
14	1	Get acquainted at a disco	–	2	0	2	more	1	2
15	1	Introduced by an acquaintance	27	1	1	2	2	0	2

(continued)

Table 14.2 (continued)

Respondent number	Married (yes = 1, not married = 0, divorced or widowed = 9)	How get acquainted with the husband	Age of the husband	Main breadwinner (husband = 1; both husband and wife = 2; other than husband and wife = 0, wife = 9)	Husband works abroad (yes = 1, no = 0)	Number of children	Desired number of children	Usage of contraception	Who decided the number of children (husband = 1; wife and husband = 2; wife = 3
16	1	Will of parents	28	2	1	1	2	0	2
17	1	A love match	22	2	0	0	4	0	2
18	1	Childhood friend (relative)	47	2	1	5	5	0	2
19	9	Will of parents	(57)	9	–	2	4.5	0	3
20	9	Childhood friend (relative)	(23)	0	0	1	2	0	1
21	1	Friend at a school	42	2	0	2	4	0	2
22	1	Friend at a school	45	–	1	2	2.5	0	2
23	1	Childhood friend (neighbor)	45	2	0	3	4	0	2

(continued)

Table 14.2 (continued)

Respondent number	Married (yes = 1, not married = 0, divorced or widowed = 9)	How get acquainted with the husband	Age of the husband	Main breadwinner (husband = 1; both husband and wife = 2; other than husband and wife = 0, wife = 9)	Husband works abroad (yes = 1, no = 0)	Number of children	Desired number of children	Usage of contraception	Who decided the number of children (husband = 1; wife and husband = 2; wife = 3
24	9	–	–	9	–	1	–	0	2
25	1	Classmate	–	2	–	3	3	0	3
26	1	Will of parents	24	1	1	1	2	0	2
27	1	Friend at a school	29	1	1	3	4	0	2
28	1	Was forced to get married	32	2	1	3	3	0	2
29	1	Friend at a school	24	1	1	1	3	0	2
30	1	Childhood friend (neighbor)	45	2	0	3	3	0	2
31	9	–	–	9	–	1	–	1	2
32	1	–	47	2	1	4	4	0	2
33	1	–	54	2	0	4	4	–	2

(continued)

Table 14.2 (continued)

Respondent number	Married (yes = 1, not married = 0, divorced or widowed = 9)	How get acquainted with the husband	Age of the husband	Main breadwinner (husband = 1; both husband and wife = 2; other than husband and wife = 0, wife = 9)	Husband works abroad (yes = 1, no = 0)	Number of children	Desired number of children	Usage of contraception	Who decided the number of children (husband = 1; wife and husband = 2; wife = 3
34	1	Childhood friend (neighbor)	28	1	1	2	4	–	2
35	1	Classmate	26	1	1	2	3	0	2
36	9	Classmate	–	–	–	1	3	1	2
37	1	Classmate	44	2	0	3	4	0	2
38	1	On the day of marriage	30	2	1	2	2	0	–
39	1	On the day of marriage	45	2	0	4	4	0	2
40	1	Childhood friend (neighbor)	30	1	1	4	4	0	1

> Do I think 'having a job is the best way for women to become independent'? Not necessarily. I think the most important thing is that the husbands and wives understand each other. (Khaidarova, 29 years old, housewife)

> I don't think that women's having a job is the best way to become independent. I don't agree with that kind of an idea. Husbands would appreciate their wives if they are good housewives. (Rafoat, 54 years old, cleaning woman)

As the above comments show, some women do not see work as a means of enabling women to become independent. They feel that if they are good housewives, their husbands will respect them. However, the idea that their husbands are persons to evaluate them hints at the power relationship within the household, which may be a manifestation of the view that the husband is the master of the household.

Nevertheless, the number of women holding such views was small. Women on the whole, whether they are currently working or not, do not seem to object to the idea that working can help women to become independent. The same trend was also seen in a survey conducted by one of the authors in Uzbekistan.[12] Thirty-five percent of the women in Uzbekistan did not agree with work as a means for women to achieve independence. The rest either had no view either way or agreed. Although the proportion of working women is low in Tajikistan compared with other Soviet republics, this answer may indicate that women's labor participation was common to some degree in comparison with other islamic nations already at the period of Soviet era.[13] Another possible reason of non-negative attitude toward work among Tajik women may be that current economic conditions, the rapid drop in income level (Kumo 2012), force women to go to work, possibly as shown in Table 14.1.

14.2.3 The Ideal Woman

The above shows that on the whole few people are opposed to women working to achieve independence. Nevertheless, many women, both those who believe that having a job can give women independence and those who said that working cannot be considered to be providing independence, agreed with traditional roles, i.e. that husbands should support their wives and that women should be full-time housewives.[14]

> I'm a housewife. My husband works for our living. It might be better if both of us had a job, but I think it is a woman's role to be a housewife and do all the chores of the household. (Khaidarova, 29 years old, housewife)

> I work as a dentist, 8 hours a day. My husband and his father mainly earn money for our living. Part of the money we spend is what I earn, but I think the husband should work to support his family. I wish I were a housewife, since it is the women's responsibility to clean the house and discipline their children. (Malika, 32 years old, dentist)

[12] Igarashi (2009).

[13] Igarashi (2009).

[14] Temkina (2008, p. 116).

> Since I am a housewife, my husband works outside the home, and I do the housework and child rearing. I think women should be housewives because they must take care of the children, and make them study. (Madina, 26 years old, housewife)

Although Malika is a well-educated woman who works full-time as a dentist, she says that her husband and his father earn the bulk of the family's money. It can therefore be inferred that the view that the main breadwinners are men remains deeply rooted.[15]

Just as some women think that being a full-time housewife is ideal, admire working women or professionals in some field or another. These comments suggest that Tajik women are hovering between two sets of values concerning work.[16] Let the authors now hear from some women who consider women who also work outside the home to be an ideal:

> I feel closest to women who work, and live with their own freedom. And, have plans about her marriage, too. That is actually the way I have lived my life so far. (Masuda, 47 years old, vice manager of a notary's office)

> I like women who work assiduously. These women may contribute their knowledge and ability to the society. (Zamira, 28 years old, Non-governmental organization interpreter)

> I admire working women because they are able to afford a better living for their family. (Adiba, 25 years old, engineer)

> I admire women with practical ability, because by using their knowledge, they may support their family financially. (Salekha, 24 years old, housewife)

According to the survey the authors conducted previously in Uzbekistan,[17] 32% of women in Uzbekistan see being a full-time housewife is ideal, while 67% view being a working women or professional as ideal. The authors cannot obtain any clear conclusion here because these survey did not utilize random sampling, therefore it is hard to generalize that more women see being a housewife as ideal in Tajikistan than in Uzbekistan.[18] If the same situation can be observed generally, the high percentage share of women who accept traditional gender role in Tajikistan may reflect lower

---

[15] As the authors show in the following section, education may induce gender equalization. However, education attainment level differs much between men and women. In 2000, among population aged 25 or older, 15.2% of male and 6.2% of female obtained tertiary education attainment (United Nations Gender Statistics: https://genderstats.un.org/#/countries). Another point is that gender wage gap is huge and it may not pay off to work for women. According to the UNECE, gender wage gap in Tajikistan in 2011 was 50.9, which means that women's wage is almost half of men's on average (UNECE Statistical Database: https://w3.unece.org/PXWeb2015/pxweb/en/STAT/STAT__10-CountryOverviews__01-Figures). On these points the authors are thankful to Ekaterina Skoglund and Ksenia Gatskova for their comments.

[16] A lot of the recent gender research in Tajikistan has explained these wavering viewpoints in terms of two background factors: the tendency for the father to be the master of the household and the trend towards modernisation (Temkina 2008, p. 107; Olimova and Kuddusov 2007, pp. 38–39).

[17] Igarashi (2009, p. 29).

[18] The lower their level of education, the more likely Uzbek women were to choose to become full-time housewives as an ideal way of life, and a future task is to analyze in detail responses from Tajik women concerning educational background and work.

education attainment level or lower economic development level in comparison with Uzbekistan.

14.2.4 Family or Work?

Some of the subjects generalised about women in Tajikistan, while others stressed that their comments only reflected their personal opinions. Yet whichever category they fell into, most of them said that as a Tajik woman, or as an individual, family was most important. Explaining their reasons for this view, many said that it was because they had been brought up with a belief that family is important, because it lies at the core of society, or because viewing family as most important was a Tajik tradition or custom.[19] Women who said that they continued to work even though they valued their families claimed that they did not neglect their households just because they had jobs. Followings are the words from women who put family before work:

> For women in Tajikistan, family is more important than their career. I suppose it has always been that way in Tajikistan. (Dilovar, 31 years old, engineer)

> Family is more important to me than work, because we are living for the next generation. (Makhina, 23 years old, housewife)

> I think home is more important than work. I was taught that way since childhood. (Chumagul, 22 years old, seamstress)

> For Tajik women, family means much more to them than work, because happiness of life lies within the well-being of the family. (Gulnora, 42 years old, teacher)

> It is impossible to apply only one idea to all Tajik women, but I personally consider that family is more important than work. Business is business. However, creating a comfortable home is different from business, and not everyone may achieve to do so. Women's happiness lies within their family. (Mavzuna, 30 years old, product controller)

Almost all the women said that family was more important than work, with few saying that the two were equally important or that they could not say either way. Here are some of comments from respondents who said that both family and work were important.

> I think home and profession are both important for women in Tajikistan, because home is the basis of our living, and work is what supports us financially. (Madina, 26 years old, housewife)

> It is difficult to answer whether family means more than work or not for Tajik women. It depends on each Tajik woman. If the husband has a good job, family would be the most important thing for the wife. But if not, the wife herself must find work, too. There are also women who are balancing work and home well. (Mariya, 28 years old, accountant)

[19] Another view that has been put forward is that the role of Tajik women is to transmit traditional culture to the next generation (Temkina 2008, p. 106).

Compared with Uzbekistan, it seems that far more women in Tajikistan, when asked whether family or work should take priority, choose family. In another survey of Uzbek women conducted by one of the authors, 52% of women opted for family, while 44% could not say either way or chose work.[20] In addition, when asked what they considered to be an ideal woman, Tajik women were more likely to say a full-time housewife than those from Uzbekistan, which suggests that many people in Tajikistan hold so-called traditional values, even compared with people from other countries in Central Asia.

14.3 Work/Life Balance: The Case of Tajikistan

As far as both men and women are concerned, striking a balance between work and other aspects of life is coming to be seen, in both developed countries and in other developing nations, as important for maintaining the birth rate over the long term and broadening and diversifying ways of living. Although work/life balance cannot really be expected to be seen in Tajikistan, the authors asked the women there about how they view it.

As the authors have already seen, the proportion of working women in Tajikistan is high, and 31 of the 40 women interviewed for this survey had jobs. During the interviews, the women were asked who does the housework, and who looks after the children. On the whole, their responses indicated that most women perform the bulk of the housework, though there are a few exceptions. For example, one woman lives with her son and his wife, and this wife does the housework. Another has divorced and moved to her parents, and her parents do the housework. Supporting the general trend, though, many women said that housework was women's work, and said that housework was a woman's primary job, and that regarding it as women's second job was not discriminatory.

> Right now, I'm doing all the housework after I come home from work. My mother helps me with it, too. This is only women's job. I don't think housekeeping is the second women's job; it's the 'first' job. But women also need their own profession to have money they may spend on their own. I myself think that raising children is the wife's responsibility. I don't have children, though. Concerning how to share all the duties at home, I think the wife must do the housework and take care of the children. The husband should work for money to support his family. (Temurova, 22 years old, shop seller)

> I do most of the housework. My husband comes home about once in 2 months. My daughters help me with the household chores. Housework is the second important job for women, and I don't think such an idea is discriminating against women. Housework and child care are basically women's work, and husbands should work and earn money – that's how it should be, I think. (Rafoat, 54 years old, cleaning woman)

> I cook meals, do the laundry, cleaning, and work in the fields with my mother-in-law, and the wife of my husband's brother. It isn't prejudice against women to say that housework

[20] Igarashi (2009, p. 28).

> is women's job. It is actually the most important job for women. (Salekha, 24 years old, housewife)

> When I am at home, I do all the housework. My family helps me, too, but I think housework is basically women's work. Since every married woman is a housewife to begin with, I don't think it is prejudice to say that housework is women's job. It is also unnecessary to decide who must do the chores or child rearing. (Shokirova, 51 years old, kindergartener)

Just one woman said that she spent little time on housework. She also said that men and women should share responsibility for housework and child-rearing. In addition, only one woman said she and her husband actually did share the housework.

> I don't spend so much time on housework. My children help me out. I think it is a prejudice against women to say that housework is women's responsibility. Husbands and wives must cooperate in housekeeping and child rearing. (Gulnora, 42 years old, teacher)

> My husband and I do the housework. I think it should be that way. In our case, for instance, my husband does the grocery shopping. My daughter helps us, too. Housework is certainly women's second work, and I don't think it is discriminating to say so. (Makhbuba, 54 years old, university lecturer)

Even so, Makhbuba gives the fact that her husband buys groceries as an example of the way they share "housework." This may indicate that she views having her husband do the shopping and herself doing everything else as constituting a sharing of duties. Because many of the women surveyed cited shopping as a household duty actually performed by their husbands or as one of their husband's roles, the "sharing" that Makhbuba talks about probably does not refer to all household tasks. If this is the case, then all the women surveyed are responsible for actual housework.

A certain number of women, however, believe that ideally couples should share the housework and help each other, even though at the moment they are performing household duties and taking care of the children on their own. Many women felt that couples ought to share responsibility for child-rearing. The women below say or indicate that it is discrimination to ascribe all the housework to women's task:

> The time I spend for housework is about 4 to 6 hours a day. I don't think housework is only women's work. My children help me out, too. I think it is a discrimination against women to say that women should do all the housework. Husbands and wives should share the responsibilities of jobs around the house and child care. (Dilovar, 31 years old, engineer)

> I do all the housework. It takes about 5-6 hours a day, which means 35-40 hours a week. My mother helps me with the housekeeping, and my husband takes care of the livestock. I think it is discriminating against women to say 'housework is women's second job.' Men might not understand that. I am mainly responsible for teaching discipline to our children because my husband is busy working at two places. Ultimately, I wish to share the responsibilities of raising our children and housework between my husband and me. (Anora, 29 years old, housewife)

> All the housework is my responsibility except for grocery shopping. I spend 20–24 hours per week on housework. I don't ask for someone to help me basically. "Housework is women's second job.' I think it is a discriminating idea. Bringing up children is also my responsibility, since my husband is working at two places. It would be good if the husband and wife share the responsibilities of housework and child care. But in reality, it doesn't always work that way. (Zarrina, 30 years old, hotel housekeeper)

In addition, others expressed views that seem to emphasize the need for couples to share the burden of child-rearing:

> I spend 4-5 hours on housework and my mother-in-law helps me with it. I don't think it is discriminating against women to say that housework is women's second work. I look after my child, but my mother-in-law supports me, too. It would be best if the husband and wife helped each other out. But as long as problems are solved in a peaceful manner, it doesn't really matter. (Gavkharoi, 22 years old, housewife)

> I spend 3-4 hours a day on all duties at home. Housework is women's most important job, not second. It is the women's responsibility to do the housework. Concerning child care, it is not only the wife's job. The husband should become involved in child rearing in spite he must work to support his family economically. (Mavzuna, 30 years old, product controller)

In the survey of gender attitudes in former Soviet countries conducted by one of the authors, which was also referred to earlier, the authors found that a general trend in Russia, Georgia, and Uzbekistan was that while housework was seen as women's work, child-rearing was regarded as something that women should share with their husbands.[21] Tajikistan seems to display a similar pattern.

Some women regard wives as being responsible for housework and child-rearing, while others believe that ideally men and women should share household and child-rearing duties. Whatever their beliefs, though, the reality seems to be that women do most of the housework and child-rearing. Aside from shopping, women are basically performing all the household duties.

As the authors have seen, in Tajik society women also work, yet they also do almost all the household tasks and child-rearing. Despite this, widespread use of electrical appliances, which would make housework easier, is low. In other words, women are shouldering a double burden: both holding down jobs and performing housework. Full-time housewives seem to spend a lot of time on housework. The figures the authors have seen show that it is difficult to imagine work/life balance being achieved soon, and that there is still a long way to go.

14.4 The Husband Is the Master of the Household: Verifying by Large-Scale Micro Data

As the authors have already seen, there remains little likelihood of work/life balance being achieved in Tajikistan, with moves toward it probably being hindered traditional values.

Astanova (1977) described that before the Russian Revolution of 1917, men from Uzbekistan, Tajikistan, and Turkmenistan were forced to work for capitalists from the Russian Empire. The women, on the other hand, were described as "the slaves to the slaves" (Astanova 1977, p. 126) which indicates how harshly they were treated.

[21] Igarashi (2009, p. 29).

14.4.1 Soviet Experience and Its Legacy

The Soviet government promoted modernization in Central Asia, and a drive to liberate women was a major pillar of this policy. The first thing that needed to be done was to replace Sharia law and local legal systems such as Adat law with Soviet law.[22]

The Soviet government organized women and put them into massive educational programs. In 1919, a women's section was established within the Communist Party, which began publishing magazines such as "*Women working in industry*" and "*Women working in agriculture*".[23] In the autumn of the same year, the women's section implemented a large-scale political and educational program for women in Central Asia, and established women's clubs, lounges for discussing cultural education, and so on. As a result, Central Asian women seem to have come to accept a new way of living different from the one they had been accustomed to until then.[24]

Nevertheless, even if women go out to work, and no longer have to wear veils, there may be no change in the status of husbands as masters of households. With regard to this subject, a head of ideology for the Jamoat office and a 40-year-old woman had the following to say during the authors' interview[25] with her:

> Tajik tradition holds that men are at the centre of the family, and the natural state of affairs has been for men to be the breadwinners. For economic reasons, however, women have also started going out to work during the last ten years, so gender relationships are changing. During the Soviet era, Tajik women bore a lot of children, usually no fewer than five or six. As a result, working women were rare. Before, only 25 percent of women in this area had jobs.
>
> In this area, half the managers in every workplace are women. Yet the husband remains the centre of the family even if his wife has gone to work and achieved a high-status job. For example, I hold a fairly important post at my workplace, but when I go back home, my husband is the boss. My husband's opinions are like the law in our household. It's the same in every family. Both women and men work, and in society they are treated equally. At home, however, the husband is the king.

Even though women are working alongside men in society, she says that it is normal for men to be the master of the household. However, even if the husband is the boss, there are still signs of democracy. Many women, for example, said that their husbands do not decide how many children they will have, that instead the couple decide together. Of the 40 women the authors surveyed, only four said that their husband decided how many children they would have.[26]

---

[22] Tyurin (1962, p. 5).

[23] Tishkin (1995, p. 162).

[24] Tyurin (1962, p. 6).

[25] The interview was conducted on August 17, 2010 in a suburb of Dushanbe, Tajikistan.

[26] "*My husband decided on how many children we would like to have*" (Dilovar, 31 years old, engineer); "*My husband mainly decided on how many children we would want*" (Anora, 29 years old, housewife); "*My ex-husband decided on how many children we would like to have*" (Chumagul, 22 year old, seamstress); "*My husband decided on the number of our children*" (Molhira, 30 years old, housewife).

Power relationships within the home and relationships between men and women are obviously subtle, and therefore need to be approached carefully. With this survey, the authors were unable to find out much about relationships between men and women.[27] Therefore, to supplement the findings the authors were able to obtain, let the authors now examine the Multiple Indicator Cluster Surveys (MICS), which are large-scale sampling surveys conducted by UNICEF.[28]

The MICS were carried out mainly in 1999 and 2005.[29] They are repeated cross-sectional surveys of individual women and children. The surveys are aimed at finding out about the health of children, the reproductive health of women, household economic and social conditions, and so on, and are conducted in five Central Asian countries of the former Soviet Union, and in Ukraine, Belarus, and Georgia. For Tajikistan, the most recent usable data is from the survey performed in 2005, so the authors will use the micro data from that. The sample includes 6245 women of reproductive age (15–45). The sample is representative of the country's population as a whole, and also of the target regions (Tajikistan, Kazakhstan, Georgia and Kyrgiz).

14.4.2 Power Relationships Within Households: Domestic Violence

Now the authors would like to turn to the second main issue of this chapter, the power relationship between men and women in Tajikistan in more detail. This may shed light on the changes/unchanges of traditional gender relations in Tajikistan. Let the authors use MICS data to look at attitudes to domestic violence, which indicates the relationship between a husband and a wife in the household. The responses indicate that the human rights of women in Tajikistan may be being seriously infringed.

Table 14.3 shows responses to the question of when a husband was justified in beating his wife, with possible answers being when she goes out without telling him, when she neglects the children, when she refuses sex with him, and when she burns food. Data from other former Soviet countries is also provided to help comparison (Table 14.4).

All this data is from MICS Round 3, which was conducted in 2005 and 2006. It shows that in Tajikistan domestic violence is not recognised as such, and provides powerful clues about the domestic situations of wives. In Kazakhstan, which is also in Central Asia, and in Georgia, which is a Christian country, the proportion of women who feel that it is acceptable to be beaten by their husbands in the various situations is extremely low. Although the proportion of such women is not as high

[27] Although the authors did ask the subjects about this, they were evasive, and the authors were unable to use their responses.

[28] Detailed description on MICS survey design is available at the UNICEF website, http://www.childinfo.org/mics3_surveys.html. The authors are grateful to UNICEF for permitting usage of micro data set.

[29] In some countries the surveys were conducted in 2000 or in 2006.

Table 14.3 Attitudes toward domestic violence: percentage of women aged 15–49 years who believe a husband is justified in beating his wife/partner in various circumstances, Tajikistan, 2005

	When she goes out without telling him	When she neglects the children	When she argues with him	When she refuses sex with him	When she burns the food	For any of these reasons	Number of women aged 15–49 years currently married or in union
Region							
Dushanbe	39.7	29.4	40.6	28.5	28.6	47.7	512
Khatlon	66.1	65.2	76.8	57.6	47.7	82.8	2048
Sogd	66.4	62.5	69.6	43.2	44.0	76.2	2166
DRD	60.2	62.2	64.0	49.1	42.7	69.8	1365
GBAO	52.4	56.9	56.0	38.4	45.8	69.4	154
Ar ea							
Urban	53.0	50.8	60.1	38.9	36.7	67.3	1727
Rural	66.0	64.2	71.1	51.3	46.4	77.2	4518
Women's education level							
None	71.8	70.5	78.4	49.0	43.4	84.1	64
Primary	74.9	70.9	82.9	62.6	58.0	86.4	103
Incomplete secondary	66.3	64.3	72.0	53.8	46.3	77.3	1313
Complete secondary	65.0	63.5	70.1	49.4	46.0	76.6	3886
Secondary special	54.3	47.7	59.8	37.7	34.6	68.4	490
Higher education	28.9	28.6	38.0	21.1	19.8	46.0	387

Source Prepared by the authors from MICS3

Table 14.4 Attitudes toward domestic violence: percentage of women aged 15–49 years who believe a husband is justified in beating his wife/partner in various circumstances, other FSU states

		When she goes without telling him	When she neglects the children	When she argues with him	When she refuses sex with him	When she burns the food
Kyrgyz	Urban	13.1	17.1	14.5	6.5	6.1
	Rural	26.3	26.4	34	11.7	15.4
Kazakhstan	Urban	2.5	7	4.2	1.5	1.9
	Rural	2.4	7.3	4.4	1.7	1.7
Georgia	Urban	1.3	4.5	1.5	1	0.7
	Rural	2.4	7.5	3.5	1.7	1.5

Source Prepared by the authors from MICS3

in Kyrgyz as it is in Tajikistan, there is more acceptance of domestic violence there than in Kazakhstan. Compared with other former Soviet countries, it seems possible to assume that husbands in Tajikistan hold absolute power within the household.

What is interesting, however, is how levels of women's education affect the responses in the cross-tabulation shown in Table 14.3. In Tajikistan, there is a clear negative correlation between a woman's education level and the likelihood of her tolerating domestic violence from her husband. The higher a woman's level of education, the less likely she is to accept it. If this trend can be generalised and represents a direct cause-effect relationship, then it ought to be pointed out that a rise in education levels in Tajikistan could dramatically change the status of women in the home.

14.5 In Place of a Conclusion: Gender Education in Tajikistan

The Education Academy of Tajikistan has introduced gender education.[30] Gender initiatives are beginning to be taken in Tajikistan, with gender education getting underway, a common program of craft and home economics education set to be introduced for boys and girls, and so on. However, the common craft and home economics program are aimed at eliminating the separation of roles for men and women, and is therefore at odds with Tajikistan tradition, which means that opposition can be expected from society. Even the head of the Academy of Education, who is working on tackling gender issues, holds the view that Tajik tradition should be maintained and not destroyed,[31] which means that the gender situation is probably not going to change easily. The superior status of men in the household, in particular, will not be easy to change, and it seems unlikely that any drive to make major changes will emerge in the near future.

Regarding the separation of male and female roles within the household, it is clear that in Tajikistan housework and child-rearing is women's work. This is considered natural there, so Tajik women will probably continue to bear the burden of housework and taking care of children. This also relates to the power of husbands within the household. In other words, work/life balance will not be easy to achieve. Nevertheless, Tajikistan and other Islamic countries of the former Soviet Union display characteristics not found in other Islamic societies. The literacy rate among women is high, as is the proportion of working women, and a certain degree of gender equality has been achieved (though this varies among the Islamic countries of the

[30]The rest of this section is based on an interview with Irina Karimova, head of the Education Academy of Tajikistan at her office on August 19, 2010.

[31]"Even if we eradicate male and female stereotypes, we must not forget the Tajik mentality. It has developed over several centuries, and we must not go so far as to destroy the good aspects of it. Some things can be accepted in Europe, but not in Central Asia. In other words, there are things that should not be destroyed, things that should not be changed. Females should be feminine. Each woman should decide on her own role in her home"—by the words of Irina Karimova, head of the Education Academy of Tajikistan at her office on August 19, 2010.

former Soviet Union). If a name were to be chosen for such nations, it might be "former-Soviet-type Islamic countries." In the future, it will be necessary to keep a close watch on how these former Soviet-type Islamic countries change in response to economic trends.

Acknowledgements This research was supported by Japan Securities Scholarship Foundation and the Grant in aid for Scientific Research of the Ministry of Education and Science in Japan.

Appendix: Sample Questionnaire for the Survey

Profile

0. What is your given name?
1. Your age:
2. Nationality:
4. Your education:
4. Your family:

    1) how many children. age
    2) live separately
    3) live with your husband's parents
    4) live with your parents
    5) about the husband

        Where and as what does he work?
        How did you meet?
        Why did you get married?
        Your attitude towards your husband at the beginning of your family life has it changed now? If so, how? What influenced your attitude towards your husband?

    6) about children

        Learning or working?
        What do they dream about?

    7) about your parents

        Age
        Family role

5. What is your main occupation?

    1) employer
    2) self-employed
    3) student
    4) retired

5) unemployed
6) housewife
7) other
8) If you work, then where and as what do you work?

6. What role of a woman is closer to you?

1) housewife woman
2) business woman
3) professional woman
4) free woman (not knowingly marrying)
5) Your answer option …….
6) hard to answer

Why do you think so?

7. Often a woman's household work is a "second job". Is this discrimination?

1) yes
2) no
3) difficult to answer

Why do you think so?

