



# Opportunities for Men and Women in Emerging Europe and Central Asia

*By Sarosh Sattar*



THE WORLD BANK



# **Opportunities for Men and Women:** **Emerging Europe and Central Asia**

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# Abbreviations

CIS	Commonwealth of Independent States
EU	European Union
GDP	gross domestic product
MFI	microfinance institution
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment (OECD)
SME	small and medium enterprise

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## Preface

This report has been motivated by the desire to understand how men and women have benefited from the long economic boom that began in the region in 2000. During the subsequent decade, the countries of the Europe and Central Asia Region achieved robust economic growth and macroeconomic stability, and many attracted foreign capital and investors. This favorable situation at the national level raised the obvious question of who was benefiting from growth and how widely shared were the wealth and the new opportunities created. During early consultations for this report both inside and outside the World Bank, there was a strong interest in understanding women's and men's gains over the last several years, especially in the labor market and in the private sector.

However, while the analysis was under way, the global financial crisis hit the Europe and Central Asia Region particularly severely, leading to sharp falls in gross domestic product and rising unemployment. It also delayed the work on the report while the World Bank was responding to the immediate needs faced by the countries in the region. Though the worst of the crisis has passed in some countries, and many countries have seen a resumption of growth, the data on the crisis years are still not available so that we might tell the story of how men and women fared as economic actors during the crisis.

At the early stages of the drafting process of the report, there was a growing awareness in the World Bank of the importance of advancing women's economic opportunities, in addition to improving women's health and education. In 2007, the Gender Action Plan was launched to improve women's access to jobs, land rights, financial services, agricultural inputs, and infrastructure. This expansion in the issues that might benefit from a deeper understanding of the opportunities and challenges faced by women and men separately led over the next four years to an increase in gender-disaggregated analysis and projects.

Building on the analysis and the experience gained through the Gender Action Plan, *World Development Report 2012* focuses on gender equality and development (World Bank 2011a). It looks at the facts and trends regarding the various dimensions of

gender equality in the context of the development process. The report provides a useful framework based on three pillars—endowments, access to economic opportunities, and agency—to understand the sources of differences in outcomes among men and women. Within this framework, the report covers a broad range of issues, from health, education, and fertility to land ownership, labor markets, and access to new technologies.

Aspects of the framework of the *World Development Report* guide the analysis in our report. Chapter 1, on human capital, looks at a narrower range of endowments rather than the broader range of assets such as land. Chapters 2 and 3, on the labor market and on entrepreneurship, respectively, provide information on access to economic opportunities. However, our report does not cover agency, that is, women's capacity to make independent decisions

and enjoy freedom of choice. This shortcoming is caused by the quantitative focus of this report and the lack of regionwide data. However, agency is an important topic, and encouraging work in this area is essential to obtaining an in-depth understanding of the reasons behind the outcomes observed. (Chapter 4 summarizes the main findings of our report.)

This report is a small contribution to our understanding of gender issues in the Europe and Central Asia Region. It does not pretend to cover all important topics even in the areas of human capital, labor markets, and entrepreneurship. Rather, it aspires to set the groundwork for more in-depth analysis at the country level of the differing outcomes among men and women and to encourage a dialogue about the related medium- and long-term implications for sustained economic development and welfare improvements.

## Executive Summary

The countries of Central and Eastern Europe and Central Asia have a long history of striving for gender equality, especially in the public sphere. Not only was this an important goal during the socialist era, but governments continued to pursue gender equality even during the difficult years of transition. The governments in the region allocated substantial resources toward the health and education of both women and men. They also adopted legislation that treated women and men equally in the labor market and they provided child care services. During much of the last century, the region surpassed countries—both developing and developed—in establishing the equal treatment of women and men.

Much of the first decade of the 21st century was defined by robust growth. The new member states of the European Union saw major structural changes, while the Commonwealth of Independent States bounced back from the financial crisis in the Russian Federation at the end of the previous decade. Thus, for several years, the economies of the region experienced robust growth. However, this period of prosperity was followed by a global financial crisis, which hit the region severely, especially in 2009 and 2010. The question remains whether men and women benefited equally over the course of the last decade, with its major economic developments, or whether the gaps between men and women and girls and boys changed significantly.

This report reviews changes in gender inequalities in Europe and Central Asia over the last decade, with a particular focus on economic opportunities both in labor markets and in entrepreneurial activity. In addition, given the importance of health and education in opening up opportunities for men and women in the economic sphere, the report discusses the changes in human capital endowments in this area as well. Unfortunately, the lack of data prevents us from covering the role of other assets, such as property or financial assets, in broadening opportunities for women.

There is a significant body of work on gender equality to build upon. Most recently, the World Bank published *World Development Report 2012: Gender Equality and Development*, which examines the progress in women's lives and provides policy recommendations to advance gender equality (World Bank 2011a). The report also

provides a useful framework for understanding the underlying causes as well as consequences. *Gender in Transition*, an earlier World Bank report specific to the region, also reviewed the gender-based differences in economic opportunities, especially in the labor market and human capital, over the first decade of transition in the 1990s (Paci 2002).

The remainder of this executive summary is structured as follows. The next section, A, reviews the main aspects of the World Development Report on gender and development. The following sections, B and C, discuss the main messages of this report and policy priorities, respectively. Section D makes some closing remarks.

### **Links to World Development Report 2012: Gender Equality and Development**

*World Development Report 2012: Gender Equality and Development* examines various dimensions of gender equality in the context of the development process. In particular, gender equality is viewed through an economic lens, with a focus on the relationship among (1) the accumulation of endowments (such as human capital and financial assets), (2) access to economic opportunities and their returns, and (3) agency, or the ability to take actions and make choices that impact the individual, household, or public spheres. These factors interact and affect one another significantly.

The report's main messages are as follows:

Gender equality is a core development objective in its own right. . . . Greater gender equality can enhance productivity, improve development outcomes for the next generation, and make institutions more representative. (World Bank 2011a, xx)

Development has closed some gender gaps. The disadvantages faced by women and girls that have shrunk most rapidly over the past quarter century include educational enrollment..., life expectancy..., and labor force participation. (World Bank 2011a, xx)

Gender disparities still remain in many areas, and even in rich countries. The most persistent and egregious gaps include excess deaths of girls and women..., disparities in girls' schooling..., unequal access to economic opportunities..., [and] differences in voice in households and society. (World Bank 2011a, xxi)

Income growth by itself does not deliver greater gender equality on all fronts... Gender gaps persist where girls and women face other disadvantages... Markets, institutions, and households can also combine to limit progress... globalization can help..., but [the] impact [of the related forces] will be muted without effective domestic public action. (World Bank 2011a, xxi)

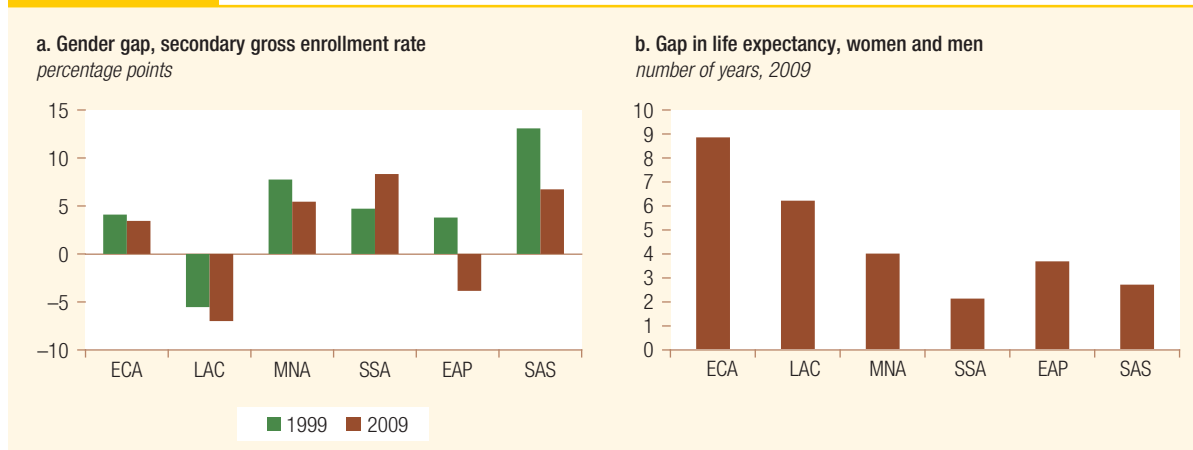
As the report suggests, there is an important role for policies targeted toward reducing the most costly gender disparities that are not responsive to growth, and closing the most egregious gender gaps has become more urgent now than it was two or three decades ago.

An overlap exists between *World Development Report 2012* and this report. The methodology of examining endowments and the access to economic opportunities and their returns is applied in the analysis of gender issues in Europe and Central Asia. Our report discusses issues of human capital, such as education and health, which is the most important asset of the majority of the population. In our report, the issues of economic opportunities and their returns are discussed in the context of labor markets. The entrepreneurship chapter (chapter 3) touches on women's business assets and on economic opportunities. However, our report does not address agency, a topic extensively addressed in *World Development Report 2012*.

The concept of agency—the ability to exercise choice over consequential decisions—is important in furthering our understanding and incorporating into analysis, particularly where there are large discrepancies between men and women in the private (household) and public spheres. In Europe and Central Asia, women and men appear



**FIGURE EX. 1 The Gender Gap in Human Capital**



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: The gender gap measures the difference in the gross secondary enrollment rate or life expectancy of males and females. EAP = East Asia and the Pacific. ECA = Europe and Central Asia. LAC = Latin America and the Caribbean. MNA = Middle East and North Africa. SAS = South Asia. SSA = Sub-Saharan Africa. All regional data are for developing countries only.

to have equal agency because of factors such as the gender-blind legal system, women's comparable labor force participation rates, and girls' access to education. However, if equal agency is to exist, men and women may need different types of institutional support given the differences between them.

Agency in the context of Europe and Central Asia has changed over the last two decades in concert with the changes brought about by the contraction of the role of the state and, more generally, the transition to a market economy and the development of large informal markets. Across the board in the region, there has been a reduction in fertility-related benefits, especially the contraction in childcare services. The scarcity of childcare availability has narrowed women's opportunities, especially in the labor market. Agency has also been circumscribed by low incomes on the one hand and, on the other hand, by a lack of the public services (for example, childcare) that allow women to function independently. However, women have much greater agency in the region because of human capital endowments, independent sources of income, and the legal framework.

## Main Messages

This section consolidates the analysis in our main report to identify the overarching messages. This approach allows policy makers and civil society alike to see the significance of individual gender gaps within the larger context of economic development and prosperity. Presented below are the report's three take-away messages.

**First, the region's advantage in gender equality has eroded, with the result that the region now looks more similar to the rest of the world.** The gender gaps in school gross enrollment rates have fallen further in Europe and Central Asia over the past decade, but so have the world average gaps, given the substantial progress achieved in improving educational outputs (see figure 1).<sup>1</sup> Globally, female enrollment rates have risen more rapidly than male enrollment rates at both the primary and secondary school levels so that global gender gaps in 2009 had fallen to 4 and 2 percentage points, respectively, compared to Europe and Central Asia's

<sup>1</sup> Measured using the difference between male and female gross enrollment rates.

1 and 3 percentage points. In terms of health outcomes, the region exhibits health indicators that are better than the world averages, especially the maternal mortality rates, which, in the region, are the lowest among all developing countries. However, in terms of female life expectancy, the region ranks below Latin America and the Caribbean, but is comparable to East Asia and the Pacific and the Middle East and North Africa. Male life expectancy in the region is unusually low and comparable to the average of Sub-Saharan Africa.

*The region's gender gap in education is similar to the gaps in other predominantly middle income regions.* One of the key areas where the gender profile of the region is similar to that of the rest of the world is in the area of education, especially in primary education and, to a lesser extent, in secondary education. Net primary enrollment rates in the region are comparable to the world average, with no significant gender gap. However, even in the area of secondary education, selected regions such as Latin America are quickly converging toward Europe and Central Asia's high net female and male enrollment rates and modest gender gap. Among the countries in the region that have made significant progress over the last decade, Turkey stands out because of an increase of 20 percentage points in female secondary enrollment rates. However, Turkey continues to show a large gender gap at the secondary level, as do some minority communities (such as the Roma) in Central and Eastern Europe. At the tertiary level, female enrollment rates exceed male enrollment rates in most parts of the region, and the level of inequality appears to increase with development. Next to the high-income countries of the Organisation for Economic Co-operation and Development, the region has the largest gender gap in tertiary education, at 11 percentage points.

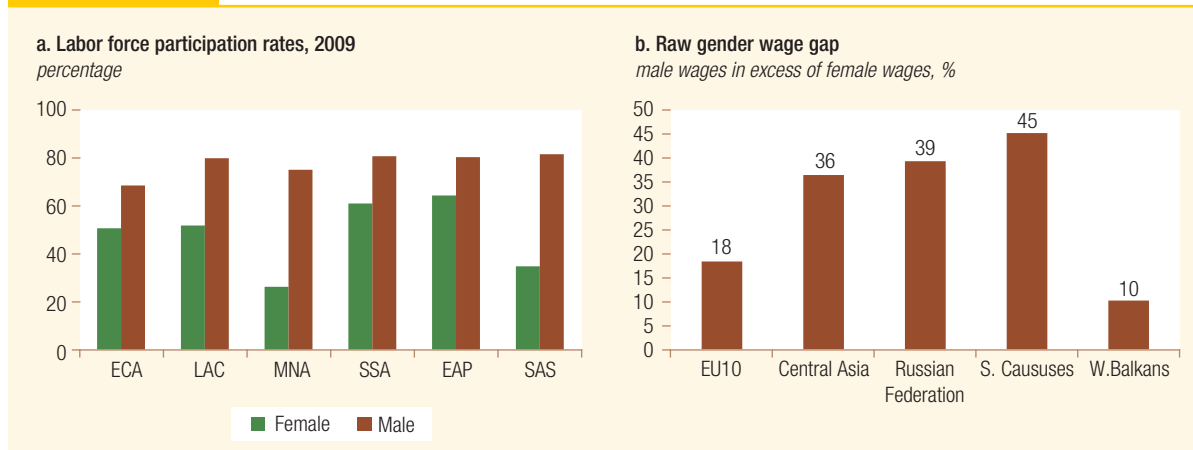
*Health indicators in the region are superior to those in other middle- and low-income countries, except for a sex imbalance among young children that has begun to emerge and unusually high mortality rates among prime age men in selected countries.* Armenia, Azerbaijan, and Georgia show the highest sex imbalance at birth in the world after China. Thus, in China, 18 more baby boys than baby girls are born per 100 live female births, while, in Ar-

menia, Azerbaijan, and Georgia, the corresponding number is 16, 15, and 11, respectively. The missing girls at birth reflect covert discrimination in the household, resulting from the combination of strong preferences for sons, declining fertility, and the spread of prenatal sex determination. The sex imbalance is reversed among the population group ages 50 years and above by the early demise of men, especially in Kazakhstan, Russia, and Ukraine because of poor health, alcoholism, and accidents.

***Second, the structural changes in the economies of the region have opened up economic and employment opportunities for women and reduced some avenues of prosperity for men.*** Women play an important role in these economies; they comprise 46 percent of the labor force in the region, which is above the world average of 40 percent. The labor force participation rates of women and men in Europe and Central Asia average 51 and 69 percent, respectively (figure 2). While female participation rates are comparable to the world average, male participation rates are well below the global average of 78 percent. This may be a reflection of many factors, including the types of jobs being created. Over the last decade, the region has experienced an expansion in the service sector, while the manufacturing and agriculture sectors have shrunk significantly. The contraction of the manufacturing sector in particular has had a disproportionate and adverse impact on men, while the growth in the service sector has opened up relatively more opportunities for women, who constitute half of all workers in the service sector in the region.

*However, women's gains in the service sector may be only short term.* Service sector jobs are diverse in terms of occupations and productivity. Service jobs may be found in both the public and private sectors. In the region, women appear to be disproportionately represented in the public sector, as indicated by several country studies. For example, if we look at the education sector (which is mostly in the public sector), women constitute 91 and 72 percent, respectively, of all primary and secondary teachers. However, the fiscal pressures on the large public sector are growing because of the need for adjustment following the economic crisis, which hit the region severely. Moreover, the role of women in the private sector as employees, but also as employ-

**FIGURE EX. 2**      **Employment Opportunities**



Sources: For labor force participation rates: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>. For the wage gap: various; see chapter 2.

Note: EAP = East Asia and the Pacific. ECA = Europe and Central Asia. EU10 = the 10 European Union (EU) countries of Central and Eastern Europe, that is, Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia. LAC = Latin America and the Caribbean. MNA = Middle East and North Africa. SAS = South Asia. Russian Federation, S. Caucasuses = southern Caucasus. SSA = Sub-Saharan Africa. W. Balkans = western Balkans.

ers lags significantly with respect to the role of men. For example, women are much less likely to engage in entrepreneurship, which has long-term implications for women's wealth accumulation.

*The wage gap between men and women remains large in the region, and, if human capital endowments are taken into account, the gap is even wider.* The wage gap in the region is comparable with the gap observed in other low- and middle-income countries. The data indicate that women's hourly wages are 22 percent less than the hourly wages of men, on average, in the region. Moreover, because women work fewer hours, the monthly wage gap is larger, indicating that women earn 29 percent less than men per month. Women earn systematically less than men even if one controls for differences in human capital. The size of the gender wage gap varies greatly within the region. The differences across countries are large within the region. The western Balkans (with the exception of Albania), the EU 10 countries, Moldova, and Turkey have a gender gap of about 20 percent.<sup>2</sup> Other countries show gender gaps that are among the largest in the world (for example, Tajikistan, with a gap of about 65 percent), while still others (Albania and Russia) have gaps in the intermediate range of about 35 percent.

***Third, the dramatic demographic changes in the region have different implications for men and women, which must be taken into account if economic growth is to be sustained in the medium to long term.*** Though the total population of the region is not expected to change during the first quarter of this century (a projected –0.1 percentage point decrease), there will be a dramatic change in the age structure of the population in coming years. The share of the population above 60 years of age will rise sharply in 2009–25, from 15 to 25 percent of the population, and women will constitute 57 percent of this age group. Moreover, 17 countries in the region will suffer from population implosion, which will result in a shrinking labor force. These countries can ill afford this outcome given their levels of income and investment.

*There will be more elderly people, especially women, and these people will be vulnerable to old age poverty.* A variety of factors increase the probability that

<sup>2</sup> The EU10 refers to the 10 European Union (EU) countries of Central and Eastern Europe, that is, Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia.

women are more likely than men to fall into poverty. Women without independent sources of income in old age must rely on the incomes of family members. However, even women who work in the formal sector and possess pension rights tend to be more vulnerable to poverty. Pension rules in many systems in the region allow women to retire early, but this decision has consequences for the level of benefits. Moreover, women live longer, on average, than men, meaning that their low benefits must stretch farther, likely resulting in a divergence between average pensions and average wages over time. Finally, the informal social safety net may be weakened because older women will have fewer children to rely upon.

*Many countries in the region will have to find a way to encourage more women to participate without decreasing women's fertility.* Many of the countries in Europe and Central Asia with aging or declining populations could experience an economic contraction because of the shrinking labor force. To prevent a sharp decline in economic activity, one may adopt the option of trying to maintain the size of the labor force by attracting temporarily or permanently inactive women or by retaining working women in the labor force for a longer period of time by delaying retirement (so that the retirement age of women is equal to the retirement age of men). Yet, to achieve higher female labor force participation without adversely impacting fertility, the supporting institutional infrastructure (for example, childcare and appropriate parental leave benefits) needs to be in place, and pension rules should be amended.

## Policy Priorities

Policy recommendations that address gender equality in the region could have two main objectives. The first goal may be to achieve equal opportunity among men and women by taking into account their different circumstances. Women differ from men in terms of their roles in the private sphere, their greater vulnerability to physical insecurity because of their longer life spans, and their fertility, among other factors. The second goal may involve helping societies meet their medium- to long-term economic needs by

removing the impediments women face in contributing to the economy. The gaps to fill in the labor market in the economies of the region are large and will become larger in the future. The countries might also benefit from the more effective use of women because of their higher levels of human capital.

*The first policy recommendation: take measures to facilitate women's entry into the labor force so as to meet the challenges of demographic changes, especially the aging of the population.* Women's labor force participation is important for several reasons, including to help ward off old age poverty and to assist the region's economies adjust to the contraction in the labor force. However, at the same time, it is also important that labor market participation not impede women in having children. These multiple objectives might be accomplished by (1) increasing the retirement age of women so as to achieve parity with the retirement age of men; (2) reevaluating maternity-related benefits in terms of their effectiveness in increasing fertility, for example, maternity leave, child allowances, lump-sum payments for the birth of a child; and (3) providing childcare given that its absence may account for the choices women make in their fields of specialization in tertiary education and in their occupation because of compatibility with raising children.

*The second policy recommendation: adopt educational reforms to reduce the gender imbalances at the secondary and tertiary levels.* The secondary school gender gap (in favor of males) appears, at best, to be closing only slowly. Country-specific policies are needed given that, depending on the country, the cause of the gap may vary significantly across the region, from income to minority status or ethnicity. For example, Roma children (especially girls) are less likely to attend secondary school. At the tertiary school level, significantly more women than men pursue higher education: the average female and male gross enrollment rates are 60 and 45 percent, respectively. The lower probability that men will participate in tertiary schooling may be linked to the lower perceived returns to education among men (either in absolute terms or relative to what men might earn through migration). Also, given the real concerns of the relevance of education discussed in *Skills, Not Just Diplomas: Manag-*

ing for Results in Education Systems in Eastern Europe and Central Asia (Sondergaard and Murthi 2012), young men may decide to forgo education so as to acquire additional work experience and earnings.

*The third policy recommendation: address pockets of health disparities on a country-by-country basis.* The region is not free of health disparities, although no one health challenge is regionwide. To address health problems, a comprehensive national program is needed that operates at all levels of government. The countries will need to ensure that an appropriate strategic, legislative, and policy framework exists, along with adequate institutional capacity. In addition, the identification and delivery of specific programs would be required and, to be effective, may call for a multifaceted approach that includes components such as information campaigns to promote the more effective enforcement of existing laws (such as road safety campaigns) to the more effective provision of health services (for example, emergency care). This is true of the effort to reduce maternal mortality rates, increase male life expectancy, and address the imbalance in the sex ratio.

## Concluding Remarks

This report analyzes various markets through a gender lens. It thereby quickly makes two main findings. First, our knowledge of why men and women behave differently is limited. For example, why do women pursue certain fields in education that men tend to avoid or why do more women than men migrate from some countries. Second, average economic indicators can be misleading because they hide the differences in behavior across large groups (in our case, males and females). The importance of the adoption of a gender lens in the development of policies in the region derives in no small part from the high stakes resulting from the dramatic demographic changes and mounting labor resource needs. Moreover, such a lens helps countries identify the necessary and appropriate policy and institutional framework to allow them to take advantage of underexploited opportunities (for example, bringing more educated women of prime age into the labor force). Ultimately, the use of disaggregated data to undertake analysis will likely lead to better policies that further the long-term objective of shared growth.



# Introduction

Europe and Central Asia have suffered a setback in economic growth because of the recent global crisis, which revealed fundamental structural weaknesses previously hidden by the prosperity before the crisis. The major weaknesses are the large savings deficits, the lagging reforms in the social sectors, and the deterioration in competitiveness. Policies can address these weaknesses by taking into account the role of the behavior of firms, public spending on health and education, the consequences of demographic pressures, particularly on pension systems, and the bottlenecks created by skilled labor force shortages.<sup>3</sup>

To overcome the current difficulties, the countries of Europe and Central Asia will need to deepen policy changes across the social and economic spheres. Social sector reforms that reach all groups within society can promote inclusive growth by increasing employment and access to high-quality public services. Furthermore, many reforms are needed to reverse the deterioration in competitiveness. Some of the most important actions will be those that enhance productivity and skill development in the region, which already possesses a highly educated population.

Any reform agenda ultimately affects a country's population. An agenda that seeks to promote inclusive growth will benefit from the identification of the different groups within society, an understanding of the related constraints, and consideration of welfare issues. Adding a gender perspective to policy making can be particularly pertinent because men and women may behave differently in the economic and social spheres. These differences mean that reforms can have dissimilar and unintended impacts on men and women. It may also mean that, by adopting gender-informed policies, countries are more likely to achieve desired outcomes.

This report reviews the performance of women and men during the past decade in three spheres: human capital, labor markets, and entrepreneurship. Similar to *World Development Report 2012* (World Bank 2011a), it looks at the dimensions of endowments and economic opportunities. However, it does not cover issues related to agency, that is,

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<sup>3</sup> The diagnosis and the solutions are proposed in World Bank (2011b).

the ability of actors to make independent choices and exercise control over their own actions. The data are analyzed to determine whether women and men are performing well compared with each other, but also how they fare in a global context. The analysis is primarily quantitative and mines various data sets. This is a strength of the report because

a quantitative analysis can add value by providing some measure of the degree of differences in the outcomes observed. Yet, it is a weakness as well because the outcomes are measured, but not always explained. Consequently, more work is needed in this area, especially qualitative analysis that is followed up by targeted quantitative surveys.



# Gender Issues in Human Capital

## Introduction

A nation's stock of human capital influences economic growth, productivity, and, ultimately, poverty reduction. Investing in the building blocks of human capital—education and health—has both direct and indirect effects on economic growth, but also on poverty reduction. The socialist legacy of investment in education and health for both men and women in Europe and Central Asia has provided an important foundation for the majority of the countries as they have embarked on a significant transformation and liberalization of their economies and on global integration. This stock of human capital is all the more valuable now because of the demographic transition occurring in the region and the decline in population in 21 of the 30 countries. The shrinking population underscores the importance of using available human resources more effectively in terms of the share of the population that is economically active, as well as the productivity of the population.

Recent analytical work has laid the foundation of knowledge on the broad education and demographic issues facing the region. The report “From Red to Gray: The Third Transition of Aging Populations in Eastern Europe and the Former Soviet Union” (Chawla, Betcherman, and Banerji 2007) analyzes the implications of the aging populations and relatively weak institutions in low- and middle-income countries. The study “Skills, Not Just Diplomas: Managing for Results in Education Systems in Eastern Europe and Central Asia” (Sondergaard and Murthi 2012) discusses the lagging performance of the education sector, primarily in terms of the quality and flexibility of curricula to facilitate lifelong learning, an important characteristic of education systems in rapidly changing economic environments. The analysis in this chapter adds a gender

emphasis to some of the conclusions reached in these reports.

The chapter contains three main messages, as follows:

- ◆ The countries of Europe and Central Asia have achieved gender parity in primary education and, to a lesser degree, in secondary education. However, there are gender gaps in tertiary education that are large and show the potential to widen.
- ◆ The demographic transitions in the region are dramatic. The aging of the population will lead to large numbers of elderly women. In countries with growing populations, there will be proportionately more women of working age, which should provide an opportunity to these countries to expand the pool of educated labor.
- ◆ Several health indicators in the countries of the region are better than the corresponding indicators in many developing countries at similar levels of income, especially the indicator on maternal mortality. Yet, other indicators show a lag, such as male life expectancy, which is exceptionally low in selected countries considering the income levels. Moreover, a gender imbalance has begun to emerge in some countries among young children, and this is cause for concern.

The rest of the chapter is structured as follows. The next section provides an overview of primary, secondary, and tertiary outcomes in education. The third section discusses demographic transitions. The fourth section reviews key health indicators, such as life expectancy, mortality rates, fertility, and missing women. The health and education indicators cover the current situation, but also trends over time so as to capture changes in the gender gap. Where possible, a comparison is made between Europe and Central Asia and other regions of the world, including the high-income countries of the Organisation for Economic Cooperation and Development (OECD). The final section offers an analysis of the implications for a policy response.

## Gender Differences in Education

Education plays an important role in raising the quality of human capital and helping people become more productive in their personal and professional lives. The countries of Europe and Central Asia invest heavily in the education of their citizens at all levels of schooling. The governments and the citizenry in these countries have an established tradition of educating both girls and boys. In the past, this set the region apart from the rest of the world through narrow gender gaps in literacy rates, but the situation is now changing, and the gender gaps in education are narrowing in all regions.<sup>4</sup>

This section provides a description of the successes and challenges in gender equality in the educational systems in the region. There have been significant and broadly based successes, but subtle challenges are also emerging. In the discussion, we review the status of male and female outcomes at the primary, secondary, and tertiary levels. In addition, several of the countries in the region participate in an international assessment of students that allows us to examine the presence of a gender gap in capabilities. Finally, we focus especially on developments in tertiary education, including entrenched and emerging trends.

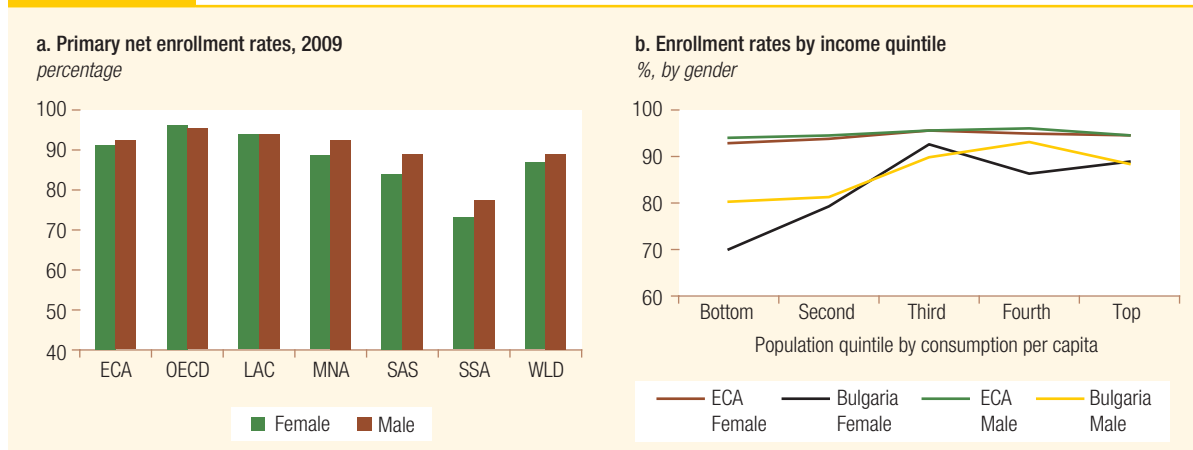
### Primary Education

The region continues to perform well in providing primary education to both girls and boys. Though there are concerns about selected countries (for example, Azerbaijan and the Kyrgyz Republic) in which almost a fifth of the relevant population is not enrolled in primary school and other countries in which completion rates are not universal (for example, Albania), these problems do not appear to reflect a gender bias. Despite the importance placed on education in the region and the significant economic growth experienced for much of the last

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<sup>4</sup> Literacy rates among men and women in Europe and Central Asia are 97 and 99 percent, respectively, compared with the corresponding world averages of 79 and 83 percent.

**FIGURE 1.1 Primary Education: A Regional Comparison**



Sources: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>; Europe and Central Asia Data (database), World Bank, Washington, DC, <http://data.worldbank.org/region/ECA>.

Note: ECA = Europe and Central Asia. LAC = Latin America and the Caribbean. MNA = Middle East and North Africa. OECD = high-income OECD countries. SAS = South Asia. SSA = Sub-Saharan Africa. WLD = World. All regional data are for developing countries only. Data for South Asia is for 2008. The Europe and Central Asia region average enrollment rates by income quintile are based upon the latest available data. Data for Bulgaria and Hungary are for 2007, and data for Albania, Azerbaijan, and Lithuania are for 2008. The rest of the countries are Kazakhstan, Latvia, Moldova, FYR Macedonia, Poland, the Russian Federation, Tajikistan, and Ukraine (all 2009).

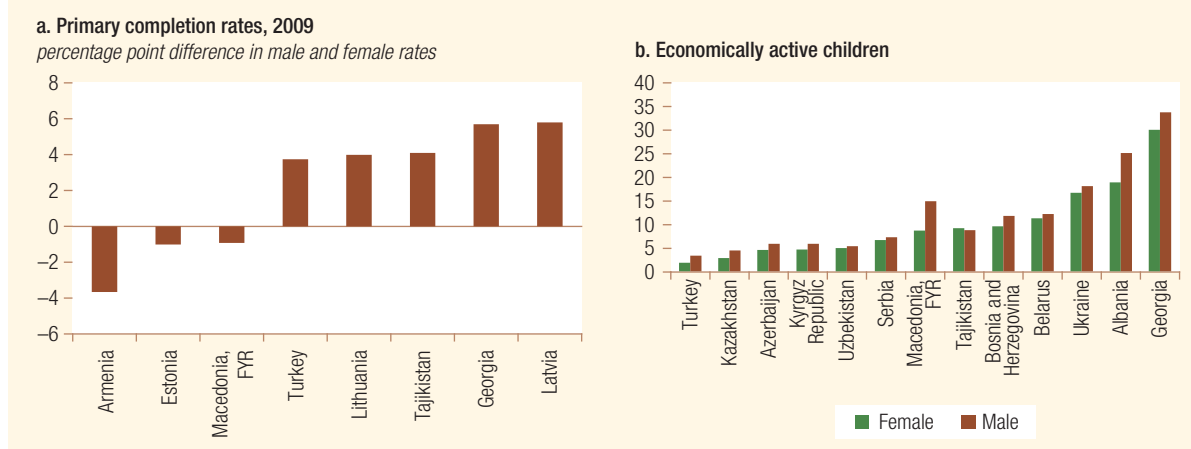
decade, there is a substantial share of working children, especially boys, in some countries (the former Yugoslav Republic of Macedonia and Ukraine). The scarcity of data makes it difficult to draw conclusions on the prevalence of this problem or the negative long-term consequences for children who carry the dual burden of work and school.

*Primary enrollment rates among girls and boys are high in the region and comparable with the world average.* The region's net primary enrollment rates are comparable with the world average (see figure 1.1). In the region, the net primary enrollment rates among girls and boys are 92 percent; they show no significant gender gap. The region's traditional advantage in this area is eroding because the gap in net primary enrollment rates by gender has been closing in most parts of the world, including in low-income regions. The world averages of net primary enrollment rates among girls and boys are 87 and 89 percent, respectively, indicating that the next generation of women and men in many parts of the world will be as well educated as their counterparts in Europe and Central Asia. Only the quality and the relevance of education will set any country or region apart from others.<sup>5</sup>

*Even in countries with below average primary enrollment rates, the gender gap is small.* In many countries, low primary rates are driven by a lack of female enrollments; however, this is not the case in Europe and Central Asia. The countries with the lowest net primary enrollment rates among girls in 2009 were Albania, Armenia, Azerbaijan, the Kyrgyz Republic, FYR Macedonia, Moldova, and Uzbekistan (83–86 percent range). Primary enrollment rates among boys in these countries fall in the same low range. The average gender gap in primary enrollment rates is negligible, and the standard deviation is small. The countries with the largest gaps are Tajikistan and Uzbekistan, though the differences are small (between 2 and 4 percentage points). At the other extreme are Armenia and the Czech Republic,

<sup>5</sup> In countries where many children enter school late or repeat grades, gross enrollment rates are high (and can exceed 100 percent). In Europe and Central Asia, net enrollment rates are high, but gross enrollment rates do not indicate whether most children in school are at the age-relevant grade levels. Net enrollment rates are reported less often.

**FIGURE 1.2 Primary Enrollment Rates and Working Children by Gender, Selected Countries**



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: Panel a: data are for 2009 for all observations except 2007 for Belarus and 2008 for Turkey. Panel b: data are for the most recent year available (2005 or 2006).

where the gender gap of 3 percentage points is caused by lower male enrollment rates.

*The average gender gap in primary completion rates in the region is small, though, in a handful of countries, there does appear to be some disparity between boys and girls.* The average primary completion rates for girls and boys were 95 and 96 percent, respectively, in the region in 2009. This gap is comparable with the gap in Latin America and the Caribbean. Though the average difference between the completion rates among girls and boys is small, Georgia and Latvia stand out in terms of the gender gap, which is about 6 percentage points.<sup>6</sup> In Lithuania, Tajikistan, and Turkey, boys lead girls by about 4 percentage points in primary school completion rates, while, in Armenia, the opposite is true (figure 1.2). Though the gap in any year is small, this inequity will lead to illiteracy among a limited, but significant share of the adult female population.

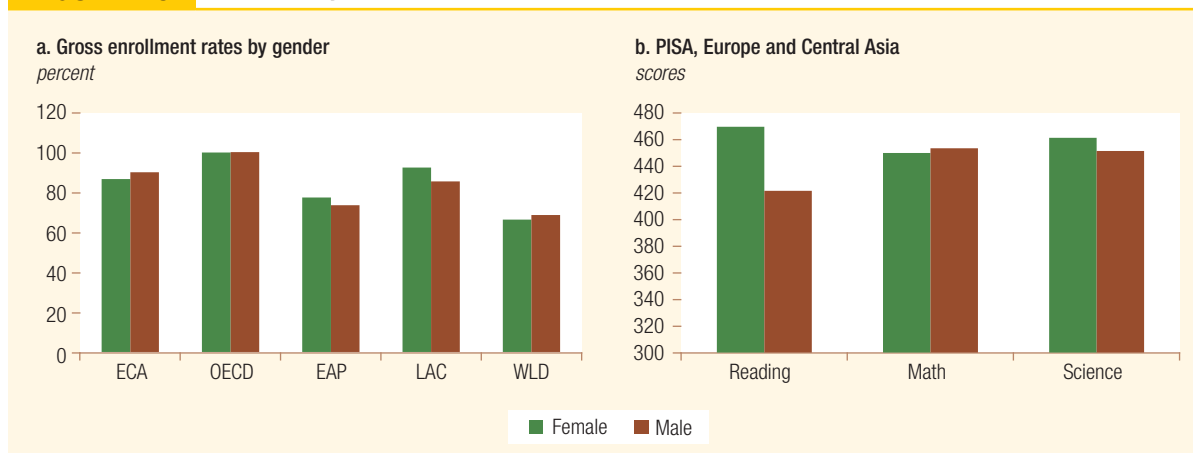
*The region shows little variation in school enrollment rates among young children across income groups.* The difference in enrollment rates between the bottom and top deciles among boys and girls (ages 7–12 years) is small, at 1 and 2 percentage points, respectively, for the region as

a whole (figure 1.1). This equitable trend across genders and income groups occurs in most countries; the exceptions are Albania, Bulgaria, and FYR Macedonia. For example, Bulgaria exhibits both income disparities and gender disparities. Almost 20 percent more 7- to 14-year-old girls in the highest income quintile attend school relative to the lowest quintile. Albania exhibits the opposite trend, with 13 percent more girls in the lowest quintile attending school relative to the top quintile. To understand the causes of these variations, one must see whether these children who were out of school were economically active, and one must also examine the attitudes of the parents of these children toward schooling.

*Young boys are more likely than young girls to be economically active.* The data on child employment are limited, and only a few countries report these statistics. The largest gender gaps are found in Albania and FYR Macedonia (figure 1.2). The countries in the region with the highest proportion of economically active chil-

<sup>6</sup> However, this should be seen against the backdrop of strong improvements over the last decade among both boys and girls: the rates have grown by 16 and 12 percentage points in Georgia, respectively.

**FIGURE 1.3** Secondary School Enrollment and Academic Performance, 2009



Sources: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>; PISA 2009 Profiles by Country/Economy (database), Programme for International Student Assessment, OECD, Paris, <http://stats.oecd.org/PISA2009Profiles/#>.

Note: EAP = East Asia and the Pacific. ECA = Europe and Central Asia. LAC = Latin America and the Caribbean. OECD = high-income OECD countries. WLD = World. For a description of PISA, see the text. Panel b: PISA scores are for the EU10 (the 10 European Union countries of Central and Eastern Europe, that is, Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia), Albania, Azerbaijan, Croatia, Kazakhstan, the Kyrgyz Republic, Montenegro, Russia, Serbia, and Turkey.

dren (ages 7–14 years) are Georgia and Ukraine, where 32 and 17 percent of children are working, respectively.<sup>7</sup> Over 90 percent of children who are economically active are also studying, except in Turkey, where only 60 percent of these children also attend school. In most countries for which data are available, boys are more likely to work than girls; the exception is Tajikistan.<sup>8</sup> Yet, this may be an incomplete picture since girls may be engaged in household chores and other unpaid family work elsewhere as well.

### Secondary Education

Secondary education enhances a population's social and economic opportunities. It provides students with marketable skills and increases their productivity in the workplace. Economies that are more sophisticated in terms of the production or the complexity of institutions require higher levels of human capital input. Secondary education also prepares students to continue on to college and university. Thus, a gender gap at the secondary school level has large implications for the long-term career opportu-

nities of students and, consequently, for the income and household welfare of these young people.

*Girls are falling behind in secondary enrollment in Europe and Central Asia relative to the high-income OECD countries.* The decades of the 1990s and 2000s saw an increase in secondary enrollment rates among girls, though this was outpaced by the growth in enrollment rates among boys. The gender gap was relatively small as measured by the ratio between the respective gross secondary enrollment rates among girls and boys, which was 0.96, meaning that, for every 100 boys in school, there were 96 girls. This compares unfavorably with the high-income OECD countries, in which gross enrollment rates are 101 and 102 for girls and boys, respectively (figure 1.3). Though the gender gap in the region is not large and the changes over a decade appear small, they have accumulated over time rather than reversed. A broader concern is the fact that school enrollments

<sup>7</sup> This assertion is based on 2005 data, which are the latest available data.