8. What is your opinion on housekeeping (cooking, washing, cleaning, grocery shopping, etc.)

1) this is a woman's business
2) this is basically a woman's business
3) housekeeping is the business of a man and a woman equally
4) Your answer option …….
5) hard to answer

9. Your opinion on parenting

1) it's the mother's business
2) this is mainly the mother's business, the man must first provide for his family
3) it is the work of father and mother equally
4) this is a school affair
5) Your answer option …….
6. hard to answer

10. What do you specifically do in the family?

1) cooking
2) washing
3) cleaning
4) walking with children
5) parenting
6) buying products

7) garbage collection
8) family spending planning
9) family support
10) Your answer option …….
11) difficult to answer

11. How would you like to see the distribution of responsibilities in the family?

11.1 The husband must engage in:
1) cooking
2) washing
3) cleaning
4) walking with children
5) parenting
6) buying products
7) garbage collection
8) family spending planning
9) family support
10) Your answer option …….
11) difficult to answer

11.2 The wife should do:
1) cooking
2) washing
3) cleaning
4) walking with children
5) parenting
6) buying products
7) garbage collection
8) family spending planning
9) family support
10) Your answer option …….
11) difficult to answer

12. To what extent do you agree with the statement: “for a woman, the best way to be independent is to have a job”?

1) totally agree
2) agree
3) I agree with something, I disagree with something
4) disagree
5) totally disagree
6) hard to answer

13. What do you think is more important for most Tajik women now, family or work?

1) family matters
2) family rather than work

3) family and work are equally important
4) work rather than family
5) work is most important
6) neither work, nor family is important, but another (for example, raising the cultural level, entertainment, etc.
7) hard to answer
8) Your answer option …….

14. What religion do you profess?

1) Islam
2) Orthodoxy
3) other …
4) atheist

15. What is the material support of the family made of?

1) Money earned by wife %
2) Money earned by husband %
3) Money earned by parents %
4) Money earned by children %

Additional Questions:

How many children do you think are ideal (for you)?
Do you want (more) children now?
Who determines the number of children? (Myself, my husband, my parents, my husband's parents)
Are you using contraception? Who do you want? (Myself, my husband, my parents, my husband's parents)

References

Ashwin S (2002) The influence of the Soviet gender order on employment behaviour in contemporary Russia. Sociol. Res. 41(1):21–37

Astanova G (1977) O polozhenii zhenshin v Bukharanskom khanstve v kontse 19- nachale 20 g. *Zhenshchiny vostoka*, pod.red. Azimdzhanova, S.A., FAN, Tashkent. (in Russian)

Funk N, Mueller M (eds) (1993) Gender politics and post-communist: reflection from Eastern Europe and former Soviet Union. Routlege, New York

Gang I, Gatskova K, Landon-Lane J, Yun M-S (2018) Vulnerability to poverty: Tajikistan during and after the global financial crisis. Soc Indic Res 138(3):925–951

Igarashi N (2009) Will huge volume of full-time housewives emerge in the post-Soviet states? Jpn J Comp Econ Stud 46(1):17–34

Kumo K (2012) Tajik labour migrants and their remittances: is Tajik migration pro-poor? Post-Communist Econ 24(1):87–110

Kurosaki T (2006) Economic analysis of poverty and vulnerability. Keiso-Shoboh (in Japanese)

Laslett B, Brenner J (1989) Gender and social reproduction: historical perspective. Ann Rev Sociol 15:381–404
Lubin N (1981) Women in Soviet Central Asia: progress and contradictions. Soviet Studies 33(2):183–186
Olimova S, Bosc I (2003) Labour migration from Tajikistan. International Organization for Migration, Dushanbe
Olimova S, Kuddusov D (2007) Sem'i migrantov v Tadzhikistane: problemy i sposoby ikh resheniya. Irfon, Dushanbe (in Russian)
Pockney BP (1991) The Soviet statistics since 1950. Palgrave Macmillan, Aldershot
Selezneva E (2017) Population policies in Soviet and Modern russia. In: Karabchuk T, Kumo K, Selezneva E, *Demography of Russia: from the past to the present*. Palgrave Macmillan, London, pp 63–113
Statkomitet SNG, Sodruzhestvo nezavisimykh gosudarstv. SNGStat, various years, Moscow
Temkina AA (2008) Seksual'naya zhizn' zhenshiny: mezhdu podchineniem i svobodoi. Evropeiskii universitet, Sankt-Peterburg (in Russian)
Tishkin GA (1995) Zhenskii vopros v istorii Rossii, Feminizm i rossiiskaya kul'tura, pod red. Tishkin, G.A., SPbGAK, Sankt-Peterburg, pp 138–167 (in Russian)
Tyurin KD (1962) Formirovanie sovetskoi sem'i v Uzbekistane. Gosudarstvennoe Izdatel'stvo Uzbekskoi SSR, Tashkent (in Russian)
World Bank (2009) Republic of Tajikistan poverty assessment. Report No.51341-TJ, World Bank

Chapter 15
Women's Political Empowerment in Post-Soviet Kazakhstan

Elena Maltseva

Abstract This chapter examines the factors that contributed to women's political mobilization in Kazakhstan in recent years and assesses the implications of this trend for the country's political and social institutions. Using the framework of social grievances and political opportunities, the chapter argues that changing socioeconomic conditions, coupled with the growing frustration among women over their inability to influence the policy-making process due to the closed structure of Kazakhstan's political institutions, as well as the renewed interest in the feminist ideas among the younger generation of Kazakhstani women and the rise of social media are the factors that best explain the recent wave of women's activism in Kazakhstan. The implications of women's collective action for the country's social and political institutions are significant. If sustained, it has the potential to reshape the state of gender relations in modern Kazakhstan and liberalize the country's political institutions. The study is based on extensive research conducted by the author in Kazakhstan between 2014 and 2019, including interviews with female activists, as well as a comprehensive review of primary and secondary literature on the topic.

Keywords Kazakhstan · Central Asia · Social movements · Women's empowerment · Democratization · Feminism

15.1 Introduction

A quarter century after the fall of the Soviet Union, Kazakhstan has made impressive strides in state- and nation-building. The country was able to successfully overcome the challenges of the transitional period during the 1990s and emerge as one of the fastest-growing economies in the post-Soviet region, also demonstrating a steady increase in the human development index (HDI) from 0.690 in 1990 to 0.817 in 2018 (UNDP 2019). The Kazakhstani gender inequality indicators (GII) also look good: as shown in Fig. 15.1, more than 98% of Kazakhstan's female population have

E. Maltseva (✉)
Department of Political Science, University of Windsor, Windsor, ON, Canada
e-mail: elena.maltseva@uwindsor.ca

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_15

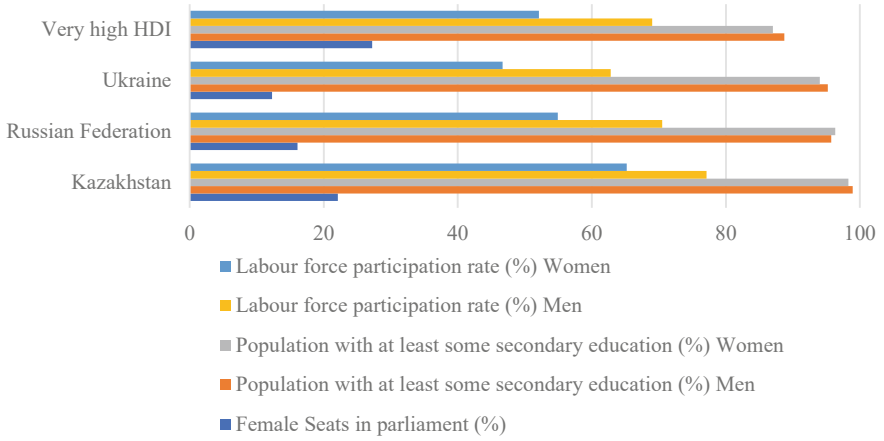

Fig. 15.1 Kazakhstan's GII for 2018 relative to selected countries and groups (*Source* Compiled by the author based on UNDP [2018] data)

at least some secondary education, nearly 65% of women are in the labour market, and 22.1% of seats in parliament are occupied by women (UNDP 2018; Abugaliyeva 2018). As a result, in 2018, Kazakhstan ranked 60th on the Global Gender Gap Index and 32nd in terms of female economic participation, according to a World Economic Forum (WEF) report (WEF 2018).

Despite such positive achievements, several structural problems in the economic and political realms remain. Women still face a substantial gender wage gap, earning on average only 57% of what men earn (ADB 2018). In addition, many women continue to work informally or are employed in low-paid sectors of the economy, such as agriculture, retail, education and health care, as well as food and hospitality services (ADB 2018; Alshanskaya 2020; Mynbayeva, n.d.). Likewise, according to data presented in the WEF's Global Gender Gap Reports from 2013–2018, the level of women's political empowerment in Kazakhstan remains low, with women being significantly underrepresented in senior decision-making positions (Figs. 15.2 and 15.3). As evident from Fig. 15.2, where 1 denotes a full parity score, women in Kazakhstan achieved gender parity on educational attainment (assessed based on literacy and education rates) and health and survival scores (assessed in terms of equal access to health care and life expectancy). At the same time, the country's scores for economic participation and political empowerment clearly show the need for significant improvement in these areas. In addition, Kazakhstani women struggle to overcome deep-seated cultural norms and traditional perceptions limiting their role to family and child care (Kuzhabekova et al. 2018). In conclusion, although the government of Kazakhstan officially declared the advancement of women's rights and the expansion of political and economic opportunities for women as one of its public

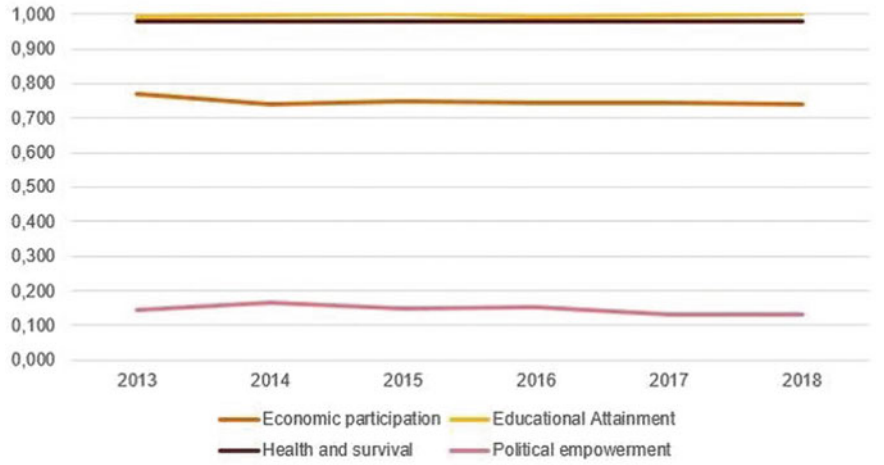

Fig. 15.2 Evolution of gender gap index scores for Kazakhstan, 2013–2018 (*Source* Yap and Szollosi 2019)

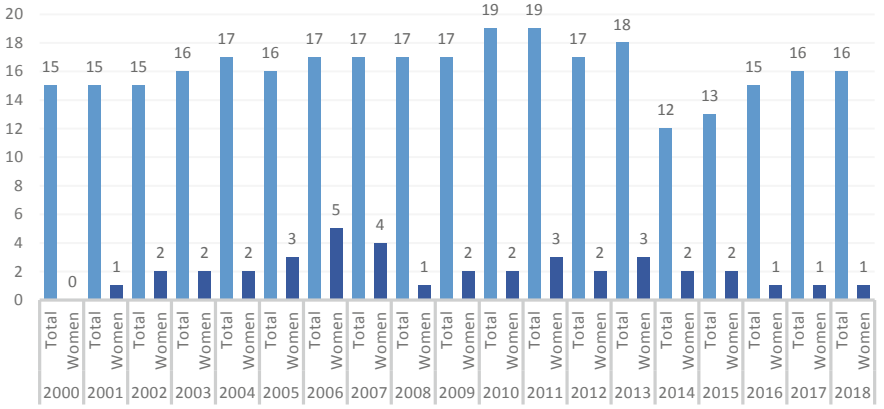

Fig. 15.3 Number of women, holding ministerial positions in the Government of the Republic of Kazakhstan between 2000 and 2018 (*Source* Ministry of National Economy of the Republic of Kazakhstan, Statistics committee, n.d.)

policy priorities, the voice of women in politics and women's impact on governance have remained limited (UNDP 2016; Abugaliyeva 2018; Yap and Szollosi 2019).[1]

[1]For an overview of the government's legislative initiatives in the area of women's rights and gender equality, review the *Strategy for Gender Equality in the Republic of Kazakhstan for 2006–2016*, approved by the Decree of the President of the Republic of Kazakhstan No. 1677 on 29 November 2005, available at http://www.akorda.kz/upload/nac_komissiya_po_delam_zhenshin/5.2%20СГР%20англ.pdf; the 2009 *Law on State Guarantees of Equal Rights and Opportunities for Men and Women No. 223-IV*, available at https://online.zakon.kz/document/?doc_id=30526983;

However, recently, to the surprise of many observers, the existing status quo, particularly with regard to women's participation in social and political affairs, has been challenged on numerous occasions. The intensity of women's collective action picked up in 2013 when Kazakhstan experienced an unprecedented wave of grassroots protests organized by women activists against a new pension law that increased the retirement age for women from 58 to 63 (Nuttall 2013). Since then, Kazakhstani women have demonstrated an unusually high level of political engagement, including their active participation in various social protests, online campaigns against sexual violence and discrimination, and civic initiatives in support of better governance, gender equality and women's empowerment (Gander 2014; Abdurasulov 2018; Seydakhmetova 2018a). The rise in women's political activism suggests that Kazakhstani society is undergoing significant social and political transformation, which has the potential not only to ensure a greater degree of gender equality, but also to challenge old authoritarian institutions, traditions and social attitudes (Zhoyamergen 2018).

Using the concepts of political opportunities and social grievances, and taking into account the growing role of social media, this chapter aims to explain the origins of the recent wave of women's mobilization in the authoritarian setting of post-Soviet Kazakhstan and analyze the implications of this trend for the country's political and social institutions. It argues that the recent rise in women's political activism is best attributed to a combination of different factors, including the changing socioeconomic context and rising grievances, evolving cultural and social attitudes about the role and place of women in society, and the growing role of social media, all of which have helped women overcome the limited political opportunities.

The long-term implications of women's mobilization for the country's social and political institutions are significant. First, the wave of women's political activism outside of formal political structures indicates just how unequal the gender distribution is in modern Kazakhstan in terms of access to power and resources. In that sense, women's collective action presents an important democratic counterbalance to the male-dominated power structure of the Kazakhstani state. If women's political mobilization continues, it has the potential to reshape the state of gender relations in modern Kazakhstan. As some feminist scholars argued, states will not willingly adopt feminist changes or take women's views into account without pressure from organized women groups (Viterna and Fallon 2008). Second, the protests point to the development of a robust civil society in Kazakhstan, which is considered a necessary pre-condition for the promotion of democracy and the protection of basic human rights. Altogether, the recent wave of women's political mobilization has the potential to address historical injustice and oppression as well as to liberalize the country's political institutions and contribute to the development of a more gender equitable state in Kazakhstan.

---

and the *Concept of Family and Gender Policies in the Republic of Kazakhstan until 2030*, adopted by the Decree of the President of the Republic of Kazakhstan No. 384 from 6 December 2016, available at http://adilet.zan.kz/eng/docs/U1600000384.

The study is based on extensive research conducted by the author in Kazakhstan between 2014 and 2019, including interviews with female activists, as well as a comprehensive review of primary and secondary literature on the topic. The chapter is organized in three sections. The next section offers insight into the role of social grievances, political opportunities and social media in contributing to mobilization of women in Kazakhstan. It also provides a theoretical framework for understanding the political and social implications of women's collective action. The following sections provide an overview of the place and the role of women in Kazakhstan before and after 1991 and examine the factors that contributed to the rise of women's collective action. The chapter concludes with a review of the main argument and a discussion of the long-term political and social implications of this trend for post-Soviet Kazakhstan.

15.2 Grievances, Political Opportunities and Social Media in Authoritarian Regimes: Theoretical Framework

To understand the origins of the recent political mobilization of Kazakhstani women, a review of relevant academic literature is required. The three main approaches that provide the most comprehensive explanation for the emergence of collective action in Kazakhstan are the relative deprivation theory, the resource mobilization approach, and the political opportunity structure framework. The relative deprivation approach postulates that people are more inclined to engage in contentious politics when they are dissatisfied with their current situation and experience feelings of illegitimate inequality, injustice, moral indignation, or societal alienation (Gurr 1970; Abeles 1976; Klandermans 1997). Depending on the conditions, these feelings may contribute to the development of a collective perception of reality and evolve into a social movement, a spontaneous protest or a rebellion. According to Alain Touraine (1981, 1988), the type of society and the level of its economic development may predispose people to certain grievances and demands. In the end, these feelings of deprivation and injustice, whether real or perceived and concerned with material or non-material issues, may motivate people to challenge the existing status quo and demand an improvement or correction to their original condition or situation (Gurr 1970; Bayard de Volo 2006).

Contrary to the relative deprivation approach, the theory of resource mobilization emphasizes the processes and actors internal to movements and pays little attention to psychological factors and the context in which they have developed. The proponents of this approach argue that grievances alone cannot explain the emergence of social movements, and that social mobilization and the possibility of a sustained collective action are determined by pre-existing social networks, the organizational infrastructure and the resources available to political activists (McCarthy and Zald 1977, 2001; Warkotsch 2014). Among the factors critical to the survival of a social movement, scholars identified the availability of actors with specific knowledge or skills required to accomplish various tasks such as organizing a protest event, running a meeting or

an information campaign, navigating the internet, or lobbying the government. Also, the success of a social movement depends on the degree of unity and commitment among its members and the presence of material resources such as financial and physical capital (Edwards and McCarthy 2004).

As time passed, the resource mobilization approach came under criticism for neglecting the context in which movements developed. As a result, a new approach emerged that focused on political opportunity structures (POS) (Tilly 1978; McAdam 1982). This approach argues that neither fully closed nor fully open POS present an ideal environment for protest, but rather a mix of both. Among the factors facilitating the opening of a political opportunity structure, scholars identified various events and situations, including the mobilization of old opponents, the fragmentation of an existing political landscape and party system, the rise of new ideas and ideologies, changes in international alliances, growing corruption and declining state capacity, changing perceptions of political activists about political opportunities, and several other factors (Warkotsch 2014). What makes the political opportunity framework particularly useful for understanding political events in post-Soviet states is that it identifies grievances and places them into a context, taking into account factors that are internal to a movement, such as people, ideas, and resources, and a political opportunity structure that plays a fundamental role in determining the timing and the reason for a movement's emergence (Tarrow 1994).

Over time, technological development and the rise of social media significantly expanded the collective action repertoire available to the actors. The use of new digital technologies and the internet diversified political engagement styles and allowed for much faster mobilization through social networks, which in turn decreased the significance of classic organizational structures, resources and instruments (Breuera et al. 2015; Selander and Jarvenpaa 2016). In these new modern realities, mobilization no longer required a lengthy investment of material and human resources, and even the nature of political activities and recruitment, and the role and purpose of leadership appeared to have been redefined. The introduction of digital media lowered the transaction costs associated with political activities and simplified the citizens' exposure to political information and its dissemination. To know about relevant events and meetings and to potentially join them, it was no longer required to be an active member of a social movement.

The long-term implications of a digital media revolution turned out to be particularly significant for the process of democratization in competitive authoritarian regimes (Warkotsch 2014; Breuera et al. 2015). The opportunities that technological development offered to political activists and social movements challenged the authoritarian institutions in several countries in the Middle East and the post-Soviet region and empowered social and indigenous movements in numerous countries around the globe (Bayard de Volo 2006; Gheytanchi and Moghadam 2014; Duarte 2017). In the post-Soviet region alone, the 'Coloured Revolutions' in Georgia, Ukraine, Kyrgyzstan and Armenia and numerous protests in countries such as Russia, Azerbaijan, Kazakhstan and several others demonstrated how collective action could be sustained in the absence of significant material and financial resources,

relying instead on new information and communication strategies (Salanova 2012; Bohdanova 2014; Mehrabov 2016).

Perhaps the most important conclusion to take from this discussion is that political opportunities may be limited in authoritarian regimes, but they do exist, and with a certain degree of organization and the effective use of social media, collective action and social movements can achieve much. At the same time, evaluating a movement's success or failure in authoritarian settings is complicated, since the effects of collective action are often multifaceted and go beyond the original goals set out by the organizers of a movement or a campaign, sometimes catalyzing broader changes in the system instead of producing the desired change for the target population. Therefore, the study of the effects of collective action in nondemocratic regimes should encompass both material and non-material changes, such as the rise of collective and civic identity as well as a feeling of empowerment that often extends beyond the actors directly involved in collective action. In the end, the long-term, non-material benefits of collective action in non-democratic regimes may include changes to a country's political system, as the rising social capital empowers citizens and enhances their political engagement, thereby increasing the chances for political liberalization and democratization (Seligman 1992; Putnam 1993; Booth and Richard 1998; Özler and Sarkissian 2011; Cannon and Hume 2012; Way 2014; Ibrahim 2015).

15.3 Women in Kazakhstan before and after 1991

15.3.1 Women, Nomadism and Islam in Pre-Soviet Kazakhstan

Low levels of political engagement and the challenges facing women in post-Soviet Kazakhstan reflect the complex historical legacies of the pre-Soviet and Soviet periods. The modern Kazakh identity rests on two main pillars—nomadism and Islam, with the Soviet legacy adding an additional layer of complexity. In the pre-Soviet period, the place of women in the Kazakh social structure has been circumscribed by the strong nomadic traditions of Kazakh communities, in which age hierarchy was more important than that of gender and the final say in family matters belonged to the elder members of a family. In addition, Islam played an important role in reinforcing the traditional family structure and values. Starting from the mid-seventh century, Islam gradually spread to become the dominant religion in the region, producing a unique blend of Sharia law and nomadic cultural practices and customs (Abazov 2007; Mendikulova 2008; Laumulin and Laumulin 2009). Over time, the influence of nomadic traditions and Islamic practices resulted in the establishment of a gendered social structure, in which the public domain was dominated and controlled by men, whereas women belonged in the private domain of a family, where they took care of children, their husband's parents and the household (Werner

2009). No movement fighting for women's rights and gender equality existed in pre-Soviet Kazakhstan, although the Jadidist movement that emerged among Muslims in Russia and neighboring Islamic countries in the late nineteenth and early twentieth centuries strove to improve women's education level and marriage status within the existing traditional social structure (Hitchins 2008). In summary, although important differences existed between the nomadic and sedentary communities of Central Asia in terms of the role and the place of women in society, the general trend was that women were subordinated to and dependent on men in all major aspects of their lives (Shakirova 2015).

15.3.2 The Soviet Emancipation Project

The onset of the Soviet period in Kazakhstan resulted in a steady process of women's emancipation, which coincided with the policies of sedentarization and collectivization as well as rapid industrialization and urbanization (Kendirbai 2002). By 1922, 95% of the Kazakh population was both sedentarized and forcibly integrated into the Soviet political and economic structures. During this time, the Soviet authorities pronounced the right to work as the main tool for women's emancipation and implemented policies to increase gender equity in education and employment and to satisfy the needs of industrialization (Werner 2009). As a result, between 1922 and 1940, the proportion of women in various sectors of the Soviet economy as well as in the total number of workers skyrocketed. Many women worked alongside men in traditionally male occupations, though the majority were employed in education, health care and social services.

The process of women's emancipation was accompanied by a Soviet campaign against local customs and traditions. The campaign was aided by activists from Zhenotdel, a feminist organization founded in 1919 in Soviet Russia that aimed to enlighten women across the Soviet Union about their role in society and then draw them into the Soviet machine as workers (Rysbekova 2009; Whalley 2018). In Central Asia, the goal of these activists was to "awaken a Muslim woman from centuries of old hibernation and put her on the path of struggle for her own liberation" (Rysbekova 2009). However, it was not until the late 1920s that Kazakhstani women became more active in the party and started participating in regional and local elections. Several famous feminists emerged in Kazakhstan during this time, including Alma Orazbayeva, Nagima Arykova, Sarah Esova, and Madina Begaliyeva, who fought actively for the political, social and economic emancipation of Kazakh women (Nikiforova 2003; Ayagan 2004, p. 265; Rysbekova 2009; Zhumaliyeva 2016; Smirnova 2020).

In terms of political representation, as part of the Soviet affirmative action policies, approximately 30% of seats in the Supreme Soviets of the USSR and union republics were reserved for women (Kandiyoti 2007; Benedict 2014). Women also served in various ranks in the Communist Party structure at the republican, regional and local levels. And although women rarely reached the top positions in the Party's ranks,

their presence in Soviet political institutions was noticeably visible. In short, despite some local resistance to women's emancipation in rural communities, government policies had a profound influence on women's lives. The Soviet system made women into active members of Soviet society, with equal social, political and economic rights and access to education, health care and employment. By the time the Soviet Union dissolved in 1991, 96% of Kazakh women were literate, 52% of university students in Kazakhstan were female, and approximately 90% of women between the ages of 30 and 50 were employed (Bauer et al. 1997; Rysbekova 2009; Werner 2009; Öz Döm 2018).

At the same time, the paradox of the Soviet emancipation project consisted of the fact that for the most part of its existence it coincided with the Soviet pronatalist policies, which promoted a traditional model of family and motherhood, with the purpose of utilizing not only women's industrial but also reproductive potential (Hoffmann 2000). The pronatalist campaign started in the late 1920s–early 1930s, when the feminist ideas of women's liberation from family and motherhood were replaced with an image of women as mothers of large families (Selezneva 2016). As part of the Soviet demographic policy, the government encouraged women to have children, offering them several welfare privileges, including a guaranteed paid maternity leave for up to one year or up to three years unpaid, access to low-cost child-care facilities, government allowances for families with children, some housing benefits, and so on (Constitution of the USSR 1936, Art. 122; Selezneva 2016). The outcome of these policies was that the Soviet emancipation project and the pronatalist campaign added several layers of responsibility to a long list of women's duties in a Soviet society. In short, although the Soviet ideology stressed gender equality in labor and education, Soviet women lacked a voice in the upper echelons of power, faced wage gaps and lived under the heavy burden of work and family obligations.

Domestic violence and abuse as well as sexist attitudes were also prevalent across Soviet society, and few of these problems were openly acknowledged, discussed or addressed by the authorities and the public (Gal and Kligman 2000; Kandiyoti 2007). Independent political activism and political opposition to the regime barely existed in the Soviet Union. Some moderate criticism of the existing system was possible, but only when it unfolded within the official channels of political participation. Political dissent was not tolerated, and people who disagreed with the Soviet ideology, starting from Soviet dissidents to the representatives of national and religious movements, were harassed, imprisoned, or forced underground or into exile (Biddulph 1972; Powell 1972; Shearer, Shearer 2009). Women did participate in the Soviet civil and human rights movement, but most of their activities were concentrated in the Western part of the Soviet Union (Milewska-Pindor 2013). In summary, Kazakhstani women entered the post-Soviet period possessing high levels of literacy and education, but little to no experience of independent political struggle and living under the heavy burden of work and family obligations.

15.3.3 Women and Women's Organizations in Post-Soviet Kazakhstan

The post-Soviet period in Kazakhstan produced several important but contradictory developments. On the one hand, Kazakhstan was among the first post-Soviet states to declare gender equality as one of the country's key social development indicators. In 1995 the government established a high-level but largely consultative body known as the Council on Problems of Families, Women and Demographic Policy and passed several legislative acts that tackled various issues affecting women, including discrimination in the economic and political spheres, domestic abuse and violence, and forced or compulsory labor (Dubok and Turakhanova 2017). In 2005, the government also adopted a national gender equality strategy for 2006–2016 that aimed to improve women's participation in public, political and economic affairs in Kazakhstan ('Strategy for Gender Equality in the Republic of Kazakhstan for 2006–2016,' 29 November 2005). Later, several legislative acts, including the 2009 laws 'On State Guarantees of Equal Rights and Equal Opportunities for Men and Women' and 'On Prevention of Domestic Violence' and the 2016 'Concept of Family and Gender Policy of the Republic of Kazakhstan until 2030', were passed, which confirmed the government's commitment to dealing with gender-related issues (Law of the Republic of Kazakhstan No. 223-IV of December 8, 2009; Law of the Republic of Kazakhstan No. 214-IV of December 4, 2009; Decree of the President of the Republic of Kazakhstan No. 384 of December 6, 2016). These developments allowed the government to claim that the problem of gender equality in Kazakhstan had been successfully addressed.

On the other hand, the country saw the revival of traditionalist values. This trend had been tacitly supported by the government, as it boosted the integrity of the nation and reinforced support for the regime among the conservative members of Kazakhstani society (Kandiyoti 2007). As a result, there was a slight increase in the number of arranged marriages, which were considered a 'traditional' Kazakh practice, and a significant increase in non-consensual bride abductions (Werner 2009; Shvets 2017). Also, despite the government's initiative to enact the law 'On Prevention of Domestic Violence' in 2009, the situation did not improve. According to various accounts, patriarchal values remained strong, and many women suffered from some form of domestic abuse. As some observers warned, the real situation may have been even worse than the official data, as many women refused to report their husbands due to fear, economic insecurity, and/or societal beliefs ("Sample survey on violence against women in Kazakhstan" 2017; Dubok and Turakhanova 2017).

Likewise, not much had changed in the gender structure of the labour market in Kazakhstan since Soviet times: women constituted nearly half of the Kazakhstani workforce, but their pay remained lower than that of men, comprising, on average, only 57% of a man's salary (ADB 2018). This was partially the consequence of the fact that nearly 70% of women were employed in traditionally low-paid sectors of the economy, namely health care, education, catering and services (OECD 2017). In

addition, many women during the transition were forced to work informally, often being denied social guarantees, such as maternity and sickness benefits and pensions.

In politics, despite the government's legislative initiatives, the share of women in the national parliament remained low compared to most OECD countries and even the Soviet levels of political participation. As stated earlier, as of 2018, women occupied 22.1% of seats in parliament, way below the minimum 30% gender equality threshold, which is the accepted international standard (UNDP 2018). Likewise, in the executive office, women comprised 55% of administrative civil servants, but only 20.7% of women occupied managerial positions in local executive bodies, and 8.4% held politically appointed positions (OECD 2017). These numbers suggest that women remained underrepresented in political institutions of post-Soviet Kazakhstan, holding lower and less important positions in the hierarchy and usually supporting political decisions of the male-dominated political elite (Satymbekova 2016). According to Gulnara Ibraeva, a feminist activist from Kyrgyzstan: "Claims for democratic changes in the region of post-Soviet countries are oblivious to the fact that development does not change the essence of political and public patriarchy. We lived and still live in a political environment that is unfriendly to the idea of gender equality and democratic parity" (Shakirova 2008).

In short, Kazakhstani women entered the post-Soviet period possessing high education levels and hopes for greater political and economic opportunities. However, gender equality, while declared, was never fully realized. Women faced discrimination in the labour market and in politics and were forced to accept lower pay and less secure employment conditions. Growing emphasis on traditional values and customs seemed to further reinforce gendered stereotypes about the role and the place of women in Kazakhstani society. Also, gender-based violence remained an important socio-economic barrier for women (OECD 2017).

Addressing these challenges proved to be particularly difficult in the male-dominated, authoritarian political structure of post-Soviet Kazakhstan. Ruled by Nursultan Nazarbayev from April 1990 until his resignation on March 19, 2019, the country remained firmly in the hands of the ruling political elite also after his formal departure. Even after the transfer of power, the executive and legislative branches continued to be controlled by the same old elites who were loyal to Nazarbayev and his successor, Kassym-Jomart Tokayev, with no viable political opposition existing in the country. As such, Kazakhstan represents an example of a consolidated authoritarian regime best described as a presidential autocracy (Svolik 2012; Freedom House 2018). Participation in political life in such regimes, if one is not a member of the ruling party or other closed political circles, is limited, and the registration of political parties is a lengthy and non-transparent process.

In addition, Kazakhstan's civil society lacks an independent voice, as the operation of civil society organizations (CSOs) and non-governmental organizations (NGOs) is closely monitored by the government. This is not to say that independent women's organizations never existed in post-Soviet Kazakhstan. In fact, the abundance of educated women and the growing exposure to Western values during the early 1990s created a fertile ground for the development of various CSOs and NGOs willing to fight for equal opportunities in education, business and politics and against all

forms of discrimination against women (Shakirova 2015). One such organization was the Feminist League of Kazakhstan founded in 1994, which actively lobbied the government on various issues affecting women and participated in drafting and amending the country's gender-related legislative initiatives. The organization did not engage in open confrontation with the authorities, instead trying to influence decision-makers through lobbying, media, international actors, academic research and educational outreach and participation in high- and expert-level discussions on gender issues (Udod 2018).

During the 1990s, the operation of many NGOs was supported with foreign grants issued by various international organizations and foreign agencies such as the United Nations Development Programme (UNDP) and the Organization for Security and Cooperation in Europe (OSCE). The government also benefitted from cooperation with local NGOs and their foreign grant-givers, as this was one of the ways to bring the country's legislation into conformity with international requirements and to achieve global recognition as a credible partner for further cooperation and investments. At the same time, the focus of these NGOs often fell in line with the agenda and ideology of international donors, leaving the biggest concerns affecting women in Kazakhstan neglected and underreported (Seydakhmetova 2018a, b; Udod 2018; Shakirova 2015). In summary, during the 1990s, the country saw the establishment of numerous CSOs and NGOs working to advance women's interests, and government cooperated with these organizations and their international donors, drawing on their expertise and assistance. And although important progress in the gender-related legislative framework was made thanks to this cooperation, the overall impact of these initiatives was rather limited, mainly affecting the urban population and failing to address the needs of the wider audience in rural and smaller communities.

The situation has arguably worsened during the 2000s, when many women's organizations lost members, funding and influence and, eventually, were forced to close operations. Several factors contributed to this development. Specifically, by the mid-2000s, the government had earned sufficient experience in drafting gender-related legislation and its formal commitment to gender equality was recognized by the international community. As a result, the Kazakhstani authorities lost incentive and interest in cooperating with independent women's organizations. Also, once the country demonstrated steady economic development and its de-jure commitment to gender-related issues was recognized by international agencies, the funding provided by international donors dried up. Ironically, this development coincided with the government tightening its control of the media and civil society organizations. Partially a response to the 'color revolutions' in Ukraine, Georgia and Kyrgyzstan, the Kazakhstani government introduced numerous measures to oversee the sources of funding and the activities of civil society organizations in the country (Dubok and Turakhanova 2017). In 2016, the government even established the Ministry of Religion and Civil Society, whose purpose was to streamline cooperation between the state and civil society and to register all NGOs in a special database. In short, over the past decade, the public space for independent civil society shrank considerably in Kazakhstan, with the government becoming the largest grant-giver in the country, coopting many NGOs and turning them into loyal supporters of the regime

(Knox and Yessimova 2015). As a result, despite the seeming abundance of civil society and non-governmental organizations, their resources, geographic coverage and independence from government control remained limited, especially after the Kazakhstani government increased its monitoring of the media and the NGO sector.

In conclusion, to this day, women in Kazakhstan experience various forms of discrimination in political, social and economic spheres, and face obstacles due to customs and traditions as well as closed political structures that limit women's roles in public life and decision-making. Until recently, the pre-Soviet and Soviet legacies, coupled with the post-Soviet authoritarian trends in Kazakhstani politics and the revival of traditional patriarchal values as a central tenet of national identity, continued to undermine the development of civil society that would be capable of advancing women's interests in public life. However, not so long ago, the country experienced an unprecedented wave of spontaneous political action led by women activists who demanded greater visibility and influence in the politics of Kazakhstan and called for a more equitable and inclusive future for all. The next section provides an overview of the origins and dynamics of women's mobilization in Kazakhstan since the early 2010s.

15.4 The Social, Political and Cultural Dimensions of Women's Mobilization in Kazakhstan

Starting in the early 2010s, the country saw a dramatic increase in the intensity and frequency of protests and campaigns that were either organized and led by women or developed with their active participation. Shortly after the protests of oil industry workers in the western town of Zhanaozen in December 2011, which ended in their violent dispersal by security forces, the country was faced with another episode of sustained collective action, this time organized by women. The protests emerged spontaneously in the winter of 2013 in response to the government's decision to increase the retirement age for women from 58 to 63 and decrease maternity benefits (Maltseva and Janenova 2018). The news about the pension age hike came after the government's regular assurances of having no intentions to raise the retirement age in the foreseeable future. The public announcement of the reform coincided with another controversial government decision to suspend the full indexation of maternity benefits to women whose annual salary exceeded the sum of 10 minimum wages, thereby shifting the responsibility for the rest of the maternity payment onto the employers (Weiskopf 2013).

As soon as the key aspects of both reforms became known to the public, the government was faced with one of the most massive women's protests in Kazakhstan's post-Soviet history. Most of the initial public outrage was related to the fact that no consultation with civil society and major stakeholders was sought during the policy formulation stage. According to Gulnur Hakimjanova, head of the Almaty-based NGO that works with vulnerable social groups, "The reforms have been conceived

and are being implemented by a small and well-connected group of men who do not care about concerns of the majority of the country's population, including women. We need open debates in which people can learn about what is really going to change, how much money is involved, and how the changes will be implemented" (Khamidov 2013). The legitimacy crisis further deepened in the spring of 2013 when the parliament supported the controversial bills despite strong public protests and calls for further discussion.

The mobilization of both movements occurred on social media networks. The activists protesting against the pension age hike used different platforms to spread the message and mobilize the masses, including several closed and public Facebook groups and a YouTube channel. In a similar vein, the protesters who demanded preservation of the old system of maternity benefits created a Facebook group called "For Fair Maternity Benefits!" as a platform for the communication and coordination of protest activities across the country. In both cases, the activism on the internet and social media networks was accompanied by regular peaceful protests in several cities throughout the winter and spring months of 2013. In addition to online activism and public protests, both women's groups drafted several petitions in which they called on the authorities to consult with civil society before making any final decisions concerning the country's pension and welfare systems. One such petition against the retirement age increase was signed by over 100,000 citizens including prominent female leaders in education, culture, sports and politics. The petition was passed to the president along with alternative suggestions on how to improve the welfare system (Janenova 2015; Maltseva and Janenova 2019).[2]

In criticizing the reforms, the activists identified several problems. When speaking on the Kazakhstani labour market conditions, many women raised the issue of limited full-time employment opportunities for women age 40 and older. Some women also argued that the introduction of a higher retirement age would have a dramatic impact on the economic well-being and social fabric of many Kazakhstani families. Since many young families are relying on their mothers for free babysitting services due to the shortage of state-run pre-school childcare facilities, a higher retirement age for women would mean that many young families would find it extremely difficult to balance their work and family obligations in the absence of free and regular help at home (Maltseva and Janenova 2019).[3] In addition, many women expressed their concern over numerous health problems that undermined women's ability to work effectively after the age of 58 and called for the establishment of a better system of disease prevention and health promotion, especially in rural areas and among poorer population groups (Maltseva and Janenova 2019).[4] Furthermore, those women who were worried about the cuts to maternity benefits emphasized the costs associated with raising a child and predicted gender discrimination in hiring policies due to the financial burden that was now shifted onto the employers.[5] In summary, the protesters

[2] Author interview, Astana, Kazakhstan, 9 July 2015.

[3] Author interview, Astana, Kazakhstan, 9 July 2015.

[4] Author interviews, Astana, Kazakhstan, 10 June 2015 and 9 July 2015.

[5] Author interview, Astana, Kazakhstan, 9 July 2015.

argued that Kazakhstan needed more jobs and a diversification of the economy to accommodate a greater number of female workers, better employment policies and their stricter enforcement, significant improvements in the healthcare and education systems and no drastic changes to the existing system of maternity benefits (Maltseva and Janenova 2019).

The government responded by pointing to growing demographic and fiscal pressures as well as the need for an equalization of payments across the various income groups. Surprised by the intensity of women's protests, it promised some moderate adjustments to its original plans and confirmed its intention to address the structural problems evident in the labour market. It also promised to engage self-employed women in the *Employment Program—2020* and improve access to micro-credit for women engaged in business or willing to start their own business. Also, the government agreed to train women who are on maternity leave in their chosen professions. In addition, a complex plan, *Initiative 50+*, was announced to facilitate the employment of people over 50 years old within state and sectoral programs ("Pravitelstvo RK utverdilo" 2013; Maltseva and Janenova 2019). Amendments were also made to the Labour Code to strengthen guarantees aimed at the elimination of discrimination during employment, keeping jobs for employees who are over 55 years old, and introducing fines for publishing vacancies that contain gender and age requirements. Finally, the government argued that further gender differences in pension provision would be reduced thanks to the availability of a minimum-pension guarantee for persons who reached retirement age but did not have sufficient retirement savings. In a reconciliatory move, the government also pushed the start date of the retirement age hike from 2014 to 2018, with an annual increase of the retirement age by six months and kept the right to retire early for some groups such as women with five or more children unchanged (Maltseva and Janenova 2018, 2019). At the same time, it kept its decision to cut maternity benefits but promised better protection of women's rights in the workplace. The protests subsided by the summer of 2013, though the core of committed women's activists remained active online and continued advocating for women's rights in other areas.

The next wave of women's protests occurred in February 2014 following the government's decision to comply with the rules of the Eurasian Customs Union regarding the ban on the import of female lace underwear (Oliphant 2014). These protests coincided with another case of public discontent related to an unexpected devaluation of the Kazakhstani currency, the tenge. Several other protests, including protests against the unjust seizure of people's land by the state, in which women took an active part, followed. Numerous, spontaneous and lacking a coordinating centre, these protests did not last, but they pointed to important changes in the dynamics of protests, the strategies of recruitment and the willingness of Kazakhstani citizens to participate in collective action (Mukankyzy 2014). The fast mobilization of numerous civic activists and the age of those involved in these protests, with many of them being in their 20s and 30s, also pointed to the evolving methods of communication and mobilization as well as the rise of a new generation of young activists who were not afraid of publicly challenging the authoritarian structure of post-Soviet Kazakhstan ("Molodeiushchee litso kazakhstanskikh protestov" 2014).

The protests increased in frequency and intensity in April 2016 following the government's announcement of the upcoming land reform that would allow business entities with at most 50% foreign ownership to lease agricultural land for 25 years, which was a 15-year extension from the older code that only allowed a 10-year lease. The announcement caused widespread protests across the country, with many people worrying about the country's sovereignty and the way in which the government was preparing the reform. According to the opposition leader, Zauresh Battalova, the people "were mostly upset because of the lack of communication. We didn't know anything about the reforms" (Sholk 2016). This lack of information produced rumors and anti-Chinese sentiment, as many Kazakhstanis feared that the law would open a window for the Chinese businessmen to buy Kazakh land. With 43% of the workforce residing in rural areas and 18% of the workforce engaged in agriculture, many of them women, the issue of land ownership proved to be a sensitive topic. Also, the fact that the reform came as a surprise angered the population, prompting many people of various ages and demographic groups to take to the streets in an act of civil disobedience (Sholk 2016). On May 21, 2016, the country saw one of the biggest demonstrations in Kazakhstan's history, organized via social networks and taking place in several cities across the country (Pannier 2017).

The government quickly recognized the danger of the escalating protests and abstained from using violence against the protesters. Instead, President Nazarbayev placed a moratorium on land reform through December 31, 2016 and announced the establishment of a formal presidential commission that would include politicians, businessmen and members of civil society to explore questions related to land use and ownership and draft a new bill. This effectively meant that the land reform was suspended until better times. Since then, spontaneous protests with women's active participation have become a regular occurrence in Kazakhstan.

The most recent case of women's mobilization took place in the winter of 2019 after a house fire in Astana, Kazakhstan's capital, killed five sisters aged between one and 13. Following the tragedy, many women took to the streets in several Kazakhstani cities, including Astana (now Nur-Sultan) and Almaty, demanding better housing and social and financial support for mothers of several children (Glushkova and Ospanov 2019). Many mothers complained about miserably low child benefits, poor housing conditions, and inaccessible child care services due to the shortage of subsidized places and high fees. In the words of one mother who attended a protest: "20 thousand [tenge] is a child care fee in a state-run child care facility! How is it even possible, given the fact that a child subsidy does not exceed two thousand [tenge]! Where is the logic?" (Glushkova and Ospanov 2019). Once again, the triggering factor—the tragic death of five children forced to live in dismal housing conditions in an oil-rich Kazakhstan, even though their parents worked full time—proved to be enough to cause numerous women's protests in freezing winter temperatures (Stronski 2019). Echoing the earlier protests, social media and communication apps such as Telegram and WhatsApp were used to organize the protests and inform the public about the upcoming events. Women also drafted petitions outlining their demands to the authorities, which they published online and, in several cases, handed personally to the authorities (Dorr 2019). Some of the protesters recorded videos, in which they

openly criticized the Minister of Labour and Social Protection and called on the president to deal with the problem. Several opposition media outlets, e.g. Current Time, covered the protests and women's demands (Glushkova 2019).

The government's response came quickly. Many regional and city administrations organized meetings with women activists to try to appease the public. Although there was no repression of protesting mothers, some women reported pressure, visits or calls from the police arranged to conduct so-called "preventive talks" with the activists (Glushkova 2019; "Politsiia zaderzhivala" 2019). In an attempt to soothe public anger, the authorities promised to speed up the construction of social housing and develop better social and economic measures that would help lift families with children out of poverty. Many women, however, remained skeptical about the sincerity of the government's actions, and so the protests continued into the fall of 2019 ("Zhil'ie nashim detiam!" 2019). In fact, in the summer and fall of 2019, the protests increased in intensity, with women organizing unsanctioned protests and even blocking entry to the Ministry of Economics in the capital of Astana/Nur-Sultan. In another case of state-society confrontation, two single mothers from Almaty were put first under house arrest and then moved to jail following claims that the pair were secretly plotting to help organize anti-government demonstrations. Both women actively participated in the rallies and demonstrations in Almaty in the summer of 2019, sharing their personal perspectives about the difficulties of life as low-income mothers, while also calling for free elections and a more open political system (Rickleton 2019).

The spontaneous mobilization of women driven by feelings of social injustice and frustration over their inability to influence the policy-making process coincided with another wave of women's activism that aimed to address the issues of gender violence and inequality and to challenge the old authoritarian and male-dominated political and social structures of post-Soviet Kazakhstan. The radical feminist movement emerged in the mid-2010s, and since then the movement has become particularly visible in big cities like Almaty and Astana/Nur-Sultan, although smaller towns and rural areas also had a core of committed women activists. The activists were inspired by global feminist trends and the growing emphasis on women's issues and gender equality on the international scene as well as a much greater exposure to Western social media trends compared with even a decade ago. International campaigns such as the UN Women's #HeForShe campaign and the global #MeToo movement also worked to raise the profile of the problem and revive feminist ideas in the post-Soviet world (Yergaliyeva 2018).

The modern feminist movement in Kazakhstan is comprised of small but diverse and active feminist groups, which, despite their ideological differences, cooperate and organize joint events and demonstrations. The majority of its members are young, progressive, well-educated (often with foreign diplomas) and tech-savvy (Udod 2018; Seydakhmetova 2018a). Some of these groups, such as KazFem, FemPoint and FemAstana, are regular organizers of cultural and art events, lectures, protests, feminist marches and street performances, highlighting the existing gender stereotypes, sexual abuse and gender violence in Kazakhstani society (Udod 2018; Dyussembekova 2017). And although the impact of their public actions as well as the public

appeal of these feminist groups remain limited outside the large urban centers, their existence and commitment to the feminist agenda point to important cultural changes in Kazakhstani society.

Most of these feminist groups have an active online presence, running various feminist sites and moderating several feminist groups on social networks like Instagram, Facebook, and Vkontakte as well as messaging platforms like WhatsApp and Telegram. In fact, the rise of feminist activism was accompanied by the development of digital feminism, best described as consistent attempts by feminist groups and individual actors to use technology as a tool of resistance and activism to achieve a much greater degree of feminist mobilization and awareness (Udod 2018). Similar to its Western counterparts, many Kazakhstani feminists use hashtag online campaigns to draw attention to issues of gender violence and inequality. One example of a successful hashtag campaign that gradually evolved into a national movement against sexual violence was the #*NeMolchi* (Don't be silent) campaign, which originated in Ukraine in 2016, but quickly spread to other post-Soviet countries. Shortly after the campaign was launched, the avalanche of personal stories revealed the degree to which sexual and gender violence, discrimination and gender stereotypes pervaded post-Soviet society. In the end, the hashtag campaign contributed to the development of a national movement against sexual violence, *NeMolchi.Kz*. The founder of the movement, Dina Smailova, herself a survivor of sexual assault, quickly became a national hero, providing women with psychological and legal support as well as ensuring that cases of gender violence and sexual assault receive enough media coverage to guarantee that the abusers are held accountable for their crimes (Kadyrova 2016; Udod 2018).

In short, two major women's movements emerged in Kazakhstan in the early 2010s. One of these movements was socioeconomic in nature and represented a series of spontaneous protests in response to mounting social and economic grievances and the growing frustration on the part of many women over their political and socioeconomic marginalization. The other movement was political and ideological in nature and was comprised of young, educated and liberal-minded activists who called for cultural modernization of Kazakhstani society and legal and political reforms. And although the origins of these movements lay in different dimensions, their social, economic and political demands resonated with many women across Kazakhstan. Such unity in resisting the government's social policies and authoritarian practices, as well as in challenging the cultural norms and conservative trends in Kazakhstani society, send a powerful message of women rising up against the oppressive structures of post-Soviet Kazakhstan.

15.5 Women Rising: Why Now, and What Comes Next?

It is clear that the origins of women's recent mobilization and collective action lie predominantly in the growing feelings of social deprivation and political marginalization. The country's remarkable economic recovery during the 2000s raised hopes and

generated higher expectations. However, not everyone benefitted from the reforms, as poverty and wealth inequality persisted, undermining the legitimacy and long-term stability of the regime. The feelings of relative deprivation and social injustice were further exacerbated following the government's unilateral decisions to reform the Kazakhstani welfare and pension systems as well as in response to the government's ineffectiveness in solving some of the pressing social problems such as the lack of subsidized and accessible housing.

In addition to the said frustration-aggression mechanism, two other factors need to be mentioned to better understand the origins and strategies used by women's activists to keep their movements alive in the context of closed authoritarian structures. Specifically, the digital revolution and the rise of new forms of mass communication simplified the tasks of civic activists and significantly complicated the government's efforts at controlling public opinion. In the case of Kazakhstan, the transformation was remarkable: if in the early 2000s Kazakhstan's internet penetration rate was only 2%, by 2013 the percentage of internet users had skyrocketed to 54% (Internetlivestats, n.d.; Niyazbekov 2017). Furthermore, many of these users became active participants on social media networks, which made it more difficult for the government to control access to alternative news sources and ban content it deemed dangerous or politically sensitive to the regime. Not that the government did not try. Following the passage of a restrictive Communications Law in 2014, the authorities regularly blocked popular internet resources such as Google, Twitter, Skype, YouTube, Instagram and WhatsApp, though they usually stopped short of banning them permanently, instead preferring temporary blocks (Niyazbekov 2017; Stojkovski 2019). And yet, aware of these restrictions, the public, especially its younger generation, learned to bypass the restrictions using Virtual Private Networks (VNPs) or proxy servers and encrypted applications such as Telegram and WhatsApp. In addition, generational change, coupled with the revival of the global feminist movement and the growing exposure of the younger generation to Western values and feminist ideas, contributed to the rise of a new feminist activism that aims to advance the broad feminist agenda in the country, including the promotion of cultural and social changes in Kazakhstani society, the advancement of gender equality in politics and decision-making and the protection of women from gender-based violence and harassment (Udod 2018).

In conclusion, despite the evidence of lower levels of political activism among youth in Kazakhstan than in other post-Soviet countries (Laruelle 2019), the recent trends provide some hope that the revival of civic activism in Kazakhstan will start with women. Kazakhstani women are rising and demanding an opportunity to meaningfully contribute to political and public policy processes in the country as well as the right to challenge the country's patriarchal cultural norms and practices. In the long run, the rise of women's civil society that is willing to pressure the men-dominated political structure and advocate on behalf of the country's female population has the potential to not only empower women but also facilitate the liberalization of the country's political institutions.