<sup>8</sup> In recent years, this gap has likely widened because of migration and poverty in rural areas.

in general are not rising to converge with the high-income OECD countries among boys or girls.

*Secondary enrollment rates among girls and boys are high in the countries of the region relative to other low- and middle-income countries, and the gender gap in secondary schools is relatively small, which is similar to other regions of the world.* The gross secondary enrollment rates in the region are 87 and 91 percent for girls and boys, respectively. Though these rates are below the gross enrollment rates among girls in Latin America and the Caribbean, this is somewhat misleading. When we compare *net* secondary school enrollment rates in Europe and Central Asia and in Latin America and the Caribbean, we find that not only does Europe and Central Asia perform comparatively better, but that the gender gap narrows additionally.<sup>9</sup> The net enrollment rates among girls and boys in Europe and Central Asia are 80 and 82, respectively, compared with 76 and 71 percent, respectively, in Latin America and the Caribbean.

*The low-income countries in Central Asia show higher secondary enrollment rates among girls relative to other low-income countries.* In the Kyrgyz Republic and Tajikistan, enrollment rates among girls were 85 and 78 percent, respectively, in 2009. These are significantly higher than the average female secondary gross enrollment rate in low-income countries, which was 34 percent in 2009. Furthermore, the average ratio of male to female enrollment rates in low-income countries was 1.36, whereas, for the Kyrgyz Republic and Tajikistan, the ratios were 0.99 and 1.15, respectively, indicating a greater degree of gender equality in these countries.

*Tajikistan and Turkey are the two outliers in terms of the gender gap in secondary enrollment rates.* In almost all the countries in the region, there is a strong correlation between male and female secondary school enrollment rates, with the exception of Tajikistan and Turkey. The gender gap in both of these countries is between 7 and 10 percentage points in favor of boys. In Tajikistan, net secondary school enrollment rates among girls and boys are 77 and 88 percent, respectively, while, in Turkey, the respective rates are 70 and 77 percent. In Tajikistan, the lower enrollment rates among girls may be caused by the lack of an adult male presence (arising from out-migration), large families, and above

average adolescent fertility rates; however, more research needs to be conducted to determine the main correlates.

*Among 15- to 17-year-olds, though poor children have lower enrollment rates than richer children, the average gender gap by income quintile is low in the region.* The gender gaps in each income quintile are negligible in the region, indicating that the disadvantage of poor children is the same irrespective of whether they are girls or boys (see the case of Albania in figure 1.4). This is, indeed, largely true across the region, though there are exceptions. In three countries, there is at least a 10 percentage point difference between the enrollment rates of girls and boys in the first quintile: Bulgaria, FYR Macedonia, and Tajikistan. The gender gap in Bulgaria and Tajikistan—where poor girls are less likely than boys to attend secondary school—is the opposite of the gender gap in FYR Macedonia. However, the gender gap is not at the same magnitude, if it exists at all, in the top quintile in these same countries.

*In the region, girls perform better than boys in learning outcomes in reading, but have similar scores in mathematics and science.* The OECD Programme for International Student Assessment (PISA) surveys test 15-year-olds in three subject areas. In the 2009 round, 65 countries were surveyed, including 18 countries in Europe and Central Asia. These were a diverse group of low- and middle-income countries.<sup>10</sup> The average score of girls on reading was 11 percent higher than the corresponding average for boys, a significant difference. The average scores for boys and girls on mathematics and science were similar.<sup>11</sup> This differential pattern in gender scores is not unique to the region.

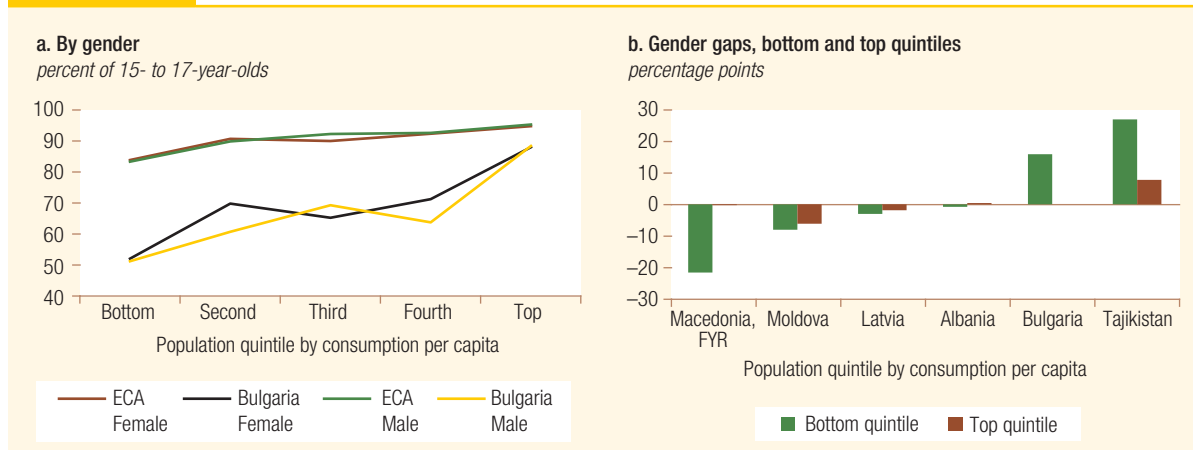
<sup>9</sup> Net enrollment rates are available only for Europe and Central Asia, Latin America and the Caribbean, and the Middle East and North Africa.

<sup>10</sup> The countries in the region participating in the 2009 PISA were Albania, Azerbaijan, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Kazakhstan, the Kyrgyz Republic, Latvia, Lithuania, Montenegro, Poland, Romania, Serbia, the Slovak Republic, Slovenia, and Turkey.

<sup>11</sup> The ratios for boys to girls in mathematics and science were 0.99 and 1.02, respectively. The difference is not statistically significant.



**FIGURE 1.4** School Enrollment Rates among 15- to 17-Year-Olds by Income Quintile, 2009



Source: Europe and Central Asia Data (database), World Bank, Washington, DC, <http://data.worldbank.org/region/ECA>.

Note: The gender gap is the difference between the enrollment rates of boys and girls. ECA = Europe and Central Asia. The data are the latest available data between 2007 and 2009. Panel a: ECA average includes Albania, Azerbaijan, Bulgaria, Hungary, Kazakhstan, Latvia, Lithuania, Moldova, FYR Macedonia, Poland, Russia, Tajikistan, and Ukraine.

### Tertiary Education

Tertiary education extends the period of education and learning among students. It allows young adults to acquire more specialized knowledge, while continuing to develop their cognitive and intellectual skills, all of which combines to improve their productivity in the work force. Yet, one generally does not strive to make tertiary education, unlike the primary and secondary levels, universally available to the population, nor is the content of curricula uniform.

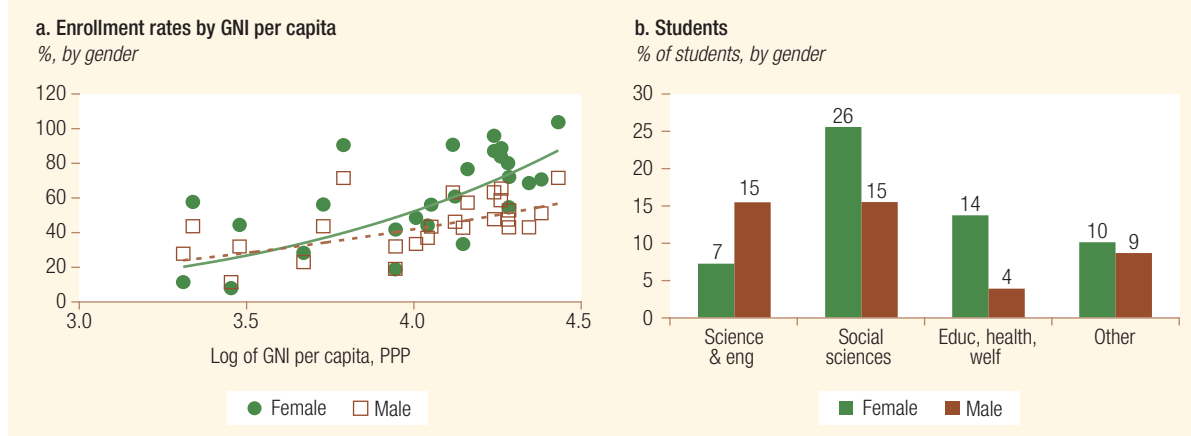
*Tertiary enrollments are growing at a rapid pace, raising the question of the impact on quality and on the returns to education, especially among women.* During the decade of 1998–2009, there was a rapid increase in tertiary enrollment rates in general in the region. Gross tertiary enrollment rates grew, on average, by 25 and 15 percentage points among women and men, respectively. Though it appears that women are investing more in education over time (in both absolute and relative terms), it is not clear whether the resources and the quality of tertiary education can keep pace with the rapid increase in enrollments.

*In the vast majority of countries in the region, female tertiary enrollment rates outstrip male tertiary enrollment rates.* The three countries that are the ex-

ception are Tajikistan, Turkey, and Uzbekistan, in which the ratio of female to male rates ranges from 41 to 70. On average in the region, tertiary gross enrollment rates among women and men are 60 and 44 percent, respectively, and the average ratio is 129 women for every 100 men attending colleges and universities. This pattern of disproportionately higher female enrollment in tertiary education is global, including in the high-income OECD countries. However, women are less likely than men to pursue postgraduate work.

*The richer the country, the more likely women will be disproportionately more well represented than men in tertiary education.* In the region, the tertiary enrollment rates grow as gross domestic product (GDP) per capita increases (figure 1.5). However, relative to the male enrollment rate, the female enrollment rate is more strongly correlated with a country's GDP per capita. As figure 1.5 reveals, there is significant variation among countries, and some clustering at the upper end of the distribution. This pattern also occurs at the global level. In low-income countries, tertiary enrollment rates are low, and female enrollment rates are much lower than male enrollment rates. In lower-middle-income countries, the gender gap in enrollment rates is negligible, while it grows dramatically among upper-middle-income countries.

**FIGURE 1.5 Tertiary Education by Gender, 2009**



Sources: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>; UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.  
Note: GNI = gross national income. PPP = purchasing power parity. Eng = engineering. Educ = education. Welf = Welfare. Social sciences includes business and law. Other = agriculture, the humanities, services, and unspecified fields. Panel b: the data are for 2009 or the latest available year.

*The gender gap in tertiary education has been widening steadily over the last decade.* The differential in gross enrollment rates by gender in the early years of the transition appeared to be relatively narrow, though this cannot be verified because of the sparseness of the data. However, since 1998, time series statistics on tertiary enrollment rates disaggregated by gender have been available for 23 countries in the region. Over the period 1998–2008, the gender ratio (in favor of girls) grew from 113 to 128 in the region. This was the result of the higher pace of tertiary enrollments among women relative to men (7 versus 5 percent per annum). This feminization of tertiary education is occurring at a more rapid pace in Europe and Central Asia than in high-income OECD countries, where the ratio increased from 116 to 129 over this same period. In only three countries—Azerbaijan, Tajikistan, and Uzbekistan—did male tertiary enrollments outpace female tertiary enrollments.

*At the tertiary level, women constitute almost half the science and engineering students in Europe and Central Asia.* This regional average is comparable with women's participation in these fields in the United Kingdom and the United States, where 50 and 43 percent, respectively, of all science and

engineering students are women. In Europe and Central Asia, the average is 46 percent; the highest participation rates are in Albania, Estonia, and Latvia. Almost half the women in the region pursue degrees in the social sciences, business, and law; health care, education, and welfare-related subjects are the second largest category.

*The gender differential in fields of study related to education has an effect on occupational segregation and the gender wage gap.* A recent study by Flabbi (2011), which was prepared as a background paper for *World Development Report 2012* (World Bank 2011a), examines the impact of the choice of the field of study on future labor market outcomes in 13 European countries, including the Czech Republic and Estonia. Three of the main conclusions of the study are relevant to Europe and Central Asia. First, women tend to choose education, the humanities, and health care as their field of study, while men choose the sciences, mathematics, agriculture, and veterinary medicine. In the social sciences, business, and law, the gender differential varies by country: for the two countries in the Europe and Central Asia region that are included in the study, there is no gender differential. Second, the gender differential in the field of study



is not explained by (observable) individual characteristics. The only difference between men and women is the effect of ability on the probability of choosing the sciences or mathematics. Persons of high ability (measured by top grades in secondary school) are more likely to pursue study in these fields, and the effect of ability is larger among men than among women. Third, the field of study is important in future labor market outcomes, particularly in the choice of occupation and in the gender gap in earnings.

## Demography

Though the pace of changes in population profiles may appear relatively slow, the changes have large implications for the societies in which they occur. Demographic shifts can easily be overlooked because the age and gender profile of a population remains relatively stable over the period in which most policies are designed and implemented. However, this prevents policy makers from reorienting public expenditures gradually, but systematically to meet the transformation in the needs of citizens. An understanding of demographic shifts can help governments shape public expenditures across a wide range of areas, most obviously in the social

sectors of health and education, but also in physical infrastructure.

The dramatic demographic changes in the majority of countries in Europe and Central Asia have brought this issue to the forefront. Many policy makers are aware of these changes, but much remains to be done at the national level to incorporate the implications of the demographic transition for public expenditures and policies. Medium- and long-term national economic development plans and strategies should reflect this information, though it is not clear that this is being done consistently in any country in the region. This section discusses some of the key changes pertaining to women and men as separate groups. Demographic changes can have different implications for men and women given their frequently different roles in the private and public spheres.

The demographic transition represents the shift from high fertility rates and high death rates to low fertility rates and low death rates over a period of decades or centuries (see table 1.1). The countries in Europe and Central Asia are experiencing different stages of the demographic transition, though at a far more rapid rate than Western Europe and North America. The demographic changes in the region have different implications for men and women, which are magnified because

**TABLE 1.1 | Demographic Profiles and Fertility**

Profile	High fertility and window of opportunity	Low fertility and window of opportunity	Sex imbalance at birth	Large increase in the share of elderly women	Moderate increase in the share of elderly women
Young population; population pyramid with large base and skinny top	Kyrgyz Republic, Tajikistan, Turkmenistan, Uzbekistan				
Aging population; population pyramid with balanced age structure		Armenia; Bosnia and Herzegovina; Kazakhstan; Macedonia, FYR; Moldova	Armenia; Azerbaijan; Macedonia, FYR		
Aged population; population pyramid with small base and wide top				Belarus, Bulgaria, Estonia, Hungary, Latvia, Lithuania, Russian Federation, Ukraine	Croatia, Czech Republic, Georgia, Montenegro, Poland, Romania, Serbia, Slovak Republic, Slovenia

Source: Chawla, Betcherman, and Banerji (2007).

Note: Window of opportunity refers to an increase in the number of the potentially economically active population (between the ages of 20 and 59).

many of these societies—even the wealthier societies—have incomes per capita that are relatively modest. Each stage of the demographic transition poses challenges that need to be addressed in the near future to benefit from the window of opportunity or to manage more effectively the consequences of large structural changes.<sup>12</sup>

*Yet, the various demographic transitions will lead, in the next two decades, to a higher proportion of elderly persons, particularly elderly women.* During the next several decades, though the total population of the region is not expected to change (a –0.1 percentage decrease), there will be a dramatic change in the age structure of the population. The share of the population above 60 years of age will rise sharply, from 15 percent in 2009 to 25 percent in 2025 and 35 percent in 2050. Moreover, this change in the age structure will not be gender neutral (figure 1.6).

*The demographic transition in most of Central Asia is characterized by growth in the share of the population of prime age, providing an opportunity for greater economic growth.* The four countries that fall into this category are the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan. These countries are moving rapidly from the population explosion phase, with a proportionately large share of children, to the window of opportunity phase, with more working-age persons. The proportion of the population between 20 and 40 years of age will rise from 30 to 33 percent between 2000 and 2025. Consequently, the demands on key public services such as maternal and child health, as well as the continued demand for education services at all levels will continue. The working population between 40 and 60 years of age will more than double among men (110 percent) and women (114 percent) during 2000–25.

*Yet, for Central Asia to benefit from the demographic window of opportunity, women of prime age need government support to facilitate their entry into the labor market, and especially into productive jobs.* Several of the Central Asian countries have seen large out-migrations of working-age men and the resulting feminization of the population. However, because of the lack of incentives and economic opportunities, many women remain either economically inac-

tive or in low-productivity jobs, such as subsistence farming. One key area of support in this high-fertility subregion would be the provision of some type of childcare services, combined with social assistance for low-income single-parent households.

*In a diverse group of countries in Europe and Central Asia, there will be more working-age women and fewer children in absolute terms.* The countries in the demographic window of opportunity are Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Kazakhstan, FYR Macedonia, and Moldova. For this group of countries, the number of children will fall by 1.9 million during 2000–25, while the number of women between 20 and 59 years of age will increase by 0.98 million during the same period. Though these societies will experience declining fertility, the needs of the growing share of working women for family-friendly policies and services (for example, childcare) will remain equally relevant compared with Central Asia and, possibly, even more relevant depending on the strength of informal family safety nets.

*The decline in fertility in some of the countries showing the demographic window of opportunity has been accompanied by a substantial sex imbalance at birth.* Three of the countries characterized by a shift toward the demographic window of opportunity show unbalanced sex ratios at birth. In Armenia, Azerbaijan, and FYR Macedonia, the number of missing girls is extremely high and comparable with the levels in China, India, and the Republic of Korea. Missing girls at birth reflect covert discrimi-

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<sup>12</sup> Demographers classify population pyramids according to four types, as follows: (a) demographic explosion in young populations, (b) demographic window of opportunity, (c) demographic implosion, and (d) demographic hourglass. The demographic explosion is the pyramid with a large base and skinny top, while the demographic implosion is the opposite, a pyramid with a small base and a wide top. The demographic window is characterized by a high proportion of the working-age population while the demographic hourglass has parts of the working-age population missing and a large elderly population. Countries described by the demographic hourglass show a rising dependency ratio, which reduces the potential of economic growth and increases the vulnerability of households to poverty.

nation in the household, resulting from a combination of strong preferences for sons, declining fertility, and prenatal sex determination. This problem has not been sufficiently studied in the region and calls for greater attention.

*In the countries in the window of opportunity phase of the demographic transition, the aging of the population has begun, and this has important consequences for elderly women. In 2009, the proportion of the population above the age of 60 years was 11*

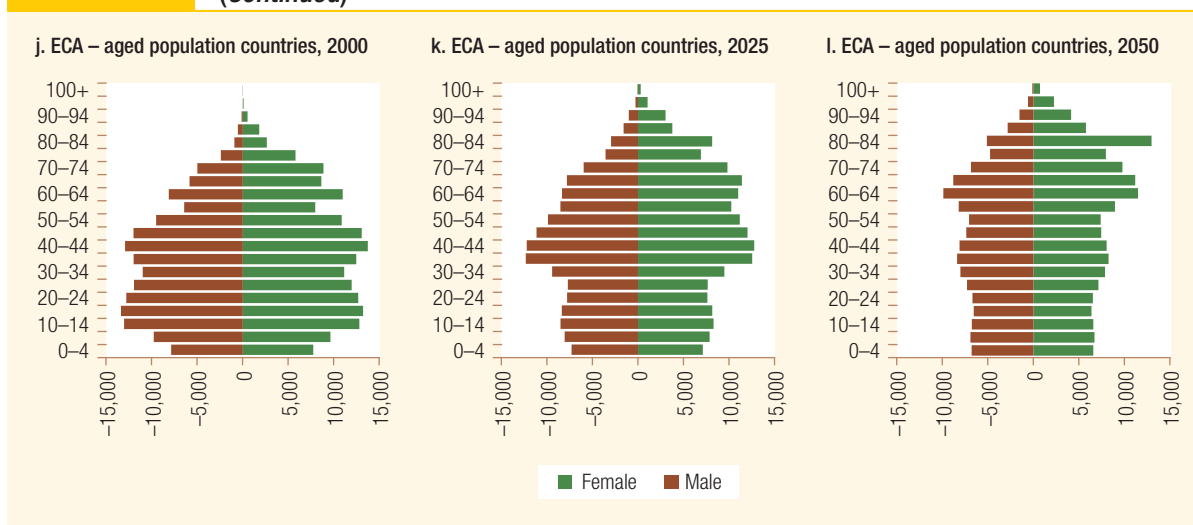
**FIGURE 1.6** Population Pyramids, Selected Countries and the Region, 2000, 2025, 2050



(Continues to next page)

FIGURE 1.6

## Population Pyramids, Selected Countries and the Region, 2000, 2025, 2050. (Continued)



Source: World Bank staff calculations based on UN (2009a).

Note: Young countries include the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan. The aging countries are Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Kazakhstan, FYR Macedonia, and Moldova. Aged countries are Belarus, Bulgaria, Croatia, the Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Montenegro, Poland, Romania, Russia, Serbia, the Slovak Republic, Slovenia, and Ukraine. Each bar represents a five-year age-group. Women are indicated in blue; men are indicated in red.

percent in the region, of which almost two-thirds (59 percent) were women. Because of the accelerated aging, the proportion of the elderly will rise to 22 percent, of which 57 percent will be women by 2025. The higher proportion of elderly women has potential fiscal ramifications through the pension and social protection systems.

*The majority of countries in Europe and Central Asia are aging rapidly, and the number of employable persons is falling.* A total of 17 countries in the region are experiencing a demographic implosion.<sup>13</sup> The number of persons between the ages of 20 and 60 years will fall from 182 million to 162 million between 2000 and 2025, equal to an 11 percent decrease. To prevent a sharp decline in economic activity, one might try to maintain the size of the labor force by attracting temporarily or permanently inactive women and retaining working women in the labor force for a longer period of time by delaying retirement (so that it is equal to men's retirement age). Yet, to achieve higher female labor force participation, the supporting institutional infrastructure (for example, child-

care and appropriate parental leave) needs to be in place, and there need to be changes in retirement laws.

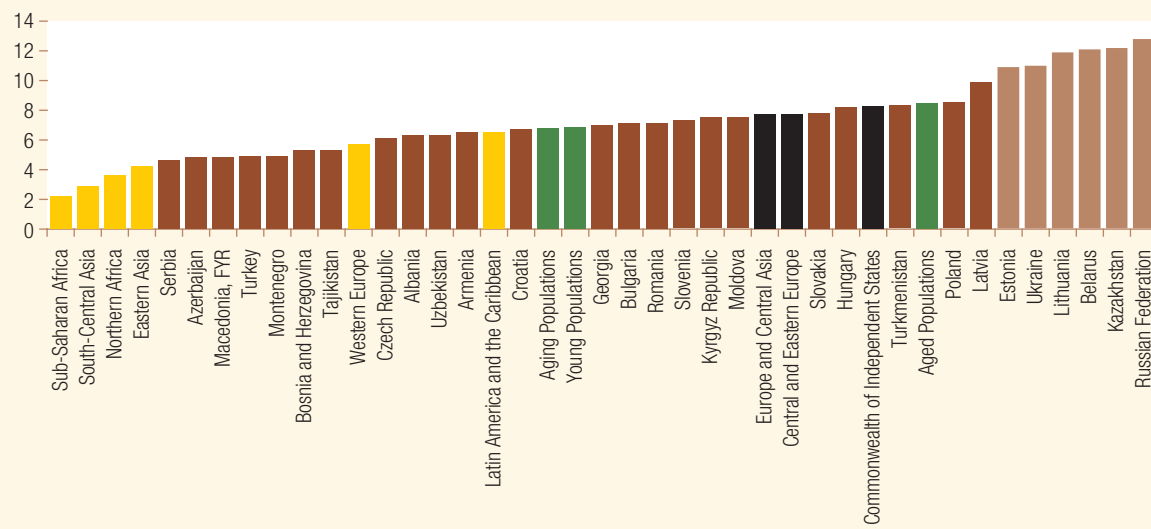
## Health

*Along most health indicators, the region is converging toward the high-income OECD countries.* In most of the indicators on demography and health, the region performs well compared with Latin America or East Asia. Though the region lagged behind the OECD at the beginning of the transition, most indicators have converged during the past decade. However, there is significant diversity in the region: selected countries show health indicators similar to those in other, less-developed regions.

<sup>13</sup> The countries are Belarus, Bulgaria, Croatia, the Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Montenegro, Poland, Romania, the Russian Federation, Serbia, the Slovak Republic, Slovenia, and Ukraine.

FIGURE 1.7

### Women's Advantage in Life Expectancy, Selected Countries and Regions, 2005–10 averages, years



Source: World Bank staff calculations based on UN (2009a).

#### Life Expectancy and Mortality

Two drivers are determining the forecasted demographic transition: changes in mortality rates and changes in fertility rates. Mortality rates and health outcomes have dramatically improved in the region; in particular, during the last decade, the mortality rate has somewhat improved among men, leading to a contraction of about a year in the gender gap in life expectancy. However, the high male mortality rate relative to the female mortality rate is persisting in many countries. This is associated with a variety of factors, including alcohol abuse.

*The gender gap in life expectancy in the region is larger than the global average, including Western Europe, and varies greatly across countries within the region.* As a general average, women can be expected to outlive men by four years, but, in Europe and Central Asia, this difference is seven years (figure 1.7). In all the countries in the region, the difference in life expectancy surpasses the world average of four years. In the countries in which the gap is smaller (Azerbaijan, FYR Macedonia, Montenegro, Serbia, and Turkey), the difference is only slightly more than four years. However, the gap is three times larger in Belarus, Kazakhstan, Lithuania, and

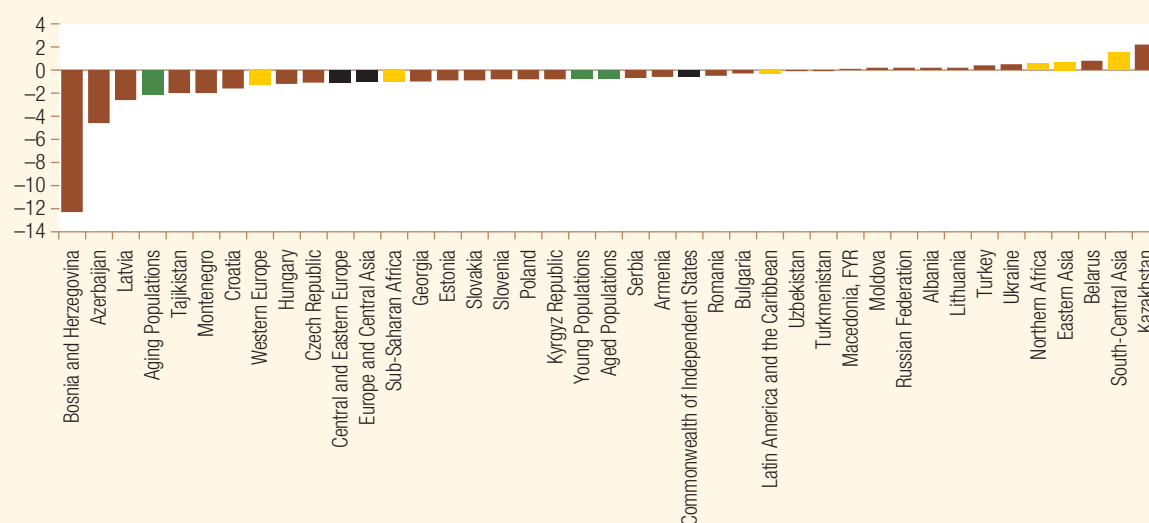
the Russian Federation. The large gap in life expectancy may be driven by the high adult male mortality rate observed in some of these countries.

*The gender gap in life expectancy in the countries of the region needs to be narrowed.* The average change in the gap in life expectancy in the region has closed by one year; however, the variability in the change in the gap in life expectancy is large (measured by statistical variance) (figure 1.8). In Bosnia and Herzegovina, the gap has closed by 12 years, mostly because of a recovery in male life expectancy. At the opposite extreme, the gender gap in life expectancy in Belarus has increased in the past five years: while male life expectancy has increased (by 0.3 years), female life expectancy has increased even more (1.8 years).<sup>14</sup>

*During the last decade, the negative trend in male life expectancy that has been common in certain countries of the region has reversed.* Although the average trend in life expectancy in the region has been positive for men and women since the beginning

<sup>14</sup> Figure 1.8 shows changes in the gender gap in life expectancy; annex A, table A.1 shows the values.

**FIGURE 1.8** Changes in the Gender Gap in Life Expectancy, 1990–2010



Source: World Bank staff calculations based on UN (2009a).

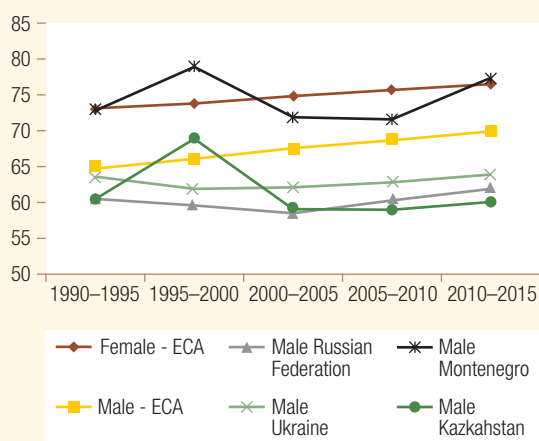
of the transition, Belarus, Kazakhstan, Montenegro, Russia, and Ukraine experienced a negative trend in life expectancy during the 1990s. Average male life expectancy fell from 64 to 62 years during the 1990s in this set of countries. This negative trend seems to have been associated with alcohol abuse, as discussed

below. During the past decade, all these countries have seen an increase in male life expectancy, despite the continuing high adult mortality rates in Belarus, Russia, and Ukraine (figures 1.9 and 1.10).

*The male mortality rate among adults between 20 and 59, although still higher than the corresponding female rates, has fallen from the high values observed in the 1990s. In the region, the average male mortality rate for adults 20 to 59 years of age fell from 223 in 2000 to 205 in 2006. The female adult mortality rate in the region is considerably lower and has been more stable since the transition at the beginning of the 1990s. However, the male adult mortality rate decreased noticeably in the last decade. This decline occurred everywhere except the Kyrgyz Republic and Ukraine, which has shown an increase in the mortality rate equivalent to the one observed in the 1990s. The high male mortality rate countries—Belarus, Lithuania, and Russia—showed some improvement, but remain among the countries with the highest rates compared with the rest of the region (figure 1.10).*

*Possible determinants of the high mortality rate are associated with alcohol abuse. The high male mortality rate in many of the countries in the region is associated with alcohol abuse and other, related risks. A recent World Bank report concluded that*

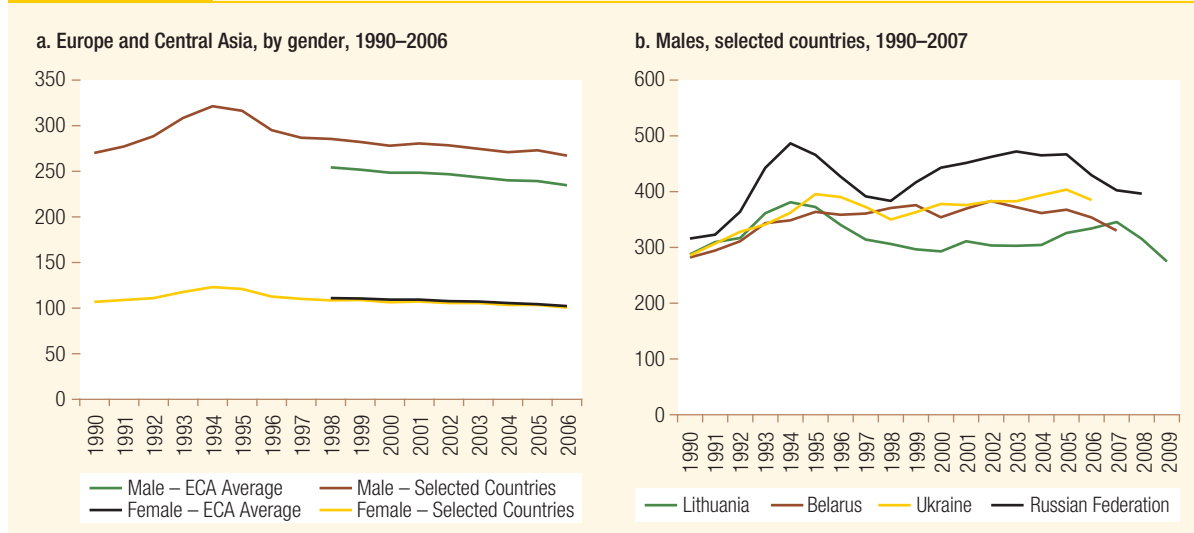
**FIGURE 1.9** Trends in Life Expectancy, Selected Countries and the Region, 1990–2015



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.



**FIGURE 1.10** The Evolution in Mortality Rates among the 20–59 Age-Group



Source: World Bank staff calculations based on UN (2009a).

Note: Selected countries are Belarus, Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Slovak Republic, Slovenia, and Ukraine.

### Box 1.1: Russia's Growing Health Crisis

Every day, 100 people die in traffic accidents in Russia, and over 100 people die of acute alcohol poisoning. The excessively high levels of mortality, ill health, and disability among the working-age population have far-reaching demographic, financial, and social consequences. (The evolution in mortality rates in the 20–59 age-group is shown in figure 1.10, for example.) A recent report of the World Bank's Europe and Central Asia Region concluded as follows:

- Economic stress, coupled with a tradition of unhealthy lifestyles and unhealthy environments, has led to a reversal in life expectancy, especially among adult men. This is worsening the demographic trends in a rapidly aging population.
- Noncommunicable diseases, notably cardiovascular diseases and cancer, as well as injuries, are the main causes of death in Russia. The mortality rates associated with these diseases and with injuries are three and five times higher, respectively, than the corresponding rates in the European Union. Traffic injuries, suicide, alcohol poisoning, and violence account for the main share of lethal injuries.
- Alcohol and other drug abuse, as well as heightened tobacco consumption, increases the probability of these diseases, as do poor diets and stress caused by worsening socioeconomic conditions.
- The ill health and high mortality rates result in fewer productive workers.
- Regional disparities and even national security risks are growing. Health care costs and the costs associated with the loss of production because of absenteeism or low productivity are high.

Source: World Bank (2005a).

Russians, especially men, suffer disproportionately from (1) injury and violence, including traffic accidents, domestic and other violence, and suicide; (2) cardiovascular disease; and (3) cancer (see box 1.1). All these causes are affected by excessive alcohol, tobacco, and other drug use. The relationship with changes in economic growth suggests that the lack of economic opportunities and the ensuing mental stress continue to play a crucial role.

*The high male mortality rate is not a new phenomenon in Russia.* The average mortality rate among adult Russian males is now on a par with the rates in Ethiopia, Haiti, and Sierra Leone. The Russian male adult mortality rate has shown several spikes over the years, usually associated with the economic and political situation (Nolte, McKee, and Gilmore 2004). The slight increase in male mortality during the 1960s, 1970s, and 1980s reversed in the mid-1980s concurrently with political changes. The male adult mortality rate then fell between the mid-1990s until the Russian economic crisis in 1998. Since then, however, the male mortality rates for ages 25–59 have been rising again, despite high economic growth. Finally, 2007 may turn out to be the beginning of a new decreasing trend.

## Reproductive Health and Maternal Mortality

At the beginning of the transition, women across the region enjoyed relatively good health and access to basic health services. The only major area of concern was the lack of access to modern forms of contraception and the heavy reliance on abortion. The change in the trend that began in the 1990s persisted, and a convergence toward OECD country levels is observable today.

*The maternal mortality rate in the region has converged to the level of the rates in the OECD countries.* At the beginning of the 1990s, maternal mortality rates in Europe and Central Asia, though relatively low compared with Latin America and East Asia, were high compared with developed countries. In 1990, the maternal mortality rate in the region was almost two-thirds higher than the rate observed in OECD countries: 49 versus 30 deaths per 100,000 live births, respectively, in Europe and Central Asia and in the OECD.<sup>15</sup> However, during the last two decades, the maternal mortality rate has converged toward the levels of the rate in the OECD (figure 1.10). In 2008, the average maternal mortality rate in the region was 27 per 100,000 live births.

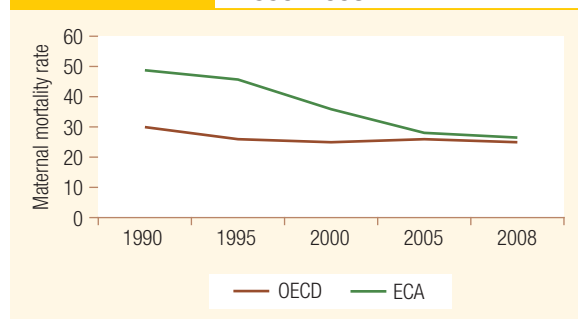
*However, there is enormous variation in maternal mortality rates across the region.* The difference in the maternal mortality rates of the countries with the highest and the lowest rates is 75 per 100,000 live births, which is three times the value of the maternal mortality rate in the OECD in 2008. The

Kyrgyz Republic, Tajikistan, and Turkmenistan are the three countries with the highest rates, while Poland, Serbia, and the Slovak Republic are the three countries with the lowest rates (figure 1.11).

*Improvement in the maternal mortality rate has been achieved in selected countries in the region.* Despite the convergence in the 1990s, two countries in Europe and Central Asia still showed higher maternal mortality rates in 2000 than the average in Latin America or East Asia. In 2000, the maternal mortality rate was 91 in Turkmenistan and 120 in Tajikistan (figure 1.12). However, significant improvement was observed in other countries of Europe and Central Asia, including Azerbaijan, Kazakhstan, Latvia, Romania, Russia, Turkey, and Ukraine. The improvements in these countries were mainly responsible for the convergence of the rates in the region toward the rates in the countries of the OECD.

*However, it is not clear why improvements in the maternal mortality rate were not achieved in all countries.* In a region in which almost all births are attended by health personnel, why is there such a high level of maternal mortality in some countries? The reasons may range from poverty at the household level (given that the poorest countries in the region experience the highest mortality rates) to the specific characteristics of the health system in each country (given the high share of births attended by skilled health personnel). In the region, Tajikistan has the lowest share of births attended by skilled health personnel; yet, only 12 percent of births occur unattended.

**FIGURE 1.11** Maternal Mortality Rates, 1990–2008



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: ECA = Europe and Central Asia.

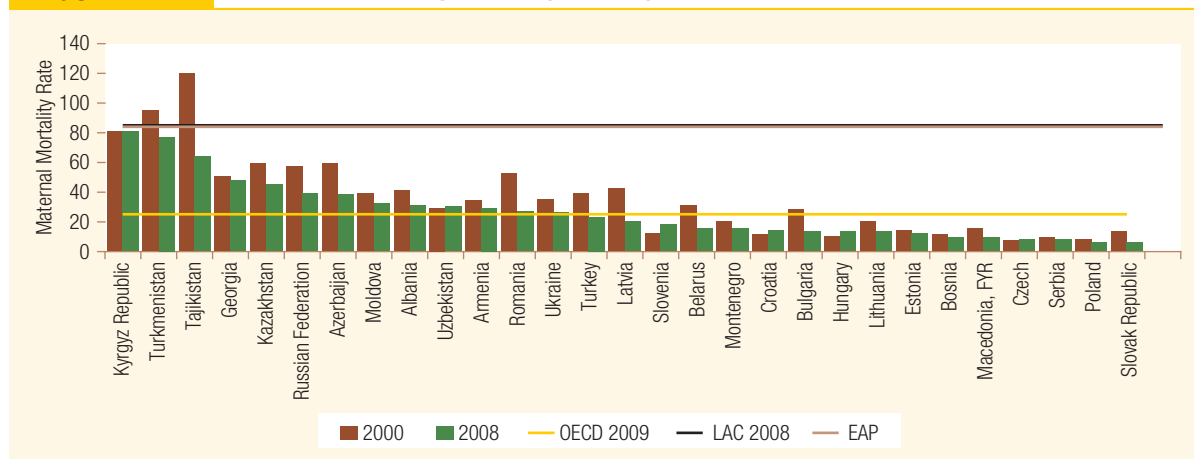
## Infant and Under-5 Mortality

Infant and under-5 mortality rates in Europe and Central Asia compare well with rates in East Asia, Latin America, and the OECD. However, the variation across countries within the region is high. The Central Asian countries, in particular, show mortal-

<sup>15</sup> The maternal mortality rate is the annual number of deaths among women due to pregnancy or child-birth-related causes per 100,000 live births. We use the model estimates. For more details, consult World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/> (accessed 2011).



**FIGURE 1.12** Maternal Mortality Rates by Country, 2000 and 2008



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: EAP = East Asia and the Pacific. LAC = Latin America and the Caribbean.

ity rates that are above the average rates in East Asia and Latin America. Nonetheless, in recent decades, the improvements in these countries has been significant, although generally below the regional average.

*The average infant mortality rate in Europe and Central Asia is higher than the average rate in the high-income OECD countries, but converging.* During the 1990s, the average infant mortality rate in Europe and Central Asia converged toward the high-income OECD average. The rate fell from 33 per 1,000 live births in 1990 to 23 in 2000.<sup>16</sup> During the last decade, the rates in the region have continued to improve. In 2009, the average infant and under-5 mortality rates in the region were only 16 and 19 per 1,000 live births, respectively (figure 1.13).

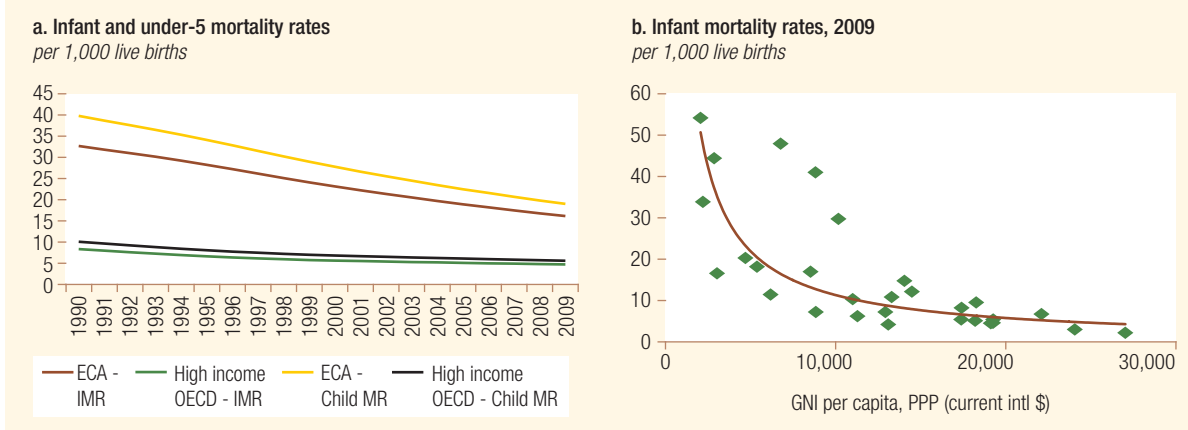
*Although at a slower pace, the average under-5 mortality rate in the region has also been converging toward the rate in the OECD.* The average under-5 mortality rate in the region fell from 40 per 1,000 live births in 1990 to 28 in 2000 and 17 in 2009. Despite the important progress observed in the region, the average under-5 mortality rate was above the average in the OECD, which was 9 per 1,000 live births in 2009 (figure 1.13).

*In the region, there is large variation across countries in infant and under-5 mortality rates* (figures

1.14 and 1.15). Infant and under-5 mortality rates are closely correlated, which is perhaps indicative of the underlying quality of the health care services available for children. While the infant and under-5 mortality rates in the Czech Republic and Slovenia are considerably below the averages in the OECD, the rates in the countries of Central Asia and the south Caucasus are significantly higher than the regional average. The under-5 mortality rate was 65 per 1,000 live births in Tajikistan, but only 3 in Slovenia. Similarly, the respective infant mortality rates in these two countries were 54 and below 3 per 1,000 live births. The significant variation in the infant and under-5 mortality rates is closely correlated with gross national income per capita, with the exception of Azerbaijan, Kazakhstan, and Turkmenistan, where mortality rates are well above what one might predict based on income. Turkey is another example. There, income per capita would suggest the infant mortality rates would be somewhat lower. It may be, in this case, that changes in health care outcomes are not keeping up with the high rates of economic growth.

<sup>16</sup> The average infant mortality rate in high-income OECD countries in 2000 was 6 per 1,000 live births.

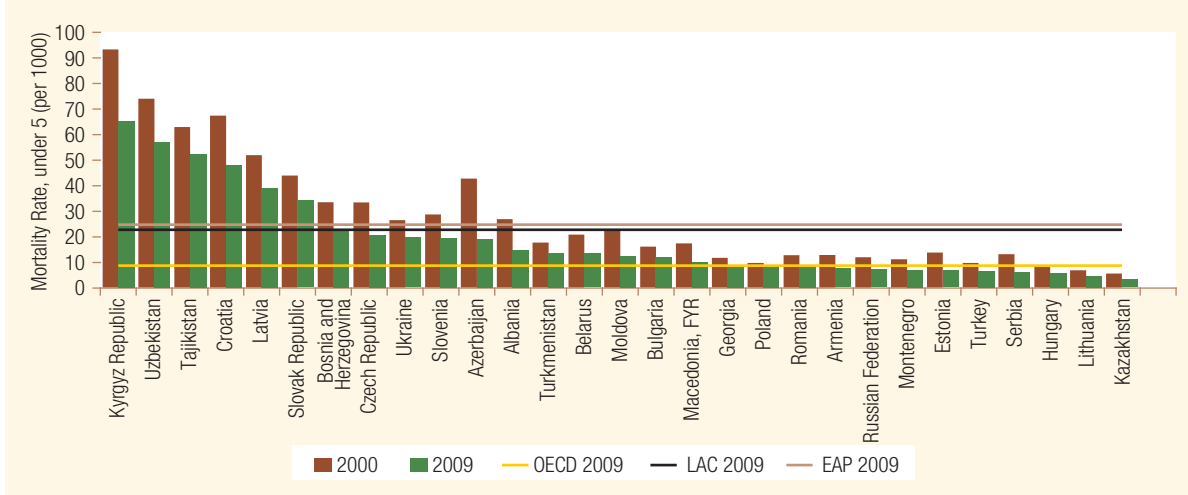
**FIGURE 1.13 Infant and Under-5 Mortality Rates, 1990–2009**



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: ECA = Europe and Central Asia.

**FIGURE 1.14 Under-5 Mortality Rates, 2000 and 2009**



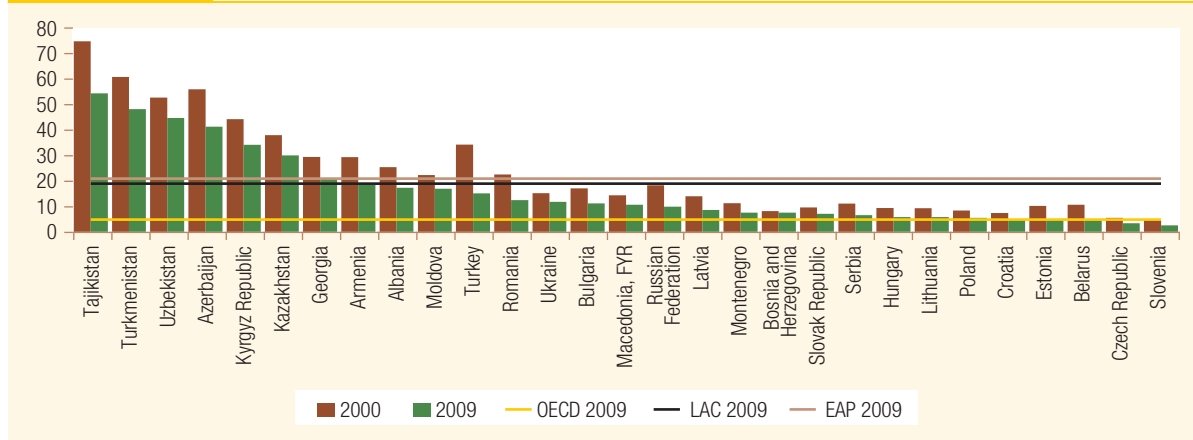
Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: EAP = East Asia and the Pacific. LAC = Latin America and the Caribbean.

*Belarus, Estonia, and Turkey have experienced the biggest drops in infant and under-5 mortality rates over the last decade, but many other countries in the region have seen big improvements as well. Infant and under-5 mortality rates dropped, on average, by one-third in the region during 2000 and 2009, while, in Belarus, Estonia, and Turkey, rates fell by over 50 percent. The decline in the infant and un-*

*der-5 mortality rates in the countries with the highest rates in the region has been mostly below the regional average, indicating a lack of convergence between the south Caucasus, Central Asia, and the rest of the region. In Azerbaijan, the infant mortality rate fell from 78 per 1,000 live births in 1990 to 56 in 2000 and 41 in 2009. In Tajikistan, the country with the poorest performance, the under-5*

**FIGURE 1.15** Infant Mortality Rates



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: EAP = East Asia and the Pacific. LAC = Latin America and the Caribbean.

mortality rate fell from 117 per 1,000 live births in 1990 to 93 in 2000 and 65 in 2009.

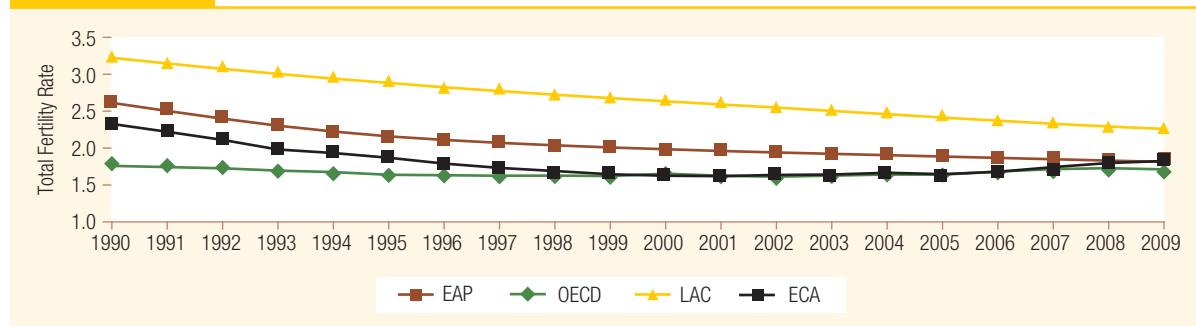
### Fertility Rates

The substantial variation in the fertility rate across the region is consistent with the diversity observed in the demographic transition. The total fertility rate in 19 countries in the region is around 1.8 births per woman (figure 1.16). The Central Asian countries, which have younger populations, have high fertility rates, while countries with populations classified as aging or aged have fertility rates below the replace-

ment level and below the average in the OECD. Among the Central Asian countries, Tajikistan had the highest fertility rate (3.4) in 2009, and Turkmenistan had the lowest (2.4).

In the region over the last two decades, total fertility rates have been diverse across countries and over time. During the 1990s, the total fertility rate fell in all countries in the region except Croatia. In some countries, such as Turkmenistan, the decline was considerable (from 4.5 in 1990 to 2.8 in 2000), while, in other countries, such as Montenegro, it was insignificant (from 1.87 in 1990 to 1.82 in 2000). However, during the last decade, the picture

**FIGURE 1.16** The Evolution of the Total Fertility Rate, 1990–2009

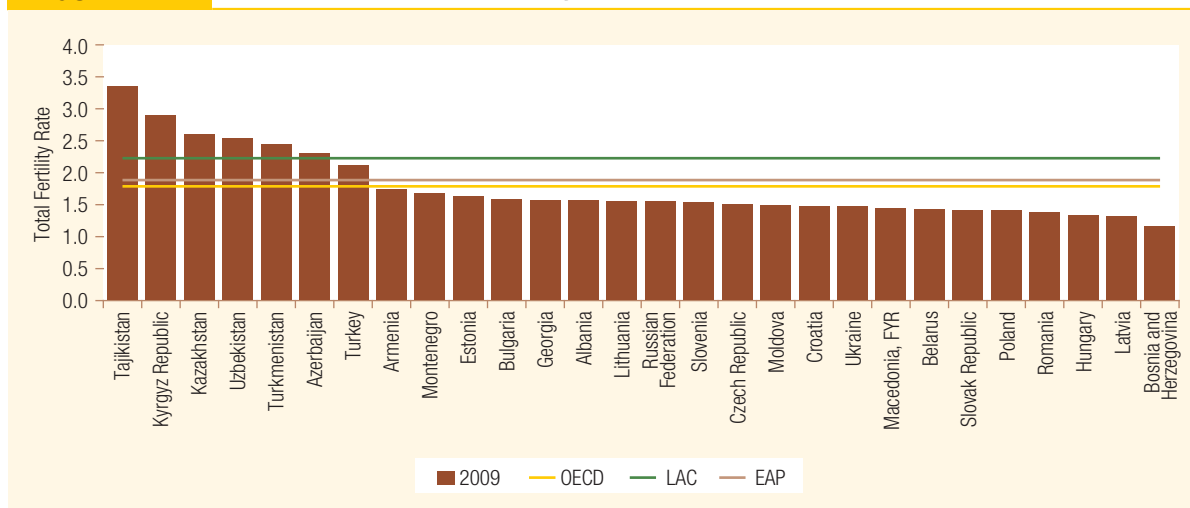


Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: EAP = East Asia and the Pacific. ECA = Europe and Central Asia. LAC = Latin America and the Caribbean.

FIGURE 1.17

The Variation in Total Fertility Rates across Countries, 2009



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: EAP = East Asia and the Pacific. LAC = Latin America and the Caribbean.

was completely different. In half the countries in the region, there was an increase in the total fertility rate, while, in the other half, there was a decline.<sup>17</sup> The magnitude of the decline in the total fertility rate during the 1990s does not seem to have been correlated with the changes in fertility in the 2000s, indicating that many factors, including the economic situation and societal changes, are likely to be in play. For example, in Azerbaijan and Kazakhstan, the total fertility rate decreased by 0.67 and 0.72, respectively, during the 1990s, but has increased by 0.3 and 0.8, respectively, since then. Meanwhile, the total fertility rate fell by 0.8 and 0.9 in Tajikistan during each decade, respectively (figure 1.17).

Thus, the declining trend in the average total fertility rate in the region during the 1990s has changed to a steady trend in the new millennium. During the 1990s, there was a drastic decline in the average total fertility rate in Europe and Central Asia, which resulted in a convergence toward the rates in the OECD. The average total fertility rate in Europe and Central Asia fell from 2.4 in 1990 to 1.8 in 2000, the average in the OECD. In 2009, the average rate in Europe and Central Asia was still the same (figures 1.16 and 1.18).

Selected countries in the region are key sources of the children involved in intercountry adoptions. Russia

and Ukraine are among the top five countries in the world in terms of the number of children put up for intercountry adoption.<sup>18</sup> Many of the children are the result of unwanted pregnancies, thus suggesting that contraceptive methods are not sufficiently widespread and that there may be a social stigma on single motherhood, since most of the mothers giving their children up for adoption are young and unmarried. (The abortion rates in Russia and Ukraine are among the highest in the region; see below.)

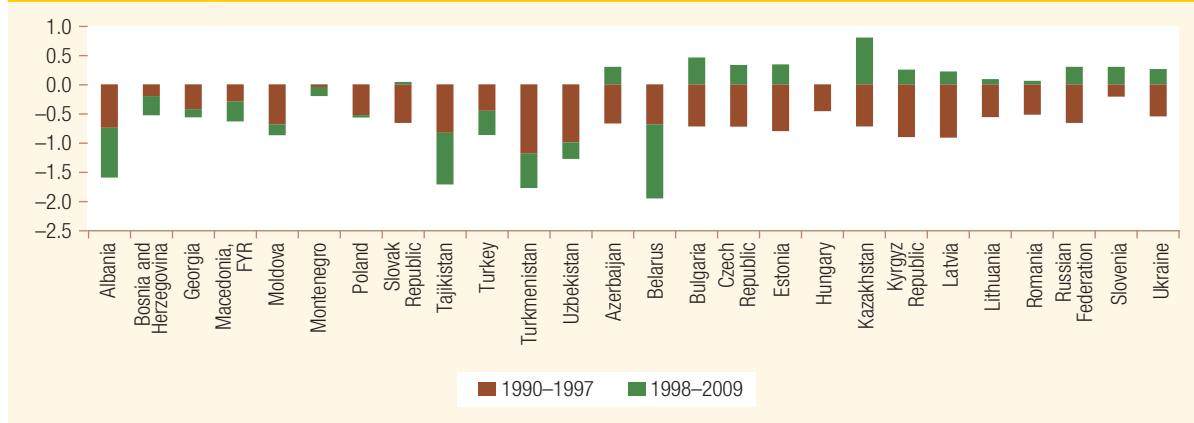
*Income per capita does not seem to be related to changes in the total fertility rate.* There are many factors that explain the total fertility rate. One of them is income per capita. Thus, in many countries, an economic boom translates into a boom in fertility,

<sup>17</sup> Albania, Bosnia and Herzegovina, Georgia, FYR Macedonia, Moldova, Montenegro, Poland, Slovak Republic, Tajikistan, Turkey, Turkmenistan, and Uzbekistan showed a decrease in the total fertility rate in both decades, while Azerbaijan, Belarus, Bulgaria, the Czech Republic, Estonia, Hungary, Kazakhstan, the Kyrgyz Republic, Latvia, Lithuania, Romania, Russia, Slovenia, and Ukraine showed a decline in the total fertility rate during the 1990s and a rise during the next decade.

<sup>18</sup> The other three countries are China, Guatemala, and the Republic of Korea.

FIGURE 1.18

Changes in the Total Fertility Rate across Countries, 1990–2009



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

which may explain the increase in fertility in countries such as Tajikistan. However, the data do not indicate any association in the region between the total fertility rate and GDP per capita or growth in GDP per capita.

*The low fertility rate is a concern among policy makers because of the implications for the demographic transition and because the fertility rate does not seem to be responding in the short run, at least, to policy changes.* Some countries, such as Croatia and Romania, are concerned about the implications of the low fertility rate and have adopted mechanisms to encourage families to have children. We note two of these policies: first, these countries are generous in terms of maternity leave coverage, but not as generous in parental leave; second, child allowances are provided instead of childcare services.

### Abortion and Contraceptive Use

The variables commonly used to explain fertility are marriage rates, abortion rates, contraceptive use, the duration of breastfeeding, and age at first marriage. Marriage rates, although relevant, are becoming less important in explaining fertility because of the increasing number of births out of wedlock. Thus, although 70 percent of children are born in wedlock, the share of extramarital births has increased by 50 percent since the late 1990s.

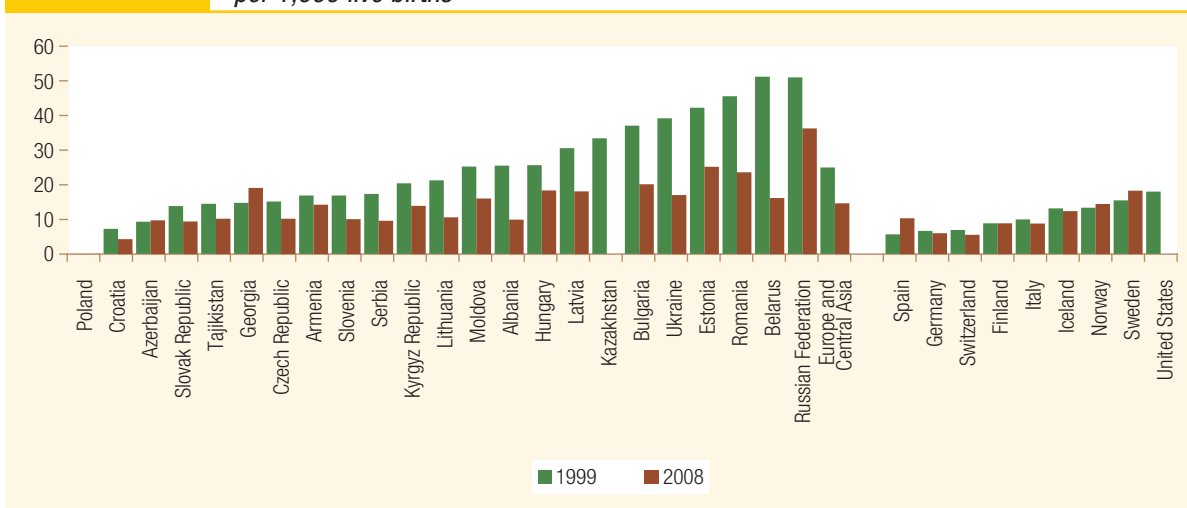
*Abortion rates are decreasing in the region as women obtain access to modern methods of contraception.* The average abortion rate in the region declined considerably between 1999 and 2008, from 25 to 15 abortions per 1,000 women 15 to 49 years of age. However, the average is still higher than the rates in the OECD. The abortion rate was only 6 in Germany and Switzerland, for example (figure 1.19).

*Despite the declining trend in the region, the abortion rate remains high in many countries; it has even increased in Georgia.* The abortion rate in Estonia, Romania, and Russia is more than two times higher than the average in Europe and Central Asia. In Georgia, the abortion rate increased during the last decade. Additionally, in the region, there is a positive association between the use of modern methods of contraception and abortion rates. In three countries (Estonia, Romania, and Russia), the use of contraception is above 70 percent among women between 15 and 49 years of age.

*The age at first birth does not seem to be a determinant of fertility in most countries in the region.* In countries with higher fertility rates, women tend to have their first born at a younger age. However, the fact that the fertility rate is low in these countries (slightly above 2 children per woman) and that the average age at first birth is relatively high (above 27 years of age) suggests that there is probably no caus-

FIGURE 1.19

### Abortion Rates across Countries, 1999 and 2008 per 1,000 live births



Source: UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.

Note: ECA = Europe and Central Asia.

al relation between age at first birth and fertility. This conclusion is supported by two observations. First, the average age at first birth in the region is slightly lower than the average age in OECD countries, 27.5 versus 28.4 years, respectively. Second, a simple correlation between the average age at first birth and the total fertility rate shows no significant association between these two variables.

*The rate of adolescent pregnancy in the region is low and is decreasing over time.* In the region, the rate of adolescent pregnancy—the number of live births to women between 15 and 19 years of age per 1,000 women in the age-group—is below the average in the OECD, although it is still above the average in high-income OECD countries. The region's average rate of adolescent pregnancy was 23 in 2008, while, in the OECD, the rate was 27, and, in the high-income OECD countries, it was 17. The average adolescent pregnancy rate in the region fell by about 30 percent during the last decade given that the rate was 33 in 1998 (figure 1.20).

*There is significant variation across the region in the adolescent fertility rate.* The adolescent fertility rate is high in the countries of the south Caucasus and in Bulgaria, Moldova, Romania, Ukraine, and Turkey. The difference in the rate between the

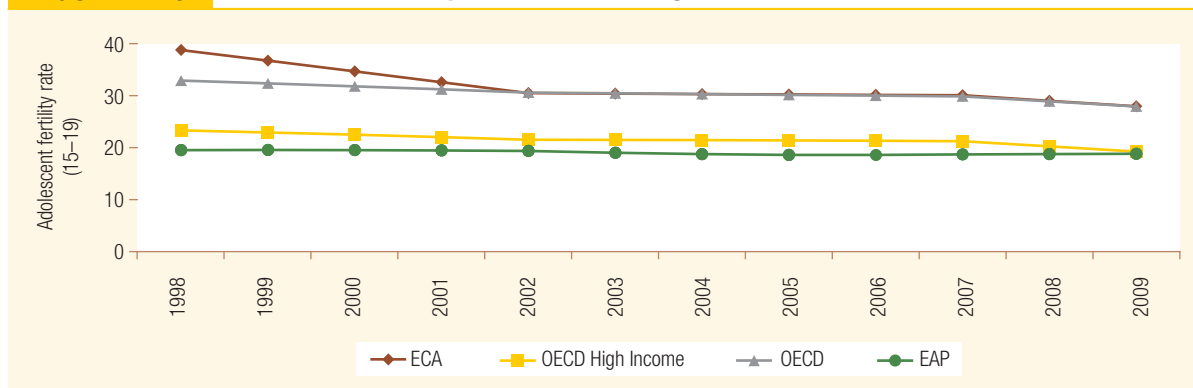
countries at the two extremes—Georgia and Slovenia—is on the order of 10 times (figure 1.21). However, though adolescent fertility should always be a concern, it is low in the region relative to other developing regions.

*Adolescent fertility rates are not correlated with total fertility rates at the country level.* This is positive because it implies that adolescents are not driving the fertility rates observed in the region. Nonetheless, for health reasons and for the sake of future labor market opportunities, it is not beneficial for adolescents to bear or take care of children. In our case, the lack of correlation between the two rates may imply that adolescent mothers either do not have information about the benefits of delaying birth or do not have access to education and labor market opportunities. Whatever the explanation, this should be a matter of concern for policy makers not least because it indicates there is room for efficiency gains in labor resources.

### Missing Women

The term missing women refers to the observation that the proportion of girls and women in the population of a country is too low. The indicator is

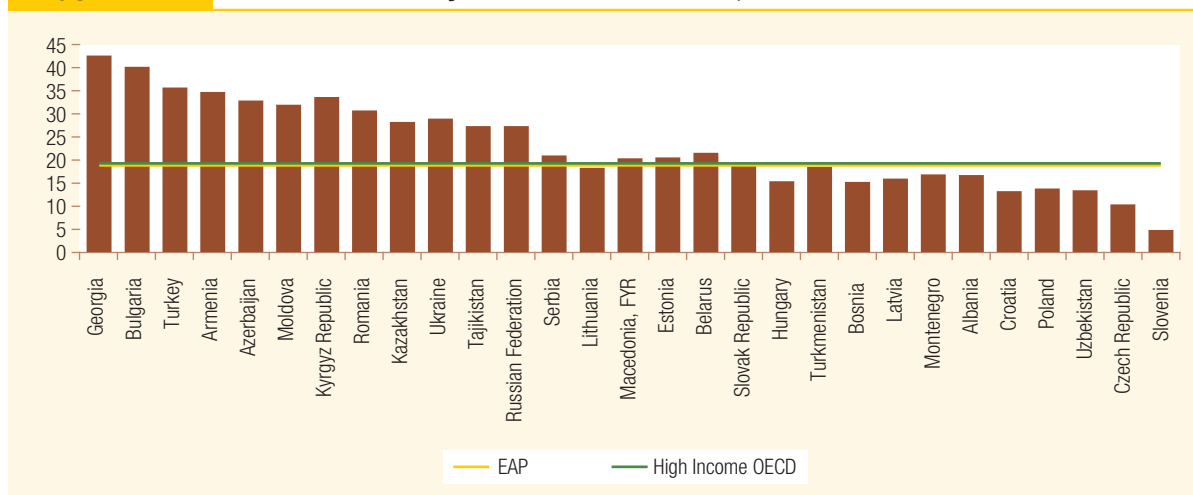
**FIGURE 1.20** Adolescent Fertility Rate, Selected Regions, 1998–2009



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: EAP = East Asia and the Pacific. ECA = Europe and Central Asia.

**FIGURE 1.21** Adolescent Fertility Rates across Countries, 2009



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: EAP = East Asia and the Pacific.

computed using the mortality risk of women and men at every age in a country relative to the mortality risk at the same ages in a group of high-income reference countries.

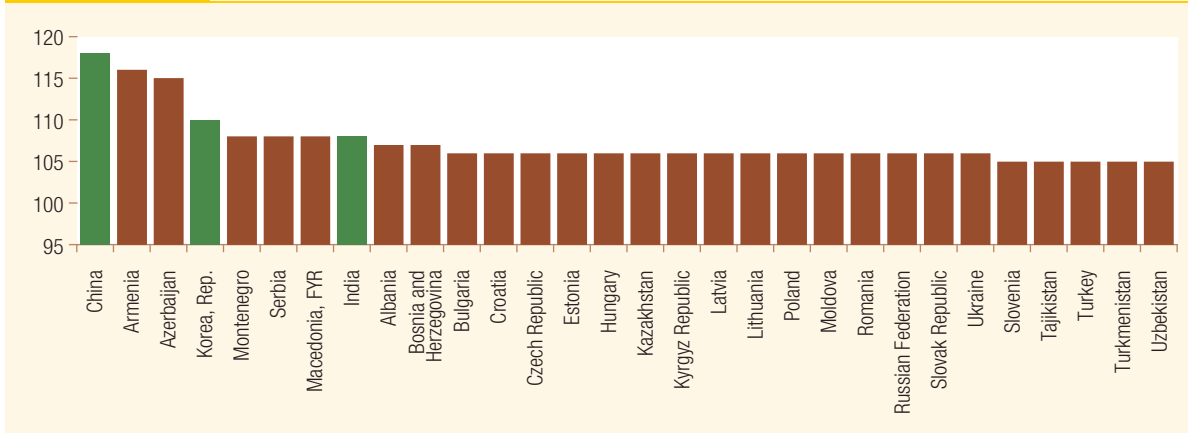
*Armenia, Azerbaijan, and Georgia have the highest sex imbalance at birth in the world after China.* Although most of the attention regarding missing women is focused on China and India, the three countries in Europe and Central Asia show levels

of sex imbalance that are equally high. In China, 118 baby boys are born for every 100 live births of girls, while, in Armenia, Azerbaijan, and Georgia, the corresponding numbers are 116, 115, and 111, respectively (figure 1.22).

*GDP growth is not driving the sex imbalance at birth, which means that three other factors may be at play.* A simple correlation of GDP per capita (or GDP growth) and sex imbalance at birth indicates



**FIGURE 1.22** Sex Ratio at Birth, 2008



Source: UN (2009a).

no association.<sup>19</sup> There are three other factors that influence the sex imbalance at birth: first, the decline in fertility may contribute to the emergence of the choice of sex in the child; second, ultrasound technology has become widely available, allowing for prenatal sex discrimination; and, third, the preference for sons among some families remains strong, at least in selected developing countries. The combination of all these factors under the different models of choice in fertility can be detrimental.<sup>20</sup>

### Disparities within Countries

It is important to acknowledge that gender differences are usually exacerbated within each country so that poor women are less able than wealthier women to defend themselves against discrimination and the lack of access. In Europe and Central Asia, Roma women offer an example (box 1.2).

### The Implications for Policy Design

*To close the gender gap in secondary schools, special emphasis needs to be placed on children in poor or minority groups.* A significant share of this gender gap can be explained by the low participation of children in poor and minority groups, especially in Central and Eastern Europe. Many schools that

are located in underserved communities may also be of poor quality and possess inadequate human and financial resources. In addition, there may be unaddressed cultural constraints explaining why girls are kept home, while boys are sent to school. To address these challenges, governments need to make a concerted effort to promote access to quality education for poor and minority children, reduce school segregation, train teachers and assistants to deal with the special challenges, and, perhaps, introduce incentives to encourage families to send their daughters through schemes such as the conditional cash transfers used by several countries in Latin America and even the western Balkans (for example, FYR Macedonia). Finally, it is

<sup>19</sup> More details about this association may be found in chapter 3 of *World Development Report 2012: Gender Equality and Development* (World Bank 2011a).

<sup>20</sup> Various models that include a preference for sons may be used to explain fertility. For example, couples may decide, in an initial stage, on the number of children they desire and then use ultrasound technology to realize the preference for sons. Thus, ultrasound technology is making other models of fertility obsolete. An example of a model that might be becoming obsolete is the stopping model, whereby families have children until they produce a son. Under such model assumptions, the mother may decide on how many children to have. Moreover, there are studies that show that the sex of the second born is related to the sex of the first born.



### Box 1.2: Health Access among Roma Women

At a population of 12 million (according to some estimates), Roma constitute the largest minority in Europe. The existing evidence suggests that Roma have generally poor health outcomes and face significant barriers to adequate health care, including discrimination on the basis of their ethnicity.

Roma women have less access to health services compared with non-Roma women. The lack of access to health services among Roma women is more significant in birth delivery than in prenatal care: 95 percent of Roma women in FYR Macedonia and 89 percent in Serbia received prenatal care in 2006 compared with 99 percent of non-Roma women. In birth attendance, the difference between groups is similar: on average, 82 percent of Roma women in FYR Macedonia and 93 percent in Serbia give birth with the assistance of skilled personnel, while the average among non-Roma women in these countries is 99 percent.

Abortion rates are higher among Roma women. In survey studies conducted in Serbia, half of all Roma women reported having had at least one abortion in their lifetimes, and 7 percent of all Roma women reported undergoing more than 10 abortions. These rates are extremely high compared with the national average, which is about 10 percent. Moreover, anecdotal evidence indicates cases of unsafe abortion (WHO 2010).

also important to address the underlying concerns of parents about sending girls to school, which may sometimes be as simple as providing safe transportation for girl students.

*The demographic transition that is under way has raised government interest in increasing fertility, although a more realistic alternative may be to focus resources on making the next generation more productive.* Traditionally, a focus on fertility has been considered a policy to mitigate the demographic transition to elderly populations. Most demographers used to recommend replacement-level fertility rates (that is, an average of two surviving children per adult woman). However, today, the world total fertility rate is below this level, and this policy recommendation seems unrealistic. Government policies geared toward reversing declining fertility have not been widely successful even in the more advanced economies. Thus, policies are moving toward ways of increasing the value generated by newer population cohorts so that children will be able to produce more for a larger population in a context of environmental sustainability. These types of policies thus advocate raising the human capital of younger cohorts, increasing the

productivity of new entrant workers, and promoting research and development in environmentally friendly industries and processes.

*The problem of the missing women in the region calls for more attention to provide evidence-based policies.* It is important to understand if this problem is common to all households or particular to the bottom of the income distribution. For example, if the gender imbalance at birth is common to all households, one policy used in many countries such as China and India is to ban prenatal screening.<sup>21</sup> However, policies should generate incentives to prevent prenatal screening because banning prenatal screening is debatable on the grounds of free choice, but also because there are plenty of ways to bypass the law. Thus, policies should be designed to discourage prenatal screening by raising the associated costs, for example, health insurance might not cover the test for prenatal screening or high tariffs might be placed on medical screening devices by private companies or individuals. If this problem is found only at the bottom of the income distribution, additional instruments such as conditional cash transfers can be used. In the state of Haryana, India, there is such a program whereby families receive an immediate cash compensation if they give birth to a daughter and a long-term savings bond redeemable on the daughter's 18 birthday provided she's unmarried, with additional bonuses for education. In addition, the problem of missing women accumulates through the life cycle if girls and women have differential access to health and nutrition, leading to a different set of policies.

*To address the maternal mortality resulting from induced abortions, greater emphasis on modern con-*

<sup>21</sup> Austria, the Republic of Korea (Asia), New Zealand (Oceania), Switzerland, and Vietnam fully prohibit prenatal screening. Australia, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, China, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, India, Israel, Italy, Latvia, Lithuania, the Netherlands, Norway, Portugal, Russia, San Marino, Singapore, Turkey, and the United Kingdom prohibit prenatal screening for social reasons (Darnovsky 2009).

*traception methods is necessary.* The government will need to consider launching information campaigns that demystify the unintended effects of contraceptives, training practitioners to offer a wider range of contraceptives to clients, understanding the needs and preferences of clients, increasing the availability of modern contraceptives free of charge or for a nominal price, and diminishing the coverage supplied by public health systems for abortion costs. Evidence suggests there is partial knowledge about modern contraceptives among both clients and health care providers. Clients perceive oral contraception as unreliable and are more likely to interrupt the use of this method, which will result in unwanted pregnancies. Health practitioners in the region recommend condoms, intrauterine devices, and oral contraceptives and do not recommend other methods (such as injectables, Norplant, and sterilization). In addition, although all contraceptive methods are legal, availability is limited to the more traditional methods. Finally, contraceptive methods are not always available through public health services, nor are they necessarily supplied free of charge. Moreover, the quality of available contraception is poor and should be improved and even fostered through research and development on new methods. Increasing the use of modern contraceptive methods is key in the region because of the high abortion rates. The purpose would be not only to reduce maternal morbidity and maternal mortality, but also to focus on the fact that modern contraception is a more cost-effective way of family planning than abortion, particularly given the limited physical availability of hospitals in some countries.

*Many of the male mortality factors can be remedied at low cost.* The evidence appears to indicate that the excessively high rates of deaths among prime age males are largely a result of noncommunicable diseases (of the circulatory system) and, to a secondary degree, traffic accidents. To address this, a comprehensive national program operating at all levels of government (federal, regional, and municipal) is necessary. At the regional level (especially, in the larger countries such as Russia), new programs need to be developed. First, primary prevention programs that undertake interven-

tions in the areas of alcohol and tobacco abuse, changes in diet, and the promotion of physical activity need to be developed. The secondary prevention programs should address hypertension, cholesterol, and diabetes control. In addition, it is important to pursue improved road safety, as well as emergency medical services. These need to be complemented at the federal level by (1) adopting appropriate legislation, policies, and strategies to support the program interventions, (2) building institutional capacity, and (3) assuring federal oversight and accountability.

*The aging of the population may require significant changes to social pension programs in the region.* Although, at present, a significant share of the elderly receive benefits through pension programs, this may no longer be the case in the future given the increased informality in the labor market. However, many governments in the region do provide social pensions, that is, cash transfer programs that help the elderly who have no recourse to any other form of income. An expansion of these programs may be necessary in the future, though these programs will be competing with other public expenditures. Depending upon the coverage of the existing pension systems, governments may need to rethink their public pension systems to determine the optimal (and affordable) way to ward off old age poverty. According to one proposal, all elderly would receive a small social pension that would be affordable and provide some small income to all elderly. However, this would need to be developed in coordination with revisions to the public pension system, as well as the social assistance system.

*The long-term care requirements of an aging population call for innovative responses to compensate women family members who provide the majority of this care.* Throughout Europe, but also in the region, the majority of long-term care is provided through informal home care arrangements rather than by public or private state institutions. In the future, reforms in the financing and delivery of long-term care will need to be addressed, especially in the case of informal caregivers. Because the burden of the care of the elderly will only increase in the future, there is a strong possibility that the

current practice of unpaid informal caregivers may not be sustainable. Some countries, such as Austria, Germany and selected Nordic countries, provide pension credits to informal caregivers given that these are women who have forfeited the opportunity of employment. In addition, in-

formal caregivers may need the support of professionals because some tasks associated with these activities may be well beyond their capability. In the Netherlands, informal and formal long-term care is provided, although this requires strong institutional capacity.



# Women in the Labor Market

## Introduction

While the second decade of the transition to a market economy brought economic growth to Europe and Central Asia, the growth varied across countries. Until the recent global crisis, growth was robust, yielding better living standards and lower levels of poverty. Many of the reforms adopted since the fall of the Berlin Wall had begun to mature and yield results. Ten new member states of the European Union (EU) from the region showed strong indications of convergence with the high-income economies of the EU.<sup>22</sup> However, despite all of the favorable economic and social changes, the labor market was an exception; it was less responsive to economic growth; and labor force expansion and employment growth were minimal during this period (World Bank 2005b).

Developments in labor markets have significant implications for living standards. Because differences in labor market outcomes among men and women are widespread and persist globally, it is useful to distinguish labor market analysis by gender. The Europe and Central Asia region is no exception. The countries with substantial economic growth were also the countries with relatively higher female labor force participation and lower wage gaps between men and women (see figure 2.1). Yet, despite this positive association among important indicators of welfare, the fact remains that women have lower labor market presence and earn lower wages than men.

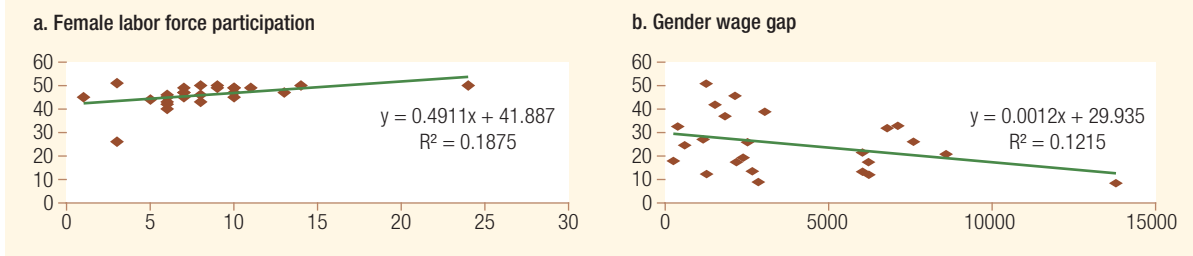
However, men and women in the labor market are different not only with respect to their labor market status, but also with respect to the *reasons* why they hold certain positions in the labor market. This means there are major implications for social policy. Thus, the greater work burden of women within the household (for

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<sup>22</sup> The EU10 consists of Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia; see annex A for a complete list of the countries in Europe and Central Asia considered in our analysis.

FIGURE 2.1

## Correlation among Per Capita GDP Growth, Labor Force Participation, and the Wage Gap



Source: For the annual GDP per capita growth rate and the female labor force participation rate: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: Chart a: the fitted line =  $0.4911(\text{GDP per capita growth}) + 41.887$ ;  $R^2 = 0.1875$ . Chart b: the fitted line (female wages as a percentage of male wages) =  $-0.0012(\text{GDP per capita}) + 29.932$ ;  $R^2 = 0.1204$  (for 2008). GDP = gross domestic product.

example, childcare and household production) implies that parental leave policies and flexible work arrangements have a much stronger impact on female labor market participation than on male labor market participation. Discrimination and segregation have the potential to explain some of these outcomes in the labor market. Social policies that facilitate women's greater labor force participation must therefore target the specific problem, and they must also necessarily be gender specific.<sup>23</sup>

This chapter has two main objectives. First, it aims to provide an overview of how men and women have performed in labor markets in the region so as to identify the gender gaps that are larger and more persistent. Given the diversity of the region, gender differences vary significantly across countries and subregions. The second objective is to summarize the factors behind gender gaps by reviewing analytical work available on the region. As a byproduct, knowledge gaps will be identified.

The chapter is organized into two main sections. First, we present an aggregate description of labor markets in the region over the last decade. We provide a description of the current status of men and women and identify those countries in which gender gaps are more persistent. Second, we describe the factors that contribute to these gender gaps.

## Description of Labor Markets

Labor markets in Europe and Central Asia have three main characteristics.<sup>24</sup> First, the diversity of the region means there is large variation across

<sup>23</sup> See Altonji and Blank (1999) for a survey on discrimination and segregation. See Holzer and Neumark (2000) for a survey on affirmative action policies.