References

Abazov R (2007) Culture and customs of the Central Asian republics. Greenwood Press, Westport, CT

Abdurasulov A (2018). Speaking up about rape in conservative Kazakhstan. BBC News, 18 March. https://www.bbc.com/news/world-asia-43247005. Accessed 25 July 2019

Abeles RP (1976) Relative deprivation, rising expectations, and black militancy. J Soc Issues 32(1):119–137

Abugaliyeva M (2018) Expanding women's leadership in business, government discussed at AEF. The Astana Times, 23 May. https://astanatimes.com/2018/05/expanding-womens-leadership-in-business-government-discussed-at-aef/. Accessed 25 July 2019

Alshanskaya A (2020) Kazakhstan: how much, where and how do women earn in Kazakhstan? CABAR, 28 January. https://cabar.asia/en/how-much-where-and-how-do-women-earn-in-kazakhstan/. Accessed 16 April 2020

Asian Development Bank (ADB) (2018) Kazakhstan: country gender assessment. https://www.adb.org/sites/default/files/institutional-document/479136/kazakhstan-country-gender-assessment.pdf. Accessed 25 July 2019

Ayagan B (ed) (2004) Kazakhstan: national encyclopedia. National Encyclopedia, Almaty

Bauer A, Boschmann N, Green D (1997) Women and gender relations in Kazakhstan. Asian Development Bank, Manila

Bayard de Volo L (2006) The nonmaterial long-term benefits of collective action: empowerment and social capital in a Nicaraguan women's organization. Comp Polit 38(2):149–167

Benedict A (2014) Women in Kazakhstan: a multifaceted approach to female political representation. MA Thesis, University of Missouri-Saint Louis. https://irl.umsl.edu/cgi/viewcontent.cgi?article=1207&context=dissertation. Accessed 25 September 2019

Biddulph HL (1972) Soviet intellectual dissent as a political counter-culture. West Polit Q 25(3):522–533

Bohdanova T (2014) Unexpected revolution: the role of social media in Ukraine's Euromaidan uprising. Eur View 13(1):133–142

Booth JA, Richard PB (1998) Civil society, political capital, and democratization in Central America. The Journal of Politics 60(3):780–800

Breuera A, Landmanb T, Farquhar D (2015) Social media and protest mobilization: evidence from the Tunisian revolution. Democratization 22(4):764–792

Cannon B, Hume M (2012) Central America, civil society and the 'pink tide': democratization or de-democratization? Democr 19(6):1039–1064

Constitution of the USSR. Moscow, 5 December 1936. https://www.marxists.org/reference/archive/stalin/works/1936/12/05.htm. Accessed 17 April 2020

Decree of the President of the Republic of Kazakhstan No. 1677. Strategy for Gender Equality in the Republic of Kazakhstan for 2006–2016. 29 November 2005. http://www.akorda.kz/upload/nac_komissiya_po_delam_zhenshin/5.2%20СГР%20англ.pdf. Accessed 15 April 2020

Decree of the President of the Republic of Kazakhstan No. 384. Concept of Family and Gender Policy of the Republic of Kazakhstan until 2030. 6 December 2016. http://adilet.zan.kz/eng/docs/U1600000384. Accessed 25 November 2019

Dorr S (2019) What is the Kazakh regime learning from citizen protests? Open Democracy, 16 April. https://www.opendemocracy.net/en/odr/what-kazakh-regime-learning-citizen-protests/. Accessed 30 September 2019

Duarte ME (2017) Connected activism: indigenous uses of social media for shaping political change. Australas J Inf Syst 21, July. https://journal.acs.org.au/index.php/ajis/article/view/1525/769. Accessed 25 July 2019

Dubok H, Turakhanova D (2017) Gender study for Central Asia: Kazakhstan final report. EuroPlus Consulting and Management, November. https://eeas.europa.eu/sites/eeas/files/kazakhstan_final_report_16.11.2017_approved.pdf. Accessed 25 July 2019

Dyussembekova Z (2017) Kazakh feminists have something to say. The Astana Times, 23 March. https://astanatimes.com/2017/03/kazakh-feminists-have-something-to-say/. Accessed 28 September 2019

Edwards B, McCarthy JD (2004) Resources and social movement mobilization. In: Snow DA, Soule SA, Kriesi H (eds) The Blackwell companion to social movements. Blackwell Publishing, Malden, MA, pp 116–152

Freedom House (2018) Freedom in the world 2018: democracy in crisis. https://freedomhouse.org/report/freedom-world/freedom-world-2018

Gal S, Kligman G (2000) The politics of gender after socialism. Princeton University Press, Princeton

Gander K (2014) Kazakhstan: lace underwear ban sees dozens of women arrested in street protest. Independent, 18 February. https://www.independent.co.uk/news/world/asia/kazakhstan-lacy-underwear-ban-sees-dozens-of-women-arrested-in-street-protest-9136570.html. Accessed 25 July 2019

Gheytanchi E, Moghadam VN (2014) Women, social protests, and the new media activism in the Middle East and North Africa. Int Rev Mod Sociol 40(1):1–26

Glushkova S (2019) V Alma-Ate mnogodetnaia mat' khotela vyiti na miting k goradministratsii. Ee zaderzhala politsiia i poprosila zamolchat'. Current Time, 8 February. https://www.currenttime.tv/a/almaty-miting-protests-Kazakhstan-mother/29759384.html. Accessed 25 September 2019

Glushkova S, Ospanov, G (2019) Stikhiinoe sobraniie mnogodetnykh materei proshlo v Astane posle pokhoron pogibshikh na pozhare pyaterykh devochek. Current Time, 6 February. https://www.currenttime.tv/a/mothers-protest-Kazakhstan/29755059.html. Accessed 28 September 2019

Gurr TR (1970) Why men rebel. Princeton University Press, Princeton

Hitchins K (2008) Jadidism. Encycl Iran XIV(4):339–346. http://www.iranicaonline.org/articles/jadidism. Accessed 25 July 2019

Hoffmann DL (2000) Mothers in the motherland: Stalinist pronatalism in its pan-European context. J Soc Hist 34(1):35–54

Ibrahim AM (2015) The role of civil society in Africa's quest for democratization. Springer International Publishing, Cham, Switzerland

Internetlivestats n.d. Kazakhstan internet users. https://www.internetlivestats.com/internet-users/kazakhstan/. Accessed 4 October 2019

Janenova S (2015) Pension provision and collective action in Kazakhstan: the case of 2013 pension law. Conference paper presented at IFEAC-KIMEP conference, Welfare State & Collective Action in Central Asia, 18–19 May, Almaty, Kazakhstan

Kadyrova A (2016) "Ne Molchi": Kak zhenschiny v Kazakhstane obretaiut golos. Wonderzine, 7 December. https://www.wonderzine.com/wonderzine/life/life/222909-kazakhstan. Accessed 29 September 2019

Kandiyoti D (2007) The politics of gender and the Soviet paradox: neither colonized, nor modern? Centl Asian Surv 26(4):601–623

Kendirbai G (2002) Land and people: the Russian colonization of the Kazak steppe. Schwarz, Berlin

Khamidov A (2013) Kazakhstan: will the elderly "swallow" pension reform? Eurasianet, 30 May. https://eurasianet.org/kazakhstan-will-the-elderly-swallow-pension-reform. Accessed 30 September 2019

Klandermans B (1997) The social psychology of protest. Blackwell, Oxford and Cambridge MA

Knox C, Yessimova S (2015) State-society relations: NGOs in Kazakhstan. J Civ Soc 11:1–17

Kuzhabekova A, Almukhambetova A, Janenova S (2018) Analyzing the experiences of female leaders in civil service in Kazakhstan: trapped between economic pressure to earn and traditional family role expectations. Int J Public Adm 41(15):1290–1301

Laumulin C, Laumulin, M (2009) The Kazakhs: children of the steppes. Global Oriental

Laruelle, M (2019) Nazarbayev Generation. Kazakhstan's youth, national identity transformations and their political consequences. Voices on Central Asia, 21 March. https://voicesoncentralasia.org/nazarbayev-generation-kazakhstans-youth-national-identity-transformations-and-their-political-consequences/. Accessed 2 October 2019

Law of the Republic of Kazakhstan No. 214-IV. On prevention of domestic violence. 4 December 2009. https://online.zakon.kz/document/?doc_id=30525680. Accessed 25 November 2019

Law of the Republic of Kazakhstan No. 223-IV. On state guarantees of equal rights and equal opportunities for men and women. 8 December 2009. https://online.zakon.kz/document/?doc_id=30526983. Accessed 25 November 2019

Maltseva E, Janenova S (2018) Case studies: Kazakhstan. In: Ortiz I, Durán-Valverde F, Urban S, Wodsak V (eds) Reversing pension privatizations: rebuilding public pension systems in Eastern Europe and Latin America. International Labour Office, Geneva, pp 199–232

Maltseva E, Janenova S (2019) The politics of pension reforms in Kazakhstan: pressures for change and reform strategies. In: An S, Chubarova T, Deacon B, Stubbs P (eds) Social policy, poverty and inequality in Central and Eastern Europe and the former Soviet Union. JH Publishing, London, UK, pp 209–236

McAdam D (1982) Political process and the development of Black insurgency 1930–1970. The University of Chicago Press, Chicago

McCarthy JD, Zald MN (1977) Resource mobilization and social movements: a partial theory. Am J Sociol 82(6):1212–1241

McCarthy JD, Zald, MN (2001) The enduring vitality of the resource mobilization theory of social movements. In: Turner JH (ed) Handbook of sociological theory. Springer, New York, pp 533–565

Mehrabov I (2016) Azerbaijani women, online mediatized activism and offline mass mobilization. Soc Sci 5(4):1–17

Mendikulova G (2008) Kazakh women: the impact of three different socio-political systems within two centuries. In: Hämmerle C (ed) *Gender politics in Central Asia. Historical perspectives and current living conditions of women.* Böhlau, Köln, Weimar, Wien, pp 21–35

Milewska-Pindor, N (2013) The almanac "Woman and Russia" and the Soviet feminist movement at the end of the 1970s. Int Studies Interdiscip Polit Cult J 15(1):5–20

Ministry of National Economy of the Republic of Kazakhstan, Statistics Committee n.d. Number of women, holding ministerial positions in the Government of the Republic of Kazakhstan. https://gender.stat.gov.kz/page/frontend/detail?id=71&slug=-58&cat_id=9&lang=en. Accessed 15 April 2020

Molodeiushchee litso kazakhstanskikh protestov. Radio Azattyk, 16 February 2014. https://rus.azattyq.org/a/almaty-week-and-protests-tenge-devaluation/25265768.html. Accessed 30 September 2019

Mukankyzy M (2014) Protesty 2014 goda. Radio Azattyk, 29 December. https://rus.azattyq.org/a/protesty-v-kazakhstane-2014-god/26767443.html. Accessed 29 September 2019

Mynbayeva J n.d. Women in Kazakhstan. Wonder Foundation Insight Report. https://wonderfoundation.org.uk/wp-content/uploads/2019/08/Women-in-Kazakhstan-Wonder-Foundation-Insight-Report-Digital.pdf. Accessed 25 July 2019

Nikiforova A (2003) Nichto ne moglo slomit' ee. Nomad, 3 August. https://nomad.su/?a=15-200308030006. Accessed 15 April 2020

Niyazbekov N (2017) Crossroads Asia: Kazakhstan's love-hate relationship with social media. The Diplomat, 23 March. https://thediplomat.com/2017/03/kazakhstans-love-hate-relationship-with-social-media/. Accessed 25 September 2019

Nuttall C (2013) Kazakhstan: protests over plans to raise women's retirement age. Financial Times, 13 May. https://www.ft.com/content/73ba8311-261c-3f01-b361-ca04492a7d5f. Accessed 25 July 2019

Oliphant R (2014) Synthetic lace lingerie ban prompts street protests in Russia and Kazakhstan. The Telegraph, 17 February. https://www.telegraph.co.uk/news/worldnews/europe/russia/10644146/Synthetic-lace-lingerie-ban-prompts-street-protests-in-Russia-and-Kazakhstan.html. Accessed 25 September 2019

Organisation for Economic Cooperation and Development (OECD) (2017) OECD gender policy delivery review: Kazakhstan. https://www.oecd.org/gov/Gender-Highlights-Kazakhstan.pdf. Accessed 25 July 2019

Öz Döm Ö (2018) Muslim women in Soviet Central Asia. Tarih İncelemeleri Dergisi XXXIII(1):91–116
Özler Şİ, Sarkissian A (2011) Stalemate and stagnation in Turkish democratization: the role of civil society and political parties. Journal of Civil Society 7(4):363–384
Pannier B (2017) Majlis podcast: Kazakhstan's protests, one year later. Radio Free Europe/Radio Liberty, 30 April. https://www.rferl.org/a/qishloq-ovozi-kazakhstan-protests-one-year/28460322.html. Accessed 30 September 2019
Politsiia zaderzhivala uchastnits protesta mnogodetnykh materei. Radio Azattyk, 8 February 2019. https://rus.azattyq.org/a/kazakhstan-almaty-police-detains-mothers-who-wanted-to-voice-their-demands/29760597.html. Accessed 30 September 2019
Powell DE (1972) Controlling dissent in the Soviet Union. Government and Opposition 7(1):85–98
Pravitelstvo RK utverdilo: Kompleksnyi plan sodeistviia zaniatosti lits starshe 50. Zakon.kz, 30 April 2013. https://www.zakon.kz/4554571-pravitelstvo-rk-utverdilo-kompleksnyjj.html. Accessed 20 September 2019
Putnam RD (1993) Making democracy work: civic traditions in modern Italy. Princeton University Press, Princeton, NJ
Rickleton C (2019) Kazakhstan jails mothers to be on the safe side. Eurasianet, 4 July. https://eurasianet.org/kazakhstan-jails-mothers-to-be-on-the-safe-side. Accessed 30 September 2019
Rysbekova ST (2009) Zhenskie organizatsii v Kazakhstane i sovetskaia praktika formirovaniia grazhdanskoi aktivnosti v 1920–1930 gody. Vestnik Saratovskogo Gosudarstvennogo Sotsial'no-Ekonomicheskogo Universiteta 2:214–217
Salanova R (2012). Social media and political change: the case of the 2011 revolutions in Tunisia and Egypt. ICIP Working Papers, Institut Català Internacional per la Pau, Barcelona. https://dialnet.unirioja.es/descarga/articulo/5535753.pdf. Accessed 25 July 2019
Sample survey on violence against women in Kazakhstan. Ministry of National Economics, Kazakhstan, Astana, 2017. https://kazakhstan.unfpa.org/sites/default/files/pub-pdf/Kazakhstan%20VAW%20report_final%2031-10-2017.pdf. Accessed 25 July 2019
Satymbekova R (2016) Female political participation and barriers that women face in politics: lessons from post-Soviet Kazakhstan and Belarus. A Master Thesis, Nazarbayev University, Astana, Kazakhstan. https://nur.nu.edu.kz/bitstream/handle/123456789/1475/Satymbekova%20Thesis%20NUR.pdf?sequence=1&isAllowed=y. Accessed 25 July 2019
Selander L, Jarvenpaa SL (2016) Digital action repertoires and transforming a social movement organization. MIS Q 40(2):331–352
Selezneva, E (2016) Struggling for new lives: family and fertility policies in the Soviet Union and modern Russia. Institute for Eastern and Southeastern European Studies, IOS Working Papers No. 355. https://www.econstor.eu/bitstream/10419/148912/1/860760901.pdf. Accessed 17 April 2020
Seligman AB (1992) The idea of civil society. Maxwell Macmillan International, New York
Seydakhmetova B (2018a) Pervaia volna feminizma predpochitaet akademichnost'. Exclusive.kz, 14 May. http://www.exclusive.kz/expertiza/obshhestvo/113878/pages/3/. Accessed 30 September 2019
Seydakhmetova B (2018b) Fighting patriarchy in Kazakhstan: problems and perspectives. Open Democracy, 19 June. https://www.opendemocracy.net/en/odr/fighting-patriarchy-in-kazakhstan/. Accessed 25 July 2019
Shakirova S (2015) Gender equality in Kazakhstan and the role of international actors in its institutionalization. In: Gradskova Y, Sanders S (eds) Institutionalizing gender equality: historical and global perspectives. Lexington Books, London, pp 211–228
Shakirova S (2008) Women's movement and feminism in Central Asia: from a not comforting forecast to efficient strategies. https://globalstudies.trinity.duke.edu/sites/globalstudies.trinity.duke.edu/files/file-attachments/v2d2_Svetlana.pdf. Accessed 25 July 2019
Shearer DR (2009) Policing Stalin's socialism: repression and social order in the Soviet Union, 1924–1953. Yale University Press, New Haven

Sholk, D (2016) Kazakhstan's land reforms: a major debate on the contentious issue of land reforms is underway in Kazakhstan. The Diplomat, 15 June. https://thediplomat.com/2016/06/kazakhstans-land-reforms/. Accessed 30 September 2019

Shvets L (2017) Institut devstvennits: Kak zhivut zhenschiny na postsovetskom prostranstve. Wonderzine.com, 13 April. https://www.wonderzine.com/wonderzine/life/life/225668-equality. Accessed 25 July 2019

Smirnova A (2020) Den rozhdeniia Madiny Begalievoi: Fakty ob inzhenere. Novoe Televidenie, 19 March. http://novoetv.kz/2020/03/den-rozhdeniya-madiny-begalievoj-fakty-ob-inzhenere/. Accessed 15 April 2020

Stojkovski B (2019) Internet throttling, blocked websites mark Kazakhstan's new political era. ZDNet, 10 June. https://www.zdnet.com/article/internet-throttling-blocked-websites-mark-kazakhstans-new-political-era/. Accessed 5 October 2019

Stronski P (2019) Tragic fire highlights Kazakhstan's social problems. Carnegie Endowment for International Peace, 8 February. https://carnegieendowment.org/2019/02/08/tragic-fire-highlights-kazakhstan-s-social-problems-pub-78332. Accessed 30 September 2019

Svolik M (2012) The politics of authoritarian rule. Cambridge University Press, New York

Tarrow S (1994) Power in movement: social movements and contentious politics. Cambridge University Press, Cambridge

Tilly C (1978) From mobilization to revolution. Addison-Wesley, Reading, MA

Touraine A (1981) The voice and the eye: an analysis of social movements. Cambridge University Press, Cambridge

Touraine A (1988) Return of the actor. University of Minnesota Press, Minneapolis

Udod X (2018) Feminisms in Kazakhstan: on the intersection of global influences and local contexts. MA Thesis, Nazarbayev University. https://nur.nu.edu.kz/bitstream/handle/123456789/3875/Xeniya%20Udod_Final%20Master%20thesis.pdf?sequence=1&isAllowed=y. Accessed 3 October 2019

United Nations Development Program (UNDP) (2016) Strengthening women's political participation. UNDP Istanbul Regional Hub. https://www.undp.org/content/dam/rbec/docs/undp-rbec-strengthening-women-political-participation.pdf. Accessed 25 July 2019

United Nations Development Program (UNDP) (2018) Human development indices and indicators: 2018 Statistical Update. Briefing note for countries on the 2018 Statistical Update: Kazakhstan. http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/KAZ.pdf. Accessed 25 July 2019

Viterna J, Fallon KM (2008) Democratization, women's movements, and gender-equitable states: a framework for comparison. Am Sociol Rev 73:668–689

Warkotsch J (2014) Bread, freedom, human dignity: the political economy of protest mobilization in Egypt and Tunisia. PhD Dissertation, European University Institute, Florence, Italy

Way L (2014) The Maidan and beyond: civil society and democratization. J Democr 25(3):35–43

Weiskopf A (2013) Dvizhenie 'Za Spravedlivye Dekretnye': Zhenschiny Kazakhstana boriutsia za svoi prava. Deutsche Welle, 25 March. https://www.dw.com/ru/движение-за-справедливые-декретные-женщины-казахстана-борются-за-свои-права/a-16697645. Accessed 30 September 2019

Werner C (2009) Bride abduction in post-Soviet Central Asia: marking a shift towards patriarchy through local discourses of shame and tradition. J Roy Anthropol Inst 15:314–331

Whalley Z (2018) Zhenotdel: the Soviet Union's feminist movement. Culture Trip, 9 September. https://theculturetrip.com/europe/russia/articles/zhenotdel-the-soviet-unions-feminist-movement/. Accessed 25 July 2019

World Economic Forum (WEF) (2013) The global gender gap report 2013. http://www3.weforum.org/docs/WEF_GenderGap_Report_2013.pdf. Accessed 15 April 2020

World Economic Forum (WEF) (2014) The global gender gap report 2014. http://www3.weforum.org/docs/GGGR14/GGGR_CompleteReport_2014.pdf. Accessed 15 April 2020

World Economic Forum (WEF) (2015) The global gender gap report 2015. http://www3.weforum.org/docs/GGGR2015/cover.pdf. Accessed 15 April 2020

World Economic Forum (WEF) (2016) The global gender gap report 2016. http://www3.weforum.org/docs/GGGR16/WEF_Global_Gender_Gap_Report_2016.pdf. Accessed 15 April 2020

World Economic Forum (WEF) (2017) The global gender gap report 2017. http://www3.weforum.org/docs/WEF_GGGR_2017.pdf. Accessed 15 April 2020

World Economic Forum (WEF) (2018) The global gender gap report 2018. http://www3.weforum.org/docs/WEF_GGGR_2018.pdf. Accessed 15 April 2020

Yap C, Szollosi D (2019) Gender equality—calls for a "state of balance"—from Hollywood to Kazakhstan. Forbes Kazakhstan, 6 March. https://forbes.kz/process/expertise/gender_equality_calls_for_a_state_of_balance_-_from_hollywood_to_kazakhstan/. Accessed 15 April 2020

Yergaliyeva A (2018) Kazakh gender equality trends are promising, society needs to engage more, say experts. The Astana Times, 17 October. https://astanatimes.com/2018/10/kazakh-gender-equality-trends-are-promising-society-needs-to-engage-more-say-experts/. Accessed 28 September 2019

'Zhil'ie nashim detiam!' Mnogodetnye materi reshili obiavit' golodovku. Radio Azattyk, 3 June 2019. https://rus.azattyq.org/a/kazakhstan-nur-sultan-mnogodetnye-materi-obyavili-golodovku/29978618.html. Accessed 30 September 2019

Zhoyamergen O (2018) Aktivisty 'NeMolchi.Kz' prizvali vlasti zakonodatel'no zashchitit' zenshchin. Radio Azattyk, 27 November. https://rus.azattyq.org/a/29623710.html. Accessed 25 July 2019

Zhumaliyeva B (2016) Osnovopolozhnitsa zhenskogo dvizheniia Kazakhstana Alma Orazbayeva. Mysl', 25 November. http://mysl.kazgazeta.kz/?p=8079. Accessed 15 April 2020

Chapter 16
Gender Equality and Individualistic Values as Determinants of Employment and Income in Central Asian Countries

Daria Salnikova and Tatiana Karabchuk

Abstract This chapter aims at disclosing the interrelationships of economic activity, support for gender equality, individualistic values and income in Central Asia. The authors use the 6th wave of the World Values Survey (2010–2014) to test empirically the association between employment, values and income for Kazakhstan, Kyrgyzstan and Uzbekistan and Russia. Gender equality attitudes in these four countries do not differ much from each other. In general, the societies are quite conservative in their evaluation of the women roles. The effect of gender equality on employment varies across the mentioned four countries. Kazakhstan and Kyrgyzstan show that support for gender equality is negatively related to self-employment. The pattern in Russia is the opposite. Gender moderates the relationship between support for gender equality and employment status in the Central Asian countries, as distinct from Russia. The evidence from Russia demonstrates a strong and positive association between self-employment and individualism. However, in Central Asia individualism is a weak predictor for employment status.

Keywords Gender equality attitudes · Individualistic values · Income · Employment status · Central Asia

16.1 Introduction

This chapter addresses the relationship between economic activity and the post-materialist values, namely, individualism and support for gender equality. The current study empirically tests and discusses whether support for gender equality and individualism explain a variation of employment status in Central Asia and Russia. Recent

D. Salnikova (✉)
Department of Higher Mathematics, HSE University, 11 Myasnitskaya, Moscow 101000, Russian Federation
e-mail: dsalnikova@hse.ru

T. Karabchuk
Department of Government and Society, United Arab Emirates University, Al-Ain, United Arab Emirates
e-mail: tkarabchuk@uaeu.ac.ae

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_16

empirical research has shown a significant relationship between values and employment status but only for economically developed countries (e.g., Cinalli and Giugni 2013; Hatos et al. 2015). This chapter attempts to fill the gap in the literature by adding the evidences from developing countries of Central Asia and Russia.

Being more traditional society Uzbekistan and Kyrgyzstan do not have high female labor force participation rates, in Kazakhstan and Russia women were always more active in the labor market. The more gender equal soviet ideology improved people's attitudes towards working women in Russia and Kazakhstan, while in Uzbekistan and Kyrgyzstan the female empowerment was less developed. The employment rates among women in 2011 varied from 52.62% in Kyrgyzstan to 65.36% in Kazakhstan. Are these differences in female employment rates could be explained by gender equality attitudes?

The chapter contributes to research on the link between gender equality attitudes and individualistic values, on the one hand, and employment status and income, on the other. The authors discuss the gender differences in the probability to have a full-time job in Kazakhstan, Kyrgyzstan, Russia and Uzbekistan. Furthermore, the employment status critically defines income and financial well-being in the Post-Soviet space as job is mostly the only income source for many families. The authors make one step further with their analysis to test the mediating impact of gender equality attitudes on income through the employment status of a person. The focus is on the mechanism underlying this relationship. In contrast to previous studies, this research assesses whether the effect of gender equality attitudes and individualistic values on income is direct or mediated through employment status.

The outline of the chapter is as follows. First, the authors describe the socioeconomic situation in the Central Asian region with a focus on gender differences. This facilitates the interpretation of the empirical results. The next section gives a concise overview of the existing research on gender equality attitudes and employment opportunities for men and women, allowing us to suggest a list of hypotheses. The section on data and methodology is followed by the results description, findings' discussion and conclusion.

16.2 Background of the Study

Let's briefly describe the situation in the labor markets of the Central Asian countries and Russia, in order to illustrate the socioeconomic situation in the region. Table 16.1 provides the general information for these countries.

Uzbekistan and Kyrgyzstan suffer from a lack of job opportunities. Labor supply exceeds the labor demand dramatically. At the same time, there are huge shortages in highly qualified specialists. The quality of available workplaces is rather low, which creates incentives to search for jobs abroad and migrate predominantly to the better developed Russia and Kazakhstan. Russia and Kazakhstan, having better developed economic industries, possibilities for full-time employment including social guarantees and chances for career development, seem to be advantageous to migrants.

Table 16.1 Demographic and socioeconomic characteristics of the Central Asian countries and Russia, 2011

	Kazakhstan	Kyrgyzstan	Russia	Uzbekistan
Total population number	16,557,201	5,514,600	142,960,868	29,339,400
Total employment rate (%)	66.57	59.03	58.61	61.04
Female employment rate (%)	65.36	52.62	56.15	52.87
% of self-employed	32.45	36.93	7.04	43.87
Unemployment rate (%)	5.39	8.53	6.54	4.96
GDP per capita (current international $)	21,276.93	2920.60	24,310.04	4469.99
Minimum wage	15,999 tenge ($109)	690 Kyrgyz Soms ($15)	4611 rubles ($157)	49,735 Uzbek Sum ($29)
Average wage	90,028 tenge ($615)	9304 Kyrgyz Soms ($202)	23,369 rubles ($798)	628,019.99 Uzbek Sum ($366)
Position of country in Doing Business	59	44	123	150
Remittances received (% of GDP)	0.12	27.81	0.28	No data available

Sources Russian Federal State Statistics Service. Available at: https://www.gks.ru/; Ministry of National Economy of the Republic of Kazakhstan. Statistics committee. Available at: http://stat.gov.kz/; National Statistical Committee of the Kyrgyz Republic. Available at: http://www.stat.kg/; The state Committee of the Republic of Uzbekistan on statistics. Available at: https://stat.uz/; Worldwide governance indicators. The World Bank. Available at: https://datacatalog.worldbank.org/dataset/worldwide-governance-indicators; The International Labor Organization. Available at: https://www.ilo.org/global/statistics-and-databases/lang–en/index.htm

The distribution for 2011 (see Table 16.2) demonstrates that up to 60% of workplaces in Russia were in the industrial and service sector, education and public health service. At the same time, approximately one-third of the workforce in Kyrgyzstan, Kazakhstan and Uzbekistan was employed in the agricultural sector.

Despite the disadvantages of the Central Asian labor markets mentioned above one can single out some benefits of Central Asian labor markets. They are a predominantly young labor force and a significant share of own-account workers (34.5, 29.5 and 26.9% in Uzbekistan, Kazakhstan and Kyrgyzstan, respectively). Economic development is driven by the young motivated generations and small businesses growth. Figure 16.1 depicts the distribution of economically active population.

There is a strong need for highly qualified agricultural engineers, experts on agricultural economics, taxation in agricultural sector etc., but these specialties are poorly represented in the Central Asian universities. Thus, the paradox of the low developed

Table 16.2 Structure of employment by industries, %, 2011

Country	Year	By industries							
		Agriculture, hunting, fishing	Industry	Construction	Transport and communication	Trade, restaurants, hotels	Finances	Education, healthcare, social service	Other services
Kazakhstan	2011	26.4	12	7.4	8	16.0	7.3	15.0	7.9
Kyrgyzstan	2011	30.7	10	11.0	7	19.0	3.3	11.2	8.4
Russia	2011	7.9	20	7.2	9	18.0	8.6	17.0	12.0
Uzbekistan	2005	29.1	13	8.3	5	8.9	0.5	20.8	14.0

Source Russian Federal State Statistics Service. http://www.gks.ru/bgd/regl/b12_39/IssWWW.exe/Stg/03-03.htm. Accessed 20 June 2019

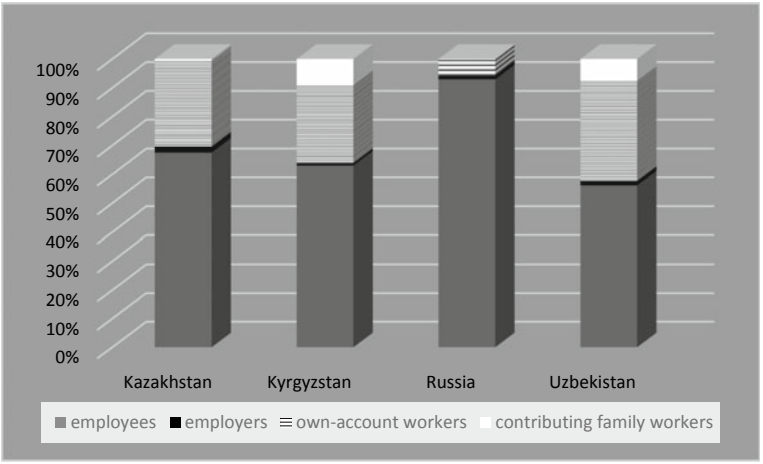

Fig. 16.1 Distribution of economically active people by employment status, 2011 (*Source* The International Labor Organization https://www.ilo.org/shinyapps/bulkexplorer47/?lang=en&segment=indicator&id=EMP_2EMP_SEX_STE_DT_A)

Central Asia presupposes the surplus of the labor force, which is accompanied by a deficit in the qualified labor force. A very small proportion of youth aged 15–29 have higher education in Uzbekistan and Kyrgyzstan (Karabchuk et al. 2015). There is also a lack of state institutions contributing to the smooth transition from university to employment.