<sup>24</sup> Labor force participation and the economically active population include all residents who are employed or unemployed. The employed are all persons above a specified age who, during a specified brief period, either one week or one day, were in the following categories: (a) paid employment, that is, (i) at work: persons who, during the reference period, performed some work for wage or salary, in cash or in kind; or (ii) with a job, but not at work: persons who, having already worked in their present jobs, were temporarily not at work during the reference period, but had a formal attachment to their jobs; (b) self-employment, that is, (i) at work: persons who, during the reference period, performed some work for profit or family gain, in cash or in kind; or (ii) with an enterprise, but not at work: persons with an enterprise, which may be a business enterprise, a farm, or a service undertaking, who were temporarily not at work during the reference period for any specific reason. The unemployed are all persons above a specific age who, during the reference period, were (a) without work, that is, were not in paid employment or self-employment; (b) currently available for work, that is, were available for paid employment or self-employment during the reference period; and (c) seeking work, that is, had taken specific steps in a specified reference period to seek paid employment or self-employment.

countries. Second, these countries exhibit one of the highest levels of occupational segregation, meaning that men and women pursue separate occupational streams. Third, with a few exceptions, most of the countries still show high female labor force participation rates that are comparable with the rates in developed countries; meanwhile, male participation rates are well below the world average. Hereafter, we present a more detailed description of labor force participation rates, employment and unemployment rates, occupational segregation, and labor market transitions.

### Participation Rates

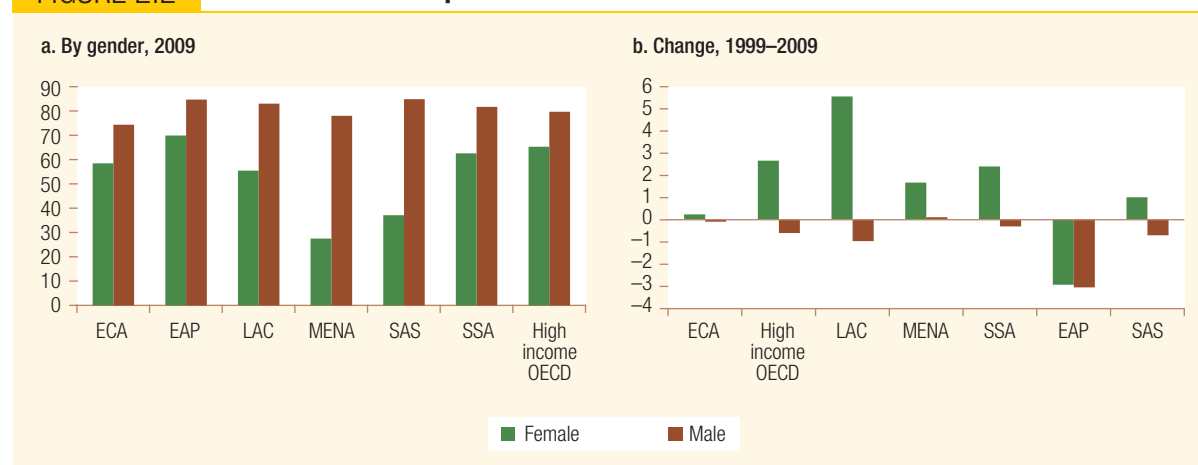
*Women make up only slightly less than half the labor force in the region.* The latest data for the region show that about 97 million women participated in the labor market in 2009. Though 60 percent of women aged 15 to 64 are in the labor force and have been since 1999, there was an increase of about 6.0 million women in the labor force between 1999 and 2008 because of population growth (figure 2.2). Women constitute 45 percent of the aggregate labor force in the region, and this proportion has also remained constant over the past decade. Men's labor force participation stands at 117 million per-

sons in the region, or 75 percent of the male population between 15 and 64 years of age in 2008.

*Over half of women labor force participants in the region (57 percent) live in the populous and middle-income countries of the Commonwealth of Independent States (CIS).* The subregion with the second largest number of women in the labor force is the EU 10, with 21 percent of the total. The four countries with the largest share of the region's women labor force participants are Poland, the Russian Federation, Turkey, and Ukraine. These four countries also have the largest share of the region's male labor force; Turkey is second to Russia in terms of share (16 percent of the region's male labor force). The low-income countries of the CIS—the Kyrgyz Republic and Tajikistan (in 2009)—and the western Balkans have a relatively small share of the region's total female and male labor force participants, accounting for around 2 percent.

*The region's female labor force participation rates are near the global average, but the male participation rates are well below the global average.* The female labor force participation rate among 15- to 64-year-olds in Europe and Central Asia, at 59 percent, is slightly above the global average of 57 percent and the average in Latin America and the Caribbean of 55 percent, but well below the rate in East Asia of

**FIGURE 2.2 Labor Force Participation Rates**



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: EAP = East Asia and the Pacific. ECA = Europe and Central Asia. LAC = Latin America and the Caribbean. MENA = Middle East and North Africa. SAS = South Asia. SSA = Sub-Saharan Africa. Labor force participation rates are for the population 15 to 64 years of age.



70 percent. The region's male participation rate, 74 percent, is significantly lower than the corresponding rate in any other region, and it is also lower than the global average. Yet, compared with the high-income countries of the Organisation for Economic Co-operation and Development (OECD), both female and male participation rates in the region are significantly lower, by 6 percentage points. This also highlights that there is no standard labor force participation rate for men and women. Concern only arises if labor force participation rates do not adequately capture the population interested in working because people faced with a long-term inability to find jobs have dropped out of the search for work.

*The country-level labor force participation rates of men and women vary greatly across the region.* Women's participation rates for ages 15 to 64 years ranged from a low of 26 percent in Turkey to a high of 73 percent among working-age women in Kazakhstan in 2009. If we take the (unweighted) average of all the female labor force participation rates by country, the average for the region is 61 percent. Male participation rates—though, on average, significantly higher than female participation rates—also vary greatly across the region, from a low of 57 percent in Moldova to a high of 83 percent in the Kyrgyz Republic. The gender gap in participation, which averages 14 percentage points (indicating that women's participation rates are much lower than men's), ranges from 48 percentage points in Turkey to 4 percentage points in Moldova. The size of the gender gap, on average, is in line with the female labor force participation rates as indicated by the strong negative correlation (0.82) between the female labor force participation rate and the gender employment gap.

*Over the last decade, the region's averages have remained largely stagnant, similar to global trends in male and female labor force participation.* Global averages indicate that women's participation rates remained stable, while male rates fell by 1 percentage point in 1999–2009. The variation in the changes across regions is high (figure 2.2, chart b). For example, in Latin America, a region with many middle-income countries, there was a surge in female labor force participation rates by 5 percentage points. High-income OECD countries experienced

a small increase of 1 percentage point in women's labor force participation, while East Asia and the Pacific—the region with the highest female participation rate—saw a decline from 67 to 64 percent. Male labor force participation rates decreased across the board: the global average decreased by 2 percentage points.

*In some countries in Europe and Central Asia, the labor force participation rates of men and women have changed dramatically over the last decade.* As noted above, the average female labor force participation rate remained unchanged in the region during 1999–2009. There were changes at the sub-regional level. Over the period, the female labor force participation rates increased by 6 percentage points in the low-income CIS countries, rising from 54 to 60 percent, while the rate fell by 6 percentage points in Turkey. The western Balkans and the middle-income CIS countries saw a slight increase, of 2 percentage points, while the EU10 saw no change over the decade. The average male participation rate increased by 1 percentage point during this period, while the changes by subregion were similar to the changes in the female participation rates, though of different magnitudes. The countries that were outliers in terms of the largest decreases in male and female labor force participation rates are Moldova and Romania, with declines ranging from 11 to 10 percentage points. At the other extreme, Tajikistan experienced an increase of 15 and 13 percentage points, respectively, in female and male labor force participation rates.

*Over the last decade, the gender gap in labor force participation rates in the region has remained unchanged, though this has not always reflected higher women's participation.* The gender gap measures the difference in the male and female labor force participation rates. The average (unweighted) difference remained unchanged at 14 percentage points over 1999–2009. By subregion, the gender gap is the lowest among the middle-income CIS countries, at 10, and most of the rest of the region is in the range of 12 to 22, except Turkey, where the gender gap is 48. The gender gap in Western Europe fell, from 15 to 11; this has been driven by large declines in the gender gap in Cyprus, Luxembourg, the Netherlands, and Spain.



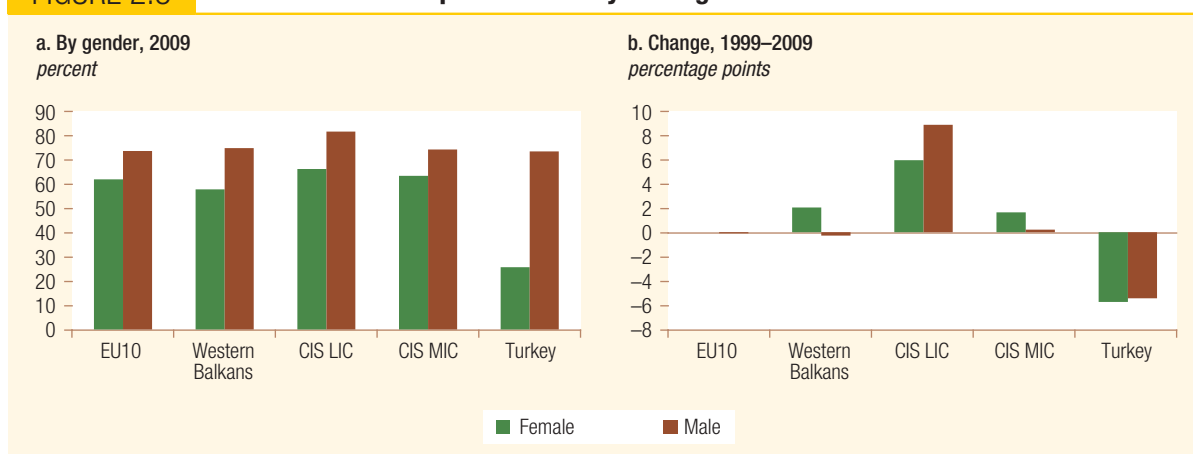
With the exception of Turkey, the labor force participation rates of men and women show a slight convergence in most subregions of Europe and Central Asia over time. Figure 2.3 reports the labor force participation rates among men and women in 2009 for each subregion and the change in the rates over the decade 1999–2009. An important difference with respect to Western Europe is apparent: in Western Europe, the gender gap in participation decreased over the decade, continuing a process of convergence that started in the 1960s. The convergence is driven by an increase in female participation rates and stable male participation rates. CIS countries have shown slight convergence: the gender gap decreased from 11.0 to 9.6 percent. However, the modest convergence in the CIS subregion is not driven by greater female participation, but by less male participation. Some subregions, such as the low-income CIS countries, showed a slight increase in the gender gap over the decade, but this was largely caused by changes occurring in the Kyrgyz Republic.

The gender gap in labor force participation is small compared with the gap in other regions, but the trend in the gap is troubling. A lower participation rate among women relative to men is common in almost all labor markets. Thus, the level of the gap

in Europe and Central Asia is in line with the average in Western Europe and in high-income OECD countries. However, the trend in the gap between men and women over time is not converging, as observed in Western Europe. The gap was stable across all subregions in Europe and Central Asia from 1999 to 2009, while, in Western Europe, there was a convergence of about 4 percentage points. Since this occurred during a decade of high growth in Europe and Central Asia, the trend is troubling.

Young women in Europe and Central Asia participate in the labor market less than young women in developed countries. The gender gap in participation varies with age. Women are less likely to work than men during childbearing years. In the countries of Europe and Central Asia, women have children at a relatively young age compared with women in developed countries. The gender gap in participation is greater in Europe and Central Asia than in the developed countries of Europe and North America among women between 20 and 35 years of age (figure 2.4). Although the gender gap in participation in the region decreases as women become older, this is partly caused by a decrease in male participation rates rather than a significant increase in female participation.

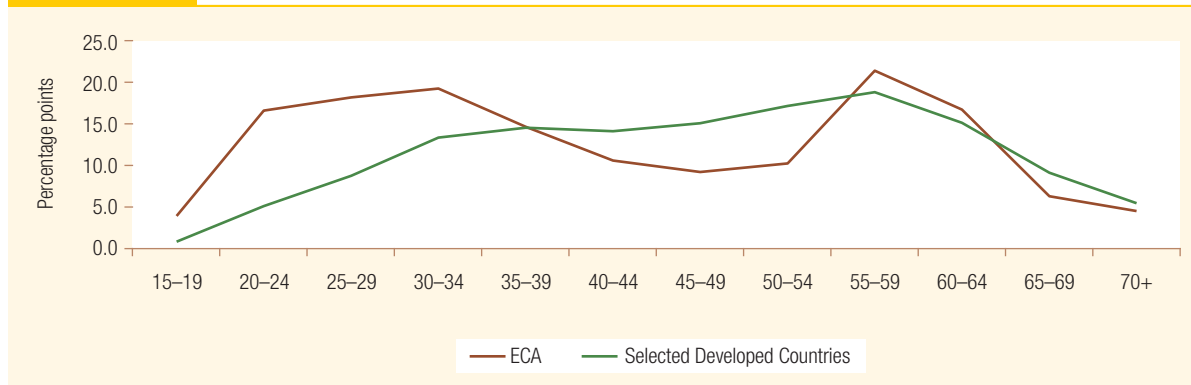
**FIGURE 2.3 Labor Force Participation Rates by Subregion**



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: CIS LIC = low-income CIS countries (Kyrgyz Republic and Tajikistan) in 2009. CIS MIC = middle-income CIS countries (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Moldova, the Russian Federation, Turkmenistan, Ukraine, and Uzbekistan) in 2009. The gender gap is the difference between the male and female labor force participation rates.

**FIGURE 2.4 The Gender Gap in Labor Force Participation by Age, 2009**



Source: World Bank staff calculations based on data of the UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.

Note: ECA = Europe and Central Asia.

Although women 60 to 64 years of age are more likely to work now than such women were 20 years ago, the increase in the participation rate among this group has been low compared with the corresponding group in the OECD countries and compared with men of the same age. Women retire at a younger age relative to men in the region and women in the OECD countries. Figure 2.5 shows the labor force participation rates for men and women 60 years old and over. The growth in the women's rate has been much greater in the OECD countries. However, women 70 or older are more likely to participate in the labor market in Europe and Central Asia than in the OECD countries. This may be an indication of the vulnerability of this population group.

### Employment

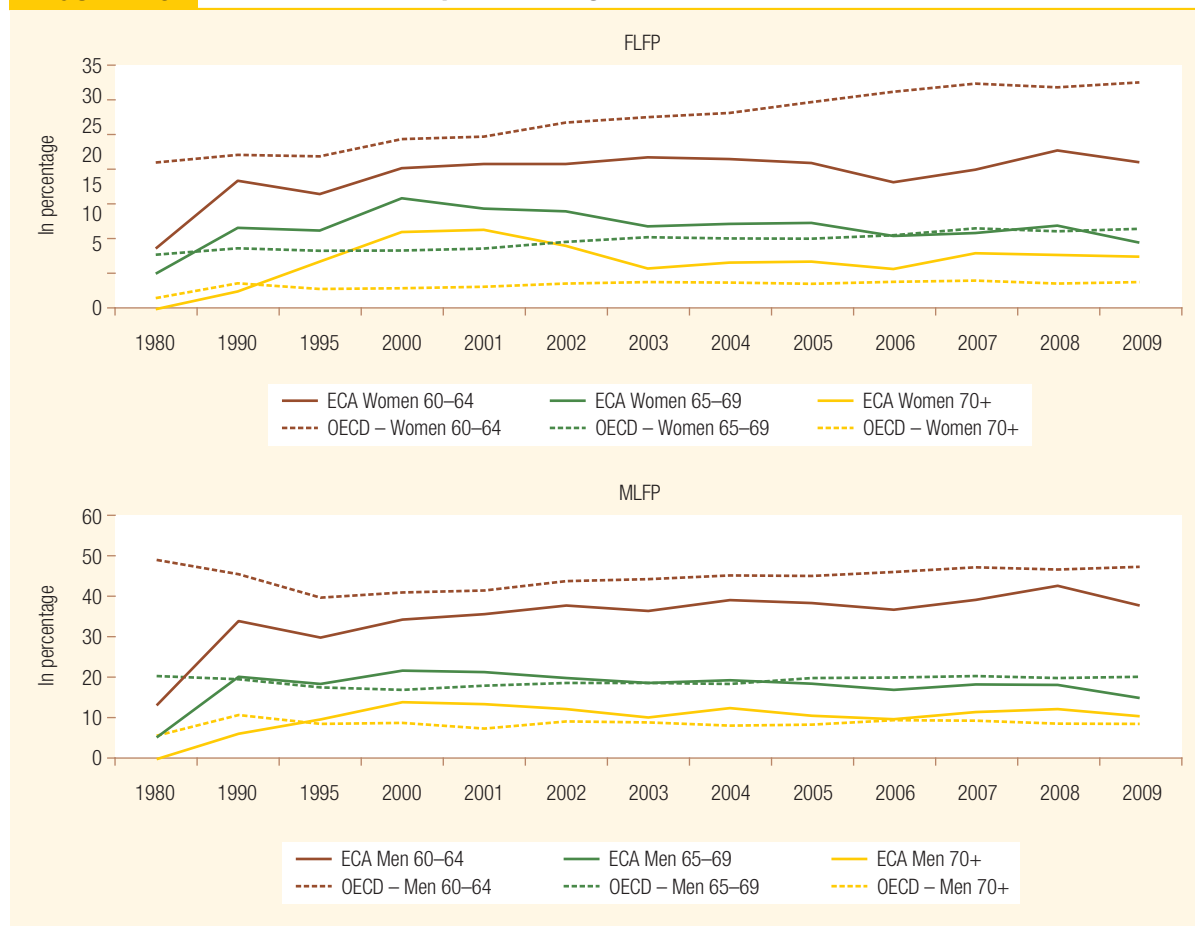
Women constitute slightly less than half the employed in the region. In 2009, an estimated 91 million women 15 years and older in the region participated in the labor force; the largest numbers were in Russia and Ukraine, where women accounted for 50 million among the employed. Women comprised 46 percent of the total number of persons employed. The average gender gap in employment was 14 percentage points; the largest gap was in Turkey (39 percentage points), and the narrowest in Belarus (0 percentage points). The gender gap in employment is similar

to the gap observed in the labor force. The average employment rate among women was 45 percent of all working-age women, which, though comparable with employment rates in Western Europe, is well below the Lisbon objectives of 60 percent.<sup>25</sup>

Employment growth was relatively weak in the region even during the robust growth period of 1999–2008. The number of employed persons in 2008 was 198 million, or 51 percent of the working-age population aged 15 years or older. Employment grew, on average, by 1 percent per year in 1999–2008, a period when average economic growth was high. The region's economy grew by 6 percent a year during the period, compared with the world average of 3 percent. However, in the region, employment creation was not particularly responsive to growth: for every 1 percent of growth in gross domestic product (GDP), employment increased by 0.10 percentage points in the region, compared with the world average of 0.52 percentage points. The situation in 2009 was significantly worse in Europe and Central Asia than in the rest of the world because of the global financial crisis.

<sup>25</sup> In Lisbon in March 2000, the heads of EU governments subscribed to the goal of a general increase in the employment rate. For women, they agreed upon a specific target of 60 percent by 2010.

**FIGURE 2.5 Labor Force Participation among Men and Women, 1980–2009**



Source: UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.

Note: ECA = Europe and Central Asia.

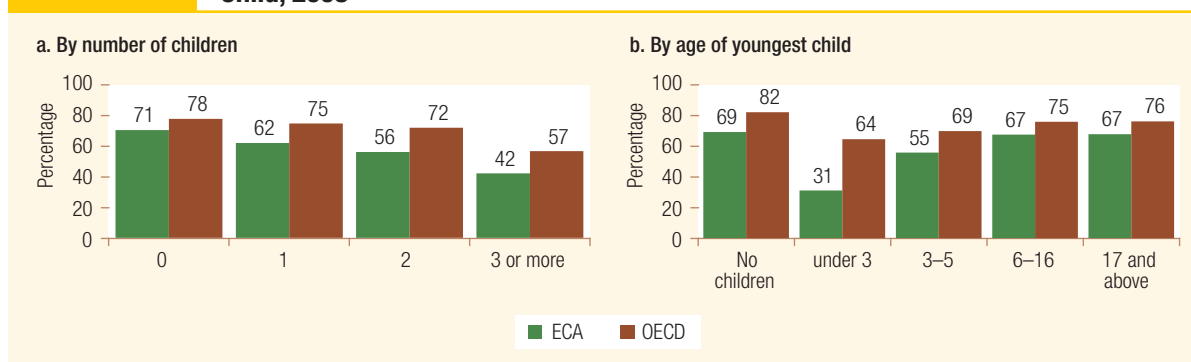
Women's employment growth has been stronger than men's, though by only a small amount. During 1999–2008, women's total employment increased by 11 percent compared with 9 percent among men. The countries with the highest growth rates in female employment are also among the poorest: Tajikistan and Uzbekistan, by an average 4.8 and 3.4 percent a year, respectively. These countries have also seen the highest growth in male employment. Five countries experienced negative female employment growth rates: Georgia, Lithuania, Moldova, Romania, and Turkey. These same countries, less Turkey, but plus Croatia, also experienced negative growth rates in male employment. The diversity of the subregions to which these countries belong indicates that the drivers of employment contrac-

tion are likely to be factors unique to each country. Another important aspect of the changes in employment among men and women is that they are strongly negatively correlated (with the exception of Turkey): female employment has been declining, while male employment has been rising. Moreover, the gender gap has remained relatively stable over the decade, except in Moldova and Tajikistan.

The employment rate is lower among women with more children and women with children under 3 years of age. Women with children are less likely to work in the region relative to OECD countries, and this difference increases with the number of children (figure 2.6). While the employment rates among women with no children are 71 and 78 percent, on average, in Europe and Central Asia and in

FIGURE 2.6

## Female Employment Rate by Number of Children and the Age of the Youngest Child, 2008



Source: UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.

Note: The averages for no children vary for the two groups because the countries included in each case are different. In chart a, Europe and Central Asia (ECA) includes Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Lithuania, Moldova, Poland, Romania, Serbia, and Slovenia; OECD includes Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States. In chart b, Europe and Central Asia includes Bosnia and Herzegovina, Croatia, the Czech Republic, Estonia, Hungary, Lithuania, Poland, Romania, and Serbia; OECD includes Austria, Belgium, Bosnia and Herzegovina, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Spain, Sweden, Switzerland, the United Kingdom, and the United States. The rates refer to women 25 to 49 years of age.

the OECD, respectively (a 7 percentage point gap), the respective employment rates among women with 3 or more children are 42 and 57 percent, or a 15 percentage point gap between the regions. The group affected the most is women whose youngest children are under 3 years of age. In Europe and Central Asia, the employment rate is only 31 percent in this group, while, in OECD countries, it is 64 percent (a 33 percentage point gap).

### The Unemployment Rate

*Unemployment fell significantly in the region over the decade.* The average unemployment rate in the region decreased from 13 to 11 percent during 1999–2009.<sup>26</sup> However, this trend hides variations across subregions. For example, the unemployment rates in the middle-income CIS countries declined over the decade, reaching around 7.5 percent in 2009 from 13.0 percent in 1999. However, the unemployment rate remained constant at around 11 percentage over the decade. Meanwhile, Turkey's unemployment rate rose from 7 to 14 percent. The western Balkans was a high unemployment subregion and includes

outliers such as the former Yugoslav Republic of Macedonia, where unemployment affects almost one-third of the labor force. The EU10 saw a minimal decline in unemployment rates. Meanwhile, though there was a positive trend in unemployment rates in Europe and Central Asia, this indicator may underestimate the number of people who are without work, but who would like to work; this is because unemployment rates sometimes fail to capture discouraged workers who have given up looking for jobs after long and unsuccessful job searches.

*The gender gap in unemployment rates in the region is small.* In 2009, the average female and male unemployment rates were 12.7 and 13.0 percent, respectively.<sup>27</sup> The average gender gap in the region was less than 1 percent. The subregion with the largest gender gap was the western Balkans, where the gap was especially severe in Kosovo, at

<sup>26</sup> This average is based on 18 countries. There are no data for Central Asia or the low-income CIS countries.

<sup>27</sup> This is based on the latest available data for 21 countries; it excludes Albania, Armenia, Belarus, Kazakhstan, Montenegro, Tajikistan, Turkmenistan, and Uzbekistan.

16 percentage points. The second largest gap was in Lithuania, at 7 percentage points. The relatively low unemployment gap in the region is comparable with the gap in Western Europe and unlike the gaps in many other developing regions, such as Latin America and the Middle East and North Africa.

*The gender gap in unemployment in the EU10 increased, especially in 2009.* Because of a lack of data, it is difficult to determine whether unemployment rates among men and women are converging. The only subregion with data over the entire decade is the EU10. The average unemployment rate in the EU10 consistently fell over the decade, and the gender gap narrowed until 2008. In 2009, the gap widened abruptly as male unemployment doubled. In the late 1990s, the female unemployment rate was lower than the male unemployment rate, but, after 2002, the female unemployment rate grew to about a half percentage point higher. Compared with the Western Europe average, this gender gap remains small in both absolute and relative terms.

*Though youth unemployment is high in the region and the gender gap in the rates is almost 2 percent, youth unemployment remains relatively modest by international standards.* In general, the unemployment rates among men and women 15–24 years old are higher than the overall unemployment rate in a country. Young labor force participants may have high expectations of finding the best jobs in terms of pay and occupation and, consequently, must undertake longer job searches until they find jobs or change their expectations about the nature of acceptable jobs. Europe and Central Asia is no different. The average youth unemployment rate in 2009 was 25 percent. Though time series data are unavailable for the decade, youth unemployment has fallen slightly over the last few years. The female and male youth unemployment rates in 2009 were 26 and 25 percent, respectively. Countries with relatively high unemployment rates also show high unemployment rates among young workers.

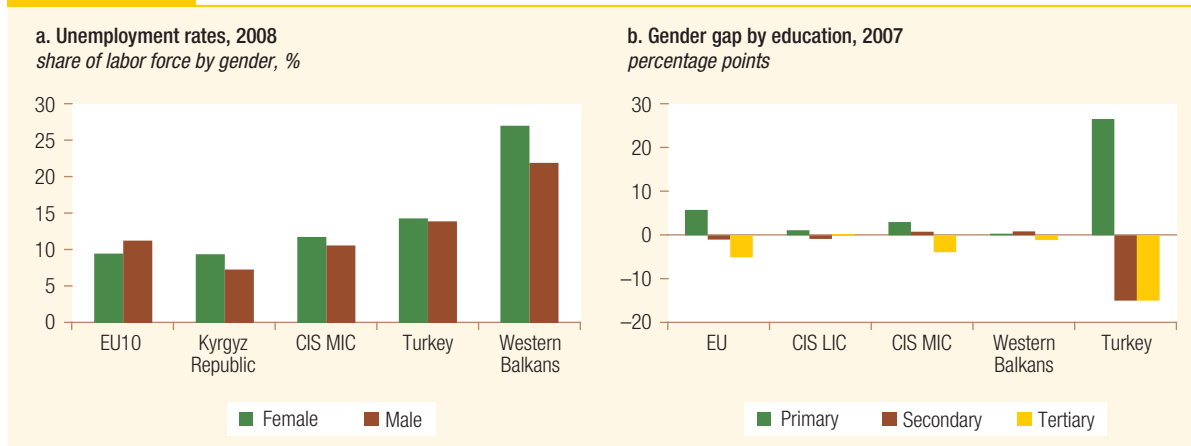
*Unemployment rates according to educational attainment varies greatly across the region.* The unemployment rate among secondary school graduates in the region is 57 percent compared with 28 and 17 percent for individuals with primary school and tertiary school degrees, respectively. These differences

may reflect the fact that persons with a primary education are more likely to be poor and unable to afford long job searches, while tertiary graduates are likely to be in high demand. There are two striking differences among countries within the region. The middle-income CIS countries show a pattern that diverges from the pattern in the rest of the region: more well educated workers constitute a much larger proportion of the unemployed than less well educated workers (33 percent in 2007). Second, in the EU10, though persons with tertiary education constitute a small share of the unemployed, this share rose rapidly from 6 to 10 percent in 1999–2008.

*The gender gap in unemployment rates by educational attainment is relatively small, except in Turkey.* The gender gaps in primary, secondary, and tertiary unemployment rates were –5, –1, and –4 percentage points, respectively (figure 2.7). (The negative sign indicates that female unemployment rates exceed male unemployment rates.) There is a gender gap across subregions, but it is small. For example, the largest gender gap occurs in the EU10 countries among persons with only primary education (–6 percentage points). Meanwhile, Turkey's gender gap is –15 percentage points among secondary and tertiary school graduates, compared with –27 among primary school graduates, indicating that, in Turkey, it is more difficult for women to find employment than it is for men.

*Unemployment rates are slightly higher among young women than among young men, particularly in countries with high youth unemployment.* Although there is no appreciable difference in the averages for the region in the unemployment rates among young men and women, this is the result of large variations in unemployment rates across countries and gender. In figure 2.8, panel a, we see that, with the clear exception of one country (Azerbaijan), the unemployment rates in most countries are higher among young women than among young men. Figure 2.8 also shows that the gender difference in unemployment rates among young men and women increases with the rate of youth unemployment (the points to the right are more likely to be farther away from the 45 degree line). For example, in Armenia, the unemployment rate among young women is 69 percent, while, among young men, it is 47 percent.

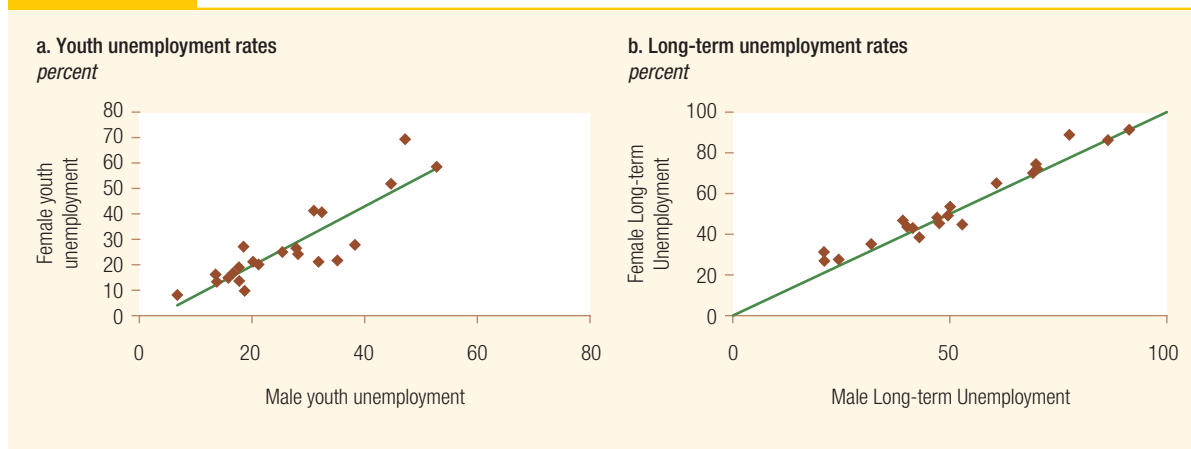
**FIGURE 2.7 Gender Gaps in Unemployment**



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: Data are not available for all countries. CIS LIC = low-income CIS countries (Kyrgyz Republic and Tajikistan) in 2009. CIS MIC = middle-income CIS countries. The average for CIS MIC includes Azerbaijan, Belarus, Georgia, Russian Federation, and Ukraine. The gender gap is the difference between male and female unemployment rates.

**FIGURE 2.8 Youth Unemployment and Long-Term Unemployment, by Gender, 2008**



Source: World Bank staff calculations based on data of the World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: The young unemployed are all the persons aged 15–24 years who, during the reference period, were (a) without work, that is, were not in paid employment or self-employment; (b) currently available for work, that is, were available for paid employment or self-employment during the reference period; and (c) seeking work, that is, had taken specific steps in a specified reference period to seek paid employment or self-employment. The long-term unemployed are the persons who have been unemployed for 12 months or more. The long-term unemployment rate is the share of the long-term unemployed in the total unemployed population by gender.

*Long-term unemployment rates are relatively similar between men and women.*<sup>28</sup> There is almost no gender difference in the long-term unemployment rates in the region, as indicated in

<sup>28</sup> Long-term unemployment refers to the number of people who have experienced periods of unemployment extending for a year or longer; it is expressed as a percentage of the total unemployed.



figure 2.8, panel b, where most of the points are on the 45 degree line (no gender differential). However, if women are more likely than men to leave the labor force if they are unemployed, the absence of gender gaps in long-term unemployment rates may not accurately reflect the differences in the success of job searches by men and women. This is supported by the evidence presented elsewhere below in the section on labor market transitions, where we show that women are more likely than men to leave the unemployment category by exiting the labor force.

### Self-employment

*Self-employment is a diverse category that changes over time.* Self-employment is a useful concept because of its links to entrepreneurial ability and informal activity in the labor market. Self-employment involves a wide range of careers, including, for example, physicians, plumbers, electricians, and farmers. Additional data would be necessary to determine the extent of self-employment in high- and low-productivity jobs or in particular sectors. However, self-employment is frequently associated with underemployment and the informal sector, especially in low- and middle-income countries.

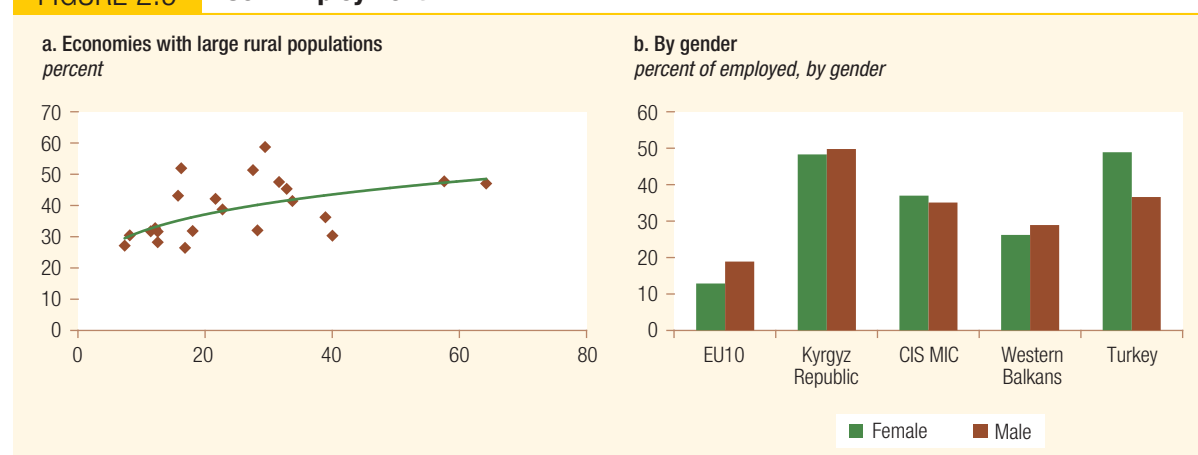
*In Europe and Central Asia, self-employment is more widespread in countries with large rural populations.* In countries in which agriculture is an important contributor to the economy, a larger share of the employed are self-employed (figure 2.9, panel a). The correlation was quite strong even in 2009, when it was 0.47.<sup>29</sup> This relationship between the share of agriculture value added and self-employment rates increased over time until 2005, then decreased, among the 21 countries in the region on which data are available. Thus, it is possible that, over time, self-employment became more closely associated with agriculture rather than with the development of small entrepreneurship in higher-productivity sectors.

*In the region, one in four employed persons is self-employed.*<sup>30</sup> Average self-employment rates are high in the middle-income CIS countries, but relatively low in the EU10. In 2009, the subregion with the high-

<sup>29</sup> To a lesser extent, there is also a positive relationship between self-employment and the share of a country's population living in rural areas.

<sup>30</sup> This assertion is based on 21 countries. The countries not in the sample are Albania, Armenia, Belarus, Montenegro, Serbia, Tajikistan, Turkmenistan, and Uzbekistan.

**FIGURE 2.9 Self-Employment**



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: Data are available for a subset of the countries in Europe and Central Asia. The countries excluded are Albania, Armenia, Belarus, Kazakhstan, Montenegro, Tajikistan, Turkmenistan, and Uzbekistan. MIC = middle-income countries.



est self-employment rate was the middle-income CIS countries, at 31 percent, whereas the EU10 showed the lowest rate, which, at 16 percent, is comparable with the rate in Western Europe. The western Balkans falls in the middle. The country with the highest rate of self-employment in recent years is Georgia, at 64 percent, followed by three countries, Armenia, Azerbaijan, and Turkey, at 39, 58, and 40 percent, respectively. Russia showed the lowest share of self-employed in total employed, at 7 percent.

*More men than women are self-employed in Europe and Central Asia.* On average in the region, an estimated 26 percent of employed women are self-employed, compared with 28 percent of men (figure 2.9, panel b). Thus, the average difference between male and female rates of self-employment is negligible. Though all subregions exhibit this pattern, the gap in self-employment rates among men and women is narrowest in the middle-income CIS countries, where the average difference is 2 percentage points. However, this difference hides extremes. For example, the two countries in which female self-employment rates significantly exceed male self-employment rates are Azerbaijan and Turkey, with differences of 11 to 12 percentage points, respectively. In the EU10 subregion on average, female self-employment rates are moderate, at 11 percent, which is almost half the average rates among men (of 17 percent), while, in Western Europe, female self-employment rates are low, at 9 percent, which is almost half the average rates among men.

*In Europe and Central Asia, male and female self-employment rates have been stable over the last decade.* On average, self-employment has remained constant among men and women over the past decade.<sup>31</sup> However, there has been variation across subregions, as well as significant variation across countries. For example, the EU10 has seen a slight decline in self-employment rates among men and women that is similar to developments in Western Europe, though with a slightly bigger magnitude. Changes in aggregate self-employment rates over time do not appear to be strongly correlated to changes in GDP; thus, countries with higher growth rates have not seen a decrease in self-employment. However, the subregions with high proportions of self-employed have seen an increase over time.<sup>32</sup>

Turkey is an exception. It shows a high, but decreasing level of male and female self-employment. Among the countries on which data are available, Georgia and Ukraine showed the greatest change in self-employment over the last decade: an increase of about 7 and 10 percentage points, respectively.

## Sectors of Employment

*In Europe and Central Asia, the service sector employs more people than the agricultural sector and the industrial sector combined.* The service sector employs, on average, 57 percent of all employed, while agriculture and industry employ 16 and 27 percent, respectively.<sup>33</sup> At the aggregate level, other than in the low-income CIS subregion, service sector jobs dominate in employment in all subregions. Yet, there is significant variation across countries and subregions, especially in the employment rates in agriculture. For example, over 50 percent of the total employed are active in the agricultural sector in middle-income countries such as Albania and Georgia, while 10 percent of the employed in Russia are active in this sector.

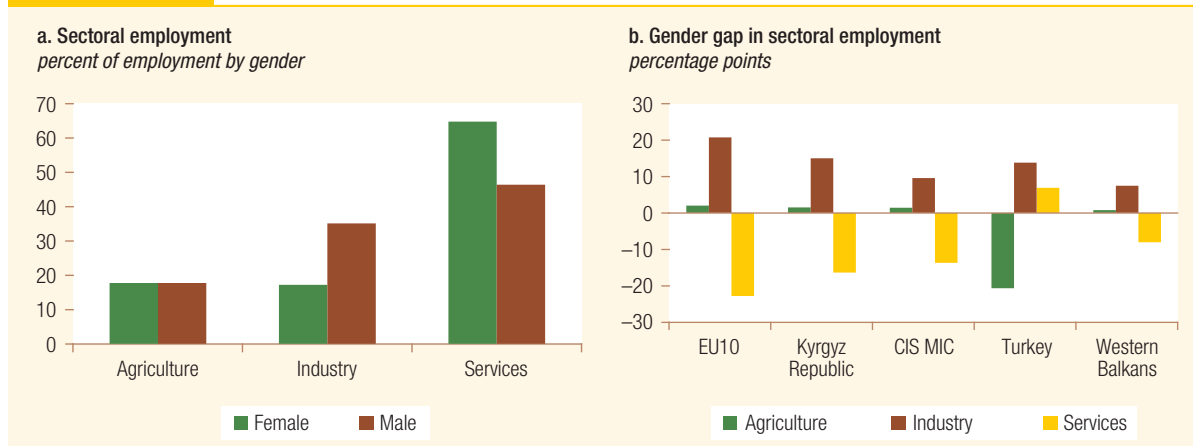
*The service sector employs the majority of women in most countries in the region.* With the exception of four countries (Armenia, Georgia, Romania, and Turkey), over half of women workers are employed in the service sector. In the EU10 and the western Balkans, the average is about two-thirds of all employed women. This structure of female employment conforms to the pattern seen in OECD economies, that is, women tend to be concentrated in the service sector (figure 2.10). In the countries in which the highest proportion of female employment is not in services, women are

<sup>31</sup> The average self-employment rate in the 17 countries for which longitudinal data are available was 16.5 percent in 1999 and 17.1 percent in 2007.

<sup>32</sup> There is a complete time series for only Moldova, Russia, and Ukraine over the period. Note that, within the middle-income CIS subregion, the countries show relatively lower proportions of self-employment.

<sup>33</sup> The averages are based on 25 countries in the region; because of a lack of recent data, they exclude Belarus, Bosnia and Herzegovina, Turkmenistan, and Uzbekistan.

**FIGURE 2.10** Sectoral Employment, by Gender



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: The gender gap is the difference between male employment in a particular sector as a share of total male employment and female employment in a particular sector as a share of total female employment. A negative gender gap means that more women than men are employed in the sector as a share of total employment among women. CIS MIC = middle-income CIS countries (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Moldova, the Russian Federation, Turkmenistan, and Ukraine) in 2008.

disproportionately present in agriculture (rather than in industry). Though male employment is less concentrated in services relative to female employment, the share is still high, at 46 percent versus 35 percent in industry and 16 percent in agriculture in the most recent years.

Though agriculture and industry are not the largest employers of women on average, women still constitute a significant share of the employees in these sectors. In the 22 countries on which data are available, women employees make up half of all workers in the service sector. However, they also comprise about 17 percent of workers in agriculture and 17 percent of workers in industry. The variation across countries in the averages is relatively modest. However, Turkey remains an outlier, with about 38 and 15 percent of women in agriculture and industry, respectively.

Over time, the share of women working in the service sector is growing. If services represent a sector of traditional employment among women in all OECD economies, the trend over time is more specific to Europe and Central Asia. The service sector has been expanding over the decade, experiencing not only growth in employment, but also growth in the

relative contribution to GDP. Women have moved into the service sector in slightly higher proportion than men in all the countries of Europe and Central Asia, a trend not found in Western Europe. If the trend continues, this sectoral allocation should be beneficial for the reduction of gender gaps in the labor markets of the region (see elsewhere below).

The customary gender segregation by industry is also found in the region. Table 2.1 shows the distribution of employed men and women across industries. In Europe and Central Asia, men and women are likely to work in distinct industries. While men are more likely to be employed in manufacturing, construction, and transport, women are more likely to be found in communal services, wholesale and retail, and restaurants. For example, while 34 percent of employed men work in manufacturing, only 22 percent of employed women do so; in contrast, 40 percent of employed women and only 20 percent of employed men work in communal services.

The region is characterized by high occupational segregation in labor markets. Table 2.1 presents the distribution of employed men and women across occupations. Occupational segregation in the labor market is significant in Europe and

Central Asia relative to other regions.<sup>34</sup> Women are concentrated in the category of professionals and technicians and in services, while men are mainly concentrated among administrative personnel and machine operators.<sup>35</sup> Almost 40 percent of women, but only 22 percent of men work as professionals or technicians, whereas 18 percent of men and 6 percent of women work as machine operators. (Box 2.1 offers the example of the teaching profession in primary and secondary education.)

*Although there is some variation across the region in women's employment in management positions,*

*the region is doing as well as, if not better than developed countries, on average.* As in developed countries, there are fewer women in management positions in Europe and Central Asia. The country with the most equitable access to management positions in terms of gender is Serbia, where the gap between men and women in management is only 1 percentage point (figure 2.11). Yet, few men and women in Serbia hold management positions: only 4 percent of employed men, for example. At the opposite extreme, a larger gap is observed in Estonia and Turkey, where employed men hold 16 and 11 percent of management positions, respectively, while only 8 and 3 percent of employed women hold such positions, respectively.

*Occupational segregation begins before entry in the labor market.* Occupational segregation at the workplace is a consequence of the choice of the field of study when one is young. A recent study shows that, although the correlation between the field of study and occupation does not appear close if one uses broad occupational definitions given that most graduates work as professionals or technicians, the field of study is a strong determinant of occupation within the broad categories. For example, in the Czech Republic, while 50 percent of men who have studied science pursue occupations as professionals or technicians in physics, mathematics, or engineering, this is true of only 20 percent of women who have studied science (Flabbi 2011).

**TABLE 2.1 | The Sectoral Structure of Employment**

Occupation and sector	Men	Women
<b>Occupation</b>		
Professionals and technicians	22	38
Directors and upper management	6	4
Administrative personnel and intermediary level	31	20
Service workers	9	17
Skilled agriculture	2	1
Machine operator	18	6
Armed forces	0.0	0
Elementary occupations	12	14
Total	100	100
<b>Economic sector</b>		
Agriculture, hunting, forestry, and fishing	8	5
Mining and quarrying	—	—
Manufacturing	34	21
Electricity, gas, and water supply	..	..
Construction	12	1
Wholesale and retail, trade, and hotels and restaurants	12	20
Transport and storage	10	4
Finance and business services	2	4
Communal services	20	41
Other services not well specified	2	3
Total	100	100

Source: Ćopić, Daza, and Ramos (2011).

Note: Weighted average for the region, including Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, the Kyrgyz Republic, Latvia, Lithuania, Moldova, Montenegro, Poland, Romania, the Russian Federation, the Slovak Republic, Tajikistan, and Turkey... = negligible.

<sup>34</sup> For more details, see Ćopić, Daza, and Ramos (2011), which is a background paper for *World Development Report 2012: Gender Equality and Development* (World Bank 2011a). The authors analyze the segregation in labor markets in Europe and Central Asia and other regions.

<sup>35</sup> Professionals include occupations in which the main tasks require a high level of professional knowledge and experience in the physical and life sciences, the social sciences, or the humanities. Technicians include technicians and associate technicians, that is, occupations in which the main tasks require technical knowledge and experience in one or more areas of the physical and life sciences, the social sciences, or the humanities.

### Box 2.1: Most Teachers are Women

Women continue to work in traditional female occupations such as teaching. Most teachers in primary and secondary schools are women. In Europe and Central Asia, 91 percent of primary teachers and 72 percent of secondary teachers are women. In a few countries, such as Armenia, all primary teachers are women (table a). In Belarus, the Czech Republic, Kazakhstan, the Kyrgyz Republic, Russia, Slovenia, and Ukraine, 98 percent or more of primary teachers are women. In most of these countries, women also predominate in instruction in secondary education, accounting for more than 80 percent of secondary teachers.

**TABLE A | Share of women teachers, 2008**

Country	Primary	Secondary	Tertiary
Albania	70	61	48
Armenia	100	84	—
Azerbaijan	87	66	52
Belarus	99	80	57
Bulgaria	93	79	47
Croatia	91	68	42
Czech Republic	98	66	48
Estonia	94	78	—
Georgia	86	82	53
Hungary	96	71	38
Kazakhstan	98	86	64
Kyrgyz Republic	98	74	59
Latvia	93	81	57
Lithuania	97	82	56
Macedonia, FYR	72	54	44
Moldova	97	76	56
Montenegro	70	61	40
Poland	84	69	43
Romania	86	67	43
Russian Federation	98	81	61
Serbia	84	64	45
Slovak Republic	89	74	44
Slovenia	98	72	37
Tajikistan	68	49	33
Turkey	50	41	40
Ukraine	99	79	—
Uzbekistan	85	63	38

Sources: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>; UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.

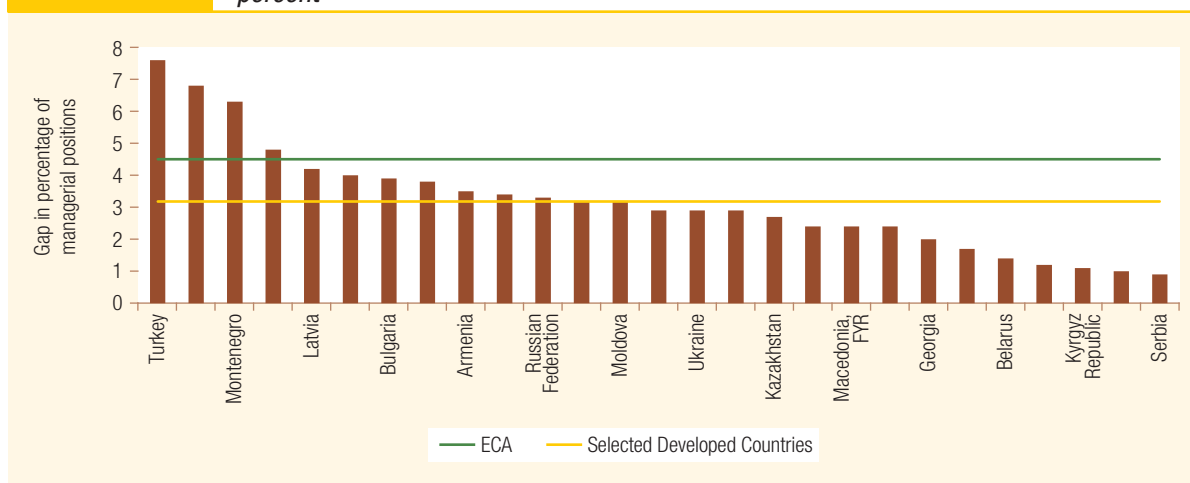
Note: — = not available.

*Segregation also exists by type of employer; women tend to work in the public sector.* Although we do not have the average for the region, several country studies find that women are more likely

to be employed in the public sector. For example, in Serbia, while 32 percent of employed women work in the public sector, only 24 percent of men work in this sector. In contrast to women, men

FIGURE 2.11

### The Gender Gap in Management percent



Source: UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.

Note: The developed countries included are Austria, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States. ECA = Europe and Central Asia.

are more likely to work in the private sector (58 percent of employed men versus 52 percent of employed women). Similar patterns of concentration are found in Bulgaria, Russia, and Serbia (see Dimova, Gang, and Landon-Lane 2006; Oglobin 2005; Reva and Sulla 2011).

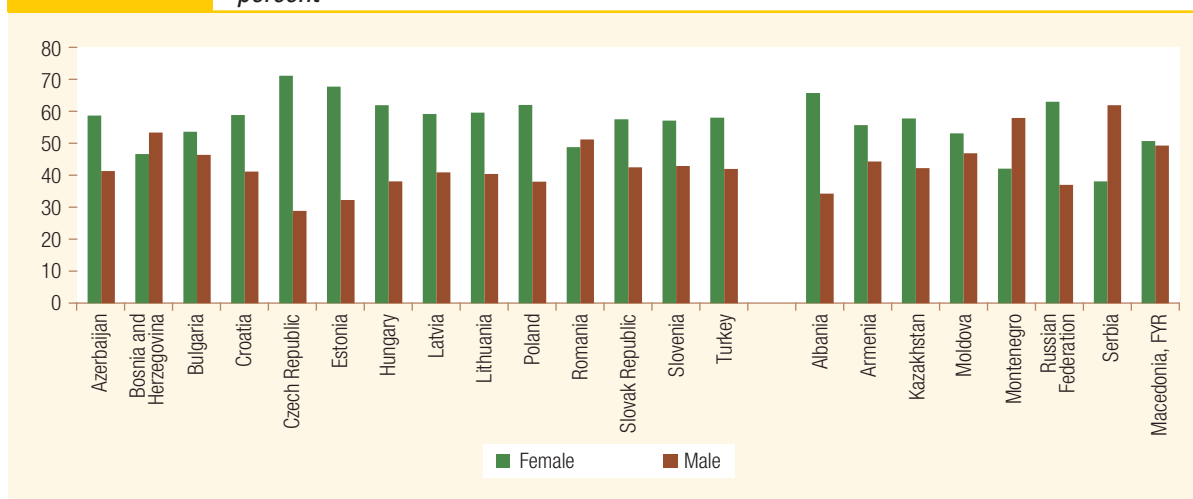
#### Time use Analysis

*Women are more likely than men to be part-time workers; however, part-time employment is less prevalent in Europe and Central Asia than in the OECD countries.* On average in Europe and Central Asia, 12 percent of employed women and 7 percent of employed men work part time (figure 2.12). The availability of part-time work in general and, in particular, for women is considerably more limited in the region than in the OECD countries (excluding the United States). In the OECD countries, 36 percent of employed women and 11 percent of employed men work part time. The lack of access to part-time employment, especially among women and relative to OECD levels, may have implications for decisions on labor force participation and for fertility rates among women.

*In the region, women spend less time than men in labor market activities.* As in the developed countries, women in the region spend, on average, almost two hours less per day than men in activities related to the labor market (figure 2.13, panel a). The variation across the countries in the region on which data are available is small. The largest difference is in Turkey, where men spend 3.5 more hours than women in labor market activities, and the smallest difference is in Bulgaria, where men spend only 1 more hour than women per day performing labor market activities.

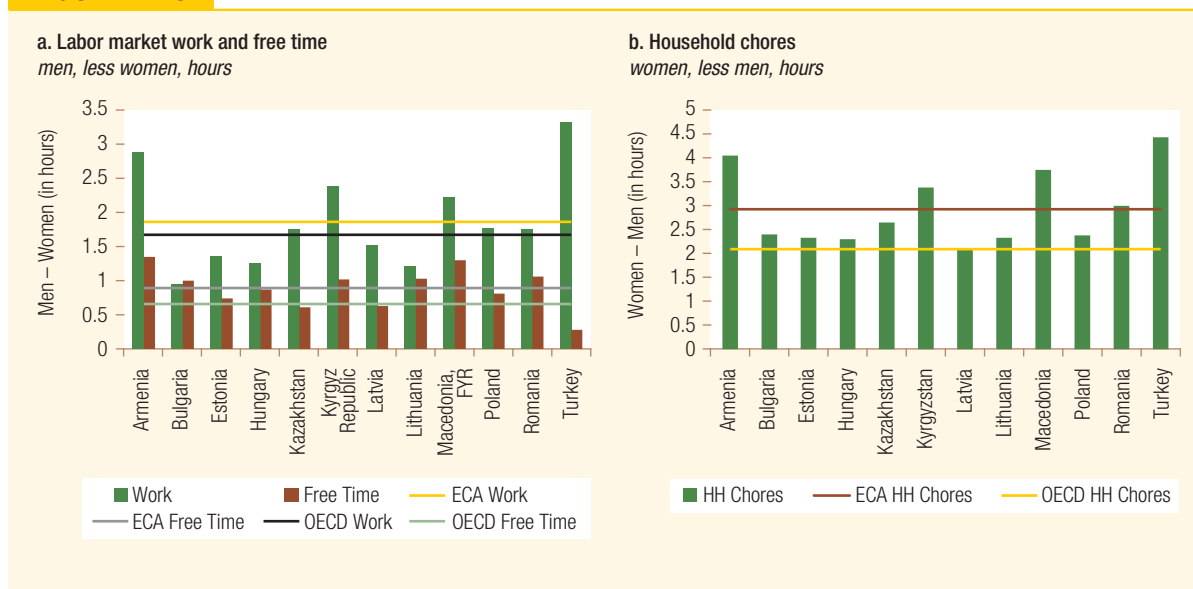
*Women in the region spend much more time than men on household activities.* In the region, relative to men, women spend three more hours per day on household work (figure 2.13, panel b). The average time women in the region and women in the OECD countries spend on household chores is similar. The gender differential is largest in Turkey, where women spend 4.5 hours more than men on household chores. It is smallest in Latvia, where women spend only two hours more than men on such chores.

**FIGURE 2.12** Part-Time Workers, by Gender  
percent



Source: UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.

**FIGURE 2.13** The Difference in Time Use between Men and Women



Source: World Bank staff calculations based on data of the UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.

Note: The countries used to compute the regional average are Armenia, Bulgaria, Estonia, Hungary, Kazakhstan, the Kyrgyz Republic, Latvia, Lithuania, FYR Macedonia, Poland, Romania, and Turkey. The OECD countries include Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States. ECA = Europe and Central Asia. HH = household.



*As a result, women have less free time than men.* Of the average three-hour difference in the amount of time women and men in the region spend on household chores per day, men spend two hours on labor market activities and one hour resting; we therefore see that women have less free time than men. This is quite consistent across the region. The most salient exception is Turkey, where men and women have almost the same amount of free time because, while women spend more time on household chores, men spend an almost equal amount of time working on other activities, for example labor market activities.<sup>36</sup>

*The patterns in the gender division of work in the household in the region are traditional; thus, women spend more time than men on caring for other household members.* Our calculations indicate that the traditional division of household chores between men and women persists in the region (figure 2.14). Women spend three-quarters of their time in cooking and the care of children and adults in the household. Indeed, while a quarter of the time women spend on domestic chores is taken up by care for other adults in the household, men do not spend any time on this task.<sup>37</sup>

## Labor Market Transitions

Labor market transitions represent opportunities and costs among individuals.<sup>38</sup> They can lead to jobs that are more well remunerated, but also to lower wages after periods of inactivity or to unem-

<sup>36</sup> Noteworthy among the findings revealed through the time use data is the relatively small amount of time spent on labor market activities across all countries. Men report that they spend an average of five hours a day on labor market activities. This rather small number of hours can be partially explained by the fact that the unemployed and men and women who are out of the labor force are included in the sample. If we consider only the employed, the average among men rises to six hours a day. Although low, this number can be partially explained by part-time jobs.

<sup>37</sup> This finding needs to be viewed with caution because it is based on only two countries: Armenia and Romania. In Romania, women report spending 2.5 hours a day taking care of other adults in the household. Women in Armenia report spending no time on this activity.

<sup>38</sup> This section is mostly based on the work of Dimova, Gang, and Landon-Lane (2006) for Bulgaria and Blunch and Sulla (2011) for Serbia. A caveat should be noted: both studies analyze the situation during times of crisis and employment restructuring.

**FIGURE 2.14** The Distribution of Household Chores among Men and Women



Source: World Bank staff calculations based on data of the UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.

Note: HH = household.



ployment. The likelihood of experiencing a labor market transition varies depending on the sector of employment, the occupation, and gender. Panel survey data are necessary for the analysis of labor market transitions, but such data are rare. However, two recent studies on Bulgaria and Serbia are useful. Though the magnitude of the data is different, the study findings are consistent with results on the United Kingdom and the United States, on which abundant panel data exist.

*Women are moderately less likely than men to find jobs if they are unemployed, and they are more likely to exit the labor force.*<sup>39</sup> During the global financial crisis and its aftermath in Serbia, unemployed women were 4.2 percent less likely than men to find jobs (Blunch and Sulla 2011). There are several possible reasons for this outcome. First, women may spend less time than men searching for work. Second, men may have access to more efficient information networks on available jobs. Third, women may be searching for specific jobs (in selected sectors or occupations; see elsewhere above) and may therefore require more time in unemployment waiting for vacancies in these jobs to become available. Fourth, women may suffer from discrimination at various stages of the job search and hiring process. Despite these adverse scenarios, women end up taking jobs. Whether or not they have to lower their reservation wage to obtain jobs and, if they do, by how much have not been determined.

*Women are more likely to become discouraged workers.* Workers are discouraged if they decide to leave the labor force because they have been unable to find jobs under terms they consider acceptable.<sup>40</sup> Blunch and Sulla (2011) estimate that unemployed women are 2.8 percent more likely than unemployed men to be discouraged and exit the labor force. This may be indicative of the higher cost of the job search and the lower probability of success in the job search among women compared with men. A better understanding of the constraints on women would contribute to the design of policies to promote employment among women and improve the functioning of the labor market.

*Employed women are as likely as unemployed men to become unemployed.* In Serbia during the last

few years, employed women have been only 1 percent less likely than men to become unemployed. Although the difference in the probability of moving from employment to unemployment between men and women is significant, the size of the difference is negligible. There may be many reasons behind the difference. Thus, there is evidence that women are usually the first to be laid off during a crisis. Yet, women may also be protected from being laid off if, because of occupational segregation, they work in industries that are less affected by crisis.<sup>41</sup>

*Whether employed women are more or less likely than employed men to leave the labor force depends mostly on age and educational attainment.* On average, employed women are only 0.3 percentage points more likely than employed men to leave the labor force. However, there are gender differences depending on age and educational attainment. For example, while workers of retirement age (65 and above) are less likely to drop out of the labor force than young workers (15–24 years of age), women of retirement age are 43 percentage points more likely than men in the age-group to retire.

*Selected evidence indicates that women are more likely to stay in public sector jobs, while men are more likely to stay in private sector jobs.* A study on labor market transitions in Bulgaria around 1996 finds that the probability of leaving jobs in the public sector is 67 percent among women and 62 percent among men (Dimova, Gang, and Landon-Lane 2006). The gender differences in these probabili-

<sup>39</sup> This assertion is based on analysis on Bulgaria and Serbia, but also on the United Kingdom and the United States.

<sup>40</sup> A worker may be discouraged because of the extensive period in unemployment while waiting for work, because of the terms of the wage offer, or because of other reasons. See Sabarwal, Sinha, and Buvinic (2011) for a detailed description of the added worker effect and the discouraged worker effect at the various stages of the business cycle.

<sup>41</sup> This was the situation during the 1997 crisis in Indonesia. See Hallward-Driemeier, Rijkers, and Waxman (2011).

ties become more striking if we take into consideration the destination: men generally leave the public sector for jobs in the private sector, while women generally leave the public sector to exit the labor force.<sup>42</sup> The probability that men employed in the public sector will find jobs in the private sector is 12 percent, while the corresponding share is only 6 percent among women. Men working in the public sector are also more likely than women in the public sector to move to unemployment (8 versus 4 percent, respectively).

*Men working in the private sector are more likely than women working in the private sector to stay in the sector.* The study in Bulgaria finds that 47 percent of men employed in the private sector versus 36 percent of women employed in the sector will be working in the sector during the subsequent year. This difference is partly explained by the greater probability among women employed in the private sector to become unemployed or leave the labor

force. (Box 2.2 examines the case of women in the informal sector.)

*Educated women in wealthier households are more likely to be employed in the private sector.* Women with higher educational attainment and living in households with higher incomes are more likely to be employed in the private sector and are less likely to leave the private sector for work in the public sector, or because of unemployment or simply because they are exiting the labor force. Likewise, women with higher educational attainment and higher household incomes are less likely to remain out of the labor force. In Bulgaria, marital status and the presence of children in the household are additional explanatory factors in determining whether a woman is working or not and whether she is working in the private or public sector.

#### **Box 2.2: The Informal Labor Market in Europe and Central Asia**

Do women have less access than men to formal sector jobs? Are they more likely to be trapped in the informal sector?

Informal employment may be defined in many ways. It usually refers to employment among workers who are not (a) carried on the accounting books of an employer, (b) formally registered, (c) included in the social security system, and/or (d) receiving the basic benefits and protections provided in labor laws.

A recent study in Albania, Georgia, Hungary, Poland, Russia, and Ukraine finds that women are as likely as men to work in the informal sector. However, men typically earn more than women in the formal sector and in the informal sector. In the formal sector, women tend to have better skills, but obtain lower returns to education relative to women in the informal sector. The gender wage gap is generally driven by the difference between the wages of men and women in the formal sector, although, in Albania, most of the gender wage gap is explained by the gap in the informal sector. Women in the informal sector are also more likely to remain employed in the informal sector relative to women in the formal sector and relative to men.

Women in the informal sector are also more likely than women in the formal sector to move back and forth between informal employment and inactivity. This may be an indication of women's self-selection into the informal labor market. However, even after we control for selection, we find that these results are confirmed.

Source: Bardasi, Paci, and Pignatti (2007).

#### **Understanding Changes in the Labor Market**

*Shifts in employment among men and women may be driven by changes in labor demand or in labor supply, which may also differ across skilled and unskilled workers in the labor force.* An analysis of a labor market would help determine if a decline in labor force participation is the result of a change in the demand for labor or a change in the supply of labor. Usually, this type of analysis is carried out by differentiating between skilled and unskilled labor. Shifts in wages and employment may be indicative of whether a change in demand or a change in supply is dominant and help clarify the direction of the change.<sup>43</sup> We may infer

<sup>42</sup> The authors of the study do not find evidence of a gender effect in the exit of individuals from the public sector into unemployment or out of the labor force.

<sup>43</sup> A rise in employment and wages indicates an increase in demand (a positive shift). A rise in employment, accompanied by a fall in wages indicates an increase in labor supply (a positive shift in supply). A fall in employment and a rise in wages indicate a decrease in the supply of labor (a negative shift of supply). Finally, a fall in employment and in wages indicates a decrease in labor demand (a negative shift in demand). Obviously, there may be a combination of shifts in the two curves, and the final result depends on the shift that is dominant.

from aggregate indicators that the labor markets in Europe and Central Asia are diverse. In the last decade, average real wages and employment increased in Bulgaria, Estonia, Hungary, and Latvia. During the same period, an increase in labor force participation and a fall in average real wages were observed in Armenia, Belarus, and Slovenia. Meanwhile, an increase in average real wages and a decrease in labor force participation occurred in Georgia, Lithuania, and Moldova. In all these cases, the changes in average real wages and employment moved in the same direction for both men and women.

The change in demand and the change in the demand for skilled labor relative to unskilled labor may partly be a consequence of shifts in the structure of economies because of the trade liberalization that occurred in many of these countries. If exporting sectors are intensive in unskilled labor and employ women, while importing sectors are intensive in unskilled labor and employ men, trade openness will alter the relative prices of the two labor inputs and may therefore affect the relative wages of men and women.

*The decrease in labor supply in some countries may be partly explained by an increase in education and in (out-)migration.* If men and women decide to acquire more human capital by pursuing tertiary education, but also postgraduate education, they would delay their entrance into the labor market and, as a consequence, reduce the supply of labor. Additionally, the decline in labor supply may be caused by the large waves of migration observed in a few of these countries (box 2.3). Armenia, the Kyrgyz Republic, Moldova, Tajikistan, and Uzbekistan show higher levels of out-migration, while Kazakhstan, Russia, and Ukraine receive immigrants.

*The process of women and men following more traditional gender roles in the labor market (retraditionalization) that started with the transition and that has resulted in a large decrease in female labor force participation is continuing in certain countries.* This process has been clearly documented in the region by Paci (2002), Paci and Reilly (2004), and a few other researchers. For example, in Bosnia and Herzegovina, female labor force participation declined

### Box 2.3: Migration and Remittances in CIS Countries

Migration and remittances have been increasing in Europe and Central Asia in the last decade. Migration corridors exist from low-income CIS countries (Armenia, the Kyrgyz Republic, Moldova, Tajikistan, and Uzbekistan in 2007) to middle-income CIS countries (Kazakhstan, Russia, and Ukraine), Western Europe (particularly Germany), Israel, and the United States. In addition, it is estimated that there are large flows of undocumented migrants.

The importance of remittances in some of these countries is not negligible compared with other developing countries. In 2009, officially recorded remittance receipts as a share of GDP were 12 percent in Moldova and 35 percent in Tajikistan. Moreover, remittance growth rates have accelerated in some countries over the last decade. For example, remittances in the Kyrgyz Republic grew from negligible amounts to 21 percent during the period.

A high proportion of migrants do not send money home (from 17 percent in Bulgaria to 53 percent in Tajikistan). Most migrants send small amounts of money: 60 percent of all migrants send less than US\$200 a year. However, remittances are significant for the receiving households. Wealthier households tend to receive larger remittances. Remittances are greater in absolute value among recipient households in the top of the income distribution. However, the importance of remittances in household expenditures is greater among households at the bottom of the income distribution.

Sources: Quillin et al. (2007); Mansoor and Quillin (2007).

during the 1990s, and the decline persisted during the next decade. In Serbia, female labor force participation fell from about 70 percent during socialist times to 58 percent in recent years (Babović 2008, cited in Blunch 2010).

*Evidence from analysis of the probability of transition in labor force status suggests that women self-select into or out of certain occupations.* The selection of women in the labor force is positive, which means that women with higher potential to produce value added tend to work, while less well educated women tend to choose to remain out of the labor force. Moreover, among employed women, women who are more well educated tend to work in the private sector. This indicates that family responsibilities and the lack of support in the decision by women to combine jobs and household chores represent important constraints and that only women with higher earnings (and with husbands who also have higher earnings) can overcome these constraints.

## The Gender Wage Gap

An examination of the gender wage gap can lead to a better understanding of the constraints that men and women face in the labor market, whether these constraints arise from past or present choices (such as the choice of occupation or the choice of the level of educational attainment), market frictions, or discrimination. First, we describe the raw gender wage gap in the region. Second, we describe the factors contributing to the wage gap using decomposition methods that allow us to assess the effects of individual characteristics on the gender wage gap. Third, we analyze changes in the wage gap over time.

### The Raw Gender Wage Gap

Is there a gender wage gap despite the relatively significant equality in employment in the labor market in the region? Wage gaps among workers arise for many reasons, including location, type of work, level of education, and experience. Wage gaps may also arise because there are too many or too few women in the labor market or because the economy is expanding too quickly or too slowly. Wage gaps may be partially a result of discrimination, whereby employers perceive workers of a particular gender or ethnicity as less capable and, hence, not worthy of equitable wages. To determine whether a wage gap exists simply because of the gender of workers, we analyze country-specific data using regression analysis.<sup>44</sup>

*There is a significant gender wage gap in the region.*<sup>45</sup> The data indicate that women's hourly wages are 22 percent less than the hourly wages of men, on average, in the region.<sup>46</sup> Moreover, because women work fewer hours, the monthly wage gap is larger, indicating that women earn 29 percent less than men per month. The available data show that women earn systematically less than men even if one controls for differences in human capital. The only exception is Bosnia and Herzegovina, where the raw gap is negative; however, this gap disappears once we control for human capital characteristics.<sup>47</sup>

*The extent of the gender wage gap varies greatly within the region.* The differences across countries are large (figure 2.15). Some countries (the EU10,

Moldova, Turkey, the western Balkans, with the exception of Albania) have a gender wage gap of about 20 percent, putting them in a similar or better position than the United States. Other countries have gaps that are among the highest in the world (Tajikistan, with a gap of about 65 percent), while still others (Albania and Russia) have gaps in an intermediate range, about 35 percent. These magnitudes and rankings do not change dramatically if the gap is computed conditioned on human capital characteristics. The averages by subregions are informative only in the case of the EU10, the western Balkans, and Turkey because there are too few data points on the other subregions. The averages indicate a moderate regional gap, with values ranging from 17 percent for the EU10 in the raw differential to 23 percent in the western Balkans for the Mincerian-based differential.

*The gender wage gap is not a result of differences in human capital.* If we compare men and women with the same level of human capital, women are paid even less relative to men than in the general case. However, the information we have on human capital is partial: it only captures the level of educational attainment, but not the type or quality of education. Thus, two persons may both be university graduates, though one may have a degree in history, and

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<sup>44</sup> There is a caveat: the data are limited. Our analysis relies on data on 12 of the 30 countries in the region. These 12 countries are located across subregions. The EU10 are represented by 4 of the 10 countries in the estimation sample; the western Balkans and Turkey are fully represented; and the low- and middle-income CIS countries are represented by only Moldova, Russia, and Tajikistan.

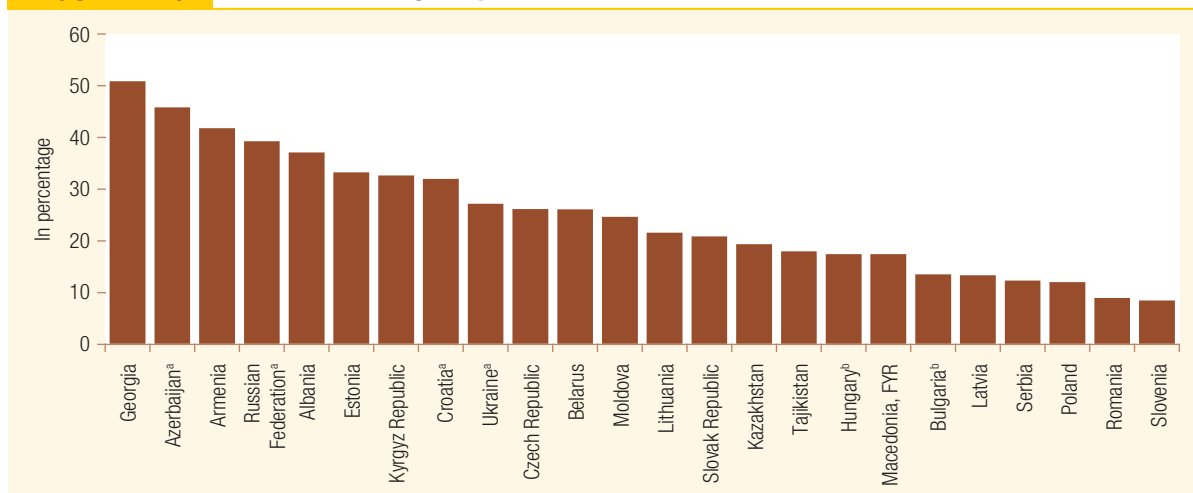
<sup>45</sup> This is based on 24 countries in the region.

<sup>46</sup> This refers to the unweighted average of the gender wage gap in the countries of the region. The gender pay gap in hourly wage rates refers to the gender gap in average hourly earnings. This indicator aims to capture the difference between men's and women's overall positions in the labor market. It measures the difference between men's and women's wage rates independent of the number of hours worked or the type of activity or occupation.

<sup>47</sup> For example, see Nopo, Daza, and Ramos (2011).



**FIGURE 2.15** The Gender Wage Gap



Sources: Miluka and Grown (2010); Apostolova (2010); Blunch (2010); UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.

<sup>a</sup> Monthly.

<sup>b</sup> 2006.

the other a degree in information technology, which are remunerated differentially by the market. Thus, it may be that the type of human capital rather than simply the *quantity* of human capital may play a role in explaining the gap.

*At the regional level, the participation rates of women do not impact the gender wage gap.* Participation rate differences may potentially have a significant and large impact on the gender wage gap for two reasons. First, if few women are active in the labor market, then discrimination and prejudice are more likely to survive, thereby generating a gender gap.<sup>48</sup> Second, if female participation is low, then women participating in the labor market may be a select sample of the population. If the selection is positive (that is, participating women are relatively more productive than nonparticipating women), the observed gap will underestimate the gender wage differential; if the selection is negative, the gap will be overestimated.<sup>49</sup> Because of these different sources, the impact of participation on the gender wage gap is ambiguous and should be empirically verified. In Europe and Central Asia, there is a significant positive correlation

between female participation and the gender wage gap only within the EU10.

### The decomposition of the Gender Wage Gap

This subsection is based on a series of academic studies carried out on the region or worldwide, but with abundant representation of the region. Most of the studies decompose the gender wage gap using different techniques, making comparisons across countries a challenge. Fortunately, in

<sup>48</sup> The two major theories of discrimination (statistical discrimination and taste discrimination) have this implication. In the statistical discrimination model (Phelps 1972), the presence of fewer women in the labor market may lead to more discrimination because employers have more difficulty in assessing the productivity of women. In the taste discrimination case (Becker 1971), fewer women, plus some labor market frictions, imply that prejudiced employers can survive and continue to operate in the market.

<sup>49</sup> Paci and Reilly (2004) provide evidence of sample selection in a handful of countries in the region. They find limited sample selection in the countries under consideration (see their table 5.3).

one of these studies, Paci and Reilly (2004), we find a description of the implications in terms of comparability across different decomposition methods.<sup>50</sup> In this subsection, we review the main conclusions that arise from the examination of gender wage gap decompositions, and, in the next subsection, we discuss the changes in the gender wage gap during the two decades since the onset of the transition.

*The disparity across countries in the region makes any generalization difficult.* Europe and Central Asia is a region of wide contrasts. It is therefore difficult to draw conclusions from the decomposition. For this reason, we discuss here the contributions of characteristics and returns to the gender wage gap. The contribution of each component depends on the data used, the selection of the sample, the definition of the variables, and the decomposition method.<sup>51</sup>

### The gender wage gap explained: differences in characteristics

*If we control for educational attainment, we find that the gender wage gap in the region increases.* The gender wage gap increases if we control for the characteristics of men and women.<sup>52</sup> As we see in chapter 1, the differences between men and women in terms of education are small in the region, but, in any case, they favor women, who are more likely to complete tertiary education. The raw gender gap is 18 percent; after we control for education, the gap rises to 27 percent. This means that, at the same educational level, women earn an average of US\$27 less per US\$100 earned by men. Moreover, only US\$9 of the US\$100 earned by men can be explained by educational attainment.

*The gender wage gap is partly explained by self-selection among women into lower paying jobs and occupations.* The gender wage gap remains constant if we control for occupation, industry, and job characteristics, such as number of hours worked, whether the job is in the formal or informal sector, and whether the worker is an employee, an employer, or self-employed.<sup>53</sup> In particular, Europe and Central Asia is the region with the highest level of segregation, and this contributes to explain the gen-

<sup>50</sup> More information on decomposition methods can be found in Fortin, Lemieux, and Firpo (2011). The core of the information here is derived from Blunch (2010), Ćopić, Daza, and Ramos (2011), and Paci and Reilly (2004). Other recent studies on the region are Apostolova (2010), Miluka and Grown (2010), Ognjenović (2010), and Eriksson, Pytliková, and Warzynski (2010). Blunch (2010) uses the United Nations Development Programme's Social Exclusion Survey for six countries: Kazakhstan, FYR Macedonia, Moldova, Serbia, Tajikistan, and Ukraine. Ćopić, Daza, and Ramos (2011) and most of the other studies use Living Standards Measurement Study surveys.

<sup>51</sup> In the case of Europe and Central Asia, the choice of decomposition method does not seem to alter the conclusions. Paci and Reilly (2004) have conducted a meta-analysis of decompositions of the gender wage gap performed on countries in the region during the 1990s. They find that estimates are generally not sensitive to the decomposition method used. However, the fit of Mincer equations to the countries is not as good as the estimations performed in developed countries. As a result, the estimates tend to overvalue the unexplained part of the gender wage gap. This means that data collection must be improved to foster more accurate policy recommendations.

Most of the comparability problems associated with data quality arise from the measurement of two variables: earnings and experience. The estimated results found in various studies are sensitive to the choice of these two key variables. Studies that use hourly rate of pay—as opposed to monthly wages—in the decomposition tend to obtain lower gender wage gaps because, in the region, men tend to work more hours per week than women. Second, using age as a proxy for experience instead of actual or potential experience also decreases the estimated gender wage gap.

<sup>52</sup> Ćopić, Daza, and Ramos (2011) use a semiparametric decomposition technique adopted from the program evaluation literature.

<sup>53</sup> Full-time work and part-time work are defined by a set of dummy variables, including working less than 20 hours a week, working between 20 and 40 hours a week, and working more than 40 hours a week. The type of employment is defined as a set of dummy variables for employee, employer, or self-employed. A rise in the number of hours of work per week considerably increases the gender wage gap. This is an indication of the existence of a wage penalty for women and part-time workers. In contrast, work in the formal sector and certain types of employment decrease the gender wage gap.

der wage gap. At the same time, these variables explain only about 9 percent of the gender wage gap. This means that only a third of the gender wage gap is explained by worker and job characteristics, including occupation.

*The field of study is a minor determinant of the gender wage gap.* The field of study is significant, but does not play a major role in explaining the gender wage gap. Job characteristics, including occupation, play a more important role. While job characteristics explain almost 10 percent of the gender wage gap, field of study explains only 1 percent of the gap. The association between field of study and occupation is strong, however.

*The determinants of the gender wage gap vary in some countries in the region.* A study by Blunch (2010) that relies on different data and a different decomposition method finds alternative results for Kazakhstan, FYR Macedonia, Serbia, and Ukraine. Whether occupational segregation is a constraint or a product of self-selection should be the subject of more research, but the evidence on labor market transitions discussed above indicates that women tend to stay in the public sector, partly because of nonpecuniary benefits such as maternity leave, flexible hours, or job attachment (Dimova, Gang, and Landon-Lane 2006; Jurajda 2003).

### The unexplained gender wage gap

The conclusion we may draw from all the studies is that most of the gender wage gap in the region remains unexplained. This result contrasts with the usual finding on Western Europe or the United States, where education, experience, occupation, and industry explain about 90 percent of the gap.<sup>54</sup> The significant unexplained portion of the gender wage gap points to discrimination: women simply do not have access to equal pay.

*Our two main explanations for the gender wage gap are discrimination in the labor market and the need to give a cost signal to employers if women show greater variability in productivity.* The archetypal interpretation of the increment in the estimated gender wage gap if we control for educational attainment is that there is discrimination in the la-

bor market. This may be pure discrimination or statistical discrimination. Additionally, analyses have found that, in a situation of great variability in wages across a group, workers with greater ability signal their greater productivity by acquiring more education.<sup>55</sup> This may be the prevalent situation in Europe and Central Asia.

### Change in the Gender Wage Gap over Time

*The unexplained gender wage gap decreased in the region during the 1990s.* An interesting result of the analysis of Paci and Reilly (2004) arises after the incorporation of a trend in the meta-analysis of the decompositions of the gender wage gap during the 1990s.<sup>56</sup> This trend was found to be negative, indicating that the unexplained gender wage gap decreased by about 1 percentage point per year during that decade.

*However, in many countries in the region, the unexplained gender wage gap increased during the 1990s.* Assessing the change in the unexplained gender wage gap in each country (or in each study), we see that, in 11 of the 26 countries examined in Paci and Reilly (2004), there was an increase in the gender wage gap.<sup>57</sup> Moreover, in many cases, the magnitude of the increase was significant. For example, in less than 10 years, the gap increased from 26 to 45 percent in Armenia, from 29 to 47 percent in Azerbaijan, and from 22 to 57 percent in Tajikistan.

*More analysis and more data are needed to assess whether the trends in the evolution of the gender wage gap observed in the 1990s continued during the last decade.* Whether these patterns persisted in the 2000s is difficult to assess given that there is

<sup>54</sup> For more details about the United States, see O'Neill (2003), Blau, Ferber, and Winkler (2002), and Blau and Kahn (1997, 2004).

<sup>55</sup> Lang and Manove (2006) propose a model that combines statistical discrimination and educational sorting that explains why blacks obtain more education relative to whites at similar cognitive ability.