Figure 16.2 depicts how the rates of total and female labor force participation change from 1992 to 2012. Kazakhstan consistently demonstrates the highest total and female employment rates. In 2012 the female employment rates in the four countries varied significantly, with the highest rate in Kazakhstan (61%) and the lowest rate in Kyrgyzstan (47%). It worth to mention that most of the time Kyrgyzstan demonstrates a downward trend in female employment rates.

16.3 Gender Equality and Individualism as Factors of Economic Activity and Income

The OECD standard defines full-time employees as those who work 30 h or more a week on the main job (Labor Force Statistics in OECD countries, 2015). However, this hour cut-off varies across countries. For example, in Austria, Israel, and the United States, they propose a 35-hour threshold. Part-time employees are those who work less than 30 h a week. The self-employed are those who are not hired but work for themselves or their family business. The nature of self-employment can be both voluntary and involuntary. The unemployed comprise all persons who currently do not have a job but are available for paid work and are searching for a job (all three

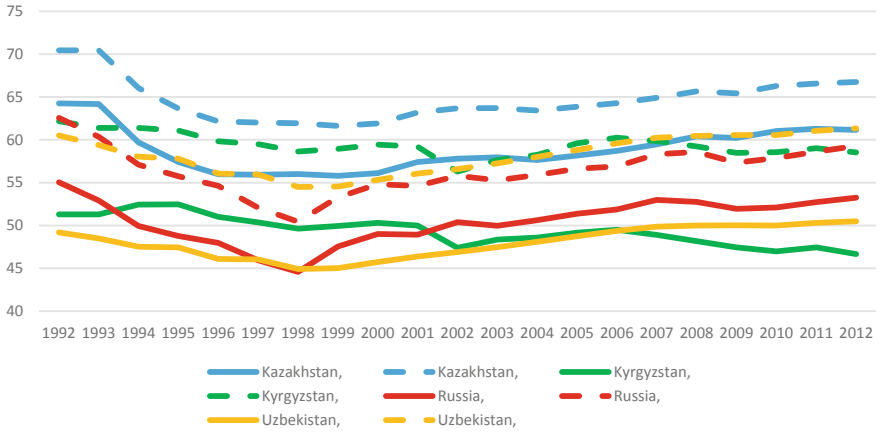

Fig. 16.2 Total and female employment rates in Kazakhstan, Kyrgyzstan, Russia and Uzbekistan (1992–2012), % of population aged 15 and older. Total employment rates are indicated by dashed lines, and female employment rates are shown by solid lines. (*Source* The authors visualized the data provided by the World Development Indicators [the World Bank]. Available at: https://data.worldbank.org/ Accessed 06 December 2019)

conditions should be satisfied simultaneously). The economically inactive comprise those who do not have a job but at the same time are not looking for it. This category includes students, housekeepers, retired or people with disabilities.

The substantial increase in the female participation in the global labor market over the last decades has stimulated research on gender equality, values and employment (especially part-time employment). Recent research emphasizes gender equality values as an explanatory variable for women's job-seeking and labor market participation decisions. Inactivity usually is a voluntary choice while unemployment is mostly involuntary choice. Values do matter in this context as they determine women's employment status. Women, who consider their gender as docile and submissive to men and separate the female domain from the private sphere, are more likely to be economically inactive (Spierings et al. 2010). Stam et al. (2014) using regression and event history analysis on the Dutch data from 2007 to 2010 conclude that women sharing the traditional gender role values tend to decrease their working hours and choose part-time employment. Moreover, the likelihood of labor market entry for women with such gender role values is significantly lower than for other women.

Societies with a more traditional values experience gender discrimination in the labor market more frequently. Due to gender discrimination, females tend to exit the paid job and become self-employed (Williams 2012). There is evidence that there are significant differences in support for gender equality between employed and economically inactive women (full-time housekeepers). A higher support for gender equality positively contributes to the likelihood of women's entry into the labor force (Bolzendahl and Myers 2004). Entering the labor market promotes egalitarian attitudes toward the gender division of labor. Women develop their egalitarian views

when they benefit from gains through employment (Lee 2019) or meet other women who are capable of combining their family responsibilities in childrearing and work (Davis and Greenstein 2009). However, this gap is partially attributed to their background socioeconomic characteristics such as educational attainment and family responsibilities in childrearing (Cunningham 2008; Pampel 2011; Rodriguez and Pillai 2019).

Socioeconomic characteristics are important factors of employment status. For example, Millan et al. (2012) show that gender and the level of education have a statistically significant effect on self-employment duration in Europe. Being a highly educated male increases the probability of surviving as an entrepreneur. Their finding about the nonlinear relationship between age and the length of the self-employment survival period is consistent with previous studies (e.g., Taylor 2004).

The authors hypothesize that *higher support for gender equality significantly increases the probability of being employed or self-employed (H1).*

Furthermore, many researchers have shown strong positive relationship between individualistic values and self-employment (e.g., Baluku et al. 2018; Tiessen 1997). However, this finding was not confirmed for transition economies and developing countries. Using the 2008 European Values Survey, Hatos et al. (2015) showed that there is no association between individualism and self-employment in Romania. The recent research (Rantanen and Toikko 2017) demonstrates that the mechanism underlying the link between individualism and self-employment is rather complex. Individualism has a positive indirect effect on entrepreneurial intention through numerous factors (for example, subjective norms that refer to the expectations of peer groups, perceived behavioral control that reflects how an individual evaluates his or her capacities to cope with responsibilities associated with self-employment).

The evidence from the 2005 Mexican wave of the World Values Survey (Temkin 2009) shows that the values of the self-employed in the informal sector are different from the formally employed and informal employees. In comparison with the other categories, the informally self-employed attach less importance to determination and independence. Opposite to Mexican developing economy, the generous welfare regimes with higher share of social expenditure tend to strengthen the collectivist values. As more people rely on state assistance, social dependency increases. As a result, there is a shift towards unemployment (mostly voluntary) under the generous welfare model (Cinalli and Giugni 2013).

Based on the mentioned above it is hypothesized that *more individualistic values increase the probability to be self-employed (H2).*

The literature on the association between post-materialist values and income is not that rich. Despite this fact, the findings of some studies imply that the effect of values is indirect. Previous studies imply that the relationship between income and values is mediated through work engagement and career decision. For example, the longitudinal study of Finnish young people by Sortheix et al. (2013) showed that individual orientations towards interesting work and strivings towards the match between job tasks and educational background contribute to work engagement. Such work values as autonomy at work, leadership, and variety of job tasks, have a positive effect on career decision and self-efficacy (Choi et al. 2013).

The researchers underscore the importance of intrinsic values as significant determinants of positive career outcomes in contrast to extrinsic values. Paradoxically, extrinsic values, which focus on the external characteristics of work, such as income, and prestigious work, do not promote career development since tangible rewards do not provide a long-term effect (Choi et al. 2013; Dik et al. 2008). In the context of this study, it is plausible to suggest that individualism and gender equality are mediator variables between employment practices and individual performance. Therefore, it is hypothesized that *gender equality preferences and individualistic values, have an indirect effect on income. Employment status mediates the relationship between the values and income (H3).*

16.4 Data and Methodology

The authors use the 6th round of the World Values Survey (Inglehart et al. 2014), with the 2011 field work conducted in Central Asia and Russia. There are several reasons for choosing this database. First, it provides measures of gender equality attitudes and individualistic values as well as the employment status and income that are the variables of interest for the present study. Second, it contains comparable data for Kazakhstan, Kyrgyzstan, Uzbekistan and Russia. Third, the WVS data is representative for the national population of the countries and quite in line with the official labor market statistics, except self-employed rates (see Table 16.3). Self-employed individuals are highly underrepresented while unemployed are a bit overrepresented in the World Values Survey.

Table 16.3 Official Labor Force Statistics (2011) in comparison with the WVS data (Wave 6, 2010–2014)

%	Kazakhstan		Kyrgyzstan		Uzbekistan		Russia	
	Of. Stat.	WVS	Of. Stat.	WVS	Of. Stat.	WVS	Of. Stat.	WVS
Active population	76.80	71.3	68.19	64.8	67.66	55.5	73.09	67.2
Non-active population	23.2	28.7	31.81	35.2	32.34	44.5	26.91	32.8
Employment	66.57	65	59.03	54.7	61.04	42.1	58.61	61.6
Self-employment	32.45	5.2	36.93	14.3	43.87	7.2	7.04	4.4
Part-time employment	18.29	13.1	32.91	15.9	No data available	14.9	8.82	5.8
Unemployment	5.39	6.3	8.53	10.1	4.96	13.1	6.54	5.6

Sources World Development Indicators (the World Bank). Available at: https://data.worldbank.org/. Accessed 06 December 2019; WVS—the calculations were made by the authors on the basis of Inglehart et al. (2014)

16.4.1 Operationalization of the Variables

The wording of the question that is used to measure income is as follows: "On this card is an income scale on which 1 indicates the lowest income group and 10 the highest income group in your country. The authors would like to know in what group your household is. Please, specify the appropriate number, counting all wages, salaries, pensions and other incomes that come in". As the income status variable has a large enough number of categories (10), it is dealt as an interval one in the empirical part.

Employment status is used first as a dependent variable and then as a mediator of the relationship between income status and post-materialist values. This is a self-reported variable: people answering the question assign themselves to one of the statuses: (1) full-time employment (in case an individual works 30 hours a week and more); (2) part-time employment (if an individual works less than 30 hours a week); (3) self-employment; (4) unemployed; (5) non-activity (the self-reported status "Retired", "Housewife", "Students" were coded as non-activity). The demographic profiles of the employment categories show that full-time workers are predominantly males, while part-timers are mainly females. It is further observed that both full-timers and part-timers in Russia have bigger share of elderly people than their Central Asian counterparts, what reflects the population structure of the countries. The Russian population is considerably older than the Central Asian one.

The key predictors of employment status for us are gender equality attitudes and individualistic values. "Gender equality attitudes" measures the propensity of an individual to support gender equality principles. A composite index of gender equality attitudes was constructed, following Inglehart and Welzel's methodology (Inglehart and Welzel 2005; Welzel 2013), on the basis of the following survey items:

1. When a mother works for pay, the children suffer
2. On the whole, men make better political leaders than women do
3. A university education is more important for a boy than for a girl
4. On the whole, men make better business executives than women do

The original scale of these variables (4 categories of agreement) was recoded into dummy variables, where 1 stands for "disagree" (original categories 3 "disagree" and 4 "completely disagree" were recoded into 1), 0—"agree" (original categories 1 "completely agree" and 2 "agree" were recoded into 0). The index of gender equality was calculated as a sum of the values for these four recoded dummy variables. Its categorical scale ranges from 0 to 4 with higher values corresponding to greater support for gender equality.

To measure individualistic values,[1] the authors follow the approach used by Arikan (2011). The WVS survey contains a list of items that assess child-rearing values.

[1]It is important to distinguish between individualism and preferences for income inequality. To avoid confusion, which may lead to a misinterpretation of individualism, the authors exclude from consideration individual views on income distribution and government responsibilities.

These items encompass the main features of individualism, namely preferences for autonomy and self-achievement. Respondents are asked to choose up to five important qualities that children can be encouraged to learn at home. This analysis utilizes an additive measure of individualism. It is constructed by adding the qualities chosen by an individual from the following list: (1) Independence (2) Hard work (3) Feeling of responsibility (4) Imagination. Therefore, the individualism index has a categorical scale and varies from 0 (if an individual mentioned none of the given qualities as desirable) to 4 (if all these qualities were chosen as desirable). Higher values indicate higher support for individualism.

Apart from the indicators given above, a set of control variables was used. They are gender dummy variable, and since the study is focusing on gender difference female category was used as a reference category. 5 age groups were constructed (18–24, 25–34, 35–44, 45–54, 55–65 years old) with the youngest group of individuals aged from 18 to 24 used as a reference category, higher education (a dummy variable which takes a value 1 if a respondent has a university degree, 0—otherwise), a marital status (a dummy variable which takes a value 1 if an individual is married or is currently living together with his or her partner, 0—otherwise), a number of children and a settlement size (higher values indicate larger population size of the city).

The analysis was carried out in two stages. First, to estimate the association between values and employment status, the authors ran multinomial logit regression models for each of the country since the outcome variable (employment status) is nominal. Full-time employment is chosen as a reference category, thus, all subsequent conclusions are hold in relation to this category. The model specification in the log-linear form is as follows:

$$\ln \Omega_{A|B}(X) = \beta_{0,A|B} + \beta_{1,A|B} GE_i + \beta_{2,A|B} Ind_i + \sum_{k=1}^{N} \beta_{k,A|B} C_{ki} + \varepsilon_i,$$

where B is a reference category of the dependent variable (full-time employment), A is any other category compared to the reference one. $\Omega_{A|B}(X)$ is the relative risk ratio of A versus B given explanatory variables X. This model is linear in the logarithm of relative risk ratios. GE_i and Ind_i stand for gender equality and individualism values respectively. C_{ki} is a set of control variables with k as a control variable index. N is the total number of control variables included in this series of models. ε_i indicates error terms that are assumed to have a standard logistic distribution.

The second stage of the empirical analysis fulfills two research tasks. The effect of gender equality attitudes and individualistic values on income status was estimated. Besides, the second stage disentangles the mechanism underlying this relationship. More specifically, it is tested whether employment status mediates the association between values and income. The mediation analysis decomposes the total effect of values (gender equality or individualism) into a *natural direct* and a *natural indirect* effect (Steen et al. 2017). The natural direct effect is the expected effect of a 1-unit increase in exposure level (values) on the dependent variable (income) when keeping the mediator fixed at the same value. The natural indirect effect shows the

change in the dependent variable (income) expected as a result of a 1-unit increase in the mediator (employment status) when keeping the exposure (values) fixed. This identification implies using a counterfactual framework.

Since the original data provide us only with the observed values of exposure, mediator and outcome variables, there is a problem of missing data. To disentangle the natural direct and indirect effects, it is necessary to have information about the counterfactual values. In other words, one needs to know which value the outcome variable (income) would take if a variable of interest (mediator or exposure) changed by 1 unit, holding all other variables constant. To generate unobserved counterfactual values, the authors apply the imputation-based approach. This approach relies on models for the exposure mean. The counterfactual outcome variables might no longer take their original values as they are substituted by conditional mean imputations. The imputation algorithm was repeated for each of the four countries under study. The procedure was implemented in three steps.

First, a preliminary regression model was estimated. This model used income as a dependent (outcome) variable, attitudes towards gender equality and individualistic values as exposure variables, employment status as mediators (with full-time employment as a reference category). Besides, confounding effects of individual characteristics were controlled by including a set of control variables. Linear regression models were estimated since the number of categories of the dependent variable, namely 10, makes it possible to approximate the original categorical scale to the interval one.

Second, the dataset was expanded by adding counterfactual values. As it was mentioned above, the authors applied conditional mean imputations to generate these values. The expanded dataset enables to observe the values of the outcome variable at all possible combinations of the mediator and exposure variables.

Third, the final disentangles the natural direct and the natural indirect effects of gender equality and individualism on income status. The linear regression models were re-estimated on the expanded dataset. As in the previous model specification, income status is used as a dependent variable. The main explanatory variables included in the model are the imputed counterfactual indicators. The inclusion of these predictors enables to separate the direct and indirect effects of post-materialist values. Since the indirect effect is produced through employment status and involves its variance, the original mediator variables are excluded from the model. In other words, the original mediators were substituted for the imputed counterfactual indicators.

16.5 Results and Discussion

The first part of this section focuses on the relationship between the attitudes towards gender equality and individualism, on the one hand, and employment status, on the other hand. Tables 16.4, 16.5, 16.6, and 16.7 represent the coefficients of the multino-

Table 16.4 The relationship between gender equality, individualism and employment status (Full-time employment is a reference category) in Kazakhstan. Multinomial Regression Models

	Part-time employment	Self-employment	Unemployment	Economic inactivity
Gender equality	0.980 (0.0668)	0.759** (0.0768)	1.014 (0.0974)	0.724*** (0.0456)
Individualism	1.130 (0.128)	1.149 (0.192)	0.895 (0.137)	1.113 (0.117)
Gender (female—reference)	0.744 (0.129)	1.681* (0.438)	1.209 (0.290)	0.142*** (0.0267)
Age 25–34	0.416** (0.115)	1.116 (0.541)	0.325** (0.118)	0.179*** (0.0458)
Age 35–44	0.450** (0.131)	0.776 (0.405)	0.292** (0.118)	0.0654*** (0.0194)
Age 45–54	0.258*** (0.0839)	0.581 (0.322)	0.430* (0.168)	0.101*** (0.0290)
Age 55–65	0.396* (0.152)	0.374 (0.284)	0.492 (0.243)	0.722 (0.205)
Higher education	0.976 (0.171)	1.185 (0.314)	0.461** (0.137)	0.271*** (0.0519)
Married	0.831 (0.168)	1.269 (0.430)	0.680 (0.193)	1.153 (0.216)
Number of children	1.326*** (0.107)	1.298* (0.149)	1.044 (0.123)	1.413*** (0.104)
Settlement size	0.984 (0.0322)	0.876** (0.0428)	0.793*** (0.0373)	0.944 (0.0286)
N	1391			
Pseudo-R2 −2 log-likelihood	0.1387 3129.2588			

Note Calculations are made by the authors on the basis of Inglehart et al. (2014)
Coefficient estimates are exponentiated. Standard errors are given in parentheses. $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

mial regression models for Kazakhstan, Kyrgyzstan, Russia and Uzbekistan, respectively. Each table contains the estimations for four categories of the employment status (i.e., part-time employment, self-employment, unemployment and economic inactivity) in reference to full-time employment (reference category).

The authors provide the interpretation in terms of relative risk ratios since the exponentiated coefficient estimates are reported. Those estimates that are larger than 1 indicate that a one unit increase in an explanatory variable increases a likelihood of being in a given outcome category (in this case, employment status) as compared to full-time employment, all other variables being equal. Estimates smaller than 1 can be interpreted as a decrease in a likelihood of being in a given outcome category in reference to full-time employment.

Table 16.5 The relationship between gender equality, individualism and employment status (full-time employment is a reference Category) in Kyrgyzstan. Multinomial regression models

	Part-time employment	Self-employment	Unemployment	Economic inactivity
Gender equality	1.005 (0.0613)	0.799*** (0.0522)	0.888 (0.0657)	0.937 (0.0524)
Individualism	0.951 (0.103)	0.994 (0.114)	1.018 (0.130)	0.970 (0.0958)
Gender (female—reference)	0.610** (0.109)	2.048*** (0.416)	1.345 (0.298)	0.230*** (0.0388)
Age 25–34	0.491* (0.149)	0.996 (0.366)	0.265*** (0.0914)	0.141*** (0.0383)
Age 35–44	0.547 (0.184)	1.496 (0.590)	0.260*** (0.102)	0.108*** (0.0328)
Age 45–54	0.718 (0.245)	1.201 (0.490)	0.241*** (0.0980)	0.164*** (0.0503)
Age 55–65	0.476 (0.206)	1.223 (0.578)	0.158*** (0.0875)	0.455* (0.160)
Higher education	1.023 (0.181)	0.350*** (0.0738)	0.185*** (0.0514)	0.176*** (0.0321)
Married	1.347 (0.345)	1.141 (0.333)	1.401 (0.449)	1.249 (0.285)
Number of children	1.011 (0.0683)	1.011 (0.0742)	0.937 (0.0802)	1.109 (0.0679)
N	1406			
Pseudo-R2 −2 log-likelihood	0.1286 3749.5594			

Note Calculations are made by the authors on the basis of Inglehart et al. (2014)
Coefficient estimates are exponentiated. Standard errors are given in parentheses. $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

The findings indicate that supporters of gender equality are less likely to be self-employed in Kyrgyzstan and Kazakhstan. However, the opposite is true for Russia: all other variables being equal, one unit increase in gender equality index increases the risk of being self-employed by nearly 28% as compared to full-time employed. It is also observed that supporters of gender equality are less likely to be economically inactive in Kazakhstan. Gender equality index does not have any significant effect on the employment status in Uzbekistan.

The most important outcomes of the study relate to the gender effects on the probability to have a full-time job in the four countries. The main conclusion is that gender does matter, it affects employment status: males have better chances to be full-time employed than women in all four countries. The likelihood of being non-active for the men in Central Asia as well as in Russia is significantly lower than for women. Except for Uzbekistan, in all the countries males are more likely

Table 16.6 The relationship between gender equality, individualism and employment status (full-time employment is a reference category) in Russia. Multinomial regression models

	Part-time employment	Self-employment	Unemployment	Economic inactivity
Gender equality	1.009 (0.0816)	1.284** (0.122)	0.919 (0.0977)	0.939 (0.0523)
Individualism	0.845 (0.112)	1.359* (0.204)	0.845 (0.144)	1.056 (0.0992)
Gender (female—reference)	0.697 (0.148)	1.913** (0.465)	2.490** (0.756)	0.284*** (0.0433)
Age 25–34	0.609 (0.202)	1.262 (0.529)	1.539 (0.776)	0.224*** (0.0521)
Age 35–44	0.368** (0.138)	1.285 (0.549)	1.608 (0.822)	0.0616*** (0.0190)
Age 45–54	0.460* (0.162)	0.744 (0.339)	1.261 (0.653)	0.0944*** (0.0251)
Age 55–65	0.980 (0.356)	0.429 (0.255)	0.832 (0.514)	1.453 (0.315)
Higher education	1.414 (0.297)	1.246 (0.300)	0.285** (0.125)	0.567*** (0.0956)
Married	0.710 (0.154)	0.843 (0.217)	0.445** (0.131)	1.118 (0.171)
Number of children	1.032 (0.127)	1.215 (0.152)	1.155 (0.165)	1.142 (0.0923)
Settlement size	1.035 (0.0412)	1.066 (0.0485)	0.880** (0.0429)	0.921** (0.0239)
N	1706			
Pseudo-R2 −2 log-likelihood	0.1487 3165.0086			

Note Calculations are made by the authors on the basis of Inglehart et al. (2014)
Coefficient estimates are exponentiated. Standard errors are given in parentheses. $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

to be self-employed than females. In Kyrgyzstan and Uzbekistan women are more likely to work part-time than full-time in comparison with men while in Kazakhstan and Russia the corresponding coefficients for part-time work turned statistically insignificant. In contrast to the Central Asian countries, for males in Russia the risk of being unemployed is higher than for females.

Gender and the attitudes towards gender equality interrelate and have a mutual effect on employment status. To test this idea, the authors additionally estimated the regression models with interaction terms between gender equality and gender (see Table 16.8). The results confirm that there are gender differences in the association between gender equality index and employment status in Kazakhstan and Kyrgyzstan. In these countries a higher support of gender equality among males is associated with part-time employment, while for females the relationship between

Table 16.7 The relationship between gender equality, individualism and employment status (full-time employment is a reference category) in Uzbekistan. Multinomial regression models

	Part-time employment	Self-employment	Unemployment	Economic inactivity
Gender equality	0.918 (0.0685)	1.155 (0.108)	1.011 (0.0805)	0.932 (0.0634)
Individualism	0.988 (0.124)	1.105 (0.179)	1.135 (0.151)	0.924 (0.108)
Gender (female—reference)	0.344^{***} (0.0684)	1.140 (0.298)	0.821 (0.177)	0.0436^{***} (0.00937)
Age 25–34	0.410^{*} (0.146)	1.275 (0.641)	0.565 (0.200)	0.187^{***} (0.0629)
Age 35–44	0.379^{*} (0.145)	0.922 (0.499)	0.310^{**} (0.125)	0.0776^{***} (0.0283)
Age 45–54	0.531 (0.221)	1.674 (0.946)	0.448 (0.197)	0.158^{***} (0.0618)
Age 55–65	0.815 (0.460)	1.771 (1.376)	0.823 (0.514)	1.623 (0.800)
Higher education	0.902 (0.211)	0.203^{***} (0.0918)	0.171^{***} (0.0653)	0.365^{***} (0.0877)
Married	1.060 (0.291)	0.982 (0.359)	0.625 (0.181)	2.336^{***} (0.602)
Number of Children	0.900 (0.0746)	0.892 (0.0924)	0.845 (0.0783)	1.032 (0.0765)
Settlement size	0.851^{***} (0.0319)	0.908^{*} (0.0440)	0.859^{***} (0.0346)	0.879^{***} (0.0299)
N	1336			
Pseudo-R2 −2 log-likelihood	0.1680 3254.7112			

Note Calculations are made by the authors on the basis of Inglehart et al. (2014)
Coefficient estimates are exponentiated. Standard errors are given in parentheses. $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

the likelihood of being part-time employed and gender equality attitudes is insignificant. The other finding is that in Kazakhstan gender equality attitudes reduce the risk of being economically inactive for females. In Russia and Uzbekistan there are no significant gender differences in the effect of the gender equality values on employment status.

The findings demonstrate that the association between individualistic values and employment status is insignificant. This is true for each of the countries except Russia, where individualistic value index increases the risk of being self-employed as compared to full-time employed, keeping all other variables fixed.

As for the control variables, in the four countries age demonstrates a consistent negative effect on the likelihood of being economically inactive as compared to the base category of the youngest people aged 18–24 years. For Kazakhstan it is also true

Table 16.8 Gender differences in the relationship between employment status and gender equality attitudes in the Central Asian countries and Russia. Multinomial regression models with interaction terms

	Part-time employment	Self-employment	Unemployment	Economic inactivity
Kazakhstan				
Gender equality	0.847 (0.0744)	0.785 (0.122)	0.985 (0.142)	0.657*** (0.0484)
Gender (female—reference)	0.325** (0.120)	1.759 (0.888)	1.017 (0.551)	0.0673*** (0.0245)
Gender equality × gender	1.424* (0.196)	0.960 (0.196)	1.079 (0.209)	1.436* (0.213)
Kyrgyzstan				
Gender equality	0.891 (0.0753)	0.789* (0.0908)	0.769* (0.0944)	0.881 (0.0662)
Gender (female—reference)	0.357** (0.113)	1.826 (0.621)	0.838 (0.311)	0.181*** (0.0528)
Gender equality × gender	1.288* (0.159)	1.043 (0.147)	1.267 (0.195)	1.118 (0.129)
Uzbekistan				
Gender equality	0.843 (0.0861)	1.004 (0.150)	0.893 (0.107)	0.847 (0.0731)
Gender (female—reference)	0.263*** (0.0840)	0.733 (0.329)	0.556 (0.197)	0.0287*** (0.00968)
Gender equality × gender	1.167 (0.177)	1.270 (0.242)	1.250 (0.200)	1.291 (0.206)
Russia				
Gender equality	0.932 (0.0990)	1.291 (0.203)	0.699 (0.133)	0.937 (0.0662)
Gender (female—reference)	0.462 (0.195)	1.945 (1.131)	1.073 (0.586)	0.287*** (0.0828)
Gender equality × gender	1.202 (0.196)	0.998 (0.198)	1.491 (0.341)	0.992 (0.115)

Note Calculations are made by the authors on the basis of Inglehart et al. (2014)
Control variables are included in the models. Coefficient estimates are exponentiated. Standard errors are given in parentheses. $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

that the older a person is, the lesser the likelihood for him or her to be unemployed or part-time employed is. This result is rather evident if it is taken into consideration that the population in the Central Asian countries is rather young. Moreover, the youth tends to emigrate to look for a job.