<sup>56</sup> Technically, a trend is a variable the value of which increases by 1 each year to reflect a linear evolution of the independent variable over time.

<sup>57</sup> See table 3.2 in Paci and Reilly (2004) for more details.



no study, to our knowledge, that compares findings based on the use of the same data, but variable definitions of the gender wage gap. Analysis of the evolution of the gender wage gap over time can contribute to understanding how the labor market reacts to changes in the composition of the labor force as the characteristics of entrant cohorts change. It can also help in understanding the consequences of changes in institutions and wage structures.

## The Implications for Policy Design

In this section, we discuss how maternity leave, childcare policies, and pension benefits relate to gender wage gaps in employment and pay.

### Maternity and Parental Leave

*Maternity leave is quite generous in Europe and Central Asia.* Maternity leave was reformed in most countries through the revision of labor codes during the transition to a market economy. Most of these laws are more generous than the old laws or the laws prevalent in developed countries. Table 2.2 shows the maternity leave benefits available in Europe and Central Asia. Most countries offer, on average, six months of paid maternity leave.<sup>58</sup> This is quite a generous policy compared with policies in countries such as the United States, where maternity leave is only 12 weeks, but stingy compared with policies in countries with low fertility rates such as Sweden, where the maternity leave is 15 months.

*There is some variation across countries in the region in maternity leave benefits.* Maternity leave benefits vary considerably across the region. In Bosnia and Herzegovina and in FYR Macedonia, the benefits are generous and comparable with those in the Nordic countries; they are 365 and 270 days, respectively. In Romania and Ukraine, the maternity leave is 112 days, similar to the benefit in the United States. Most of the countries in the region offer 130 days of paid or partially paid maternity leave.

*The generous maternity leave benefits in certain countries in Europe and Central Asia seem to represent a response to low total fertility rates.* All the countries with generous maternity leave benefits have total fertility rates below the replacement level. Bosnia and Herzegovina has the lowest total fertility rate and the most generous maternity leave policy. However, two other countries—Albania and Montenegro—with generous maternity leave laws have considerably higher total fertility rates than Bosnia and Herzegovina (1.6 and 1.9, respectively, versus 1.2 children per woman in Bosnia and Herzegovina; all three provide 365 days of paid maternity leave).

*Parental leave benefits are unusual in the region.* Parental leave benefits are almost nonexistent in Europe and Central Asia. Only two countries offer parental leave benefits: Azerbaijan, which offers 14 unpaid days of parental leave, and Latvia, which offers 10 paid days of parental leave.<sup>59</sup> This indicates that the region is still conservative regarding the scope of parental leave benefits, and, despite the low fertility rates observed in many countries, none of them have adopted more modern systems, such as the systems of Norway and Sweden.

*Increasing parental leave benefits is a way to incentivize higher fertility rates.* The question whether parental leave benefits, especially maternity leave, are sufficient to incentivize higher fertility rates is unresolved. However, the available evidence seems to indicate that there is a positive association between the two.<sup>60</sup> In Sweden, the change in family

<sup>58</sup> In some countries, the basis of the paid leave varies with the length of the maternity leave and ranges from the full wage of the last working year to 85 percent of the last annual wage.

<sup>59</sup> Bulgaria offers a year of paid leave, as well as shorter partially paid leave, for single male parents.

<sup>60</sup> This assertion is based on the estimates of Ruhm (1998), who examines data on selected Western European countries (Denmark, Finland, France, Germany, Greece, Ireland, Italy, Norway, and Sweden). More extended entitlements (nine months) raise the predicted ratios of female employment to population by approximately 4 percent, but with a decrease in hourly wages of around 3 percent.

**TABLE 2.2 | Maternity Leave Legislation**

Country	Mother								Father		
	Number of days paid leave								Additional Leave		
	before birth	after birth	all	Number of days	Child care leave until the	Illegal job termination	Partially paid leave	Equally divided	Paid	Unpaid	Child Care
Albania		42	365			yes					
Azerbaijan	70	56	126	14		yes	a			14	
Bosnia and Herzegovina	42		365				1 yr				
Bulgaria	45		135		2 yrs old				b		
Croatia	45	365				yes					
Czech Republic	42		196			yes					
Estonia						yes					
Hungary	28		168		3 yrs old	yes					
Kazakhstan	70	56			18 months old						
Kyrgyz Republic	70	56			8 months old			yes			
Latvia	56	56								10	
Lithuania	70	56		90							
Montenegro	45		365								
Poland			112								
Moldova	70	56			3 yrs old						
Romania											
Russian Federation	70	70		14	3 yrs old	yes					
Slovakia	42		196		3 yrs old	yes					3 yrs old
Macedonia, FYR	45		270			yes					
Turkey	56	56		180							
Ukraine			112								

Source: Gender Law Library (database), World Bank, Washington, DC, <http://wbl.worldbank.org/WBLLibrary/elibrary.aspx?libid=17>.

Note: The information has been retrieved from the Gender Law Library using the Labor Code of each country.

<sup>a</sup> Single parents until the child is 3 years old.

<sup>b</sup> Single parents only: 1 year.

policies that began in the 1980s contributed to an increase in the total fertility rate (Hoem 1990). In the United States, it has been found that women with high rates of desired fertility do not sort themselves into jobs with more maternity benefits. However, women already working in jobs with higher maternity benefits are more likely to have more children (Averett and Whittington 2001). The question remains unanswered whether these benefits offset the high costs of generous maternity benefit systems.

*Increasing maternity leave benefits may reduce female labor force participation.* The other relevant question we must ask in analyzing maternity leave benefits is whether the benefits will discourage female labor force participation. As in the case of fertility rates, there is no unanimous answer to this long-standing question. However, in the case of the United States (where the work culture is considerably different relative to other parts of the world), it has been shown that, among women who had jobs before giving birth, those with maternity leave

benefits return sooner to their jobs (immediately after the 12 weeks of leave) than those without the benefits. In general, maternity leave coverage is not related to female labor force participation, at least not in the United States, but to the length of the leave benefit.<sup>61</sup>

*Interruptions in labor force participation because of childbearing reduce wages.* The interruptions in labor force participation related to childbirth and child-rearing have a definite negative impact on women's wages. It has been estimated that, in the United States, a 12-month interruption in full-time jobs because of childbearing reduces the lifetime incomes of women by about 10 percent.<sup>62</sup> There are multiple mechanisms through which this occurs. First, women do not accumulate any work experience while they are out of the labor force, placing them in an unfavorable position if they have to compete with men for jobs. Second, during the time women are out of the labor force, their labor market skills can depreciate. Moreover, it is more difficult to find a job if one begins the search while out of the labor market rather than while unemployed (Omori 1997; Fallick, Haltiwanger, and McEntarfer 2010; Fernández-Kranz and Rodríguez-Planas 2011).

*Women perceive interruptions in labor force participation because of childbearing as detrimental to their careers.* In seven countries of the region, 25 percent of women who had each had at least one child since 1987 stated that their job interruptions because of childbearing had negative consequences on their careers.<sup>63</sup> Only 14 percent of the women in these countries who had had at least one child *before* 1987 had the same view, implying that the experience about which they were concerned occurred after the end of the socialist period. In Poland and Ukraine, respectively, 50 and 40 percent more women reported negative consequences compared with the average across the seven countries.<sup>64</sup>

### Childcare and Elderly Care

*Population aging will disproportionately impact women as the supply of health services declines and the need for the care of the elderly increases.* Expenditures on

long-term care are expected to double in almost all Eastern European and former Soviet countries and will eventually account for between 0.5 and 1.0 percent of GDP. The projections of a World Bank study show that, if institutionalized care is extended to cover 20 percent of the elderly with disabilities, expenditures on long-term care alone will consume between 2 and 4 percent of GDP (Alam, Anós Casero, and Khan 2008). Countries in the region must carefully deliberate on the policy choices in the provision of such services. Informal care will be an increasingly important part of such policies. Women as informal providers of care will be greatly affected.

*The opportunity costs of any increases in care responsibilities will be particularly high, especially among younger women.* A recent World Bank report warns of the dangers of increasing the burden on the declining number of informal caregivers, that is, women currently not in employment. The capacity and willingness of informal caregivers to

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<sup>61</sup> For more details, see Berger, Hill, and Waldfogel (2005).

<sup>62</sup> For more details, see Francesconi (2002), who builds a structural model of fertility and work decisions and provides illustrative simulations of the benefits of each decision. He compares a profile of no full-time job interruptions to each of two alternative choices: a year-long interruption after childbirth versus a year of part-time work after childbirth. His simulations show that there is no statistically significant difference between part-time work and interruption choices. Working part time is slightly better than being out of the labor force, but the difference is negligible. The other interesting result of the exercise is the finding on the cost of the interruption of full-time work, which is about 25 percent of income utility relative to a full-time working career in the short run, followed by a rebound effect once a woman returns to full-time employment. However, the total loss in income over the life-cycle is about 10 percent. This is for the most conservative simulation involving the birth of only one child and only one year-long interruption. The losses are obviously higher with more interruptions (that is, more children).

<sup>63</sup> The seven countries are the Czech Republic, Estonia, Hungary, Poland, Slovenia, the Slovak Republic, and Ukraine.

<sup>64</sup> For more details on women's perceptions of the consequences of career interruption because of childcare, see Zhelyazkova and Valentova (2009).

continue providing care is also a major concern: “There is a real danger of unpaid informal caregivers becoming overloaded and feeling compelled to move their elderly family members to an institution” (Chawla, Betcherman, and Banerji 2007, 34) Such caregivers will need to be provided with support.

*Looking after other persons, raising children, and performing housework are the main reasons women give for staying out of the labor force or working part time.* A recent Eurostat survey finds that women are “held back from working full-time by the work that they carry out raising children, looking after other persons, or housework; this was the single largest reason (36.0 percent) for women working less than 30 hours per week in 2007, in contrast to the proportion (5.0 percent) of men for whom this was the reason that they worked less than 30 hours per week” (European Commission 2010, 27) (figure 2.16).

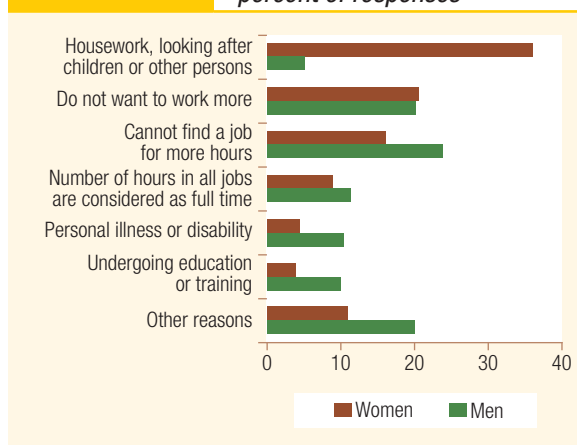
*Innovation in policy design is needed to avoid unwanted substitution effects between raising fertility rates and discouraging female labor force participation.* In Romania, the child allowance benefit is a monthly cash transfer for a parent who stays at home to take care of a child. It is equivalent to 85 percent of the average income earned by the par-

ent over the past 12 months and is available until the child is 2 years old (box 2.4). This type of policy does not specify which parent should stay at home to receive the benefit, though it is more likely that mothers will. This raises the question of whether this policy will have the same impact as a maternal leave policy. Answering this question would require significant national dialogue, but also thorough consideration of the entire range of family policies, such as the maternity leave, so as to be consistent, gain efficiency, and foster accurate targeting.

*The enrollment rate in childcare facilities among under-3-year-olds is lower, on average, in Europe and Central Asia than the observed average rate in se-*

FIGURE 2.16

**Reasons Men and Women Work Less Than 30 Hours a Week, European Union, 2007**  
percent of responses



Source: European Commission (2010).

**Box 2.4: Family Policies in Romania**

The *state child allowance* is a monthly cash transfer to all children age 0 to 18 (or more if the child is still in school), with differentiated benefit levels for all children 0 to 2 years old (RON 200), children 2 to 18 years old (RON 42), or children with disabilities who are 0 to 3 years old (RON 200) or 3 to 18 years old (RON 84). The value of the benefit has been raised five times since it was implemented.

The *child-raising benefit* is a monthly cash transfer for a parent who stays home to care for a child. It is equivalent to 85 percent of the average income earned by the parent over the previous 12 months. The value ranges from a minimum of RON 600 to a maximum of RON 4,000. It is granted until the child turns 2 years old or 3 if the child is disabled. On January 1, 2011, the parameters of the program were modified. A parent who opts to participate in the program for two years receives a monthly allowance equivalent to 75 percent of the average income earned by the parent over the previous 12 months. The value of the benefit ranges from a minimum of RON 600 to a maximum of RON 1,200. A parent who opts to participate in the program for one year receives a monthly allowance equivalent to 75 percent of the average income earned by the parent over the past 12 months. The value of the benefit ranges from a minimum of RON 600 to a maximum of RON 3,400. Parents who opt for the one-year program and return to work before the end of the program are eligible for a back-to-work bonus of RON 500 per month for the second year upon their return to work.

These programs have resulted in a modest increase in fertility rates at the expense of a reduction in labor force participation among parents of childbearing age. These programs may be revised in light of further analysis to achieve the same goals in a more efficient and simpler way. The overlap in the programs increases costs, allows room for error and fraud, and could be eliminated or reduced through simplification and coordination with other family and social programs.

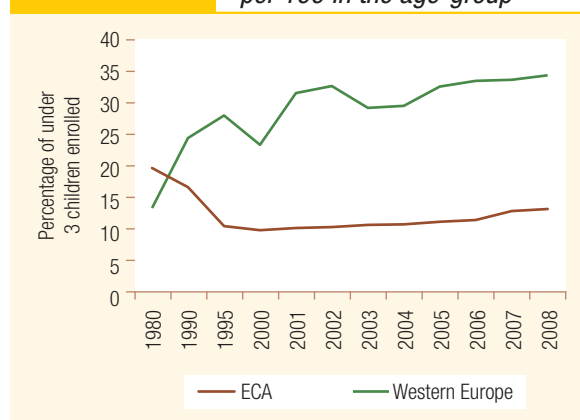
Source: World Bank (2011c).

lected Western European countries. On average in Europe and Central Asia, only 13 percent of children under the age of 3 are sent to childcare. In Western Europe, the rate is 34 percent (figures 2.17 and 2.18). While childcare enrollment in Europe and Central Asia fell considerably during the 1990s and has not increased in the last decade, the trend is quite the opposite in Western European countries.

*The low enrollment rate in childcare is a consequence of the lack of childcare services.* The enrollment rate in childcare among under-3-year-olds varies greatly across the region. This large variation may be caused by a lack of labor market opportunities among women that would encourage women to send their young children to childcare and participate in the labor market or by social norms or preferences, but also by a lack of childcare services. This last seems to be a strong determinant. For the small sample of countries in the region on which we have information on childcare availability, childcare enrollment rates increase in tandem with the places available in childcare facilities. Providing more (subsidized) childcare could serve not only to promote female labor force participation, but also to increase fertility rates.

**FIGURE 2.17**

**Childcare Enrollment Rates among Under-3-Year-Olds per 100 in the age-group**



Source: UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.  
Note: ECA = Europe and Central Asia.

*In the region, mature women who retire early could become caregivers for children and the elderly.* Countries in the region could take advantage of the fact that women are retiring relatively young and in good health and exhibit high life expectancy. These women could provide both childcare and elderly care. In many countries in the world, grandmothers are providing childcare. For example, since the introduction of the grandparent childcare benefit, the Australian government has been paying grandparents who take care of their grandchildren for up to 50 hours per week. The United Kingdom is considering a similar policy; the city council of Nottinghamshire conducted an experiment in 2004 involving payment to grandparents on a weekly basis to take care of their grandchildren. Although this kind of policy is not consistent over time because, as women become more attached to the labor market, their opportunity cost in providing care increases, it may represent a fruitful resource for the near future given the characteristics of the 55–65 age cohort among women.<sup>65</sup>

*Awareness should be raised to demystify care as a female activity and to involve men more regularly.* As we see elsewhere above, most of the constraints—many times, self-imposed—in the labor market are related to the fact that women have to carry out work on the labor market, as well as household chores. The elimination of some of these constraints arises through the development of new technologies that reduce the time required to perform household chores. To improve the opportunities for women to gain access to the same jobs as men, husbands should become more involved in household chores, particularly in childcare and elderly care.

## Pensions

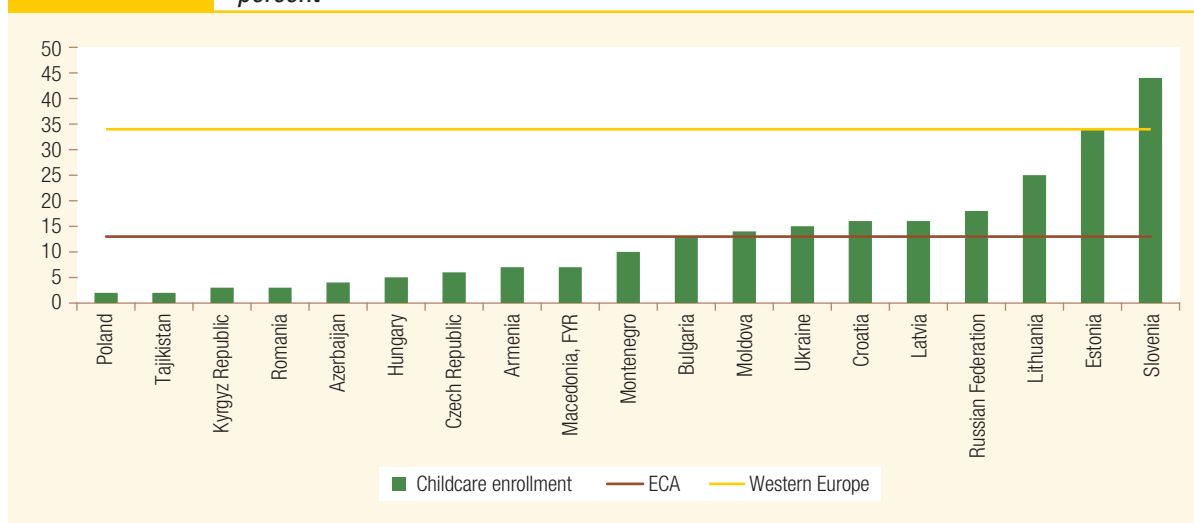
The aging of the population has raised concerns about the sustainability of pension systems in view of the growing number of beneficiaries and the declining number of younger contributors. However, EU and World Bank projections show that appro-

<sup>65</sup> For more details, see Posadas and Vidal-Fernández (2011).



FIGURE 2.18

### Share of 0- to 3-Year-Olds Enrolled in Childcare, 2008 percent



Source: UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.

Note: ECA = Europe and Central Asia.

priate and timely policy reforms can significantly reduce the impact of aging populations on pension systems.

*In most countries in Europe and Central Asia today, women are able to retire at a younger age relative to men.* The average age of retirement in the region is 55 for women and 57 for men. This is considerably lower than the observed average in OECD countries, where the age for both women and men is 60. In Turkey, the minimum retirement age varies depending on whether the person was registered with the system in 1999 or not. For new entrants since 1999, the retirement age for women has been set at 58 and for men at 60 (except in one of the three current schemes). The minimum retirement age for people who were already in the system in 1999 has been increased to 52 for women and 56 for men (Chawla, Betcherman, and Banerji 2007).

*To avoid a severe fiscal crisis related to the lack of sustainability in a pension system, labor force participation should increase, particularly among women.* To raise labor force participation, an untapped area of reform is the equalization of the retirement age among women and men. Raising the age of retirement for women will have a doubly positive effect. On the one hand, it will increase the revenues of

the pension system deriving from working women; on the other hand, it will reduce the period over which these benefits need to be spread, which is particularly important given that women have longer life expectancy. In addition to enhancing the sustainability of pension systems, longer tenures will boost women's pension benefits, as well as the opportunities of women to reach senior decision-making positions.

*To avoid unintended secondary effects on fertility rates, while encouraging female labor force participation, some countries in the region have considered linking the retirement age to fertility rates.* Pronatalist policies in many countries in Europe and Central Asia require women to work fewer years than men. In the Slovak Republic, for example, the retirement age for women depends on the number of children the women have raised: the greater the number of children, the lower the retirement age. However, because the fertility decision is based on a complex mix of factors, including the cost of bringing up children, the opportunities for women's participation in higher education and employment, household economic status, marital status (including divorce and cohabitation), and the degree of compatibility of work with childcare, the balance of

evidence suggests that the effect of transfer-based pronatalist policies is negligible (Chawla, Betcherman, and Banerji 2007).

*Because growth in labor productivity has been the main engine of growth in the region, it is essential that countries implement policies to continue benefiting from this trend.* The cornerstone of the reform strategy going forward is increased productivity. Measures

to improve labor productivity may potentially offset the effects of reductions in the size of the labor force. For example, growth decomposition exercises show that, in most of the countries in the region, the growth in labor productivity in recent years has been the single greatest contributor to increases in per capita incomes (Chawla, Betcherman, and Banerji 2007).



# Women in Entrepreneurship

## Introduction

The expansion and recognition of the formal standing of entrepreneurship were among the major changes brought about by the transition from the planned economy to the liberalized market economy in Central and Eastern Europe and Central Asia in the 1990s. In the rapidly changing social and economic environment of the transition countries, entrepreneurship held the potential to contribute to both economic development and social inclusion. Moreover, entrepreneurship also provided another means of income generation among men and women in economies characterized by limited growth in employment even during high-growth years.

Entrepreneurship also has a broader economic impact and is important from the perspective of job creation, private sector development, and wealth creation. Women's participation in entrepreneurship can enhance the expansion of these economic goods and simultaneously lead to less inequality in the two largest subgroups in the population: men and women. However, in addition, as discussed elsewhere in this chapter, businesses owned and managed by women are different from businesses owned and managed by men; thus, the gender specialization that appears to occur in the labor market is reflected in entrepreneurship as well. One important issue is whether the smaller number of women entrepreneurs and the differences in the businesses of women reflect preferences or are the result of constraints placed on women that unfairly target the ability of women to grow businesses and accumulate wealth.

The results reported in this chapter indicate that, though there is significant representation of women in leadership positions in firms as owners or managers, their representation is well below the level commensurate with either women's presence in the labor market or women's educational qualifications. The chapter explores the issues and relative challenges faced by women entrepreneurs. In brief, we find as follows:

- ◆ Women constitute about one in three entrepreneurs in the region. Though the relative proportion is comparable with the international average, there are fewer women and men entrepreneurs as a share of the workforce in Europe and Central Asia relative to other regions.
- ◆ The types of firms operated by women and men entrepreneurs are different. The firms of women are smaller and are concentrated in different subsectors in both services and manufacturing.
- ◆ In aggregate, firms owned by women perform less well than firms owned by men. This trend could be changed if the scale of the businesses of women were expanded. This might be achieved through the expansion of credit, as well as the expansion of access to business development services, especially better links with supply chains.

The remainder of this chapter is structured as follows. The next section presents available data on women who are business owners, managers, and founders. The second section analyzes gender-based differences in the characteristics of entrepreneurs and their enterprises. The following section

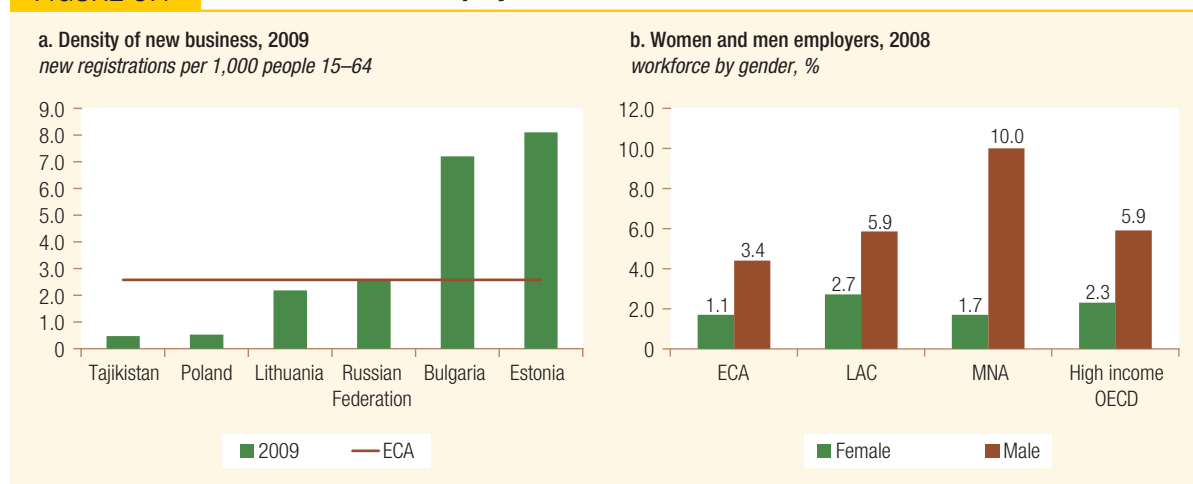
explores the relative constraints faced by women entrepreneurs. The fourth section discusses the performance of these entrepreneurs. The final section concludes by providing the main findings and recommending policy reforms.

## The Involvement of Women in Entrepreneurship

Entrepreneurship and business creation can be significant contributors to private sector enlargement and to the dynamism of an economy. However, it is difficult to estimate the size of the private sector in any economy in Europe and Central Asia. The same is true of women's contributions to and participation in entrepreneurship. Indicators that capture information on the value added by the private sector or the share of private sector employment in total employment are broadly lacking in the region. Nonetheless, limited data exist on the amount of new business creation in the formal sector, and this gives a sense of private sector activity (see figure 3.1).

Though we cannot quantify men's and women's contributions to the private sector, we can compare and contrast the performance of men and women as entrepreneurs to give some indication of

**FIGURE 3.1 Women and Men Employers**



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: ECA = Europe and Central Asia average. LAC = Latin America and the Caribbean. MNA = Middle East and North Africa. OECD = Organisation for Economic Co-operation and Development.

the gender gap in this important aspect of economic activity. This section describes women's involvement in business as entrepreneurs in Europe and Central Asia. There is no single definition of entrepreneurship, which includes varied economic activities, such as ownership, strategic management, and the founding and establishment of businesses. Moreover, to take advantage of the few available gender-disaggregated data sets or regional and national studies, our analysis is opportunistic and adopts the definition that best allows us to exploit the information at hand to gain insights.

### Women Employers

*There are relatively fewer employers in Europe and Central Asia than globally.*<sup>66</sup> The concept of entrepreneur includes the concept of employer. Persons who employ others constitute only a small share of the total work force in the economies of the region, but also in other parts of the world. The average share of employers among the employed was 3.1 percent in Europe and Central Asia in 2008. The share varied from about 6 percent in Turkey to about 1 percent in Armenia, Georgia, and Moldova. If one compares this with the high-income countries of the Organisation for Economic Co-operation and Development (OECD) and Latin America and the Caribbean (both 4.3 percent), one finds that there are relatively fewer employers in Europe and Central Asia.

*In Europe and Central Asia, women are more likely to be employers if men are also more likely to be employers.* The share of male employers in the total male workforce is 3.4 percent, compared with 1.1 percent among women; both of these shares are low by international standards (figure 3.1). Though there is a large difference in employer rates by gender, they are strongly correlated (0.8); countries with higher shares of male employers are also likely to have higher shares of women entrepreneurs among all employed women. The exceptions are Armenia, Azerbaijan, and Turkey, where the ratio among male and female employers is large, and the concentration of male employers is particularly high. The ratios are closest in Kazakhstan and the Russian Federation, though the overall proportion of entrepreneurs is low in these two countries.<sup>67</sup>

*Self-employment rates and employer rates are negatively correlated, but only among women.* If self-employment among women declines, the proportion of women employers increases. This may be a reflection of the difficulty self-employed women face in growing their own businesses. This may be because, relative to men, women encounter greater obstacles than men, or it may be that the incidence of self-employment among women reflects a market necessity, while the status of employer represents a career choice made by women who, among other reasons, desire to expand their wealth (see box 3.1). Self-employment rates among men and women are strongly negatively correlated with income per capita as measured by the log of gross domestic product (GDP) per capita at purchasing power parity, whereas the incidence of employers among men and women increases somewhat as income per capita increases.

*The better business environment has not led to a greater prevalence of women or men employers in the region.* The Doing Business indicators provide one measure of the ease of doing business in a country, though only in the formal sector (World Bank and IFC 2009). Europe and Central Asia perform relatively well compared with other regions of the world. The average rank of Europe and Central Asia in the ease of doing business was 71 in 2009,

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<sup>66</sup> The concept of employers used here reflects the definition of the International Classification by Status in Employment, of 1993 (<http://laborsta.ilo.org/applv8/data/icsee.html>), as follows: "Employers are those workers who, working on their own account or with one or a few partners, hold the type of job defined as a 'self-employment job' [that is, jobs where the remuneration is directly dependent upon the profits (or the potential for profits) derived from the goods and services produced], and, in this capacity, on a continuous basis... have engaged one or more persons to work for them in their business as 'employee(s)'. "

<sup>67</sup> The employer gender gap is the difference in the employer rates between men and women. However, given the variations in employer rates in the region, the ratio of male to female employer rates may be more appropriate as a measure. This employer gender ratio shows that the same countries are at the extremes of the distribution.

### Box 3.1: Entrepreneurship: Opportunity or Necessity?

Some men and women are motivated to become entrepreneurs to pursue business opportunities, while others are pushed into entrepreneurship by necessity. Those entrepreneurs who establish and grow their enterprises because they enter into business willingly may have different attachments to their businesses and different risk profiles relative to those who pursue entrepreneurship because they see few other attractive opportunities in the market.

In 2007, the Global Entrepreneurship Monitor involved an effort to collect data on entrepreneurship in 41 countries. Nine of the countries were in Europe and Central Asia (Croatia, Hungary, Kazakhstan, Latvia, Romania, Russia, Serbia, Slovenia, and Turkey). Though, globally, opportunity was the dominant motivation among men and women entrepreneurs, this was less true in Europe and Central Asia. On average, about half the women entrepreneurs in any individual country pursued entrepreneurship because of opportunity. However, there was significant variation. At one extreme, in Slovenia, the wealthiest country in Europe and Central Asia, almost four women entrepreneurs in every five saw entrepreneurship as an opportunity. However, in Croatia, Serbia, and Turkey, only 25–45 percent of women who self-identified as entrepreneurs reported that they had established their businesses because of opportunity.

Source: Allen et al. (2008).

compared with 83 and 95 for East Asia and the Pacific and for Latin America and the Caribbean, respectively. The overall rankings of the region for the friendliness of the business environment and for the prevalence of employers do not appear to be positively correlated. However, there is a strong negative relationship between the Doing Business ranking and the rate of new business registrations.<sup>68</sup> This apparent contradiction may indicate either that not all employers are in the formal sector or that improvements in the business environment are more recent and have not yet resulted in a significant shift in the stock of business owners.

### Women Owners in the Formal Sector

In most economies, small and medium enterprises are more prevalent than larger ones.<sup>69</sup> These enterprises are also frequently responsible for driving innovation and competition in the private sector. Though not all microenterprises and small enterprises are necessarily active in the formal sector,

estimates of the informal sector appear to indicate that, in terms of the contribution to GDP, a substantial portion (though, perhaps, not the majority) of the enterprises in Europe and Central Asia are, indeed, active in the formal sector (World Bank, forthcoming). Consequently, any analysis of formal firms (for example, registered firms) provides useful insights into overall activity in the private sector of a country.

Entrepreneurship and ownership are closely associated and are often considered identical in the case of companies owned by individual owners or groups of owners. In most countries in Europe and Central Asia, the majority of firms are not publicly traded because most firms are either owned by individuals or by small groups of individuals, many of whom are related. This subsection discusses the ownership of firms disaggregated by men and women in the region and in specific countries.

*In 2009, women participated in the ownership of more than one-third of all registered firms in the region.*<sup>70</sup> At 36 percent of all firms, the share is slightly above the global average, though it is significantly below the share in East Asia and the Pacific, which exhibits the highest rates of female participation

<sup>68</sup> The rate of new business registrations is the annual rate at which new businesses are registered per 1,000 persons 15–64 years of age.

<sup>69</sup> The European Union's current definition categorizes companies with fewer than 10 employees as microenterprises, while those with fewer than 50 employees are small, and those with fewer than 250 employees are medium.

<sup>70</sup> The data are taken from the Enterprise Surveys (database), World Bank, Washington, DC, <http://www.enterprisesurveys.org/>. The sample covers formal (registered) firms with five or more employees in the manufacturing and service sectors, which corresponds to International Standard Industrial Classification codes 15–37, 45, 50–52, 55, 60–64, and 72 (see United Nations, “Detailed Structure and Explanatory Notes: ISIC Rev.3.1,” Statistics Division, United Nations Department of Economic and Social Affairs, <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17>). Service firms include firms in construction, retail, wholesale, hotels, restaurants, transport, storage, communications, and information technology. State-owned firms are excluded.

in ownership among all developing regions (figure 3.2). The different rates of female entrepreneurship across countries may reflect many factors, including the level of development of the private sector, the share of firms in sectors in which women are concentrated, and woman-friendly credit policies. The countries in Europe and Central Asia with the highest rates of female participation in ownership are Belarus, the Kyrgyz Republic, and Moldova (50–60 percent), while the countries with the lowest female participation rates in ownership are Albania, Azerbaijan, and Kosovo (11 percent).

*Women's participation in firm ownership varies greatly by type of enterprise.* The type of firm matters significantly in indicating the degree of control that owners have over the day-to-day operations or even the strategic direction of firms. Firms with multiple owners, such as public shareholding companies, are likely to have diluted ownership. The ownership arrangements of sole proprietorships are clearer in terms of determining the role of the owners and the gender of the owners. In sole proprietorships in Europe and Central Asia, about one in three owners is a woman, which appears to be largely consistent

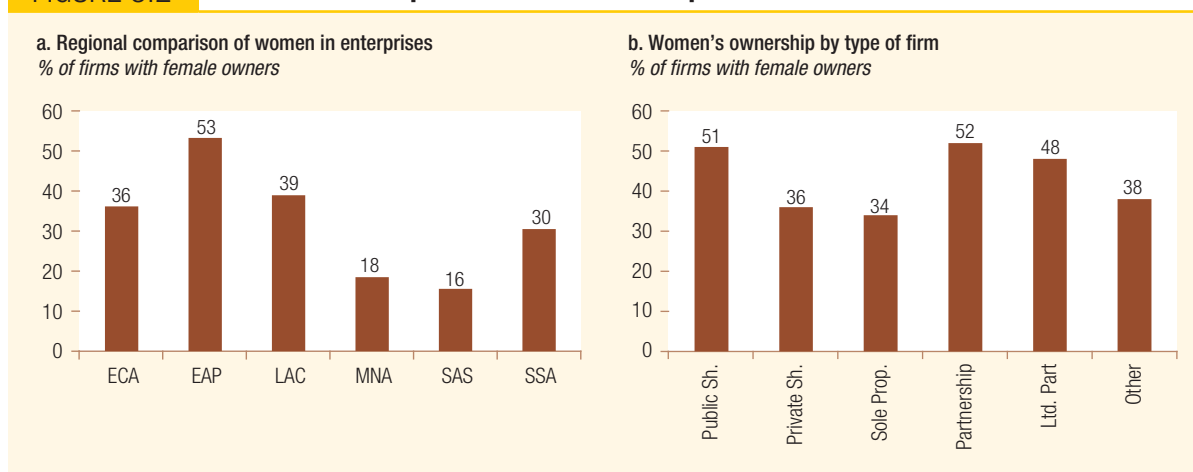
with the concentration of women employers (see elsewhere above).

*Ownership within firms is highly concentrated in the region; thus, the ability of women and men joint owners to exercise their ownership rights is potentially limited.* On average, an estimated 82 percent of domestic firms in the region are owned by the largest shareholders, whereas, in other regions, majority shareholders own from 67 percent (South Asia) to 78 percent (in OECD) of firms. In this case, unless majority shareholders are woman, it is unlikely that, despite participation in ownership on a broad scale, women exert control over the direction of companies or obtain significant shares of the income streams from the firms. (However, the data are insufficient to identify majority owners in shareholding companies or partnerships.)

### Women in Top Management

Though senior managers may not be entrepreneurs, they may have significant control over the direction of firms. Senior managers are responsible for key decisions affecting not only the daily

**FIGURE 3.2 Women's Participation in Firm Ownership**



*Sources:* Business Environment and Enterprise Performance Survey, European Bank for Reconstruction and Development and World Bank, London, <http://www.ebrd.com/pages/research/analysis/surveys/beeps.shtml>; Enterprise Surveys (database), World Bank, Washington, DC, <http://www.enterprisesurveys.org/>.

*Note:* Data are for 2009 or the latest available year. EAP = East Asia and the Pacific. ECA = Europe and Central Asia. LAC = Latin America and the Caribbean. MNA = Middle East and North Africa. SAS = South Asia. SSA = Sub-Saharan Africa. Public Sh. = public shareholders. Private Sh. = private shareholders. Sole Prop. = sole proprietorship. Ltd Part = limited partnership.

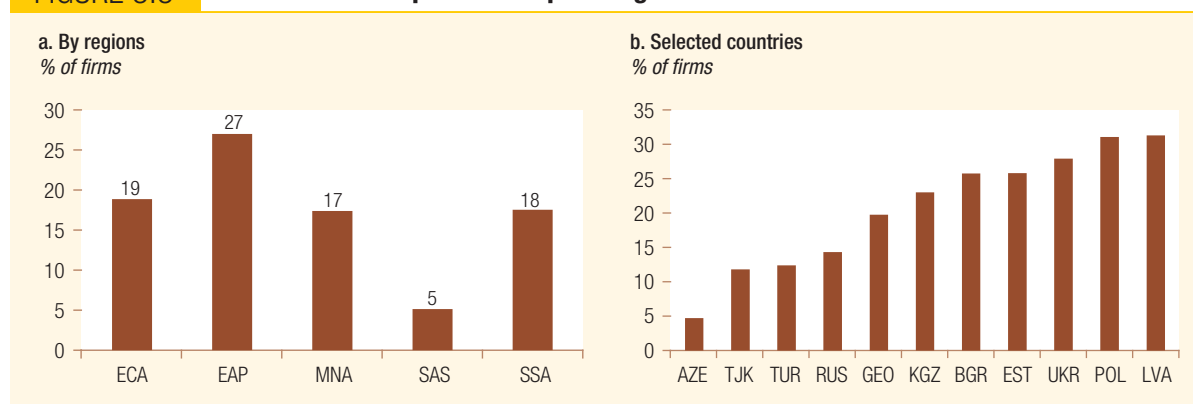
operations of businesses, but also long-term strategic development and profitability. An analysis of women in top management is likely to provide a more accurate picture of the degree to which women have a say in firms because, in many cases, firm ownership may be diluted, or women (such as wives and daughters) may be owners, but effectively silent. Thus, managers may often have greater influence than nonmajority owners of firms. This subsection discusses the share of women in top management in formal sector firms with at least five employees, as well as the significant correlations between female ownership, management, and employment in the region and in specific countries.

*A woman is a top manager in about one in five firms in the region.* Women hold top management positions in an estimated 19 percent of firms in Europe and Central Asia (figure 3.3). Data on other regions are far less complete; not all countries report information on top managers. The proportion of firms with top managers who are women was 27 percent in East Asia. As in other regions of the world, women in Europe and Central Asia are much less likely than men to obtain seniority

and become critical decision makers within firms. From the low representation of women in top management positions, it appears that the large pool of well-educated women, especially those who have specialized in the social sciences, law, and business, are underutilized in Europe and Central Asia.

*The level of variation in women's participation in senior management positions in enterprises is high in the region, ranging from 0.3 to 31 percent of all firms.* The countries with the highest proportion of firms with top managers who are women are Latvia and Poland, at 31 percent. At the other extreme, only 5 and 0.3 percent of firms in Azerbaijan and Kosovo, respectively, have women in top management positions. The subregion with the highest proportion of firms with top managers who are women is the 10 member states of the European Union (EU) that are in the region (EU10) (22 percent), followed by the middle-income countries of the Commonwealth of Independent States, at 19 percent. There is also a relatively strong correlation (0.6) between the proportion of firms with female participation in ownership and the proportion of firms with women in top management.

**FIGURE 3.3 Women's Participation in Top Management**



Sources: Business Environment and Enterprise Performance Survey, European Bank for Reconstruction and Development and World Bank, London, <http://www.ebrd.com/pages/research/analysis/surveys/beeps.shtml>; Enterprise Surveys (database), Enterprise Analysis Unit, World Bank, Washington, DC, <http://www.enterprisesurveys.org/>.

Note: Data are for 2009 or the latest available year. The average for East Asia (EAP) includes Indonesia, Malaysia, Mongolia, the Philippines, and Vietnam. The average for Europe and Central Asia (ECA) is based on data on 29 countries. The average for Middle East and North Africa (MNA) includes Lebanon, Syrian Arab Republic, and Republic of Yemen. The average for South Asia (SAS) is for Afghanistan, Bangladesh, and Nepal. The average for Sub-Saharan Africa (SSA) is for Angola, Benin, Botswana, Cape Verde, Democratic Republic of Congo, Republic of Congo, Eritrea, Gabon, Lesotho, Liberia, Mali, Malawi, and Togo.



## Women Entrepreneurs and the Characteristics of Their Firms

The characteristics of firms of women entrepreneurs and the firms of men entrepreneurs are different. This is true whether the women are owners (sole or joint) or top managers. Firm characteristics vary by sector, number of employees, and domestic or foreign ownership.

### Women Owners in the Formal Sector

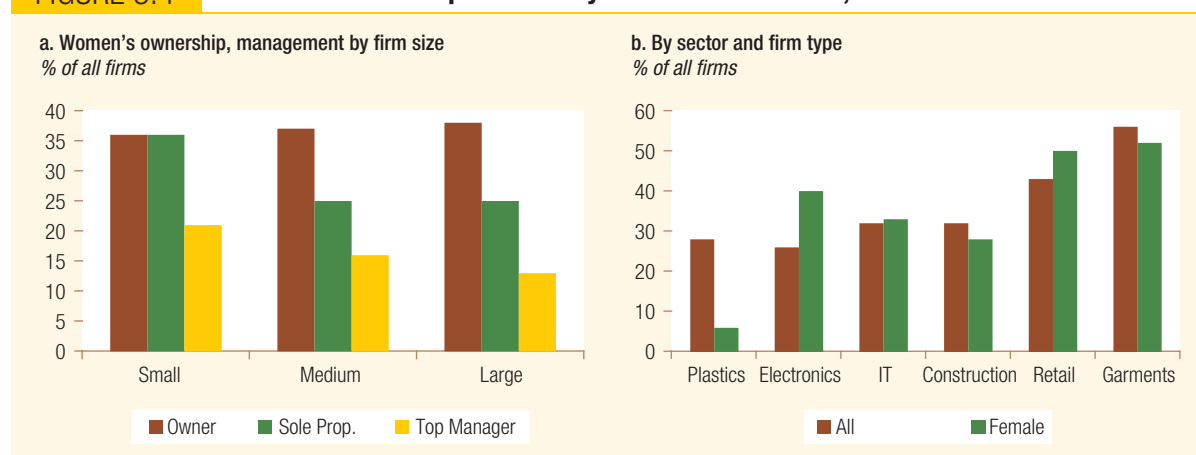
*Small, medium, and large firms in the region show approximately the same level of participation of women in ownership.* On average in the region, women's participation in ownership ranges from 36 to 39 percent in firms by size (though with variation across countries) (figure 3.4); this is comparable with the results in Latin America and the Caribbean. However, there are large variations among female participation rates; the greatest variation across firms occurs among large firms, where the participation rates range from 4 percent in Montenegro to 64 percent in the former Yugoslav Republic of Macedonia. Within countries, women's participation rates by firm size are closely correlated, that is, if women show a high participation in large firms, they are also likely to show a high participation in medium and small firms. This rela-

tively balanced participation across firms by size appears to indicate that women are not being excluded from either small or large firms.

*However, among sole proprietorships and family-owned firms, woman-owned firms have fewer employees.* In the region, about 65 percent of all registered enterprises owned by women employ fewer than 10 permanent employees, in contrast with 56 percent among enterprises owned by men (figure 3.5). By their nature, the ownership in these types of firms is not diluted. Thus, women owners are much more likely to play an important decision-making role in these firms than in general. However, the predominance of women in smaller firms is difficult to ascertain. This may be caused by many factors, ranging from the particular sector of activity of women's firms to the ability of women to gain financing to expand their businesses and even women's business preferences. However, this characteristic of woman-owned firms is not unique; it is also evident in developed countries.<sup>71</sup>

<sup>71</sup> This finding is based on data for 2005 from the Business Environment and Enterprise Performance Survey, European Bank for Reconstruction and Development and World Bank, London, <http://www.ebrd.com/pages/research/analysis/surveys/beeps.shtml>; see also Sabarwal and Terrell (2008).

**FIGURE 3.4 Women's Ownership of Firms by Firm Characteristics, 2008**

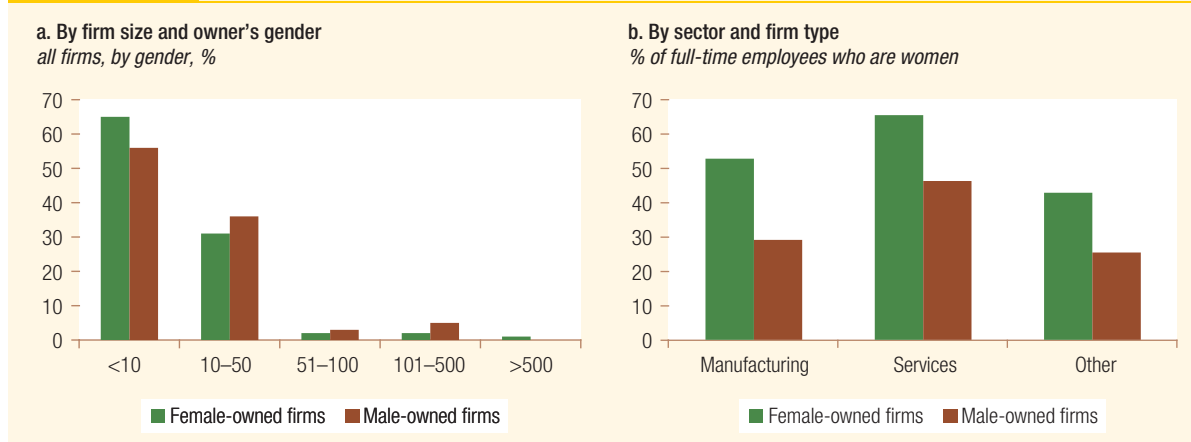


Source: Business Environment and Enterprise Performance Survey, European Bank for Reconstruction and Development and World Bank, London, <http://www.ebrd.com/pages/research/analysis/surveys/beeps.shtml>.

Note: IT = information technology. Sole Prop. = sole proprietorship.



**FIGURE 3.5 Sole Proprietorships and Firm Characteristics, 2008**



Source: Business Environment and Enterprise Performance Survey, European Bank for Reconstruction and Development and World Bank, London, <http://www.ebrd.com/pages/research/analysis/surveys/beeps.shtml>.

*The participation of women and men in firm ownership in the region is concentrated in different sectors. Women participate in the ownership of over half (55 percent) of the registered firms with 10 employees or more in the textile and garment industry, compared with only a quarter of the firms in basic metals, transport, and electronics.<sup>72</sup> This variation grows significantly among sole proprietorships, among which some sectors show a negligible share of women owners (such as in basic metals or plastics), while others show nearly equal representation (garments and retail). In some higher-productivity sectors, women have a strong presence. For example, among sole proprietorships in information technology and electronics, respectively, 33 and 40 percent are owned by women.*

*The employment rate of women is higher in sole proprietorships owned by women. Women proprietorships hire, on average, more women than men in some sectors. However, sole proprietorships owned by men usually hire relatively fewer women than men for full-time positions. This is true irrespective of the sector (see figure 3.5). It is not clear whether this arises because of a preference on the part of owners or some other characteristics of the firms and employees that are not readily apparent. However, irrespective of the underlying reasons, this appears to suggest that ownership by women*

and greater female participation in the private sector labor market may be correlated.

### Women in Top Management

*Women are more likely to achieve top management positions in small firms than in large and medium firms in Europe and Central Asia and in most other regions. About one in five top managers of small firms in Europe and Central Asia is a woman. However, in general, female participation in top management in small firms is not a good predictor of female participation in medium or large firms in the region. Nonetheless, there is great variation across the region. Thus, there are almost no women in top management positions in Kosovo, while, in Latvia, almost one in three top managers is a women irrespective of firm size. Europe and Central Asia does not perform particularly well in this indicator relative to other regions of the world. Women are in top management positions in 33 and 22 percent of*

<sup>72</sup> The full sample is weighted. The data are for 2008 and have been taken from the Business Environment and Enterprise Performance Survey, European Bank for Reconstruction and Development and World Bank, London, <http://www.ebrd.com/pages/research/analysis/surveys/beeps.shtml>.

small and medium firms in East Asia and the Pacific and in Latin America and the Caribbean, respectively, which is significantly higher than the share in Europe and Central Asia. In any case, it appears that, across the globe, women face obstacles in obtaining senior management positions in large firms.

*There are more women top managers in sectors in which women owners are more prevalent.* Women are more likely to be top managers in the garment industry, hotels and restaurants, and textiles than in any other sectors. The share of top managers who are women is around 30–40 percent in these sectors. The share of top managers who are women is only 6 percent in the basic metals, machinery, and equipment industries. The significant variation in female participation in top management mirrors to a greater degree the situation in female ownership discussed above. This correlation between the proportion of women owners and women managers is strong, but it is unclear why this occurs and whether it reflects the similar pattern seen where sole proprietorships led by women are more likely to hire women relative to sole proprietorships owned by men. It may indicate the existence in business of the occupational segregation commonly seen in labor markets.

*Women are more likely to obtain senior management positions in small firms that are in the service sector and in which at least one of the owners is a woman.*<sup>73</sup> Women are more frequently top managers in small retail firms and in firms where at least one of the owners is a woman. In countries on which relevant data are available, women are, on average, three times more likely to be top managers in small firms than in large firms (for example, Armenia, Georgia, and Ukraine). Similarly, women are more frequently top managers in retail firms. More than half the firms in which at least one of the owners is a woman are also run by women; the corresponding share in firms in which no women are owners is 4 percent (data on Armenia and Ukraine). Women are far less likely to hold top management positions in manufacturing than in services (data on Armenia and Turkey), while, in the service sector (excluding retail), three times as many firms have top managers who are women. Women managers are also, on average, younger and less experienced than their men counterparts (data on Uzbekistan).

## Constraints on Women's Entrepreneurship

Men and women in the region face constraints in starting and growing businesses partly because of the lingering effects of the transition process and, in some instances, because of an incomplete transition. However, across the region, several constraints, such as lack of access to credit, lack of networks, and barriers in the business environment, appear to affect men and women business owners differently. In this section, we discuss the difficulties women face in accessing finance, selected regulatory obstacles, and women's lack of access to networks.

### Access to finance

*Women in the region are less likely than men to obtain bank financing, and they are more likely to pay higher interest rates if they do obtain bank financing.* Access to bank finance is thus a more important barrier for women business owners than for their male counterparts (Aidis et al. 2007; Sabarwal and Terrell 2008). In the formal sector in the region, woman-managed firms with more than five employees have a 5.4 percent lower probability of securing a bank loan relative to man-managed firms. Woman-managed firms, on average, pay 0.6 percent more in interest rates relative to their man-managed firms.<sup>74</sup> In the next section, we discuss the effects of this on business choices among women and on firm profitability.

*The lack of physical and financial assets penalizes women in credit markets.* Factors such as less well developed financial systems, lower collateral, and lack of credit histories appear to constrain women

<sup>73</sup> Here, firm size levels are 5–19 employees (small), 20–99 employees (medium), and 100+ employees (large).

<sup>74</sup> See Muravyev, Talavera, and Schäfer (2009), based on data of the Business Environment and Enterprise Performance Survey, European Bank for Reconstruction and Development and World Bank, London, <http://www.ebrd.com/pages/research/analysis/surveys/beeps.shtml>.

more than men. Evidence on the existence of discrimination against women in interest rates and in access to finance is found more readily in the least financially developed countries in the region (Muravyev, Talavera, and Schäfer 2009). Because banks typically lend on the basis of hard assets, such as plant and equipment, of which service businesses have few, women are less likely to obtain loans and are thus capital constrained and must operate at a lower scale (Sabarwal and Terrell 2008; see box 3.2 for an effort to alleviate this problem in India). Women are also disadvantaged in collateral-based lending because, in the process of privatization, private property has been disproportionately acquired by men, and, across most of Eastern Europe, new property owners have been mostly men (Paci 2002; Lastarria-Cornhiel 2009).<sup>75</sup> A study based on Living Standards and Measurement Study analysis in Tajikistan finds that, for long-term loans, women are charged a 16 percent interest rate, compared with 4 percent for men, because women are assumed to be less creditworthy given their significantly lower rate of ownership of land, assets, and livestock and their overall lower employment ratios and wages (World Bank 2009). In Tajikistan, banks also require the signatures of husbands for loans to women. For sim-

ilar reasons, MI-Bospo, a women-only microfinance institution (MFI) in Bosnia and Herzegovina, also requires the signature of husbands as a guarantee for loans to women who lack collateral.

*Women may be less inclined than men to pursue loans in some cases.* Less access to loans may also be explained as demand-side behavior caused, for example, by fewer applications to banks by women who may be more risk averse (Jianakoplos and Bernasek 1998; Barber and Odean 2001; Dohmen et al. 2005). These differences may have important implications for business performance if higher risk aversion leads women to restrict their investment in business ventures. The 2005 Global Entrepreneurship Monitor found that fear of business failure is significantly greater among women than men in middle-income countries (Minniti et al. 2006). In addition, Kepler and Shane (2007) find that nascent male entrepreneurs examine more ideas and gather more information while pursuing start-ups than do female nascent entrepreneurs. They report that firms are adjusting their input to reflect the capital constraint and that the capital constraint is partially responsible for the smaller scale of women's businesses (see also Sabarwal and Terrell 2008).

*MFIs provide women an opportunity to build a credit history, though this resource is underexploited.* Overindebtedness and the proliferation of nonperforming loans in the microfinance sector following the financial crisis have underscored the need for more credit bureaus in the region. Women comprise a large number of microfinance clients and have excellent repayment rates; however, despite this, they fail to build credit histories or the reputation collateral that could help them graduate to bank loans or larger loans given that MFIs in many countries in Europe and Central Asia, similar to

### Box 3.2: Encouraging Property Ownership through Stamp Duty Reduction

India's 11th Plan encourages ownership rights for women by offering incentives for ownership of property in women's name. Women home buyers benefit from tax exemptions, lower stamp duties and easier availability of home loans. A lower stamp duty rate helps in saving on the overall costs while purchasing property, thus acting as a significant boost for prospective women buyers.

Such is the increase of prospective women buyers that developers are also considering incentives aimed at women. State and local governments in Uttar Pradesh, Delhi, Orissa, and Punjab have launched some initiatives in this regard. For example, in 2002, the state of Delhi cut stamp duty rates from 8 to 6 percent for women owners. In case of joint ownership by men and women, the duty is 7 percent. Using the opportunity that India's favorable macroenvironment provided, MannDeshi Bank—a women's cooperative bank in the state of Maharashtra—has advocated for stamp duty reduction for joint property registration for women borrowers. This bank also honors and rewards husbands that undertake such joint registrations.

Source: Narain (2009).

<sup>75</sup> In Bosnia and Herzegovina, despite laws on equality, only 6.5 percent of women respondents to a survey reported owning land in their own names (STAR Network of World Learning, cited in IFC and MI-Bospo 2008). In Montenegro, only 3 percent of property is registered in women's names, while the corresponding figure in rural parts of Kosovo is 10 percent. Moreover, 40 percent of women noted that the lack of property makes it difficult to gain access to financing.

MFIs globally, do not participate in credit bureaus and credit registries. Currently, in 10 countries in Europe and Central Asia, MFIs provide information to credit bureaus and credit registries.<sup>76</sup> Increasing the access of women to MFIs would benefit nearly 2 million women borrowers in the region.<sup>77</sup> Though the World Bank collects data on the share of the adult population covered by public and private credit registries, there is no gender-disaggregated information. However, in five countries (Croatia, the Czech Republic, Lithuania, Poland, and Serbia), over two-thirds of the population is covered, which indicates that there is likely to be significant coverage among women.

### Other Regulatory Obstacles

Across the region, bureaucratic hurdles to investment, such as the registration of business activities, obtaining permits, dealing with tax inspections, and demands for bribes, constrain women's businesses more severely than men's businesses. This is, however, also a reflection of the deficiencies in the business environment and disadvantages in the size and the sectors of the businesses in which women more typically work.

*Women who head businesses report more often than men who head businesses that they face obstacles in finance, taxation, inspections, registration, permits, and so on.*<sup>78</sup> For example, the time needed to register a business is reportedly higher for women than men in Georgia and Tajikistan.<sup>79</sup> Similarly, relative to men, more women in Tajikistan cite tax administration as an obstacle. In Ukraine and Uzbekistan, inspections are more of a problem for women than men. In Belarus and Ukraine, women must make unofficial payments more often.<sup>80</sup> Do women entrepreneurs face more severe constraints? The limited available evidence only captures the problems encountered by registered firms. Thus, information on the obstacles women meet in trying to start or formally establish businesses is not at hand.

While more research is required, the constraints blocking women entrepreneurs should also be examined in light of the sectors in which women start and try to grow their businesses. Thus, the trade and service sectors are characterized by high

turnover among enterprises, as well as significant competition, thus rendering any business growth in these sectors difficult (Welter and Kolb 2006). Moreover, the sectors and the nature of the businesses in which women are concentrated, such as hotel and catering services, require more inspections (for example, sanitation, food quality, and health), and the cost of these inspections may thus be disproportionately high for the smaller businesses that, in Europe and Central Asia, show significant female participation. Nonetheless, this also means that the business environment is generally deficient.

*Access to swift, affordable, and effective justice systems and dispute resolution mechanisms such as arbitration is important for men and women entrepreneurs involved in small enterprises; these mechanisms are lacking in many countries in Europe and Central*

<sup>76</sup> The 10 countries are Armenia, Bosnia and Herzegovina, Bulgaria, Georgia, Kazakhstan, the Kyrgyz Republic, Mongolia, Montenegro, Russia, and Serbia. See Gender Law Library (database), World Bank, Washington, DC, <http://wbl.worldbank.org/WBLLibrary/elibrary.aspx?libid=17>.

<sup>77</sup> Gender Law Library (database), World Bank, Washington, DC, <http://wbl.worldbank.org/WBLLibrary/elibrary.aspx?libid=17>, based on the MFIs reporting to Mix Market (database), Microfinance Information Exchange, Washington, DC, <http://www.mixmarket.org/data-center>.

<sup>78</sup> See the previous note.

<sup>79</sup> In Tajikistan, relative to men, women who own incorporated businesses need an average of 10 more days to register their companies.

<sup>80</sup> Other studies show that the impact of investment climate barriers in Europe and Central Asia differs considerably by gender. Thus, Aidis et al. (2007) find that, in Ukraine, while both men and women entrepreneurs identify tax issues as a major constraint, regulations and legal barriers were identified by women more often. Women also reported more frequently that they were constrained by the lack of capital. In Lithuania, high taxes were identified as a barrier by all entrepreneurs regardless of gender. However, low purchasing power, which is directly related to low consumer demand, was identified as the second most important constraint by women entrepreneurs. The third most important barrier cited by women entrepreneurs was lack of financing for business investment, though this did not figure among the top three barriers reported by men.

*Asia*. Because women entrepreneurs in the region are concentrated in small businesses and face greater constraints in accessing formal legal structures or courts, affordable alternative dispute resolution mechanisms may benefit them disproportionately. Though a third of the countries in the region have created small claims courts, more initiatives, such as mediation and arbitration, as well as judicial cost reduction, the simplification of claims procedures, and improvements in access to justice, would likely aid in combating late payments and resolving disputes in commercial transactions, which can affect the survival of small businesses.

### Access to Networks

*Business networks and associations are largely male dominated, and women are disadvantaged.* Women's lack of access to networks and business associations deprives them of information, resources, and voice. Networks and business associations play an important role in support, training, information management, and access to mentors, role models, and resources, as well as forums for advocacy. Women entrepreneurs in Europe and Central Asia are disadvantaged because formal and informal networks and business development services are largely dominated by men. Such male-dominated networks led during Soviet times to greater gains in the early privatization process in transition economies. Even in countries where governments have taken proactive steps to support women entrepreneurs (for example, in Slovenia), women have been obliged to access resources through family and spouses in the absence of formal support structures (Drnovsek and Glas 2006). Moreover, the lack of access to networks deprives women of voice in ongoing reform processes and in efforts to make the business environment work for them by mainstreaming their concerns.

### Do Woman-Owned Firms Perform Comparably with Man-Owned Firms?

If women face different conditions and institutional constraints relative to men, the effects can spill over into women's performance in entrepre-

neurship. This section explores gender differences in entrepreneurial performance in terms of scale, profit, and total factor productivity. It is based on data of the Business Environment and Enterprise Performance Survey in 2005 and includes only the sample of firms in which women are the sole proprietors of individual firms or are the proprietors of family-owned firms.<sup>81</sup>

*Enterprises in Europe and Central Asia that are owned and managed by women are small in terms of sales revenue.* However, women generate more profit per unit of sales revenue and show higher returns to scale. Firm-level data on 26 countries show that, while the companies of men and women entrepreneurs in the region are suboptimally small, women's returns to scale are significantly larger than men's, implying that women would gain more if the scale were increased.

*On average, women owned businesses underperform in sales revenue by 6 percent relative to men.* However, this difference is driven by variation in the size of businesses (there is no such difference in larger businesses), and the gender efficiency gap in non-EU countries is larger than the corresponding gap in EU countries. The difference in performance is driven by the small scale of women's businesses. The suboptimal size of woman-owned firms arises because these firms are capital constrained and are concentrated in industries characterized by small firms. Internal financing and bank financing appear to be the two most important sources of financing; it also appears that, relative to men, women rely more on internal financing and less on banks (Sabarwal and Terrell 2008). More recent data of the Business Environment and Enterprise Performance Survey (2008–09) confirm this trend over time. Thus, women's enterprises (for example, in Azerbaijan, Belarus, Georgia, and Tajikistan) exhibit a much lower performance level in annual turnover or in annual profits relative to men's enterprises. These findings are consistent

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<sup>81</sup> See Business Environment and Enterprise Performance Survey, European Bank for Reconstruction and Development and World Bank, London, <http://www.ebrd.com/pages/research/analysis/surveys/beeps.shtml>.



with the conclusions of individual country studies: women entrepreneurs run businesses that are smaller in terms of sales and number of employees.

*Women entrepreneurs in the region generate the same amount of profit per unit of revenue as men entrepreneurs.* The performance of woman-owned firms in terms of total factor productivity is significantly more limited relative to man-owned firms in the same industries. However, the average gap, at –2.1 percent, is small and may not be economically significant. The overall finding that there are gender differences in scale and profits is the same throughout the region; however, the gender gap in total factor productivity is significant only in the non-EU countries, not in the EU countries. Our report finds that women and men operate businesses at an inefficiently small scale in both of these sets of countries, but that there is evidence women in non-EU countries fare better than men in access to finance.<sup>82</sup> We also find that significant gender gaps exist only in the scale of firm operations and not, as others have argued, in firm profitability or efficiency. This supports the argument that, if the existing capital constraints are lifted, women's businesses are likely to expand at least as much as the businesses of their male counterparts. Our report strongly indicates that more research is needed to explain the differences in firm performance between EU and non-EU countries. Also, evidence suggests that policy in Europe and Central Asia needs to be geared toward easing the capital constraints on women entrepreneurs and encouraging more women to start businesses in industries with greater growth potential.

*Is the smaller scale of women's businesses in the region caused by risk aversion among women?* The available evidence suggests that women entrepreneurs in the region increase the scale of their businesses if they have access to sufficient capital and that women implement such scale increases at the same rate as men entrepreneurs in the region. This runs against the perception that women's businesses are smaller and less profitable because women are risk averse or because they do not want to grow their businesses (Jianakoplos and Bernasek 1998; Barber and Odean 2001; Dohmen et al. 2005). This report finds, however, that there is no significant differ-

ence in firm profitability between men and women (Sabarwal and Terrell 2008). However, questions remain: Why do women concentrate their businesses in certain sectors (services rather than manufacturing)? Does sector concentration or the choice of activity reflect capital constraints at start-up? Is the capital constraint self-imposed or does it reflect bias in the financial system toward women entrepreneurs who lack collateral or a track record? (Boxes 3.3 and 3.4 offers examples of approaches to mitigate the financing problem at start-up.)

### Box 3.3: Equity Funds

Lack of start-up finance is a constraint for women in both starting and growing businesses. The following are two examples of equity funds that support women's start-ups.

Trapezia, an equity fund for women in the United Kingdom, is a private investment fund and is a venture capital and business angel for women entrepreneurs. It offers women investors the opportunity to invest in women-focused businesses over a three- to five-year period. Its investment advisory panel includes representatives from the Women in Business Unit of the Bank of Scotland and other seasoned entrepreneurs and professionals (IFC 2006).

The Women Private Equity Fund in South Africa was established in 2003. The fund provides expansion capital to companies that are controlled or managed by women, employ a majority of women, or have a market focus on women. The fund targets investments ranging from R5 million to R19 million. It also assists companies in strengthening their strategic focus. After three to five years of investment, the fund exits the investment in different ways, for example, through an initial public offering on the stock exchange, trade sales, international exits, or management buybacks (UN 2009b).

Source: Narain (2009).

<sup>82</sup> There are studies showing that women entrepreneurs face higher barriers and pay higher interest rates than their men counterparts. For example, in Germany, while both men and women have difficulty in accessing external finance, Constant (2006) points out that women often have difficulties convincing financial institutions and potential clients that they have strong management abilities and sound business ideas. Among other European countries, a recent empirical study by Alesina, Lotti, and Mistrulli (2009) finds that self-employed women pay more than men in Italy for overdraft facilities and that this difference does not seem to be explained by any variable capturing differential risk, directly or indirectly.

### Box 3.4: Capital Seed Program in Chile

Capital Seed (*Capital Semilla*) is a program to distribute funds with the objective of fostering the creation of new firms and strengthening existing microenterprises and small enterprises. It is part of the Servicio de Cooperación Técnica (technical assistance service), a government office within the Ministry for the Economy, Development, and Tourism. The program targets microentrepreneurs whose yearly sales are below UF 25,000, who pay taxes, and who have not carried on activities for more than one year.

The program provides start-up capital of between US\$2,162 and US\$4,325, of which an additional 30 percent comes from the entrepreneur in cash. The applicant goes through a competitive process that begins with an online self-diagnosis of the entrepreneur's skills and the economic activity of the firm or proposed firm. According to the result, the entrepreneur can directly apply for funds by presenting a business plan or must submit to a conditional application in a business training program. If the applicant fails the diagnosis, the applicant is eliminated from the process. The application process is open yearly during the month of March.

The business plans are carefully evaluated by a jury from the Servicio de Cooperación Técnica according to criteria stated in the application forms. The jury grants the capital according to the score assigned to the business plan and according to regional criteria.

During the time the entrepreneur uses the funds, the Servicio de Cooperación Técnica provides technical support through a consulting firm.

In 2009, 650 projects were financed. In 2010, 879 entrepreneurs applied for the program, of which 178 were microfirms, which were evenly distributed between men and women managers, and 701 were entrepreneurs. More men (449) applied than women (282).

Source: <http://www.sercotec.cl>.

to be smaller firms or microenterprises and often focus on the shuttle trade. More support for women would help women entrepreneurs in the region become more confident and positive and less risk averse and would also enable the region to leverage women's full potential to assist in building sustainable and competitive economies. This section outlines policies and strategy directions to achieve these goals.

*In addition to increasing women's participation in entrepreneurship (woman-owned businesses account for a mere 10th of all incorporated enterprises in the region), there is also a need to support, grow, and diversify women's businesses.* Our analysis has shown that woman-owned firms, though often smaller, are as efficient as the firms owned by men.

However, in Europe and Central Asia, not only is the overall gender gap in entrepreneurship significant, but a large number of women are also involved in the shuttle trade or in microenterprises that face low entry barriers. Many women operate their businesses from their homes or in street markets or can afford to engage in self-employment only part time. In addition to increasing women's participation rates, it is thus equally important to address the specific constraints women entrepreneurs encounter in growing their businesses (see box 3.5 for an example from Afghanistan). It is significant that, in the region, the share of women

## The Implications for Policy Design

Women entrepreneurs play an important role in the private sector of the transition economies. However, they face significant constraints in starting and growing businesses. There is an urgent need for governments in Europe and Central Asia to recognize the potential of women entrepreneurs and to address the constraints women entrepreneurs face. Private sector and nonprofit organizations, donors, and public-private partnerships should be part of the solution. The current economic crisis has highlighted the need to support women, who constitute at least half of the human capital and a third of the private sector in the region and who are also more vulnerable because their businesses tend

### Box 3.5: Training Women in Nontraditional Sectors

Under an initiative led by Italian Cooperation, Pashtun women in low-income families in Kabul have been trained in nontraditional businesses (that had hitherto been a preserve of men) such as gem-cutting, the repair of mobile phones, and catering. Many of the trainees have graduated to work as caterers, lantern makers, mobile repairers, and gem-cutters. A group of trained gem-cutters has subsequently established Sultan Razia Gem Cutting Co., an enterprise in Kabul. A program evaluation carried out by the United States Agency for International Development of the company's business model finds that it is a sound basis for rapid expansion (Bowersox et al. 2007). Convincing the women to undergo the training was not easy, however. Italian Cooperation first had to win over the *shura* (a consultative body) to allow women to train with them. As an additional guarantee, a *shura* member was hired as an advocate.

Source: Narain (2006).



entrepreneurs who desire to grow their businesses is relatively high (Welter et al. 2006).

*Policy initiatives to support sectors in which woman-owned businesses are concentrated will benefit women disproportionately. However, there is also a need to support women's participation in nontraditional sectors.* Linking women entrepreneurs to business development services and mentors and increasing women's access to relevant technical education is an imperative for raising the competitiveness of women in the region. While initiatives exist in the region to support small and medium enterprises, such services are currently lacking for microenterprises and small enterprises and for women traders (Aidis 2006; Rankin and Narain 2009). Even in training programs for small and medium enterprises, the region, with an average index score of 2.83 on a scale of 5.00, ranks below the high-income countries (4.36) and Latin America and the Caribbean (2.94).<sup>83</sup> Furthermore, women's concentration in small trade, small businesses, and microenterprises would need to be addressed to enable women to take advantage of emerging opportunities by increasing their access to global supply chains. Women faced with fluctuating domestic demand would particularly benefit from such links.

*There is a need to offset the revival of patriarchal traditions in the region by undertaking efforts to support women's role in society.* The lack of self-confidence and the fear of failure among women entrepreneurs can be linked to the perception in the region of women's role as housewives and of entrepreneurship as a male domain (Minniti, Allen, and Langowitz 2006; Allen et al. 2008). Counterbalancing these negative social attitudes can be achieved by creating a positive image of women entrepreneurship through media outreach, the sensitization of policy makers, and support for networking and mentoring among women entrepreneurs.

*Women entrepreneurs in the region lack access to networks; this represents a disadvantage among women in accessing resources, information, and advice and in lobbying for reform.* Networks are especially important for women entrepreneurs in a transition context because the formal institutional framework in many of these economies does not

yet function well (Welter et al. 2006). Informal networks help entrepreneurs in gaining access to resources and information and in voicing their concerns. Women's lack of access to networks therefore represents a disadvantage for them. This should be addressed through the development of formal structures, such as business associations and business support mechanisms that are sensitive to the needs of women entrepreneurs (box 3.6 offers examples). Supporting women's presence in important business entities such as chambers of commerce is also important for mainstreaming women's concerns. A EuroChambres (2004) survey of 25 member countries recently found that a chamber of commerce in only one of these countries (Slovenia) had a woman president.

*Improving the overall business environment will help both men and women, but especially women, who face additional constraints.* The countries in the region, especially countries in the early stages of market development, are burdened with corruption, inefficient judicial systems, and disregard for rules at the local level. These constraints affect particularly women. In addition to rationalizing tax policies and tax administration and reducing the barriers to the establishment of formal sector businesses through improved, simplified business registration processes, it will also be important to address issues such as building capacity, the sensitization of

### **Box 3.6: Networking for Success: Examples of Women's Business Associations**

The National Association of Women Business Owners represents over 9,000 women-owned businesses organized into 80 chapters throughout the United States. It creates networking opportunities for its members, sponsors nationwide conferences and public policy days, and provides tools for growing a business. (For more information, go to <http://www.nawbo.org/>.)

The Jordan Forum for Business and Professional Women, which was established in 1976, provides a platform for development, empowerment, and advocacy for women in business in Jordan.

Source: IFC and MI-Bospo (2008).

<sup>83</sup> Ranking of the *Economist* Economic Intelligence Unit.

officials to the problems of women entrepreneurs, and corruption. Concerted efforts should also be made to ensure that any revised policies and regulations are widely disseminated and publicized so as to reach women entrepreneurs, many of whom, for example, do not have access to the Internet for communication. Furthermore, because many women in the region cite inspections as a major constraint, a risk-based approach in inspections is warranted, along with more clarity and transparency in inspection visits.

*Women entrepreneurs in the region face significant challenges in accessing finance. Initiatives are needed to target women entrepreneurs and address their needs beyond microfinance.* While important, microfinance is clearly not sufficient to meet the needs of growth-oriented women entrepreneurs who need access to a variety of financial products, services, and service providers. (See box 3.7 for an example of a successful program.)

Recent government and donor initiatives in the region are significant in this regard (annexes B and C). Among donor-supported initiatives, recent credit lines of the European Bank for Reconstruction and Development to commercial banks that are aimed at women entrepreneurs are particularly important (box 3.8).

*Boosting women's access to information and communication technology will benefit women entrepreneurs in the region who have less access to such*

### Box 3.8: A Small and Medium Enterprise Finance Facility for Women

The European Bank for Reconstruction and Development signed a €50 million loan facility with Garanti Bank of Turkey to enable the Turkish bank to expand its portfolio of loans to microenterprises and small and medium enterprises in the economically less developed east and southeast regions of Turkey and for specific sectors and areas, namely, agriculture and women entrepreneurs. The objective of the program is to increase the access to finance among business women and the access of women to training and to raise the awareness of this financial market. Since the start of the program in 2007, Garanti Bank has lent US\$157 million to 8,400 women, trained approximately 1,600 participants, and received over 3,000 applications for the bank-sponsored Turkey's Woman Entrepreneur of the Year contest.

Source: IFC (2010).

*services.* A survey of Internet use by men and women entrepreneurs in Cyprus shows that not only do more men (74 percent) than women (38 percent) use computers in their businesses, but that men also use the computers in more ways (such as in design, modeling, and financial statements) (Nearchou-Ellinas and Kountouris 2004). Of the women respondents in Cyprus, 88 percent do not use the Internet at all. Similarly, a study has found a statistically significant difference in the use of Internet, e-mail, and broadband by men and women entrepreneurs in Tajikistan (World Bank 2009a). The Cyprus survey also finds that 96 percent of woman-owned enterprises are active only in their local communities. Deploying information and communication technology for e-commerce could help expand women's business activities beyond the company premises. Business incubators are promising in this regard. Business incubator initiatives in Georgia, Mongolia, and Slovenia, a part of InfoDev, a World Bank-supported global development financing program, have been actively increasing awareness and seeking to enhance the participation of women entrepreneurs in incubator initiatives, including in Europe and Central Asia.

*Gender-disaggregated data and analysis are important in designing appropriate policy responses*

### Box 3.7: Finance for the Missing Middle

The Growth-Oriented Women's Enterprises Programme, a part of the African Development Bank's larger African Women in Business Initiative, is an attempt to address the constraints faced by business women. The program is based on lessons from enterprise development research in Africa by the International Labour Organization and the African Development Bank in Africa. It is a comprehensive program that responds to women's constraints such as lack of property rights and the lack of collateral, lack of adequate business financial records, limited capacity to prepare a business plan, and the high-risk perception about women by banks. The program thus supports women in growing their businesses through all three components: finance, training, and mentoring.

Source: IFC (2006).

*and in tracking what works and what does not work.* Gender-disaggregated data are needed to monitor the growth of women's enterprises and women's access to finance, as well as to determine whether policy interventions are working or not. A joint United Nations Economic Commission for Europe–World Bank initiative in Europe and Central Asia aimed at increasing the capacity of national statistical agencies to collect such data is significant in this regard (UNECE and World Bank Institute 2010). The same two organizations have also recently launched training modules for policy makers on the collection of such data on access to finance and on entrepreneurship.<sup>84</sup> (See box 3.9 for an example from India.)

**Box 3.9: A Government-Led Initiative in India to Track Gender-Disaggregated Data on Access to Finance**

The Indian government has drawn up an ambitious 14-point action plan for public sector banks to increase women's access to bank finance. The government instructed the central bank to maintain a database to track performance during the effort. Following the issuance of the government directive, the Reserve Bank of India, in 2000, asked public sector banks to disaggregate and report on the percentage of the credit going to women within their total lending. The government's action plan has set a target of increasing such loans from the 2001 level of 2.4 percent to 5.0 percent of total lending. The data are reported annually in the Reserve Bank of India's Trends and Progress Report. The aggregate net bank credit to women had increased to 6.3 percent by 2009, and 25 banks reached the target. Though an assessment of the full impact of the policy requires further exploration, the data tracking has increased the general awareness about women's low access levels.

*Source:* Narain (2009).

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<sup>84</sup> See the Genderstats modules at <http://go.worldbank.org/SLGF EKJT90>.



## Summary of Findings

This report reviews the performance of women and men during the first decade of the 21st century in three spheres: human capital endowments, labor markets, and entrepreneurship. Data are analyzed to determine whether women and men are performing well compared with each other, but also how they fare in a global context. The analysis is primarily quantitative and mines various data sets. This is a strength of the report because a quantitative analysis can add value by providing some measure of the degree of differences in the outcomes observed. Yet, it is a weakness as well because the outcomes are measured, but not always explained. Consequently, more work is needed in this area, especially qualitative analysis that is followed up by targeted individual surveys.

### Human Capital Endowments

The countries of Europe and Central Asia have invested heavily in the education and health of their populations. These long-term investments have resulted in societies with well-educated and healthy citizens. They have also resulted in large payoffs among individuals, giving men and women broadly comparable endowments. Thus, the stock of human capital in the region is substantial, and, despite the pressures resulting from the global economic crisis, social sector expenditures continue to be protected to a significant extent. Across the wide income spectrum in these countries, many key educational and health indicators vary by gender only moderately, though Turkey is an exception.

Yet, despite this large stock of human capital, social developments in the region should give pause to decision makers and civil society alike. The population of the region is aging rapidly. The growth imperative to raise productivity and employment is being impeded by the fiscal straitjacket that many countries are facing and will continue to face for the foreseeable future. Though these are well-known challenges, there has been little discussion about whether gender issues are important in diagnosing the problems or framing the solutions. Though not all issues need to be gender differentiated, it is unlikely that demography, productivity, employment, and public expenditure are areas in which gender is marginal or irrelevant. This section discusses some of the most impor-

tant findings of the gender-disaggregated analysis of human capital in Europe and Central Asia.

*The region's gender equality advantage in education is eroding relative to the rest of the world, and convergence with the high-income countries of the Organisation for Economic Co-operation and Development (OECD) has decelerated.* The region has rightly prided itself for its low gender gap in primary and secondary education. However, this advantage has eroded. Other regions have understood the importance of investing in education among girls and women and are succeeding in closing the gender gap even at the secondary school level. Thus, though the region has not had to focus on closing a significant gender gap, a small gap remains at the secondary school level (figure 4.1). However, more importantly, though the income level of the region has been rising, enrollment rates among girls and boys have not been converging with the rates in high-income OECD countries, including in Western Europe.

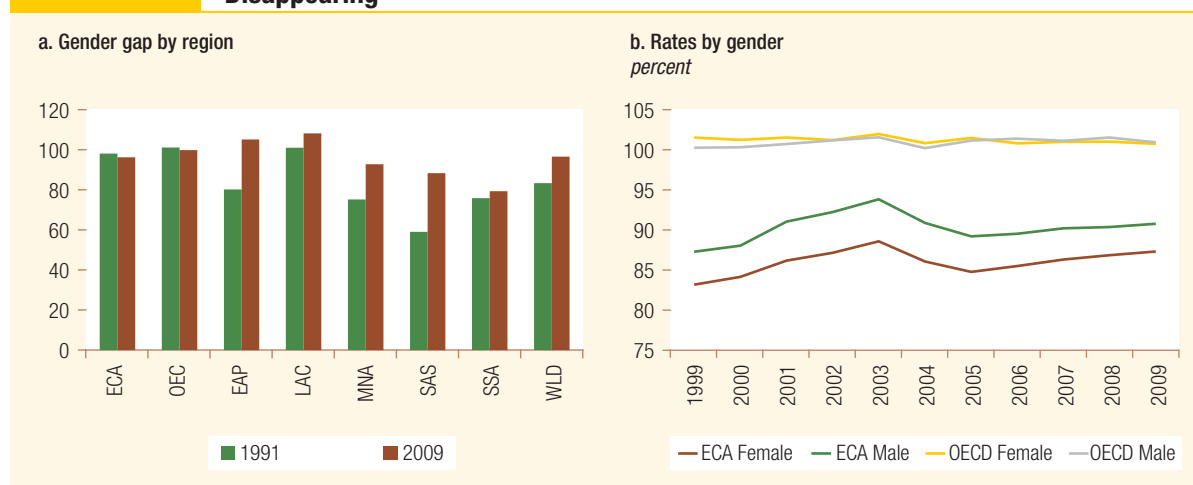
*The gender gap emerges significantly in tertiary education and sets the stage for inequalities in the labor market and, possibly, in productivity.* Substantially more women than men pursue higher education in

the region so that the average female and male gross enrollment rates are 60 and 45 percent, respectively. Income appears to exacerbate the gap since more well off countries exhibit a wider gender gap, on average (figure 4.2). Yet, despite their strong presence in tertiary education, women appear to be poorly represented in science and engineering and disproportionately represented in education, health care, welfare, and the humanities. This pattern is not unique to Europe and Central Asia, but is repeated in other regions and in high-income countries.