In line with the previous studies on the relationship between employment and human capital (Choi et al. 2019; Davidsson and Honig 2003; Sanders and Nee 1996), higher education decreases the likelihood of being unemployed and economically

inactive. This finding remains robust for the Central Asian countries and Russia. The other observation is that in Uzbekistan and Kyrgyzstan having a university degree decreases a risk of being self-employed in reference to full-time employed.

A marital status does not have a significant effect on employment status in Kazakhstan and Kyrgyzstan. In Russia, being married decreases the risk of being unemployed. In Uzbekistan, being married increases the likelihood of being economically inactive. The authors suggest that this positive effect is mainly due to the sample of married women who are more likely to become housekeepers. The number of children has a significant effect only in Kazakhstan. The more children an individual has, the higher a risk is for him or her of becoming part-time employed and economically inactive. The result that turns out to be robust for all the countries is that living in bigger settlements is associated with a lower risk of being unemployed. In Kyrgyzstan and Uzbekistan, living in bigger settlements has a negative effect on the likelihood of each of the employment status as compared to full-time employment.

The second part of the empirical analysis was aimed at disclosing the relationship between the attitudes towards gender equality, individualism, employment status, on one side, and income, on the other. Besides, the authors attempt to disentangle the mechanism underlying this relationship by testing the hypothesis about the mediation role of employment status in the association between the post-materialist values and income.

Before implementing the mediation analysis, preliminary linear regression models with income as a dependent variable were estimated. First, only employment status as key explanatory variables and control variables were included. Second, support for individualism and support for gender equality as predictors were added. The authors make these steps to test whether the values have more explanatory power than employment status. If this was the case, value variables would suppress the effect of the other explanatory indicators.

The results show that being unemployed and being economically inactive significantly decreases the income status. This is true for each of the countries under study except for Kyrgyzstan where employment status is not related to income. One of the explanations of this phenomenon might be the big role of the remittances in the economic life of the Kyrgyz families that are sent from the migrant workers abroad. Remittances in Kyrgyzstan accounted for 27.5–30.75% of GDP in 2011–2012 accordingly.

Apart from these findings, in Kazakhstan part-time workers experience significant income reductions. The peculiarity of Russia is that being self-employed positively contributes to income. These findings are robust to the inclusion of gender equality and individualism. Values do not suppress the effect of employment status on the dependent variable. Kazakhstan demonstrates a positive link between gender equality and income, namely the Kazakhs who support gender equality tend to earn more. However, this result does not hold for the other considered countries. The estimates for Kyrgyzstan, Russia and Uzbekistan suggest that neither gender equality nor individualism are associated with income.

It is important to consider that the coefficient estimates for the values in the preliminary regression models might be misleading due to the aggregation of direct and

indirect effects. It is hypothesized that gender equality and individualism contribute to income through employment status. Table 16.9 reports the results of estimated regression models on the expanded imputed dataset (for more details see the description of the imputation procedure in Sect. 16.4). These models separate the natural direct and indirect effects. The models are estimated for the total sample and separately for males and females to see whether there are some gender differences in the mediation effect.

The effect decomposition indicates that in Kazakhstan gender equality has only a direct effect on income. The corresponding indirect effect is small in magnitude and insignificant. In Kyrgyzstan support for gender equality is not related to income both in terms of direct and indirect effects. However, for females in Kyrgyzstan support for gender equality values and income are negatively related. The same is true for Uzbekistan. The possible explanation for this counterintuitive result is that the self-employed are highly underrepresented in the data for the Central Asian countries used in this study. The estimates for Russia support the hypothesis about the mediation role of employment status. The authors observed earlier the insignificant impact of gender equality because the positive direct and negative indirect effects were suppressing each other. The effect decomposition demonstrates that higher support for gender equality positively contributes to income through employment

Table 16.9 Support for gender equality and income: direct and indirect effects. Mediation analysis

	Kazakhstan	Kyrgyzstan	Russia	Uzbekistan
Total sample				
Direct effect of gender equality	0.146*** (0.041)	– 0.058 (0.036)	– 0.061* (0.032)	– 0.052 (0.0367)
Indirect effect of gender equality	– 0.002 (0.007)	– 0.006 (0.005)	0.014** (0.006)	0.004 (0.005)
Control variables	Included			
Males				
Direct effect of gender equality	– 0.025 (0.024)	– 0.046 (0.026)	– 0.1167*** (0.022)	– 0.0598* (0.025)
Indirect effect of gender equality	– 0.0018 (0.003)	0.0001 (0.0029)	– 0.003 (0.003)	– 0.0001 (0.002)
Control variables	Included			
Females				
Direct effect of gender equality	– 0.0202 (0.0235)	– 0.066** (0.024)	– 0.0328 (0.023)	– 0.068** (0.023)
Indirect effect of gender equality	– 0.002 (0.0025)	– 0.007* (0.003)	– 0.003 (0.0026)	– 0.0027 (0.0029)
Control variables	Included			

Note Calculations are made by the authors on the basis of Inglehart et al. (2014)
Natural Effect model on the imputed sample. Standard errors based on the non-parametric bootstrap are given in parentheses. $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

status. However, in Russia there is no direct association between gender equality and income. The coefficient estimate for the direct effect produced by gender equality has a negative sign, but it is at the edge of significance. In Russia the mechanisms of the relationship between support for gender equality values and income vary by gender. Russian women's income does not depend on their support for gender equality. Males with a higher support for gender equality tend to have a lower income. This effect is direct, which implies that a higher level of gender equality does not predetermine the choice of employment status by males. At the same time if males oppose the idea that they are the only breadwinners in their families, they tend to be less eager to look for additional sources of income.

Additionally, the same algorithm was repeated to define the mechanism of the relationship between individualism and income. The findings indicate the absence of direct and indirect effects in all the countries under consideration.

16.6 Conclusion

This chapter was aimed at testing the association between support for gender equality and individualism, on one side, and employment status and income, on the other. The current study contributes to the research on economic activity and employment status determinants in the Central Asian economies. This section of the chapter summarizes and discusses the main results of the comparison between Kazakhstan, Kyrgyzstan, Uzbekistan on the one hand, and Russia, on the other hand, as one of the main country-recipients of labor immigrants from Central Asia.

The analysis of the relationship between values and employment status shows that the effect of gender equality on employment varies across the countries under consideration. The hypothesis about the positive relationship between self-employment and gender equality was confirmed only for Russia. Self-employment is also significantly correlated with gender equality attitudes in Kazakhstan and Kyrgyzstan, but the effect is in the opposite direction. To explain this phenomenon, one can address the fact that the self-employed in Russia and Central Asia are different categories of people. In Central Asia, young people regardless of gender become entrepreneurs since there is a lack of workplaces in the current labor market. Most Russian self-employed individuals are opportunity entrepreneurs (Pham et al. 2018). Such factors as market opportunities and the desire for independence and creativity (i.e., individualism) facilitate entry into self-employment (Block and Koellinger 2009; Liu and Huang 2016).

Individualism in its turn is positively correlated with gender equality. Collective societies are usually characterized as being based on patriarchal hierarchies. For example, family hierarchies shape gender inequality and traditional attitudes toward the role of women in labor markets (Alesina and Giuliano 2014). The positive association between individualism and gender equality values explains why gender equality is related to the higher likelihood of self-employment in Russia. The other possible explanation could be that Russian women who support gender equality dare

to start their own business. However, the analysis does not support this proposition by showing that in Russia the effect of gender equality on self-employment does not vary by gender (see details in Table 16.8).

At the same time the Central Asian countries demonstrate that gender moderates the relationship between support for gender equality and employment status. Women in Kazakhstan are more likely to be active in the labor market and to be part-time employed if they share gender equality values. This is in line with the recent studies (Lee 2019; Rodriguez and Pillai 2019). The effect is twofold. On the one hand, women who have positive attitudes toward gender equality choose to be employed rather than to be housewives. On the other hand, women who participate in the labor force benefit from employment, which fosters their gender equality values. That makes it difficult to speak about causal relationships and there for the next studies should address the endogeneity problem here. Unfortunately, the nature of the available data does not allow the authors to solve the endogeneity problem.

The evidence from Russia confirms the hypothesis about the positive association between self-employment and individualism. Individualism increases the likelihood of being self-employed. This conclusion is consistent with previous findings (Baluku et al. 2018). People with a higher propensity to rely on their own capacities are more inclined to start their own business. Individualism does not predict employment status in the Central Asian countries. As the authors have already discussed above, people in these countries are pushed into self-employment due to the lack of job opportunities. Therefore, in Central Asia values are weak predictors of employment status.

The second part of the analyses focused on the association between the post-materialist values and income. Only the evidence from Kazakhstan confirms that gender equality is a significant predictor of income. This country indicates that supporters of gender equality values tend to earn more. However, there is not enough evidence for understanding how this relationship works. To clarify the mechanism underlying this link, the mediation analysis was implemented. The important observation is that the effect of gender equality values in Kazakhstan is direct and not mediated by employment status. This implies that a higher support for gender equality may result in higher work engagement. This is in line with the previous studies (Choi et al. 2013; Sortheix et al. 2013). The high level of work engagement in its turn may contribute to higher income.

On the contrary, for Russia it is true that gender equality has an indirect effect on income. This effect is mediated through the employment status. The results also evidence that individualism is a weak predictor of income for both Russia and the Central Asian countries. The mediation analysis indicates that individualism produces a direct effect on income. To summarize, the hypothesis about the indirect effects of values is partially confirmed. While the Central Asian countries give more evidence for the direct relationship, Russia corroborates the proposition about the mediation between support for gender equality and income through employment status.

References

Alesina A, Giuliano P (2014) Family ties. In: Aghion P, Durlauf SN (eds) Handbook of economic growth. North Holland, Amsterdam, The Netherlands, pp 177–215

Arikan G (2011) Economic individualism and government spending. World Values Res 4(3):73–95

Baluku MM, Bantu E, Otto K (2018) Effects of locus of control on entrepreneurial attitudes and self-employment intentions: the moderating role of individualism. J Enterprising Cult 26(3):251–283

Block JH, Koellinger P (2009) I can't get not satisfaction - necessity entrepreneurship and procedural utility. Kyklos 62(2):191–209

Bolzendahl CI, Myers DJ (2004) Feminist attitudes and support for gender equality: opinion change in women and men, 1974–1998. Soc Forces 83:759–790. https://doi.org/10.1353/sof.2005.0005

Choi SJ, Jeong JC, Seoung NK (2019) Impact of vocational education and training on adult skills and employment: an applied multilevel analysis. Int J Educ Dev 66:129–138. https://doi.org/10.1016/j.ijedudev.2018.09.007

Choi B, Kim B, Jang S, Jung S, Ahn LS, Gysbers N (2013) An individual's work values in career development. J Employment Couns 50:154–165

Cinalli M, Giugni M (2013) New challenges for the welfare state: the emergence of youth employment regimes in Europe. Int J Soc Welf 22(3):290–299. https://doi.org/10.1111/ijsw.12016

Cunningham M (2008) Changing attitudes toward the male breadwinner female homemaker family model: influences of women's employment and education over the Lifecourse. Soc Forces 87(1):299–323

Davidsson P, Honig B (2003) The role of social and human capital among nascent entrepreneurs. J Bus Venturing 18(3):301–331. https://doi.org/10.1016/S0883-9026(02)00097-6

Davis SN, Greenstein TN (2009) Gender ideology: components, predictors, and consequences. Annu Rev Sociol 35:87–105. https://doi.org/10.1146/annurev-soc-070308-115920

Dik BJ, Sargent AM, Steger MF (2008) Career development strivings: assessing goals and motivation in career decision-making and planning. J Career Dev 35:23–41. https://doi.org/10.1177/0894845308317934

Hatos A, Hatos R, Bădulescu A, Bădulescu D (2015) Are risk attitudes and individualism predictors of entrepreneurship in Romania? Amfiteatru Econ 17(38):148–161

Inglehart R, Welzel C (2005) Modernization, cultural changes and democracy. Cambridge University Press, New York

Inglehart R, Haerpfer C, Moreno A, Welzel C, Kizilova K, Diez-Medrano J, Lagos M, Norris P, Ponarin E, Puranen B et al (eds) (2014) World Values Survey: round six—country-pooled datafile 2010–2014 version. JD Systems Institute, Madrid. http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp

Karabchuk T, Kostenko V, Zelikova J, Beishenaly N, Ryabchikova A, Zakotyansky D, Salnikova D, Pereboev V (2015) Labor migration and labor-intensive industries in Kyrgyzstan and Tajikistan: possibilities for human development in Central Asia. Eurasian Development Bank Centre for Integration Studies Report, 31

Lee Y (2019) Transitions in adulthood and women's attitudes toward the gender division of labor in South Korea. J Child Fam Stud 28:1815–1825. https://doi.org/10.1007/s10826-019-01403-x

Liu C, Huang X (2016) The rise of urban entrepreneurs in China: capital endowments and entry dynamics. Growth Change 47(1):32–52

Millan J, Congregado E, Roman C (2012) Determinants of self-employment survival in Europe. Small Bus Econ 38(2):231–258. https://doi.org/10.1007/s11187-010-9260-0

Pampel F (2011) Cohort changes in the socio-demographic determinants of gender egalitarianism. Soc Forces 89(3):961–982

Pham T, Talavera O, Zhang M (2018) Self-employment, financial development, and well-being: evidence from China, Russia and Ukraine. J Comp Econ 46:754–769

Rantanen T, Toikko T (2017) The relationship between individualism and entrepreneurial intention—a Finnish perspective. Journal of Enterprising Communities: People and Places in the Global Economy 11(2):289–306. https://doi.org/10.1108/JEC-10-2014-0021

Rodriguez JO, Pillai VK (2019) Advancing support for gender equality among women in Mexico: significance of labor force participation. Int Soc Work 62(1):172–184

Sanders JM, Nee V (1996) Immigrant self-employment: the family as social capital and the value of human capital. Am Sociol Rev 61(2):231–249. https://doi.org/10.2307/2096333

Sortheix FS, Dietrich J, Chow A, Salmela-Aro K (2013) The role of career values for work engagement during the transition to working life. J Vocat Behav 83:466–475

Spierings N, Smits J, Verloo M (2010) Micro- and macro-level determinants of women's employment in six MENA countries. J Marriage Fam 72(5):1391–1407

Stam K, Verbakel E, Graaf PM (2014) Do values matter? The impact of work ethic and traditional gender role values on female labor market supply. Soc Indic Res 116(2):593–610. https://doi.org/10.1007/s11205-013-0287-x

Steen J, Loyes T, Moerkerte B, Vansteeelandt S (2017) Medflex: an R package for flexible mediation analysis using natural effect models. J Stat Softw 76(11). http://doi.org/10.18637/jss.v076.i11

Taylor M (2004) Self-employment in Britain: when, who and why? Swed Econ Policy 11(2):139–173

Temkin B (2009) Informal self-employment in developing countries: entrepreneurship or survivalist strategy? Some implications for public policy. Anal Soc Iss Pub Pol 9:135–156

Tiessen J (1997) Individualism, collectivism, and entrepreneurship: a framework for international comparative research. J Bus Venturing 12(5):367–384

Welzel C (2013) Freedom rising. Human empowerment and the quest for emancipation. Cambridge University Press, Cambridge

Williams D (2012) Gender discrimination and self-employment dynamics in Europe. J Socio-Econ 41(2):153–158

Chapter 17
Spent by Mammy as Earned by Daddy: Rethinking Household Consumption as a Foundation of Gender Egalitarianism

Elena Berdysheva and Boris Belyavskiy

Abstract Earning has been traditionally prescribed to male identity, while housekeeping management to the female. The opening of the labor market for women partly weakened gender inequality and the connection between gender and economic performance. However, that decision only opened a "male" economic role for all and kept the "female"-governing household expenditures underestimated. On the data of 37 in-depth interviews with middle-class housewives from Moscow, Russia, carried out between 2014 and 2019 using grounded theory methodology, the chapter reconstructs two lines of argumentation used by women to justify that management of household expenditures can be chosen as a main economic activity without the failing modern gender standards. The first one is denoted as a "consumptive thrift" or "frugal approach." It explains expenditures of a household as a form of saving and a way to obtain control over the family's budget. This approach uses economic rationality to suppress impulsive decisions and emphasize the similarity with actions of earning. The second logic is "consumption as social reproduction" or "abundant approach." It emphasizes the dissimilarity between female-driven spending to male earning. In this view, household expenditures make the family a domain of recovery, satisfaction, and relational work that is impossible without the satisfaction of desires.

Keywords Financial behavior · Household management · Gender power · Care · Frugality · Russia

17.1 Introduction

In contrast to Europe and the USA, inversion of economic roles in families, where men choose a less prestigious home environment is a fairly new phenomenon in Russia (Singleton and Maree Maher 2004). This trend may be a symptom of the

E. Berdysheva (✉) · B. Belyavskiy
National Research University Higher School of Economics (HSE), Moscow, Russia
e-mail: eberdysheva@hse.ru

B. Belyavskiy
e-mail: bbelyavskiy@hse.ru

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1_17

underdevelopment of society or the lack of adaptability by groups of men (See Chapter 10). However, it may also indicate that caring for the family and home that has been considered secondary with respect to market labor suddenly turns out to be a socially acceptable choice for personal self-realization, accessible and attractive to both women and men.

Contrary to the discussion on the crisis of family institution against individualization and marketization of society (Dagenais 2008), in the last decade, sociological theory has introduced the idea that domesticity has become more meaningful for an individual than it used to be before (Beckert 2016; Hulme 2019). Home life is the stronghold of an individual's identity, environment, and recreation. This function of an individual's daily social reproduction in a household has been underestimated by researchers of modern capitalism (Fraser 2016). The empirical data collected between 2014 and 2019 on spending, or rather the savings of the family budget by Russian housewives, is suggested to balance the asymmetry of home power in favor of women who have discerned that home management can be considered an area of self-realization, equivalent to a professional life and therefore, prosperity in those activities increases their social recognition. At the same time, the status of household management as an economic activity is changing.

Gender expectations towards men are traditionally associated with earning, as the most prestigious economic activity (Fraser 2016). Across different countries, including Russia, women are expected to manage household expenditures, plan family savings, and arrange consumption of goods in favor of the family (Ibragimova and Guseva 2017; Popova 2017). Considering a society focused on the market, professionality is greatly valued while facing the need to cut costs and waste (See Chapter 1); following global trends Russian women have been developing special expertise in home management. Between breadwinning and housekeeping, competition loses its essence. Spouses either find more in common despite the gender and better cooperate in household decisions or succeed from the recognition of gender difference and complementarity.

Empirically this chapter is based on the data of 37 in-depth semi-structured interviews with Russian housewives from Moscow, gathered and processed along with the methodology of grounded theory (Charmaz and Belgrave 2019).

Most works on thrift consumption are dedicated to practices forced by poverty (Cappellini et al. 2019; Waight 2019). This text is focused on voluntary choices of consumption practices by women from the middle class to reconstruct conscious justification on the importance of housekeeping.

The chapter starts with the theoretical justification of the key assumption. It argues that either with the rise of thrift economy or with the recognition of the role of consumption for social reproduction in market societies practices of economizing within household management, obtain positive connotations and open new ways of equalizing female and male positions in a market society. Thereafter, it briefly describes the dynamics of spending practices in Russia against the background of stability of that part of the current gender contract that has prescribed women to bear responsibility for family needs, consumption, and expenditure management.

Subsequently it sheds light on the design of fieldwork and presents two empirically rooted logics of economizing developed by housewives in Moscow.

17.2 Theoretical Perspective

17.2.1 Equalizing the Principles of Earning and Consuming as a Way to Gender Equality

According to M. Fourcade, the democratization of society claimed to overcome gender inequality. The new cultural and political code prescribed to give up the nominal distinction between men and women as biological species. Instead, it imposed a new order where each gender was declared to contain both feminine and masculine dimensions measured along within the interval scale. This modified interpretation opened for everyone, a new opportunity to manage their own positions on the feminine-masculine scale.

Soviet Russia was the pioneer in the emancipation and integration of women into labor markets. Two-earner couples became the most prevalent type of partner relations since the early Soviet period (Ibragimova and Guseva 2017). Female success in the labor market has contributed to the equality of gender roles in society (See Chapter 16). However, labor market economic activities were still more prestigious than household management or planning of family consumption. The latter was perceived to be inevitable, but an involuntary burden that must be undertaken. The responsibility for socially less attractive housekeeping was still attributed primarily to women.

After the crises of 2008, the role of household economy in market capitalism was revisited. It was reevaluated as a resource for economic resilience and autonomy (Fligstein 2016). Household management revealed its function as the domain of emotional recovery and social reproduction—critically important in a stressful and competitive market rush (Fraser 2016). Furthermore, considering consumerism and customer protection, management of household consumption was interpreted as a crucial contribution to both the economy and social order within the family and beyond.

In Europe and the USA, during the second half of the twentieth century, consumption was supported as a significant driver of national demand for consumer goods. Consumption went hand in hand with a civic duty that helps the state stimulate the development of the market economy (Cohen 2004). During the era of consumer society, consumer decisions became a legitimate tool for conveying the civil and political attitudes of individuals. Socialization in market society prescribed to seek for marketplace competence as an ability to gain profits through recognizing and exploiting market opportunities (Bevir and Trentmann 2007; Cochoy 2015; Micheletti 2003; Wherry 2008). The market economy has produced a market society (Sandal 2013). Consumer choice becomes a site of social identity. Russia

has witnessed the shift towards a market economy and consumer choice after "perestroika" (Matza 2012). Today Russian consumers adapt their practices according to the global trends directed towards a sustainable economy of scarcity (Berdysheva and Romanova 2017a).

Economic stagnation that began worldwide after the crises of 2008 shifted the key pattern of consumption. After 50 years of consumption rush, strong political and social critics against greed and wastefulness came to the scene (Vedwan 2009). The logic of scarcity entered the discourse as a new universal moral benchmark for economic processes. Frugality has taken its place in consumer practices and social meanings behind them (Bradshaw and Ostberg 2019). Thus, consumption practices got collinear with earning practices through economizing (Bradshaw and Ostberg 2019). Thrift reduces costs and creates additional money in the form of assets saved from vulgar excessive consumption (Waight 2019). Frugality in expenses management indicates agency performed by consumers (Lewis and Rauturier 2019). "Consumptive thrift" or "spending to save" turn out to be a new form of hedonism (Hulme 2019).

Thus, female consumption behavior obtains a chance to be considered as an equal to primarily male earning practices in terms of functional importance for society. With building-up expertise in household management, and consumer markets women are found to produce additional social worth even without leaving home for the labor market.

Assumption 1: Gender inequality can be reduced by highlighting the importance of economic role traditionally prescribed to women. Management practices of household spending may be reinterpreted as money-saving, or even earning by "consumptive thrift," and frugality. So, activities of household spending undergo reconsideration based on the principles of calculation and strategic planning similar to earning. Now both women and men provide the same amount of economic worth through different economic actions.

17.2.2 Enhancing Worth of Consumption as a Way to Gender Equality

"Spending as saving" highlights the efforts and skills required for effective household management. Here spending and saving practices are interpreted as only alternative forms of earning. However, consumer spending may have its autonomous worth. Substantial importance of consumption refers to its role as an instrument of social reproduction that goes far beyond earning and accumulation of money. "Consumption as social reproduction" optics meet the idea that consumption functions can potentially be performed through less resource-intensive ways but accentuates unobvious effects of an ascetic lifestyle choice for social well-being and struggles with the tendency to blame consumers in terms of emotional, relational and social benefits that may be gained through the consumption (Evans 2011).

In addition to "consumptive thrift," the proposed logic of "consumption as a social reproduction" equalizes both earning and consumptive economic activities and represents these roles as equally honorable (even if not honorary) for both genders. This logic conforms the critics of over-consumption but insists on the irreducible social and economic role of consumption in a market society. Instead, it seeks the substantive meaning of consumption in the household and ways to maintain it despite the economic circumstances.

According to Beckert, market commodities today function as an analog of the totem in primitive societies—they are used for social rituals that provide collectivity and integrity of social order (Beckert 2011). Consuming process enables to represent an affiliation with particular social groups and distinction from others and, therefore, denotes stratificational positions (Beckert 2016). In a market society, consumption contributes to the reproduction of both social structure and social order. Mastering consumption becomes a special social deal.

Additionally, market societies underestimate women's household labor as an effort to transform market commodities into family blessings necessary for recreation and restoration of the human labor force (Rubin 1975). These efforts relate not only to housekeeping but more importantly to the emotional labor that accompanies the household activities (Hochschild 2011). Nancy Fraser explains the crisis of social reproduction under capitalism by the lack of monetary estimation of the positive impact that relational work (Bandelj 2012) and care have on economic development (Fraser 2016, p. 101). Women's relational work plays a crucial role in social reproduction as a process of socialization, formation of habitus, and developing human capital (Fraser 2016, p. 106). Without developed configuration of habitus and human capital, the process of consumption cannot maintain social order, as consumption practices will not be content with symbolic meanings. Tracking, tuning and satisfying family needs are not just mechanical tasks, since they cannot be carried out without the use of market commodities.

Hence, the logic of "consumptive thrift" balances the social worth of spending and earning practices. They are two sides of the same work on asset accumulation: saved money adds surplus for the household as earned money. It simplifies the female and male transition between economic roles traditionally prescribed to genders. At the same time, the logic of "consumption as social reproduction" opposes the outcome of spending to earning but consider both economic roles as equally important and not interchangeable.

Assumption 2: Gender inequality can be reduced by highlighting the importance of household consumption as a form of social reproduction. Despite the tendencies of austerity and thrift, family management cannot be reduced to a secondary form of earning/saving. Both economic roles appear as available for female and male performance, but genders remain dissimilar in their logic and thus complementary to each other.

17.2.3 Gender Relations and Attitudes to Spending in Russia

Gender relations in Russia have undergone strong transformations from the mid-twentieth century to date. During this period, the two types of justification explained earlier indicate the importance of household management replacing each other as the dominant explanation several times.

In Soviet Russia, the core of feminine identity included rationality, sharp mind, diligence, and persistence (Temkina and Rotkirch 2002). A Soviet woman spent most of her time at work performing "the contract of working mother" but her gender role assumed the excellence in searching goods (both legally and by informal contacts—"blat") and to assess their quality (Fitzpatrick 2000). Under the challenges of deficit Soviet economy, women were expected to bear responsibility for family consumption, good taste, and children's upbringing.

The deficit era in USSR forced special strategies of housekeeping. For instance, females were excellent in cooking "stone soup" (Echevskaya 2005). They struggled for the satisfaction of the family's basic needs. Thrift and creativity were not a choice but an imposed necessity.

The period of Perestroika claimed for a new type of social actor—with entrepreneurial self (Matza 2012). After the 70 years of the planned economy, Russians habitually act under explicit locus control, while the economic safety is provided by the third party, in USSR it was the State that provided economic stability and the balance between demand and supply. However, the Post-Soviet market economy brought a new neoliberal ideology into Russia. Individuals found themselves responsible for their own economic well-being along with socially responsible business, and the State (Harvey 2007). At the beginning of the 1990s, Russian government actively supported educational programs aimed to instill entrepreneurship among citizens (Matza 2012). Self-sufficient and disciplined behavior expected to correspond to the reality of a market economy.

At the same time, access to goods in a market economy depends on the availability of money received from the conversion of individual's skills and efforts at a labor market. Income became the unified scale of stratification in the new Russian context. A person who was unable to earn a lot or develop professionally started to be discounted. The shame of poverty and failure had been cultivated. The guilt and responsibility for poverty began to be associated with inappropriateness and permanent feeling of shame (Simonova 2014, p. 548). Thereafter, social success was associated with the ability to earn and display of power by purchasing expensive things (Oushakine 2000; Patico 2005).

Gender contract of that time had a dual character. Researchers consider that the two-breadwinner model remained widespread, and both spouses had to work to survive (Malkova and Roshchina 2011). Women's labor market activity was combined with the role of a "good housekeeper." Nevertheless, describing early Post-Soviet situation P. Watson pointed that the creation of a civil society in Eastern Europe caused the formation of the "male world" and the increase in representation of traditionally styled masculinity in public. The compulsion of women to come back to

household activities, the commodification of femininity, and the belittling of female identity were considered as inevitable parts of this process (Watson 1993, p. 472). Notwithstanding, speaking about the consumption domain, the process described by P. Watson could be considered as a transition of female breadwinner's role familiar by Soviet experience into decorations of consumerism. Consumption has become a success measure and prevented the depreciation of female gender positions. The role of a housewife was prescribed to women, but only women from wealthy households could allow themselves to be housewives. Gender relations of that period demonstrate the relevance of consuming practices as forms that maintain social order.

First seeds of frugal consumption were thrown into the Russian economy by transnational corporations. Their marketing programs in the first decade of the 2000s destroyed semantic links between low prices and bad quality, thrift, and poverty. Retailers benefited from a portfolio of organizational formats including lower-priced hypermarkets and discounters, and they were interested to enhance the competency of Russian consumers (Berdysheva and Romanova 2017a) regarding price differentiation.

In 2008–2009 the Russian government introduced programs of financial literacy for the population (Kuzina 2015). Together with the expansion of consumer credits and mortgages, it stimulated the increase of knowledge in money management of Russian consumers (Yudin 2015). Working class did not change its spending models radically. It continued to spend extra money on consumption (including the conspicuous one) (Karavay 2016), while families from the middle class (whose income enabled long-standing purchases like a mortgage), manifested an interest in strategies of conscious and responsible consumption (Ovcharova et al. 2013; Shabanova 2017). Frugality became the mark of conscious agency and personal freedom.

The Russian economic crisis that started in 2014 enforced the trend of frugality in Russia. It has scrapped institutional trust in both market and the government, encouraging Russians to look for individual economic sustainability on their own (Berdysheva and Romanova 2017a; Patico 2015). Experience of unpredictable inflation with the accumulated knowledge about consumer markets maintained the interest in calculation and active expenditures' management (Berdysheva and Romanova 2017b). Women continue to manage families' everyday needs and consumption.

17.3 Methodology

The qualitative design of the empirical study aligns with the aim to identify, understand, and explain the subjective interpretations of economizing practices by Russian housewives in a gender context. It is also epistemologically suited, as gender display and identity are theorized in this chapter in a constructionist way. The empirical part is carried out in the methodology of grounded theory (Charmaz and Belgrave 2019).

To develop the research assumptions, a special series of in-depth interviews with Moscow housewives was conducted. The willingness of individual and proactive approach is based on emotional power (Collins 1993); hence, questions on emotional

perception have been raised and added into the guide covering gender context. Interviews were pursued at respondents' homes, or in public venues like cafes and restaurants. Women with necessary set of social characteristics were recruited via researchers' social ties. Social contacts were cordially provided by distant relatives, colleagues and even students. Women with the experience of participation in on-line marathons on family budgeting were invited through internet forums (babyblog.ru, mommies.com). Nobody received money for the interviews.

This chapter gives voice to the married women who live in Moscow, categorized as middle class and currently choose housekeeping as their main economic activity. The criterion of the economic well-being of the family has a fundamental importance for studying frugality. Cases of voluntary thrift should be methodologically separated from strategies of coping with income loss and poverty (Berdysheva and Romanova 2017b). Poverty results in cost reduction without the ability to choose. Such cases do not represent strategies of proactive thrift but surviving and enforced economy. The chapter focuses on other strategies, aimed at increasing economic resilience and chosen by Moscow families purposefully and voluntarily. In these cases, frugal consumption practices become a way of expressing values and attitudes instead of structural pressure.

In Russia, only wealthy households can let women be just mothers and housewives. Poorer families considered unemployed wives as an unreachable dream (Rotkirch et al. 2007). Thus, housewives from middle class families are the core of the sample. It meant, firstly, relative economic well-being, which, for a Moscow family of four, means an income from 120,000 rubles a month (around USD 1900 in 2019), secondly, the fact that the current consumption expenditures in the family do not exceed 20%, and thirdly, that the family has resources for activity in the commercial services sector, investing in the human capital of family members (medical care and training for children and adults), the purchase of banking products, recreation, and leisure (Ovcharova et al. 2017). Based on this distinction, 37 in-depth interviews were compiled. The average interview lasted for 60 min.

The sample structure was developed according to the principle of the maximum variability of its socio-demographic parameters. The diversity of the sample increases the analytical productivity of constant comparisons methods and helps to gather rich and saturated textual data. This study focused only on married women (unmarried, living with partners without marriage, and divorced females were excluded). The final sample of Moscow housewives varied around parameters like age (from 25 to 55 years old as current extremums of the sample), type of education (humanitarian, market oriented, with special attention to education in finance, marketing, sales and educated abroad), the nature of employment in the past (hired worker, worked within corporations—especially large and international, self-employment, freelance, entrepreneurship), years in marriage (from 2 to 35 years in the sample), the number of children, the reasons for staying in the status of a housewife (choice, maternity leave, problems with employment), religious attitudes (Orthodoxy, Islam, sympathy to oriental religions like Buddhism, Hinduism, etc.).

The grounded theory prescribes to go through the text word by word to identify meanings that seem to be significant and to develop them following the idea that the

semantic use of any meaning by a respondent refers to the existence of the culturally and historically rooted intersubjective semantic field on the topic. To get a saturated picture of this field is the prime empirical task in grounded theory.

The methodology of grounded theory assumes that people are guided by everyday theories. The explanatory theory that is justified in the study connects existing ideas about the phenomenon being studied with ordinary ideas of ordinary people about it. The result should include concepts, metaphors, ideal behaviors that holistically explain how people make decisions. These concepts should expand the theoretical understanding of the situation. In the course of the analysis, a search is made for variables that form such concepts. Each of the desired variables is a continuum with clearly defined contrasting semantic poles. Real empirical cases are the point between the poles of the continuum. In practice, the ideal types built during the analysis are not found in practice in their pure form. The task of grounded theory is to offer a hypothetical description and corresponding interpretation. It does not test the hypotheses; it formulates them. This is based on the idea that in the future the proposed hypotheses will be tested in the course of quantitative research using statistical analysis.

Coding in grounded theory organizes logical work with data. Analysis of the first interviews highlights aspects of the studied phenomenon that are significant for respondents, as well as the everyday concepts that they use to substantiate their decisions. These mundane concepts are key to the latent picture of the world on which respondents rely. Concepts that are repetitive, emotionally loaded, voluntarily or involuntarily accented by the respondent are used as codes. The set of codes revealed during the initial open coding is specified in the course of further field work. The first codes highlight which areas of the phenomenon under study should be clarified during the next meetings with the respondents, and which social groups these respondents represent. More detailed work with codes is the stage of axial coding. Here, the codes either develop to explanatory categories and variables, or are discarded as less significant for the studied semantic field (Strauss and Corbin 1990).

Coding example is the following. To the question of how respondents evaluate the pros and cons of their experience of frugality, proponents of the logic "consumption as social reproduction" gave the following answers.

> Once, at the expense of your reasonable calculations, you can buy a whole basket of strawberries in mid-January and bring it to a loved one. And then you will get a great pleasure from his delight. With age, or not with age but with a matter of maturity, a person begins to get more pleasure from the happiness of another [person] or from the results of own efforts. I would hardly be able to do what I want, if I had not saved somewhere on something. We are balancing in this sense and quite successfully, because everything works out well. Of course, I would like more lightness, but again, not so much in acquiring the benefits that are enough, but in the opportunity to do something for myself and for my relatives to get this complex of emotions.

At the level of primary codes, the following semantic parameters can be distinguished, with the help of which, two competing logics of perception of frugality turn out to be noticeable: *reasonable calculations, a strawberry basket in the middle of January,*

for a loved one, pleasure from the happiness of another, age, maturity, ability to do something for oneself, for loved ones, complex of emotions. These codes may be arranged in "*Abundance through calculation*" analytical category.

Opportunities that open up with thrift are positively experienced at the emotional level—but not with a reference to material achievement, but through access to an internal resource, which a woman can use to influence the quality of significant social relationships. Self-sufficiency, individual sustainability, apart from willingness, the ability to rely primarily on oneself are seen as the main conditions of social well-being. However, well-being is associated with the ability to bring joy to a significant other, that is, female self-realization occurs by means of care. Therefore, this aspiration to be frugal but to spend with pleasure on wishes, indicate the understanding of femininity with the core that is more about open heart and social fertility, achieved through pragmatics than about pragmatics. In a positive connotation frugality and austerity turn out to be means, not the goal of an economic action, more of a social effort. (Please, see the fragment of codes table in the Appendix.)

17.4 Empirical Results

With the abductive analysis of received narratives, two approaches to management of household expenditures have been reconstructed. The first reconstruction corresponds to the first assumption of "consumptive thrift" or spending as saving. The second approach supports the second assumption of "consumption as social reproduction" and puts the idea of abundancy at the core of expenditure management. Both are described as concentrated ideal types. In practice, perceptions and pursuing of spending by Moscow housewives are balanced between them.

17.4.1 Frugal Approach to Management of Household Consumption

The data indicates that the first reason to manage expenses more thriftly is the very fact of marriage, and especially the birth of children. The capacity to calculate money is associated with the categories of maturity, personal responsibility, and independence. Willingness to spend time and efforts on finding better price solutions is regarded as gaining an opportunity to influence the economic situation of the family and an alternative to the expansion of workload through additional employment. Women speak about prudent consumption as a new way of life "*to improve the long-term financial health of the family.*"

The essence of frugality is associated with separating "needs" from "desires" and eliminating the latter. Thrift turns out to be the antithesis of impulsive, unreasonable, and mindless spending. It is conceptualized from the perspective of a dichotomy

"rational–emotional," and emotionally driven expenses get stigmatized. The ability to "*reflect on one's desires and keep a tight rein on them*," to refuse a purchase or at least to postpone it until better times, turns out to be of a new value:

> Our human nature is that we are able to think and stop at the right time. (Tatiana, 44 years, higher education, teacher, currently—housewife)

At the same time, the revision of desires and needs is not a mechanical process. The boundaries here require delicate sense-making. Restricting family shopping should not interfere with the sense of "*decent level of life.*" Economizing should not mean "*infringing on oneself*." The goal is "*to live within means*," to reduce unnecessary expenses, many of which are regarded as imposed from the outside, "*market provoked.*"

> We live in a strange time when we are the target audience with a wallet for the marketers. And we are being manipulated so that we would want something we don't want or cannot afford. (Ekaterina, 37 years, higher education, worked in accounting, housewife)

> We started to eat meat less frequently. It is also cheaper and, given that all meat is pumped with antibiotics, it is better for health. (Alina, 38 years, higher education, psychologist, currently—housewife)

Some consumer desires are suspected to be historically inflated in Russia. Women recall the gastronomic traumas of the past, which are preserved in the memory of their parental families and voice the need to put an end to the effects of these traumas.

> You don't have to grab everything in the store simply because you had a hungry childhood… (Julia, 44 years, higher education, artist, currently—housewife)

Thereby, thrift is achieved through abandoning some market services and sacrificing personal comfort for the sake of the best price.

> We started using the cheap-trip service. Yes, the departures there are often at a very inconvenient time. And it is quite risky … But the price of the tours is attractive. (Anna, 37 years, higher education, teacher, currently—housewife)

> Baking your own bread is both healthier and cheaper. (Olga, 43 years, higher education, pharmacy, currently—housewife)

At the same time, conscious money spending does not mean ignoring the needs or neglecting the quality of the goods; in the narrative, frugality is strongly opposed to "*stinginess*" or "*obsession of discounts*," when the commodities are purchased only because they are low-priced. Goods of appropriate quality is a component of human dignity. The guiding principle here, relates to the emotional component: economizing should not oppress.

> This is fundamentally important that the children would not feel disadvantaged. (Elena, 31, higher education, sales manager, housewife, maternal leave)

Informants demonstrated certain excitement in the search for the needs that can be satisfied without money and expenses that can be optimized. Proponents of frugality are ready to change their everyday practices to avoid spending. They choose DIY

products for self-care and ABC-chemicals like lemon and vinegar for housework, self-cooking replaces restaurants and processed food, fitness video lessons instead of sports centers, walks in nature instead of entertainment in shopping centers, handmade accessories and gifts rather than shops.

Prudence is elevated to the rank of a principle. Proponents of frugality are trying to save on everything, to look for alternative ways to obtain less expensive market goods. They also make efforts to accustom their family to controlled use of available resources. And a wide range of practices minimizing utility bills do emerge. Meters for electricity and water, relatively new to the Russians, are welcomed; reusable shopping bags instead of disposable ones, careful monitoring that the household appliances should be unplugged after use.

> The refrigerator should not stand next to the oven, since it consumes more electricity. (Daria, 29 years, special education, cooker, housewife, maternal leave)

> Instead of buying a book, you can read it right in the bookstore. Rates and fees for banking products, Internet services, etc. also may be reviewed and reconsidered. (Svetlana, 26, higher education, marketing manager, currently housewife, maternal leave)

Female respondents who declare their inclination to frugality are also obsessed with planning. They see the secret of economic prosperity in "*sticking to the plan whatever it takes.*" Therefore, they keep diaries of expenses, write down shopping lists that they are hesitant to deviate from, design the menu for the upcoming week, limit visits to the store to one visit a week to avoid additional expenses, avoid going to the store on an empty stomach while being upset or with children—avoiding all circumstances that pose a risk of impulsive shopping. They often buy a seasonal outfit at sales, use mobile applications that reflect the structure of expenses with bank cards, and prefer to shop online as it is easier to track the structure of purchases.

> When shopping, I want to make informed decisions. (Uliana, 33 years, higher education, doctor, 3 children, currently –housewife)

Women demonstrate high reflexivity over the observed market prices, argue that the stores of different organizational formats have different trade margins. When seeing the same products in stores near home and at discounters, they choose the latter as the place of purchase. There is a growing demand for fixed-price stores and mobile applications that track discounts, promotions, and profitable offers in stores. The popular application for monitoring prices "Edadil[1]" was created by a Russian housewife.

Effectiveness of control within a frugal approach is directly associated with women's human capital. In this vein, informants mention their education—accounting, economics, and marketing as special advantages—as well as past entrepreneurial experience and insider knowledge of the marketplace. The need for special competencies highlights the complexity of the performed economic role,

[1]This app aggregates discounts of retailers and shows special offers for consumers. It has 10 million users in Russia, and more than 160 suppliers who offer discounts. https://edadeal.ru/?ncrnd=8046 (date of citation16 December 2019).

making it more attractive as a challenging space for self-realization; and convincing husbands that their wives' economic role cannot be ignored, or belittled.

> I know that Forbes' millionaires and billionaires economize, and even economize on little things. Because it is your set of mind, it is how you think. It is impossible to earn without economizing, I mean, you must always be an analyst, must choose the most cost-saving decision. And it is not always about the money. It is also about time and other resources. (Oksana, 41 years, 2 children, worked in logistics firm, currently—housewife)

Proactivity in frugal spending does not happen automatically. Even though it is attractive in the eyes of the respondents, it requires development of new spending habits. These habits are more easily acquired by the women who have been socialized by mothers who are noted for their prudence, or life circumstances. An important role is played by the willingness to follow the chosen vector of prudence, not deviating under the weight of doubts concerning the possibility of another—less controlled—way of life. Sometimes the development of such habits becomes a purposeful project for which women deliberately join forces, supporting each other. For example, in the form of daily reports as a part of training or "marathons" conducted online. For some women, prudence even becomes an expertise that they try to professionalize and marketize. Online courses on financial awareness and art of home accounting are widely offered across the Russian internet.

Mastering frugality requires effort. Yet, those who were successful in this task, express a special pleasure from gaining control over life. Proactive acceptance of responsibility may give women a feeling of personal strength, stability and independence, predictability of the situation, and special states of mind. They said that self-restraint and discipline, which is expected to be developed, can be regarded as a form of spiritual growth, and the ability to abstain from spending can be regarded as a way to improve yourself. Special satisfaction results from awareness of one's competence, acquisition of experience and skills of money-saving.

17.4.2 Abundant Approach to Management of Household Expenditures

The view opposite to calculative frugality also supports the idea that every family should learn to live "*in its abilities' diapason*" and be economically independent. Extra consumption and demonstrative expenditures are being criticized by abundant model too. However, the passion for permanent life control is described by "abundant" informants as a form of thrift harmful for woman. Abundancy in narratives is opposed to austerity. And its proponents insist on the point that "*some things deserved to be spent on.*"

Respondents who choose social reproduction as a key goal of their household management see the essence of social care and emotional work in a gender perspective. In their interviews, they question the extent to which the desire for control and calculation is a female matter.

> I recently found an idea that I really liked. It supposedly claimed that many sensible and wealthy men acknowledged the key secret of success long ago—to invest in one's wife permanently. To give her money and not blame for waste. That such investments return emotionally, in a form of atmosphere at home, and three times pay back. Prosperity appears at home where woman educates family not to feel shame for one's desires, or not to blame oneself for every ruble spent. To feel no fear of scarcity. Not to be jealous of somebody who has everything, and shame before those who do not have what we have. (Olga, 37 years, 5 children, education in cybernetics, programmer, has left the labor market to be a housewife)

Abundancy proponents prioritize building family atmosphere and relationships and providing care for each family member. Empathy appears to be the primary means of acknowledging family needs for care. Abundant females consciously oppose their household management to rationalistic practices of earning and saving. They also speak about living in harmony with the world as it becomes essential for developing human capital for activities aimed at social reproduction. In their logic, psychological and spiritual practices substitute economic and business education for gaining relevant experience.

Noteworthy practices of financial management may look alike within frugal and abundancy approaches. However, semantic justifications behind actions may vary. Interpretations of bread baking can illustrate the difference between the two types of housewives' management strategies. In terms of the frugal approach, home bread baking is motivated by the utilitarian logic of cheapness and health benefits. In the abundant model choice of handmade bread is reasoned by the principle of "*baking makes blessing.*" Home labor that substitutes market labor becomes a symbol of a woman's care.

Followers of abundant models try to find ways of spending less, but they see the task to make life brighter as the main goal of household management. Paradoxically, they declare that the sense of economic well-being is achieved more easily by charity donations to indigents. The opportunity to give and to share is perceived as a better indicator of its own sustainability than accumulation of assets for a black day.

> The more people you help by money, the more money you will have. Verified. (Anna, 32 years, education in marketing, previously worked in the Ministry of Construction, 2 children, housewife)

> Permanent obsession with economy forms some kind of tightness, and not only in expenditures. Less contact with people, [we] do not invite guests, go have fun nowhere, communicate less. Want to hide both from bad, and good. (Olga, 45 years, 2 children, accounting education, worked in the state bank, currently housewife)

While the core sense-making category of the frugal type is the idea of control, the abundancy type of household management is built around the category of acceptance. The belief in unlimited abilities of human control over life opposes the vision denoted by informants as an "*ecological lifestyle.*" In the last case, ecology goes beyond the care about the planet but gets conceptualized as a relationship with the world based on harmony. In abundant model, practices of emotional care are anchored by this female feeling of harmony. Contrary to the frugal model, it does not see the world to be a source of risks and dangers, where techniques of self-discipline become a

form of defense. Being open to the world helps serve the family needs that should be satisfied. Through the satisfaction of needs, women contribute to social reproduction.

> It is important for family to pet themselves when it is possible. Little trifles constitute a mindset. (Olga, 45 years, 2 children, accounting education, worked in the state bank, currently—housewife)

Abundant model pays a lot of attention to the identification of authentic needs. It does not imply simple refusal from things called "*overindulgence*" by frugal proponents. Instead of pressure of obligations, abundancy proponents dare to speak about designing life in the "*want*" optic. Satisfied "*wants*" ("hotelki") become a permanent source of emotional resources.

> As demonstrated in practice, and the experience of our friends, the more you spend, the more you earn. Well, that's what happens. If you save and thrift during the whole life, you will never have any income, and the earning process will be quite difficult. What about me, I seek not to go, not to see, not to want. But if I wanted, even trinket, [I] should buy it. [You] can think a day, but if you still want this thing, you should buy it. While from the outside it may seem wasteful. (Svetlana, 47-years, 1 child, higher education, marketing manager, currently—housewife)

Important to note, that the "want" logic assumes the decisiveness to design family lifestyle in contradiction with common consumerist standards. If the "need" (frugal) model implies the reduction of meat meals' consumption because of meat's dearness, the "want" (abundant) model seriously discuss full meat refusal for being ethically vegetarian. Abundant model tries to revise consumption's role in general lifestyle philosophy. The refusal from some practices is being interpreted as the creation of new ones, which better fulfill social or emotional demands like being more humanistic.

There is also special interpretation of time-labor-money trinity in the abundant approach. Extra expenditures are legitimated if they liberate additional time and energy that can be redirected to other activities with higher emotional or material returns.

> Generally, I am against overconsumption. So, we must be sensible. At the same time, suppose, that the head of a household goes to a shop. He has a normal wage, but due to psychological trauma in childhood, the craving for cheapness has developed. He wants to buy chocolate for himself very much, but he can't. His wife persuades him to buy chocolate for the child, after some clashes, he buys a chocolate for the child, but the whole road back to home he stares at the chocolate with awful, hungry, and evil eyes. After that, a scandal is at home. Well just normally buy chocolate to oneself, eat it, and everything would be fine. (Anna, 32 years, 2 children, education in marketing, previously worked in the Ministry of Construction, currently—housewife)

Instead of severe discipline and technics of self-control, an abundant type of household management seeks spiritual and psychological practices that help identify authentic needs. Meeting this authenticity provides excitement and emotional energy needed for an agency. Therefore, when first-type women abandon beauty shops in favor of home beauty care the second-type ones consider beauty services as a key to a fruitful emotional state and perfect mood that justify spending.

> When I spend, I have no regrets at all. Even conversely, [I] would rather regret if I didn't spend. Because you can miss some cool opportunities. It is necessary to live the real life, not to postpone for "later" as "later" can be already too late. Essentially, while you restrict a budget, you restrict yourself, and, therefore, limit your personal development. You deprive yourself of some happy moments. (Tatyana, 34 years, married, 2 children, economic education, worked as a manager in international corporation, housewife, maternity leave)

Attempts of purposive comparison of narratives by age, religious belief, and the number of children did not discover noticeable contrasts. The choice of the frugal model seems to be associated with educational trajectory (economics, accounting, marketing). Women of these professions mentioned working experience that allowed them to see the backstage of the market process. References to family socialization appeared in narratives of visions of both proponents. Informants pointed to different books that had inspired them to implement frugality or abundancy for household management. It is important to know that women communities, especially internet, frequently organize marathons for mastering new skills found in literature. These marathons simplify the transition to new frugal mentality for housewives who acknowledged western literature about rational household management that gained popularity in Russia. At the same time, narratives of abundancy followers indicate interest in Eastern religions, yoga, meditation, and other psychological practices.

As for the gender effects of both logics, according to the empirics on the whole voluntary frugality marks spouses' unity is reached by developing agreements between wife and husband on the regime of expenditures. Such agreements may prevent risks of financial deception in the family and contribute to family integrity via the transparency of household accounting. However, this integrity is shaped differently in the two approaches.

In the narratives that describe an approach to economizing in terms of frugality, prudence, and thrift household management resembles a business project. A housewife achieves professional realization at home like a chief accountant, purchasing director, and a business analyst in consumer markets. Filigree budget management turns out to be a female way of controlling the life circumstances expressed by the formula "*buy uncut chicken – help to pay a mortgage loan off.*" Frugality is tricky and challenging. Female achievements here seem to balance their negotiation power with husbands and to enhance mutual understanding reducing the distance between genders.

Alternative approach to economizing is described through the categories of abundance, acceptance, and harmony. These codes are less frequent in narratives and also appear in explanations of frugality proponents. Here housewives consciously contrast the household spending to the money earning and underline the complementarity of gender functions within the family. Women explain the role of spending and consuming as a way of "*refilling the source.*" And thrift appears for them as a threat of "deficit mentality." Proponents of abundancy approach argue to choose "*female life path*," the essence of which can be designated by the formula "*to be an ocean of love and tenderness in the midst of an economic crisis and not to fight with the world.*" They are ready to adapt to any of the husband's budget constraints and see the latter as a key to family balance, where "*to be happy is more important than to*

be right." In such families, gender partnership is described as "*father is the celebrity, while mother is his executive producer*."

With qualitative methodology, one cannot deny the limitations of the validity of results. This design does not imply a generalization of conclusions and does not claim for external validity. Results based on 37 interviews point to some tendencies that take place in the Russian society but do not cover it all. Moreover, this study is focused on housewives from relatively wealthy families, whose share in the structure of post-crisis Russian society should not be overestimated. It also makes sense to be more accurate with estimations of attractiveness and popularity of "frugal' and "abundant" perspectives in Russia. Relative resourcefulness of this group allows to get down to the values of austerity, which are quite innovative for Russia, where until recently, savings were primarily associated with budgetary constraints. Also, the focus of this work is on housewives living in the capital of Russia, with its more competitive consumer markets, higher prevalence of innovations and higher access to information, including training of financial literacy and other skills. The findings of this study in terms of frugal spending strategies should be validated in the future on more a representative sample in Russia, including quantitative grounds. Another limitation of this study are the men whose wives can be housewives did not receive a voice. Thus, all effects of frugality for gender relations in the family identified in the empirics describe only the female point of view. Similarly, the study does not cover working women. This obvious sacrifice was made to limit reflections on economizing practices to the cases without a burden of expenditure management in two-earners family and building work-life balance by women who combine housekeeping with an occupation at the labor market.

17.5 Conclusion

Empirical data of 37 in-depth interviews with Moscow-living housewives allowed to reconstruct two logics of justification of the importance of household spending as a gendered activity. Both logics emphasize the impact of earning and spending on family sustainability. Independent economic activity, and with this perspective, both genders become somewhat more equal. The first logic indicates frugality. It meets the tendency for "spending to save" consumption being identified nowadays in different developed countries (Hulme 2019). In this case management of household expenditures is based on the same principles as earning at the labor market. The second logic is based on the philosophy of sufficiency instead of control and gamble with prices and expenses. It emphasizes abundance and highlights the crucial importance of consumption for the reproduction of sociality. When criticizing consumption, one should remember that few consumption practices provide resources for emotional labor, relational work, and care that is essential for the accumulation of bodily, human, and social capitals of the family and society (Fraser 2016).

From a theoretical point of view, few empirical insights of this study may seem old-fashioned. Many years ago, Gary Becker argued that male-female labor division between earning and household management was the best decision for modeling household economy (Becker 1993). However, 30 years later the authors find these kinds of ideas in the narratives of ordinary people. And with a performative turn

in economic sociology, one should understand that it is not about the validity of economic models anymore. It is about the effects of economization of a social order where economic models through education, markets, and social policy shape social attitudes and practices (Caliskan and Callon 2009). In general, both the identified approaches of Moscow housewives to frugality demonstrate how skills and practices of economizing get detached from poverty and surviving, acquire proud connotations and open opportunities for new social compromises, including those related to gender.

Acknowledgements This chapter is an output of the research project "Non-economic sources of Russian markets dynamics" carried out by Laboratory for Studies in Economic sociology, HSE, within the frameworks of the Basic Research Program at the National Research University Higher School of Economics in 2020.

Appendix

See Table 17.1.

Table 17.1 Fragment of coding list

Forced economizing (avoid buying as being unable to afford)	Selective economizing (can afford but choose not to buy)	
	Spending as saving	Abundancy as the core of expenditure management
Survival Poverty Oppression and shame To cope with the present	Economizing as an indicator of smartness *Not to the detriment of ourselves* *Frugality as a new style of living/Hobby* No oppression, no depression ("*Pay less as you are smart, not poor*")	Learning to live within your range of capabilities Learning to be contented with what you have and desire more "*Kids shouldn't feel disadvantaged*"
The source of money substitution	Spending time instead of spending money	Investing "own energy" instead of spending Money Dancing in front of the computer
Temporal orientation	In favor of a better future Anxiety about the future Grow up, do not depend on anyone, rely on yourself, protect yourself from crises	Caring about the present Do not fall for the myth of stability, life is constantly changing, the future is produced in the present
Seek for	Control over life	Peaceful life Develop the atmosphere of love inside the home
Motivation	Gambling for more	Sufficiency
Principle of self-management	Self-restriction ("*to think about myself less*") Control of market deals	Self-reflection ("*to hear your soul*") "You want to light someone's path, do not feel bad about money to change a light bulb"
The core attitude	Avoid buying to escape financial slavery, to avoid a "credit needle", to not allow "enjoy first, then pay" Avoid buying "*to keep myself managed*" Avoid buying at an "*unreasonable price*" Avoid buying to get more for the same money	Avoid buying when there is no need Restrict the passion for something desperately desired, defeat greed; wanting something is fine, but there are various desires Avoid buying as I am enough. Everything can be accepted, everything can be dealt with, shift the focus from "People owe me" to "what do you need, what can I do for you" Take from the world no more than you really need Sometimes a new dress is a necessity, not a whim

(continued)

Table 17.1 (continued)

Forced economizing (avoid buying as being unable to afford)	Selective economizing (can afford but choose not to buy)	
	Spending as saving	Abundancy as the core of expenditure management
Desirable condition, self improvement	Patience and stubbornness Cunning, competency We weren't born yesterday, will is required	Acceptance, everything is possible, and everything is realistic, not panicking Relaxing without consumption rush The measured course of a peaceful life. Work is based on the state of relaxation, do not be nervous, do not rush from place to place
Strategies of action	Prevent harmful reflection, block emotions, think soberly, evaluate advantages and risks Do something every moment Use the energy of action Try harder Tighten one's belt when necessary Money under the pillow, save Shut the door, close oneself off Refuse purchasing unnecessary things, get rid of whims, limit yourself to the necessities, be comfortable	Learn, turn into creativity, see the good things, find the good in every day Manage negative emotions, let off steam Do not get wound up, do not focus on what has not happened yet, focus on what is already there, do not consider wishes to be bad by default To take care of the main things, to understand what is important to a greater extent and what to a lesser extent, "what exactly is needed for a calm soul" Fight with anxiety Give husband strength and inspiration, be the home Goddess of Prosperity, don't try to become an ascetic, "a zombie can survive, but it no longer is alive" Do not pressure anyone, do not force Do things out of love, use things to love people Small victories over bad habits Do not suffer from brand disease, do not repair nylon tights, do not want others' desires Trust life, "every person is actually richer than he thinks" Do not say goodbye to dreams, do not wait for the fulfillment of desires immediately, protect your interest in life Accumulate internal forces

(continued)

Table 17.1 (continued)

Forced economizing (avoid buying as being unable to afford)	Selective economizing (can afford but choose not to buy)	
	Spending as saving	Abundancy as the core of expenditure management
Affective side of frugality Pleasure to change/pleasure to be	Pleasure to win over oneself Pleasure of spiritual growth (Responsibility and Austerity) Pleasure to gain the skill to pay reasonably Pleasure to win over market Pleasure to be in trend of "paying for pragmatic advantages" Enjoying economizing as an art and hobby Enjoying gained sustainability	Pleasure to feel your inner self Pleasure to live in harmony with life Pleasure of spiritual growth (Authenticity)
Marital relationships	Gender Alikeness as a Path to Understanding Business approach to family issues as a path to egalitarism Unity of family objectives, ethics Transparency of expenditures via home accounting Being together, being on the same side, not setting yourself against men	To accept man's authority Following Husband's decisions Trust in husband Subordination Shoulder-to-shoulder
Mastering frugality	Using professional experience at home, books on home management (#flylady movement), courses and on-line marathons, home accounting books, list of purchases, strict planning purchases calendar (seasons, sales)	Yoga and "Eastern" practices, strengthen the soul, share with those who have more difficulties

(continued)

Table 17.1 (continued)

Forced economizing (avoid buying as being unable to afford)	Selective economizing (can afford but choose not to buy)	
	Spending as saving	Abundancy as the core of expenditure management
Some Practices of Frugality	Freeze meal and seasonal products Using no name products Private label products Waste reduction, re-purpose and re-use what you have Home eating, own dinner to work, movies at home instead of cinema, home parties instead of restaurants (On-line) libraries instead of buying books/reading in bookstores Uncomfortable schedules of flights (cheaper) Presents in advance DIY (presents, home necessities, bread, treats) No shopping when hungry or depressed No shopping with kids On-line shopping and home delivery Strict shopping lists/menu Low spend challenges (cultivating frugality) Public transport instead of taxi Drive better—avoid fines Free entertaining Buying in bulk, whole products instead of cut, sliced, instant; discounts, loyalty programs, postponing purchases till the sale period, seasonal sales, store pricebooks, coupons (Biglion, Groupon), budget diaries, optimization of bill rates, seeking cashbacks, lowering communal expenses (LED light bulbs, energy efficient home appliances, turning off water, lights, washing clothes at a night tariff, fridge far from the oven, unplugging items), store price monitoring, cheap price stores (FixPrice), APPs (Edadil, CoinKeeper), local products instead of imported, joint consumption	Less meat in the menu Less chemistry in the house Quality instead quantity with clothes Small pleasures expenditures Free entertaining Psychotherapy and spiritual practices instead “seizing up the problems via consumption” Removing junk from the home Upcycling

References

Bandelj N (2012) Relational work and economic sociology. Polit & Soc 40(2):175–201. https://doi.org/10.1177/0032329212441597

Becker G ([1981] 1993) A treatise on the family: enlarged edition. Harvard University Press, Cambridge, MA

Beckert J (2011) The transcending power of goods: imaginative value in the economy (SSRN Scholarly Paper No. ID 2464454). Retrieved from Social Science Research Network website: https://papers.ssrn.com/abstract=2464454

Beckert J (2016) Imagined futures: fictional expectations and capitalist dynamics. Harvard University Press, Cambridge, MA

Berdysheva E, Romanova R (2017a) Rethinking prices during an economic crisis: calculation as a new mode of consumer behaviour in Russia. Int J Consum Stud 41(4):397–403. https://doi.org/10.1111/ijcs.12366

Berdysheva E, Romanova R (2017b) Social architectonics of market prices: basic principles of russian consumer price perception (a Moscow case study). Probl Econ Transit 59(4):239

Bevir M, Trentmann F. (2007) After modernism: local reasoning, consumption, and governance. In Bevir M, Trentmann F (eds) Governance, consumers and citizens: agency and resistance in contemporary politics, pp 165–190. https://doi.org/10.1057/9780230591363_8

Bradshaw A, Ostberg J (2019) Blaming consumers: ideology and European austerity. J Consum Cult 19(4):448–468. https://doi.org/10.1177/1469540519872065

Cappellini B, Harman V, Marilli A, Parsons E (2019) Intensive mothering in hard times: Foucauldian ethical self-formation and cruel optimism. J Consum Cult 19(4):469–492. https://doi.org/10.1177/1469540519872067

Charmaz K, Belgrave LL (2019) Thinking about data with grounded theory. Qual Inq 25(8):743–753. https://doi.org/10.1177/1077800418809455

Caliskan K, Callon M (2009) Economization. shifting attention from the economy towards processes of economization. Econ Soc 38(3):369–398

Cochoy F (2015) Consumers at work, or curiosity at play? Revisiting the prosumption/value cocreation debate with smartphones and two-dimensional bar codes. Mark Theory 15(2):133–153. https://doi.org/10.1177/1470593114540676

Cohen L (2004) A consumers' republic: the politics of mass consumption in postwar America. J Consum Res 31(1):236. https://doi.org/10.1086/383439

Collins R (1993) Emotional energy as the common denominator of rational action. Rat Soc 5(2):203–230

Dagenais D (2008) The (un)making of the modern family. University of British Columbia Press, Vancouver, p 531

Echevskaya O. (2005) "Svoboda v veshach" ili "Svoboda ot veshej": Znachenija veshey v practikah povsednevnoj zhizni ("Freedom in things" Or "freedom from things": the meanings of things in the practices of everyday life). In Ludi i veshi v sovetskoj culture (People and Things in Soviet and Post-Soviet Culture). National Research University of Novosibirsk, Novosibirsk, Russia, pp 49–66

Evans D (2011) Blaming the consumer—once again: the social and material contexts of everyday food waste practices in some English households. Critical Public Health 4:429

Fitzpatrick S (2000) Everyday Stalinism: ordinary life in extraordinary times: Soviet Russia in the 1930s. Oxford University Press, Oxford and New York

Fligstein N (2016) The rich got richer: the effects of the financial crisis on household well-being, 2007–2009. Res Sociol Work 28:155–185

Fraser N (2016) Contradictions of capital and care. New Left Rev 100:99–117

Harvey D (2007) A brief history of neoliberalism. Oxford University Press, Oxford and New York

Hochschild A (2011) Emotional life on the market frontier. Ann Rev Sociol 37:21–33

Hulme A (2019) The hedonic delights of frugality: pound store shopping in austere times. J Consum Cult 19(4):551–566. https://doi.org/10.1177/1469540519872068

Ibragimova D, Guseva A (2017) Who is in charge of family finances in the Russian two-earner households? J Fam Issues 38(17):2425–2448. https://doi.org/10.1177/0192513X15623588
Karavay A (2016) Otnoshenije Rossijskih rabochih k svoim resursam: Finansam, zdorovju i svobodnomu vremeni (Attitude of workers in Russia to their resources: finance, health and free time). J Soc Policy Stud 14(2):229–244
Kuzina O (2015) The financial capability of Russians: measurement and policy implication. NRU HSE. Series WP9 "Research in Economy and Finance". Retrieved from https://www.hse.ru/staff/kuzina#sci
Lewis T, Rauturier F (2019) Gleaning around the globe: reframing urban thrift via practices and economies of hard rubbish reuse. J Consum Cult 19(4):493–512. https://doi.org/10.1177/1469540519872072
Malkova MA, Roshchina YM (2011) Tipologicheskiy analys domashnego truda v sovremennoj Rossijskoj semje (Typological analysis of domestic work in a modern Russian family). Mir Ross: Sociol, Ethnol 20(1):147–166
Matza T (2012) "Good individualism"? Psychology, ethics, and neoliberalism in postsocialist Russia. Am Ethnol 39(4):804–818. https://doi.org/10.1111/j.1548-1425.2012.01396.x
Micheletti M (ed) (2003). Political virtue and shopping: individuals, consumerism, and collective action. Palgrave Macmillan US. https://doi.org/10.1057/9781403973764
Oushakine S (2000) The quantity of style: imaginary consumption in the Post-Soviet Russia. Theory, Cult Soc 15(5):97–120
Ovcharova LN, Popova D, Pishnyak A, Shepeleva E (2013) Ot standarta vizhivanija k otvetstvennomu vibory (From the standard of survival to responsible choice). Pro et Contra 17(6):6–34
Ovcharova LN, Biryukova SS, Selezneva EV, Abanokova KR, Pishnyak AI, Halina NV (2017). Naselenie Rossii v 2016 godu: dohody, raskhody i social'noe samochuvstvie (Russian population in 2016: income, expenditures and social well-being). Monitoring NIU HSE. Itogi goda. M.: NIU HSE
Patico J (2005) To be happy in a Mercedes: tropes of value and ambivalent visions of marketization. Am Ethnol 32(3):479–496
Patico J (2015) Culturedness, responsibility and self-help: contexts of middle classness in postsocialist Russia. In: Leslie M, Hongmei L (eds) The middle class in emerging societies: consumers, lifestyles and markets. Routledge University Press, London
Popova P (2017) How to explain financial disagreements in families: a review of economic, psychological and sociological theories. J Econ Sociol 18(2):25
Rotkirch A, Temkina A, Zdravomyslova E (2007) Who Helps the Degraded Housewife?: Comments on Vladimir Putin's Demographic Speech. EJWS 14(4):349–357
Rubin G (1975) The traffic in women: notes on the "political economy" of sex. In: Reiter RR (ed) Toward an anthropology of women. Monthly Review Press, London, pp 157–210
Sandal M (2013) What money can't buy?: The moral limits of markets. Farrar, Straus and Giroux, New York
Shabanova M (2017) Socially responsible consumption in Russia: factors and development potential of market-oriented and non-market practices. Soc Sci 48(3):17–36
Simonova O (2014) The sociology of shame and the research of poverty: the consequences for the social policy. J Soc Policy Stud 12(4):539–554
Singleton A, Maree Maher J (2004) The 'new man' is in the house: young men, social change, and housework. J Men's Stud 12(3). https://doi.org/10.3149/jms.1203.227
Strauss A, Corbin J (1990) Basics of qualitative research: grounded theory procedures and techniques. Sage, London
Temkina A, Rotkirch A (2002) Soviet gender contracts and their transformation in modern Russia. Sociol Stud 11:4–15
Waight E (2019) Mother, consumer, trader: gendering the commodification of second-hand economies since the recession. J Consum Cult 19(4):532–550. https://doi.org/10.1177/1469540519872069

Watson P (1993) Eastern Europe's Silent Revolution: gender. Sociology 27(3): 471–487
Wherry FF (2008) The social characterizations of price: the fool, the faithful, the frivolous, and the frugal. Sociol Theory 26(4):363–379
Vedwan N (2009) What's greed got to do with it? Anthropol Now 1(2):81–87
Yudin G (2015) The Moral nature of debtand the making of responsible debtor. Voprosy Ekonomiki (3):28–45. https://doi.org/10.32609/0042-8736-2015-3-28-45

Conclusions: Do Gender Differences Remain?

Transformational processes during the transition to a market economy in the post-Soviet states were accompanied by multiple cultural and social challenges. The research results presented in this volume demonstrated that gender attitudes, gender roles, and gender differences in both economic and social spheres of life were also changing. Gender differences could be traced among youth, adult, and older populations. These differences are shaping the economic activity of both men and women, impacting their career choices and types of jobs, and affecting family formation, political participation, civic engagement, and, consequently, the economic development and demographic outcomes at the country level.

Some positive changes toward gender equality attitudes and political empowerment of women may be traced across the post-Soviet space, but not in all countries. In post-Soviet countries, those which are closer to Europe by territory, women and men tend to have similar educational attainments and access to health services and health outcomes and (nearly) equal access to the labor market and political participation; other countries still lag behind in terms of gender equality. Thus, many achievements in the gender equality of the Soviet era were deteriorated by the revival of religiosity and traditional values in Azerbaijan, Kyrgyzstan, Tajikistan, and Uzbekistan. Interestingly, the typical traditional family model, including a male breadwinner and a female housekeeper and caregiver, has regained its importance not only in the Caucasus and Central Asia. The echo of these traditional views can still be heard in the opinions of respondents in Armenia, Russia, and Ukraine (see Chapters 1, 6 and 8).

The first part of this book provides a detailed analysis of the gender differences in family roles, marriage priorities and childbearing, educational attainment, and employment among youth and older adults. Better education is associated with a higher probability of employment, higher support of egalitarian gender values, and postponement of family formation. In contrast, lower educational attainment is often associated with early marriages and childbirth, traditional gender norms, and lower labor market participation rate (see Chapters 2 and 3).

The registration of marriage in Russia is still viewed positively by most of the population; however, no stigma on cohabitation, desirable marriage connected to

T. Karabchuk et al. (eds.), *Gendering Post-Soviet Space*,
https://doi.org/10.1007/978-981-15-9358-1

pregnancy, or easy divorce is observed. The marital age has increased for both women and men, although women still get married at an earlier age. A different situation can be observed in Kyrgyzstan, where a low social acceptance of out-of-wedlock births was found. The weakening of traditional norms has led to an increasing age of the first marriage for younger cohorts, but the average peak of fertility is 25 years for Kyrgyz women (Chapter 2). The domestic roles of housewife and childcare provider prevent women from participating in the labor market. These gender differences in perceptions of family roles and the social expectations of women to take care of the home rather than earn money outside of it often explain why women are less engaged in economic activity than men, work fewer hours, and earn lower wages.

Young women below 35 years old in Azerbaijan, Georgia, and Tajikistan remain economically inactive much more often than men do (Chapter 3). The percentage of economically inactive females ranges from 25.9% in Georgia to 48.7% in Tajikistan. In contrast, among the male counterparts, the share of economically inactive people does not exceed 11%. Family reasons for keeping young women at home are the main factors in their high economic inactivity. However, there are also cultural differences. For example, in Georgia, the main reason for inactivity is family responsibilities including marriage and caretaking, whereas in Muslim countries, such as Azerbaijan and Tajikistan, young women often report that their parents/spouses do not allow them to work. This finding is in line with the cross-country statistics discussed in the Introduction section of this book, where Azerbaijan, Georgia, Kyrgyzstan, and Tajikistan have the highest Gender Inequality Index (GII) rates among the post-Soviet countries and have very low female labor participation rates.

In general, the post-Soviet countries could be characterized as quite gender unequal in terms of work opportunities, even though, in many countries, the rate of women with higher education exceeds that among men. The study presented in Chapter 4 demonstrates that, according to the World Values Survey data from the last three decades, the ratio of men to women holding full-time positions has risen in most post-Soviet countries. Traditional gender roles still dominate in these countries, which prevents young women, especially those with young children, to take full-time positions at the same rate as men. It is notable that the results of the empirical study in Chapter 4 are in line with the dynamics of the GII indicators. The findings showed that Russia and Kazakhstan are experiencing positive shifts toward gender equality. Thus, young women in these two countries have more chances to hold a supervisor position in comparison to males of the same age group.

There is considerable gender segregation in the occupation-professional structure and industries, especially in the Russian labor market (Roshchin and Solntsev 2006; Maltseva and Roshchin 2007). Gender job segregation remains among people above 45 years of age (Chapter 5). Men are more likely to work in the army and civil services and in positions as specialists with higher- and middle-level qualifications, such as officials, employees of offices and customer service, and employees of commerce and service sectors, while women are more likely to work in public sector occupations (Chapter 5).

Russian female life expectancy is much higher than that for males. Due to lower earnings over the life cycle and a slightly shorter period of paid contributions to the

pension system, on average, women receive lower pension benefits in comparison to men, which might force them to stay active in the labor market after their retirement age. Part-time jobs are typical for retired women, even with poor health conditions. In contrast, men with poor health have a lower probability of being employed in comparison to women in Russia (Chapter 5). At the same time, better education and tenure increases the chances of employment for older men. Empirical evidence suggests that perceived obstacles to finding a new job include an age limit (usually 40 years old) and gender discrimination.

Part II of this volume covers a more detailed analysis of gender differences in employment, economic activity, and wages in Armenia, Belarus, Estonia, Russia and Ukraine. In addition, it focuses on the gender differences in online and offline employment, the gender pay gap, the motherhood wage penalty, and gender differences in the opportunities for academic careers in the hard sciences.

A typical post-Soviet labor market inherited a high Soviet female labor participation rate but, simultaneously, a high degree of horizontal and vertical economic segregation. Female workers, while widely present in the labor market, still occupy lower paid and less prestigious jobs and at the same time carry out the lion's share of unpaid housekeeping activities. Women are often seen by the society, and thus by the women themselves, as "better fitting" for the less profitable occupations, for example, related to services and care, and to lower positions within the job hierarchies. These views have only been slowly changing in their transmission from older to younger generations. The necessity to balance work and childcare responsibilities leads women to be overrepresented in more secure but less profitable positions, often in the public sector.

In Armenia, there are substantial differences between rural and urban employment as far as the gender component of employment is concerned (Chapter 6). The employment gap between men and women is higher in urban areas. Tertiary education helps women to engage in the labor market, but only in urban areas. An important finding for policymakers is that having preschool children is negatively associated with female employment. This leads to the idea that there is a need for childcare development in post-Soviet Armenia. Moreover, for men, being married and having children is associated with a significantly higher probability of being employed. This evidence suggests that in urban areas, fathers can be considered "breadwinners" while mothers are the principal childcare providers.

Interestingly, there is gender segregation by field of work even in the online labor market in both Russia and Ukraine (Chapter 13). Despite consistent growth of the share of women working online within the last ten years, the research proves that there are significant gender differences in online employment structures as well as in payments. For example, female freelancers are choosing "lighter" sectors, such as, notably, working with texts: 43.5% of women vs. 12.5% of male freelancers work in this sector in Russia; those numbers are 35.6% vs. 12.3% in Ukraine.

Segregation into specific economic sectors and occupations, along with unequal treatment by employers, is vocalized as being a part of the persisting gender wage gap, which amounts to roughly 20–30% in Belarus, Estonia, Russia and Ukraine (Chapters 7–10) and accounts for a 100–150% wage difference in online labor markets

(Chapter 13). In other words, women in the post-Soviet countries consistently earn one-third of their income less than men. This often leads to a relatively low appreciation of their financial contribution to family budgets, and the mental and physical burdens of housekeeping and budget-keeping efforts are not always recognized. Discriminatory practices (the unexplained differences in the wage gap account for 30–50%, according to the decomposition analysis results) and traditional attitudes plague women's outcomes along the entire wage distribution scale, and it is even more pronounced at the higher end. Surprisingly, lower wages for female employees are often seen as justified by both men and women.

Indeed, women's own values and perceptions of gender differences often define their careers. A case study of female scientists building careers in Russia, compared to a German case, clearly reflects and supports this idea. STEM fields are traditionally viewed as male-dominated academic fields that are less open and accessible to female scientists. Chapter 12 of this volume discloses these differences through a qualitative interview approach and demonstrates the importance of these perceptions and cultural heritage. Thus, female scientists' views in Russia are shaped by the post-Soviet academic environment in which they build their careers, where greater emphasis is placed on the collective and on being part of a group. Female scientists in Germany generally try to emphasize qualities in their work as scientists, such as communication and collaborative skills, that they view as "feminine" and as beneficial to achieving high academic positions. Interestingly, they tend to have a more individualistic perspective on their careers as they respond to the demands of contemporary academia, in which careers must begin directly following one's PhD completion and cannot be postponed. For Russian women, career breaks or postponements due to childbearing are natural and not questioned by society.

Activity in the labor market is deeply intertwined with family matters. While men who have children are more likely to be employed and tend to earn higher incomes, women experience the opposite phenomenon. A motherhood wage penalty, which describes the significant income loss of working women with preschool children compared to women without children, is a typical phenomenon in the post-Soviet states. Previous studies both in Western and in the post-Soviet countries showed that mothers usually earn up to 20% less than women without children. The wage penalty is more severe for women with two or more children. The research presented in Chapter 11 of this volume sheds light on the wages of mothers and non-mothers in Russia and concludes that the wage penalty has remained consistent over the period of 2000–2016 and comes to up to 11% in comparison to non-mothers and up to 30% in comparison to men.

Finally, part III of the volume comprises empirical qualitative and quantitative research dedicated to the discussion of gender equality attitudes, perceptions of gender roles, female empowerment in society, and female roles' importance in family management. Gender attitudes and values vary across the post-Soviet space. Countries in Eastern Europe tend to support more egalitarian gender norms compared to those in Central Asia and the Caucasus, where traditional gender attitudes dominate.

For example, people in Tajikistan consider housework and child-rearing to be women's work (Chapter 14). This is considered natural in this society, so Tajik

women continue to bear the burden of housework and taking care of children while having low bargaining power and tolerating domestic violence from their husbands. However, empirical findings show that husbands' domestic violence is less tolerated by women with higher education levels. Tajikistan and other Islamic countries of the former Soviet Union are different from other Islamic societies in the sense of female education. The literacy rate among women in the post-Soviet states is higher, as is the proportion of working women, and a certain degree of gender equality has been achieved in education.

Kazakhstan clearly stands out from all other Central Asian countries in terms of female empowerment and gender equality rates. This country has the highest female employment rate in all post-Soviet space and a high share of women in parliament. Kazakhstan is leading among non-European post-Soviet societies in the transformation toward gender equality. Recent women's movements, described in Chapter 15, are challenging the cultural norms and conservative trends in Kazakhstani society. They send a powerful message of women revolting against the oppressive structures of post-Soviet Kazakhstan. The high Internet penetration and predominance of social media use made these women's movements possible and have kept them active in the context of closed authoritarian structures. The digital revolution and the rise of new forms of mass communication have simplified the tasks of civic activists and significantly complicated the government's efforts to control public opinion. This has resulted in considerable shifts toward gender equality in society. The growing exposure of the younger generation to Western values and feminist ideas has contributed to this situation.

Russia seems to be more conservative than Kazakhstan, as it is ranked ten points lower according to the GII recent rating. Indeed, significant share of the population in Russia believes that in times of economic distress, scarce jobs should be taken by men. These perceptions, however, are also shared in Kazakhstan, while in Kyrgyzstan and Uzbekistan, the societies express even more unequal gender preferences (Chapter 16). On the other hand, there is a tendency wherein the views of women as leaders have improved, although it is accompanied by a perception of women as not having sufficient desire or qualities to become leaders and managers. Women are still less sure, in comparison to men, of being able to find a job of equal quality if they are laid off. Women tend to be employed in traditionally female-dominated sectors.

In general, gender equality attitudes impact female labor market behaviors. Thus, the positive association between individualism and gender equality values explains why gender equality is related to a higher likelihood of self-employment in Russia. Russian women who support gender equality are more likely to start their own businesses. Women in Kazakhstan are also more likely to be active in the labor market (to be full- or part-time employed) if they share gender equality values (Chapter 16). However, there is a certain interdependence here. On the one hand, women who have positive attitudes toward gender equality choose to be employed rather than to be

housewives. On the other hand, women who participate in the labor force benefit from employment, which fosters their gender equality values.

Chapter 17 of this book clarifies the logic behind women remaining as housewives and participating in economic activity. It provides insights into the justification strategies of gendered activities by Moscow housewives. The authors have reconstructed two ways of justifying the importance of household spending as a gendered activity via 37 in-depth interviews with Moscow housewives, showing that the narratives of ordinary people are reflecting the old ideas of famous economist Gary Becker, who argued that the male-female labor division between earnings and household management was the best decision for modeling a household economy. This chapter allowed the readers to see how economic models, through education, markets, and social policy, shape and maintain social attitudes and practices, including gender equality attitudes and perceptions of gender roles.

What will be the future of gender relations in the post-Soviet states? The chapters of this volume imply a long and winding road toward the realization of gender equality in the area. Better education, especially for women, appropriate family policies aimed at increasing the family work balance and enabling both partners to move toward more equal participation in the labor market, housework and childcare, and general strengthening of the rule of law and legislation on gender nondiscrimination could play a major role in achieving gender equality in the decades to come.