*The rapid demographic transition unfolding in the region opens up opportunities for women, but also increases the risks.* In the majority of countries, the population will contract rapidly because of the low fertility rates. As more women obtain higher education and the demand for labor goes unabated, women have potentially even greater opportunities in the labor market. However, in all countries of Europe and Central Asia, the population is aging, and the majority of the elderly will be women: the average life expectancy of women exceeds that of men by nine years. Without proper pensions and savings, health and dependent care

FIGURE 4.1

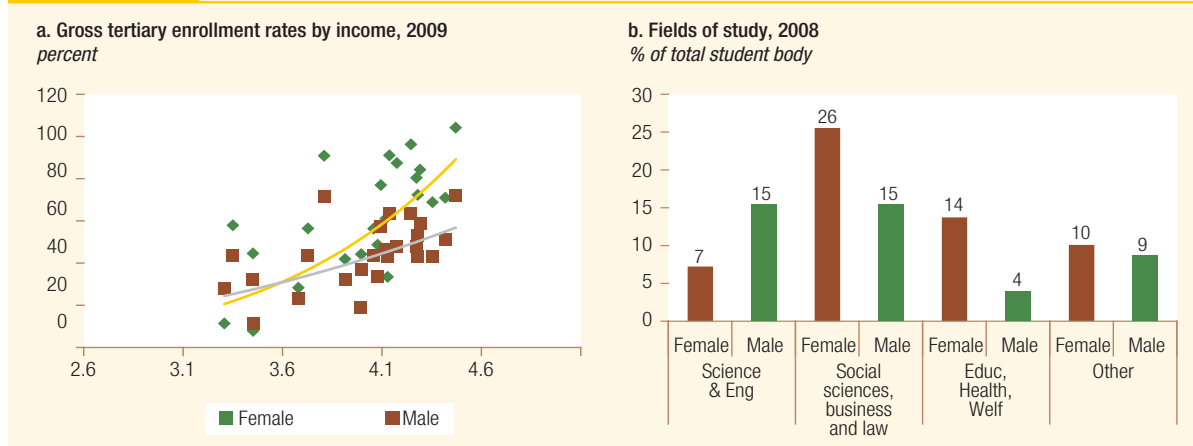
### Secondary School Gross Enrollment Rates: The Region's Gender Advantage is Disappearing



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

Note: The gender gap is the ratio of the gross secondary enrollment rate among girls and the corresponding rate among boys. EAP = East Asia and the Pacific. ECA = Europe and Central Asia. LAC = Latin America and the Caribbean. MNA = Middle East and North Africa. OECD = high-income countries of the Organisation for Economic Co-operation and Development. SAS = South Asia. SSA = Sub-Saharan Africa. WLD = World. All regional data are for developing countries only.

**FIGURE 4.2 Gender Gaps Emerge Significantly at the Tertiary Level**



Sources: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>; UNECE Gender Statistics (database), United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/> (data for 2008).

Note: Eng = engineering. Educ = education. Other = agriculture, humanities, services, and unspecified fields.

services, and housing, women will be vulnerable to old age poverty for the last decade of their lives.

*In the south Caucasus, the low fertility rates are exacerbated by a high gender imbalance at birth second only to the imbalances in China and India.* In Armenia, Azerbaijan, and Georgia, 11–16 percent more boys are born than girls, indicating prenatal sex discrimination. To a lesser degree, this gender imbalance exists in other countries of the region as well, especially in a few of the countries of the western Balkans. To determine the extent to which this prenatal sex discrimination reflects entrenched gender inequities in the economic sphere (for example, in labor markets, migration opportunities, and wealth accumulation through entrepreneurship) rather than household preferences requires more analysis. In addition, there is a large surplus of males in the 0–14 year age-group not only in the south Caucasus, but also in the western Balkans (especially, in the former Yugoslav Republic of Macedonia, Montenegro, and Serbia).

## Labor Markets

Though men and women enter the labor market with comparable human capital endowments, they

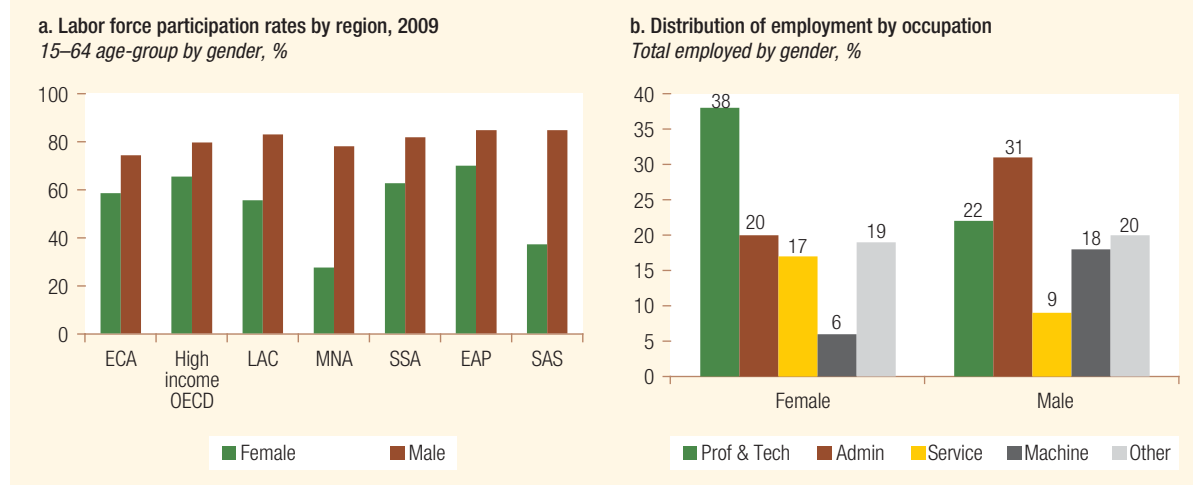
fare differently thereafter. The role of women in the household (for example, child and dependent care and other household activities) has implications for the professional lives of women in terms of their special needs, such as maternity leave, flexible working hours, and leave benefits. Thus, women and men make distinct choices with regard to sectors of employment, occupational streams, and the number of hours worked that inevitably affect their earnings and wage rates. The presence or absence of public support for women's fertility and childcare needs can influence women's labor market behavior, as well as the decision to have children. In a region where reversing population decline and increasing employment are critical to sustaining economic growth, government action may be pivotal.

*Though more women are entering the labor market in most developing regions and in high-income OECD countries, women's participation in the labor market has remained stagnant, on average, in Europe and Central Asia over the past decade.*<sup>85</sup> In 2009, the

<sup>85</sup> The labor force participation rates are computed as a share of the population (by gender) between the ages of 15 and 64.



**FIGURE 4.3 Women's and Men's Labor Market Outcomes**



Sources: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>; UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.

Note: The data are for 2009 or the latest available year. See the note to figure 4.1 for an explanation of the terms. See chapter 2, table 2.1 for the specific country coverage in chart b. Prof & tech = professionals and technicians. Admin = administrative and intermediary level personnel. Service = service workers. Machine = machine operators. Other = directors and upper management, skilled agriculture, armed forces personnel, and low-skill occupations.

female and male labor force participation rates in the region were 58 and 74 percent, respectively, compared with 65 and 80 percent, respectively, in high-income OECD countries (figure 4.3). Though in the low-income countries of the Commonwealth of Independent States (CIS), female and male labor force participation rates rose during 1999 and 2009 and fell in Turkey, the rest of the region saw little change.<sup>86</sup> Stagnation in labor force participation rates in the region could become a bottleneck for future economic growth, especially in the economies of the EU10 and selected CIS middle-income countries that were particularly adversely affected by the crisis.<sup>87</sup>

*Relative to men, women are more likely to work in the public sector and are concentrated heavily in a few occupations and economic sectors.* Europe and Central Asia is one of the most highly segregated regions occupationally. One in three employed women works in the public sector, compared with 21 percent of employed men. About four in five women are concentrated in three economic sectors: communal services (41 percent), manufacturing (21 percent), and trade and hotels and res-

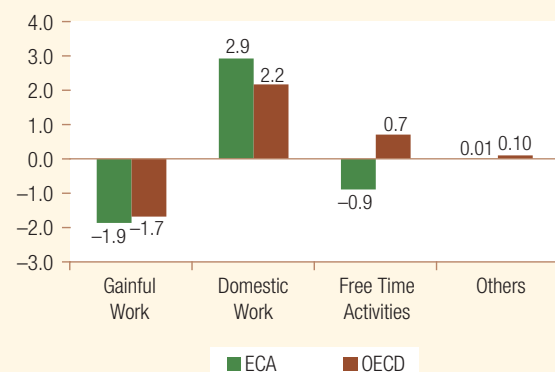
taurants (20 percent). Communal services include health care, education, and civil administration; many are government-provided services. Thus, the demographic transition and the decline in the school-age population over time will adversely affect women, who constitute almost 90 percent of the teaching force. In addition to the concentration in sectors, women are heavily concentrated in three particular occupational categories in Europe and Central Asia: 38 percent of all women employed are professionals and technicians, and another 20 percent are administrative personnel (figure 4.3).

<sup>86</sup> In 2008, the CIS consisted of Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, the Russian Federation, Tajikistan, Turkmenistan (an associate member), Ukraine (an informal participant), and Uzbekistan.

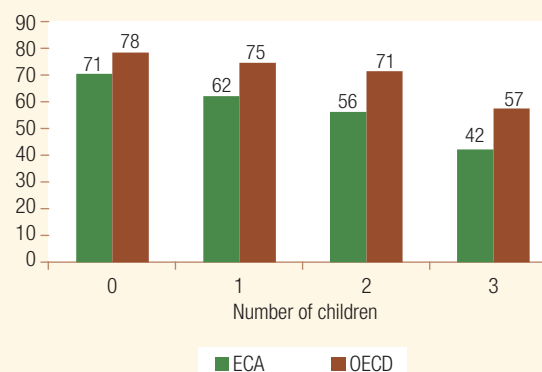
<sup>87</sup> The EU10 refers to the 10 European Union (EU) countries of Central and Eastern Europe, that is, Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia.

**FIGURE 4.4** Working Women's Constraints

**a. Gender gap in time use, Europe and Central Asia and high-income OECD countries**  
hours per day



**b. Employment rates, women with and without children**  
percent



Source: UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.

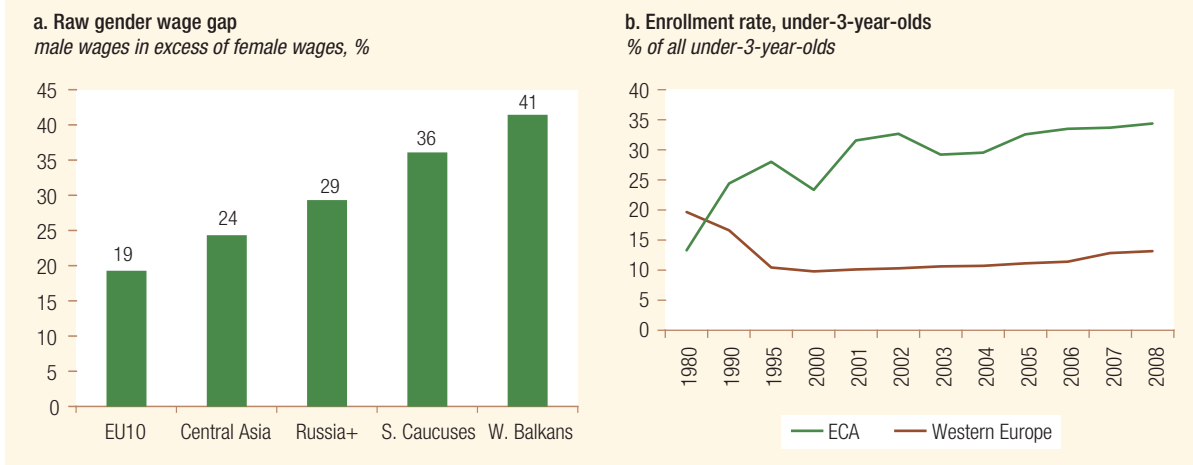
Note: The data are for 2009 or the latest available year. The gender gap for an activity is the number of hours spent by women, less the number of hours spent by men. The employment rate is the share of employed women (25–49 years of age) with the specified number of children (17 years or younger) in the total number of women in the same age-group with the specified number of children (17 years or younger). ECA = Europe and Central Asia.

Occupational segregation in the region may be the result of self-selection by women to balance work and family life. Women are clearly choosing different types of jobs than men. There may be many reasons for this behavior, including the compatibility of the jobs they choose with raising children. On average, working women in the region spend two hours less on paid work than men, but three hours more on domestic activities; the bulk of the latter is devoted to food preparation and dish washing (37 percent); adult care (27 percent); cleaning, other upkeep, laundry, and handicraft production (28 percent); and childcare (11 percent). Though childcare appears to take up relatively less time, other activities, such as food preparation and laundry, are likely to increase because of the presence of children. If women have children, their employment rates begin to fall dramatically in the region (figure 4.4). This sharp downward trend is not seen in the high-income OECD countries, which may be because of the better infrastructure for childcare, as well as more household appliances such as dishwashers in the home. In high-income OECD countries, one-third of under-3-year-olds are in childcare, compared with only 13 percent in Europe and Central Asia.

Though women are more highly educated than men and though many are professionals or technicians, women's earnings are about 20 percent less than men's earnings. The gender gap in wages varies significantly across the region (figure 4.5). Moreover, women with the same educational qualifications as their men counterparts earn 25 percent less. However, only about a third of the gender wage gap can be explained by high occupational segregation. Women may be self-selecting into less well paying jobs or occupations that have favorable characteristics such as work hours compatible with school hours, work flexibility, or favorable nonmonetary benefits.<sup>88</sup> The large unexplained difference between male and female earnings may be the result of outright discrimination in the labor market, the need to give a costly signal to employers if women show a greater variability in productivity, or differences in hours

<sup>88</sup> Other reasons why women may be willing to take low-paying jobs include shorter commutes, easy access by public transportation, a safe work environment, less physically strenuous work (especially in the manufacturing sector), and greater job security.

**FIGURE 4.5 The Wage Gap**



Sources: For the wage gap: various (see chapter 2). For enrollment rate data: UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.

Note: ECA = Europe and Central Asia.

worked and in actual experience. On the last factor, women's childbearing and relatively generous maternity leave benefits in the formal sector combine to reduce women's work experience; women in Europe and Central Asia consider these labor force interruptions to have costly long-term income effects.<sup>89</sup>

*The mix of instruments to support women in balancing childbearing and childcare with paid work may be of critical importance to the demographic and productivity challenges facing the region.* Governments in the countries of Europe and Central Asia support families in the functions of childbearing and raising children. The most prevalent policies and programs include generous maternity leave and child allowances. However, the effectiveness of these programs in maintaining women's attachment to the labor market and in fertility have not been studied regionwide, nor has there been any assessment of the consequences of the lack of the widespread availability of high-quality, affordable childcare services. During the socialist period, childcare services were commonly available, but they quickly disappeared during the early years of the transition.

## Entrepreneurship

Entrepreneurship expands women's economic opportunities. It not only provides income, but it is a means for women to accumulate assets and wealth. Entrepreneurship is important from a societal and economic perspective because it plays a key role in private sector development, innovation, and employment generation. Given that men and women behave differently in the labor market, it is not surprising that we find that men and women entrepreneurs are different in terms of sectors of operation, constraints, employment generation, and profitability. The necessity to enhance competitiveness in the countries of Europe and Central Asia should make the topic of entrepreneurship central to any strategy aiming at business development and expansion.

*There are relatively few men employers and even fewer women employers in Europe and Central Asia compared with other regions.* An estimated 2.4 percent of the active workforce in Europe and

<sup>89</sup> The effect of a 12-month labor market interruption in the United States resulted in an average 10 percent decline in the lifetime incomes of women who work full time. See Francesconi (2002).

Central Asia consists of employers. The shares are higher in Latin America and the Caribbean (4.6 percent) and in the high-income OECD countries (4.3 percent) (figure 4.6). Male employers account for 10 percent of all employed men in the Middle East and North Africa, 6 percent in Latin America and the high-income OECD countries, but not in Europe and Central Asia or South Asia, where the shares are only 3.4 and 1.2 percent, respectively. This lower entrepreneurship in Europe and Central Asia is reflected among women as well. In Europe and Central Asia, only 1.1 percent of all employed women are employers compared with 2.7 percent in Latin America. This lack of engagement in business by women may be caused by many factors, including the greater constraints to establishing and growing a business or household decisions to reduce risk in an uncertain economic environment (particularly among families with dependents).

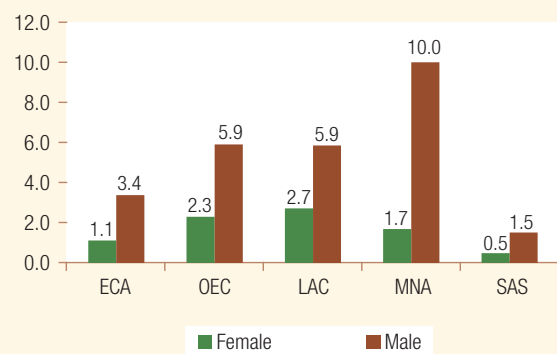
*Women's modest role in the private sector is seen across various dimensions of ownership and management.* Though women appear to be represented equally in some types of firms, especially public shareholder companies and partnerships, there are proportionately fewer women in cases

in which they could play a pivotal role, that is, in sole proprietorships. Moreover, top women managers—who may have an even greater say in the direction of firms than some types of owners—are comparatively few in the region. These managers have an important role not only in day-to-day firm operations, but also in determining the strategic direction of firms. In the region, an estimated 19 percent of firms have top women managers, though the variation is substantial across countries (figure 4.7).

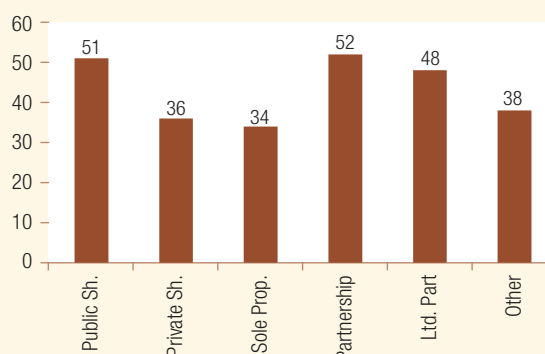
*In Europe and Central Asia, woman-owned firms differ significantly from firms owned by men.* Depending on the type of ownership, women's participation in the firm changes dramatically. At one extreme, women and men are equal in terms of ownership of partnership companies and publicly traded companies. However, in private shareholding companies and sole proprietorships, about one in three firms has female representation and female input over the direction of the firms. Woman-owned sole proprietorships are also smaller as measured by sales and numbers of employees even after one controls for country and industry. Women entrepreneurs are more heavily represented in certain sectors, especially garments and textiles, but they

**FIGURE 4.6 Employers and Owners**

**a. Comparison of employer rates**  
employers among total employed by gender, %



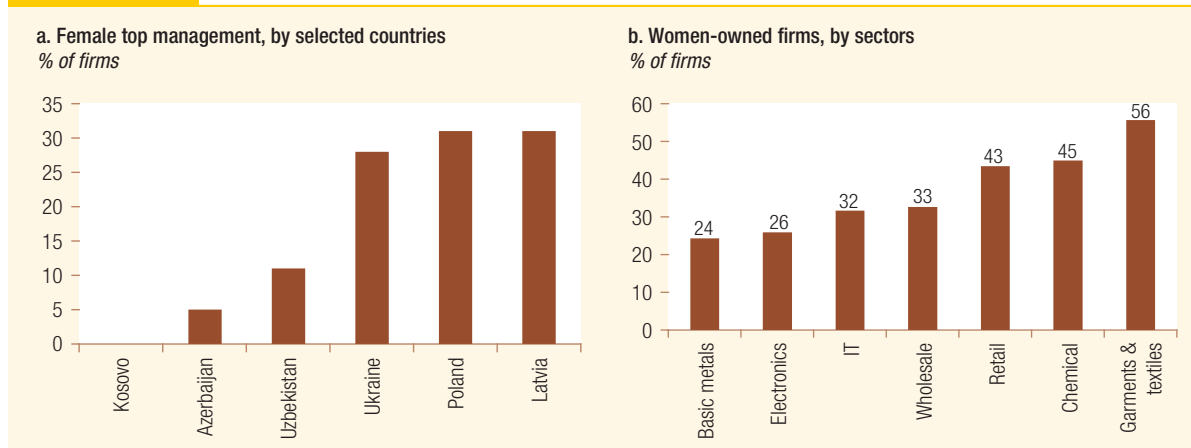
**b. Women's ownership by type of firm**  
% of firms with female owners



*Sources:* World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>. Ownership data: Business Environment and Enterprise Performance Survey, European Bank for Reconstruction and Development and World Bank, London, <http://www.ebrd.com/pages/research/analysis/surveys/beeps.shtml>.

*Note:* ECA = Europe and Central Asia. Ltd Part = limited partnership. Private Sh. = private shareholders. Public Sh. = public shareholders. Sole Prop. = sole proprietorship. Panel a: the data are for 2008 or the latest available year. Middle East is 2007, and South Asia is 2005.

**FIGURE 4.7 Firm Characteristics of Woman-Owned and Woman-Managed Firms**



Source: Business Environment and Enterprise Performance Survey, European Bank for Reconstruction and Development and World Bank, London, <http://www.ebrd.com/pages/research/analysis/surveys/beeps.shtml>.

Note: Data are for 2009 or the latest available year. In chart a, the averages are taken from Enterprise Surveys (database), Enterprise Analysis Unit, World Bank, Washington, DC, <http://www.enterprisesurveys.org/>. In chart b, the data refer to the selected sectors only. IT = information technology.

are poorly represented in basic metals, transport, and electronics.

Women's firms generally operate at an inefficiently small scale, resulting in a (small) gender gap in profits. The average gender gap in profits in the region is about 3 percent in favor of firms owned by men.<sup>90</sup> This difference is driven by the smallness of women's firms; the gap disappears after we correct for this characteristic. Women operate firms at an inefficiently small scale for two reasons. First, women are concentrated in industries in which small firms dominate. Second, women appear to be capital constrained; this is apparent in capital-intensive industries. Firms that are more likely to have access to capital are larger, and women entrepreneurship is underrepresented in these firms.

### Policy Implications and Critical Knowledge Gaps

This report examines a narrow range of issues pertaining to men's and women's economic opportunities. However, even among the few topics that it surveys (human capital, labor markets, and entrepreneurship), women and men show different outcomes, which, at times, reflect inequali-

ties in opportunity. These gender differences may worsen the already difficult economic future facing the countries of Europe and Central Asia. There is a need to accelerate growth through reforms in health care, education, and pensions and through improvements in productivity and competitiveness against the backdrop of dramatic demographic changes. Some of the gender differences in health, education, labor markets, and private sector business are likely to have an impact on how the necessary fiscal, sectoral, and institutional reforms are designed and implemented.

It is important to address two types of gender issues. The first type pertains to issues that, if they are not addressed, threaten to cause the region to move backward or to stagnate in the social sector. These include the following:

- ◆ The *gender imbalance* that has emerged in the south Caucasus and in the western Balkans is a grave concern. A preference for males appears to have grown dramatically in recent years; if this issue is not addressed, there will be negative consequences for population growth.

<sup>90</sup> These data have been corrected for country- and industry-specific effects.

- ◆ The lack of progress in *secondary enrollment rates* and the small, but persistent gender gap over the last decade are contrary to the expectations of countries seeking significant economic growth and sharp declines in poverty.

The second type of gender issue that should be addressed in the region is important mostly because of the implications for productivity and the health of labor markets. This type involves gender differentials. No single instrument is available that is appropriate for dealing with issues of this type, but a range of cross-sectoral policies can be effective. Though this report provides evidence on the causes of certain outcomes, more research in these areas is warranted. This second type includes three main issues, as follows:

- ◆ Women's *labor force participation* rates in the region lag behind the average in high-income OECD countries. Labor market participation is a personal choice that is often associated with financial circumstances. Women may not participate in the labor market because of their responsibilities in caring for dependents, their limited opportunities for part-time work, the early retirement options available to women, and the generous maternity leave in the formal sector. Thus, reforms in long-term dependent care, retirement legislation, pension reform, and social protection could all contribute to enhancing the labor market opportunities and long-term income potential of women.
- ◆ *Occupational segregation* that affects women may be the result of a choice women are making to achieve a better balance between work and other aspects of their lives. Occupational segregation may already be occurring as early as tertiary education when many men and women make their first career choices based on education. Professions that allow them to receive relatively generous benefits, have greater flexibility in hours worked, and are compatible with raising children may be more attractive to women. The choice of occupation is made within an environment in which the availability of childcare services is limited

and women have greater household responsibilities, but also jobs are being offered, especially in the public sector, that are associated with benefits that are well suited to meeting these challenges. Given the economic importance of raising productivity and employment, research on the effects of improvements in the coverage of childcare services and non-monetary benefits that ease women's role in managing household responsibilities may be worthwhile at the country level.

- ◆ Women are underrepresented in *private sector leadership*. Data indicate that entrepreneurship is less common in Europe and Central Asia than in other parts of the world and that women play only a modest role. To understand why relatively few women enter business professions, more research should be initiated on the costs of business failure, the advantages of job mobility, household risk mitigation strategies, and the (risk-adjusted) returns to entrepreneurship among women relative to those available among men.<sup>91</sup> Women entrepreneurs in formal sector firms appear, on average, to face more difficulty than men in obtaining credit (because of firm size).<sup>92</sup> Whether any policies can be instituted to help the owners of small firms should be explored.

Addressing gender differentials is a complex, but feasible task. Important areas of analysis must still be addressed, especially to identify the causes and the motivations behind certain outcomes in the private and professional spheres. Governments in the region play an important role in determining how women interact with the labor market, women's educational attainment, and even household fertility decisions. Government policies in what may be considered a marginal area can ultimately have a significant impact on a country's economic future.

<sup>91</sup> Do women pursue more stable jobs, while men take more risks?

<sup>92</sup> The question that remains is whether the small size of women's firms is also often due to lack of access to start-up capital or working capital. However, the data necessary for further analysis are lacking.

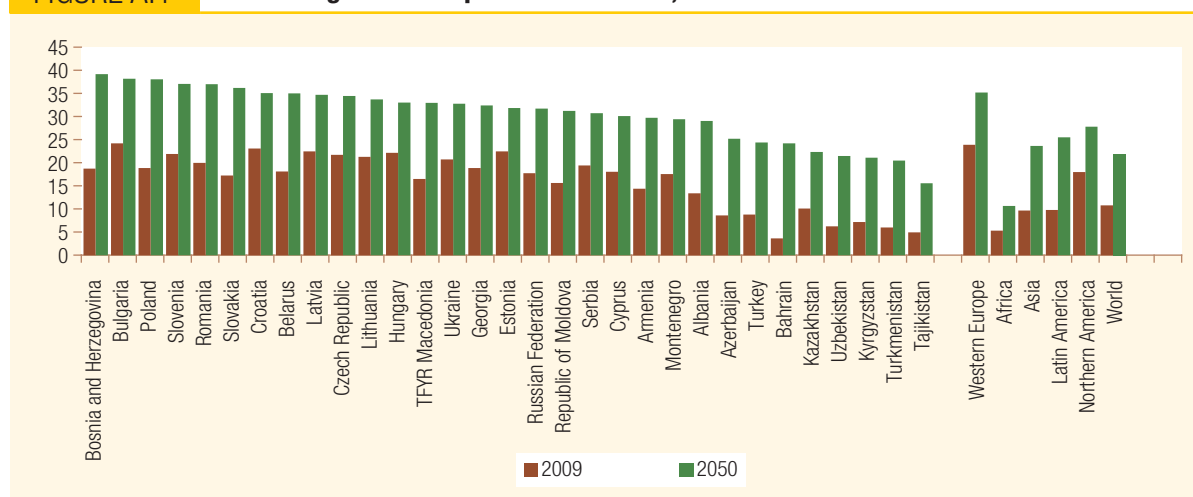




# Annexes

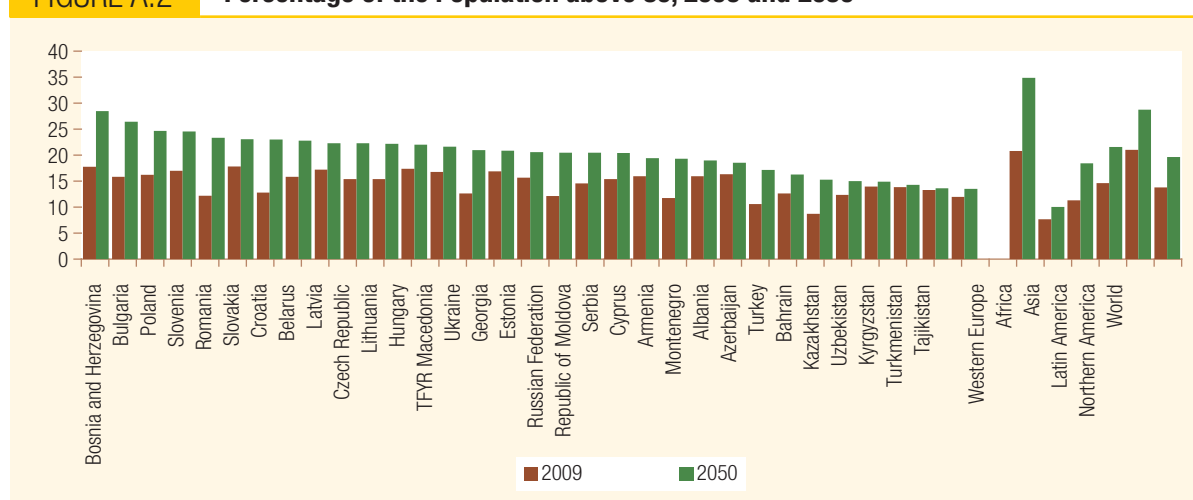
## Annex A: Data

**FIGURE A.1** Percentage of the Population above 60, 2009 and 2050



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

**FIGURE A.2** Percentage of the Population above 80, 2009 and 2050



Source: World Development Indicators Database, World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators/>.

**TABLE A.1 | Life Expectancy, by Country**

Country, region	1990–95			2000–05			2010–15			Change 1990–2010		
	Women	Men	Women – men	Women	Men	Women – men	Women	Men	Women – men	Women	Men	Women – men
Albania	74.9	68.9	6.0	79.0	72.6	6.4	80.4	74.2	6.2	5.50	5.30	0.20
Armenia	71.5	64.5	7.0	75.6	68.9	6.7	77.7	71.3	6.4	6.20	6.80	–0.60
Azerbaijan	69.7	60.7	9.0	71.2	65.6	5.6	73.5	69.1	4.4	3.80	8.40	–4.60
Belarus	74.9	64.2	10.7	74.6	62.5	12.1	76.0	64.5	11.5	1.10	0.30	0.80
Bosnia and Herzegovina	73.2	55.8	17.4	77.2	71.6	5.6	78.4	73.3	5.1	5.20	17.50	–12.30
Bulgaria	74.7	67.6	7.1	75.6	68.7	6.9	77.7	70.9	6.8	3.00	3.30	–0.30
Croatia	76.5	68.3	8.2	78.4	71.4	7.0	80.4	73.8	6.6	3.90	5.50	–1.60
Czech Republic	76.4	69.3	7.1	78.7	72.1	6.6	80.3	74.3	6.0	3.90	5.00	–1.10
Estonia	74.0	62.7	11.3	76.9	65.6	11.3	79.3	68.9	10.4	5.30	6.20	–0.90
Georgia	74.3	66.5	7.8	75.0	68.0	7.0	75.9	69.1	6.8	1.60	2.60	–1.00
Hungary	73.9	64.8	9.1	76.6	68.3	8.3	78.3	70.4	7.9	4.40	5.60	–1.20
Kazakhstan	70.3	60.5	9.8	70.4	59.1	11.3	72.1	60.1	12.0	1.80	–0.40	2.20
Kyrgyz Republic	70.1	62.1	8.0	70.6	62.7	7.9	72.7	65.5	7.2	2.60	3.40	–0.80
Latvia	73.9	61.9	12.0	76.2	65.3	10.9	78.1	68.7	9.4	4.20	6.80	–2.60
Lithuania	75.5	64.4	11.1	77.5	66.3	11.2	78.3	67.0	11.3	2.80	2.60	0.20
Macedonia, FYR	74.0	69.4	4.6	75.9	71.1	4.8	77.3	72.6	4.7	3.30	3.20	0.10
Moldova	70.9	63.6	7.3	71.2	63.6	7.6	73.1	65.6	7.5	2.20	2.00	0.20
Montenegro	79.1	72.8	6.3	77.0	71.9	5.1	77.4	73.1	4.3	–1.70	0.30	–2.00
Poland	75.9	67.0	8.9	78.8	70.4	8.4	80.4	72.3	8.1	4.50	5.30	–0.80
Romania	73.2	65.8	7.4	75.1	67.8	7.3	77.2	70.3	6.9	4.00	4.50	–0.50
Russian Federation	72.5	60.5	12.0	71.8	58.5	13.3	74.1	61.9	12.2	1.60	1.40	0.20
Serbia	74.5	69.2	5.3	75.6	70.9	4.7	77.1	72.5	4.6	2.60	3.30	–0.70
Slovak Republic	76.2	67.8	8.4	77.8	69.8	8.0	79.3	71.8	7.5	3.10	4.00	–0.90
Slovenia	77.6	69.6	8.0	80.3	72.6	7.7	82.6	75.4	7.2	5.00	5.80	–0.80
Tajikistan	65.9	58.6	7.3	68.6	60.9	7.7	70.4	65.1	5.3	4.50	6.50	–2.00
Turkey	68.5	64.0	4.5	73.3	68.5	4.8	75.2	70.3	4.9	6.70	6.30	0.40
Turkmenistan	66.6	58.9	7.7	68.2	60.4	7.8	70.0	62.4	7.6	3.40	3.50	–0.10
Ukraine	73.5	63.6	9.9	73.4	62.1	11.3	74.3	63.9	10.4	0.80	0.30	0.50
Uzbekistan	69.4	63.0	6.4	70.4	64.1	6.3	72.0	65.7	6.3	2.60	2.70	–0.10
Europe and Central Asia	73.2	64.7	8.5	74.9	66.9	7.9	76.5	69.1	7.4	3.38	4.41	–1.04
Commonwealth of Independent States	70.5	62.0	8.6	71.6	63.1	8.6	73.4	65.5	8.0	2.92	3.52	–0.60
Central and Eastern Europe	73.1	64.5	8.6	74.7	66.7	8.0	76.4	68.9	7.5	3.30	4.38	–1.08

Source: UN (2009a).

**TABLE A.2 | Age-Specific Fertility Rates**  
*births per 1,000 women*

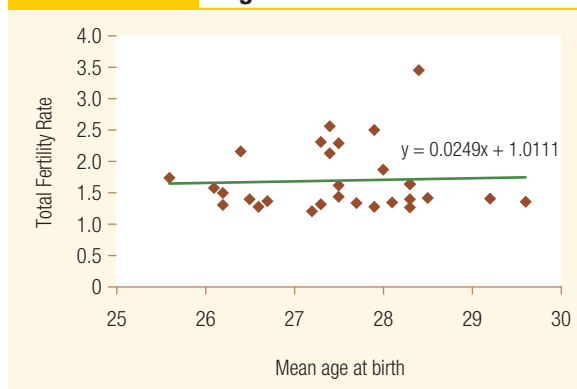
Country	15–19	20–24	25–29	30–34	35–39	40–44	45–49
Albania	14.2	104.8	136.7	80.7	29.6	7.5	1.2
Armenia	35.7	152.1	95.5	43.3	16.6	3.7	0.2
Azerbaijan	33.8	168.1	128.5	67.6	27.6	5.2	0.3
Belarus	21.3	89.8	79.9	46.4	15.9	2.5	0.1
Bosnia and Herzegovina	15.9	79.6	78.6	45.8	18.9	4.0	0
Bulgaria	42.2	77.5	84.4	55.4	12.5	5.6	2.8
Croatia	14.1	62.8	98.9	75.0	29.0	5.0	0
Czech Republic	10.6	46.3	102.0	87.8	29.9	4.7	0.2
Estonia	21.4	78.8	104.7	80.7	35.8	6.2	0.2
Georgia	44.7	106.7	88.7	48.7	20.4	6.8	0
Hungary	20.2	49.3	96.6	90.2	10.8	3.2	0
Kazakhstan	30.7	152.0	141.0	90.3	39.5	7.9	0.6
Kyrgyz Republic	32.3	182.9	146.0	89.2	44.1	15.4	2.6
Latvia	15.2	70.7	89.1	67.5	30.0	6.1	0.3
Lithuania	21.9	70.3	87.0	59.1	25.3	4.8	0.2
Macedonia, FYR	21.7	74.5	99.9	68.3	20.4	3.2	0
Moldova	33.8	106.9	87.1	51.5	17.4	3.1	0.2
Montenegro	14.7	87.9	106.9	77.0	32.7	7.6	0.4
Poland	13.9	57.4	90.3	62.5	23.8	5.1	0
Romania	31.2	61.8	86.3	60.7	20.0	3.8	0.2
Russian Federation	25.1	90.3	83.9	51.9	18.9	3.0	0.1
Serbia	22.1	94.9	107.8	66.5	25.7	4.7	1.9
Slovak Republic	20.7	58.0	86.8	63.7	22.5	3.7	0.2
Slovenia	4.9	40.7	101.3	89.3	30.3	4.7	0.2
Tajikistan	28.4	190.3	222.4	155.4	68.0	21.9	3.6
Turkey	38.8	127.0	133.4	73.7	38.4	12.4	2.6
Turkmenistan	19.5	144.6	176.0	108.6	42.2	7.9	1.0
Ukraine	28.3	94.0	78.0	44.3	15.3	2.5	0.1
Uzbekistan	12.9	158.8	154.1	92.1	34.0	5.9	0.6

Source: Data of the United Nations.

Note: Mean age at childbearing is the average age mothers would have at the birth of their children if women were subject throughout their lives to the age-specific fertility rates observed in a given year. An age-specific fertility rate is defined as the annual number of births to women in a particular age-group divided by the number of years lived by the women in that age-group. It is expressed as the number of births per 1,000 women in the age-group considered.

FIGURE A.3

**Relation between the Total Fertility Rate and the Mean Age at Birth**



Source: World Bank staff.

Note: The equation is  $TFR = 1.01 (2.89) + 0.025 \text{ Age } (0.10)$ .

**TABLE A.3 | Age at First Birth**

Country	1980	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008
Albania	—	—	—	—	—	—	—	—	—	—	—	—
Armenia	22	23	23	22	22	22	22	23	23	23	23	23
Azerbaijan	23	23	24	24	24	24	24	24	24	24	24	24
Belarus	—	23	23	23	23	24	24	24	24	24	24	24
Bosnia and Herzegovina	23	24	—	24	24	24	24	24	24	25	25	25
Bulgaria	22	22	22	24	24	24	24	25	25	25	25	25
Croatia	23	24	25	26	26	26	26	26	27	27	27	27
Czech Republic	22	22	23	25	25	26	26	26	27	27	27	27
Estonia	23	23	23	24	24	25	25	25	25	25	25	26
Georgia	—	24	24	24	25	25	25	24	24	24	24	24
Hungary	23	23	23	25	25	26	26	27	27	27	28	28
Kazakhstan	—	22	22	23	24	24	24	24	24	25	25	25
Kyrgyz Republic	22	22	22	23	23	23	23	23	23	24	24	23
Latvia	23	23	24	24	25	25	25	25	25	25	25	26
Lithuania	24	23	23	24	24	24	25	25	25	25	25	25
Macedonia, FYR	23	23	24	24	24	25	25	25	25	25	25	26
Moldova	23	—	22	22	22	22	22	22	22	23	23	23
Montenegro	—	—	—	26	26	26	26	26	26	25	26	26
Poland	23	24	24	25	25	25	25	26	26	26	26	26
Romania	23	22	23	24	24	24	24	25	25	25	25	26
Russian Federation	23	23	23	—	—	—	—	—	—	—	—	—
Serbia	23	24	24	25	25	25	25	26	26	26	26	27
Slovak Republic	—	21	22	24	24	25	25	25	26	26	26	27
Slovenia	23	24	25	27	27	27	27	28	28	28	28	28
Tajikistan	22	22	22	22	22	—	—	—	—	—	—	—
Turkey	—	—	—	—	—	—	—	—	—	—	—	—
Turkmenistan	—	24	24	24	24	24	24	25	25	25	—	—
Ukraine	22	23	—	22	23	23	22	23	24	24	26	26
Uzbekistan	—	22	22	23	23	23	23	24	24	24	—	—
Europe and Central Asia	23	23	23	24	24	24	25	25	25	25	25	25

Source: UNECE Statistical Database, United Nations Economic Commission for Europe, Geneva, <http://w3.unece.org/pxweb/>.

Note: — = not available.



## Annex B: Selected Government-Led Initiatives in Europe and Central Asia

Germany has launched initiatives to increase women's entrepreneurship with a view to mainstream women entrepreneurs and increase their visibility and their access to finance, as follows:

- ◆ *TWIN, the Two Women Win program*, encourages mentoring among the ventures of young women. After a successful start in North Rhine–Westphalia, the program has been extended to the whole of Germany.
- ◆ Through a *loan program in North Rhine–Westphalia*, the state government allows applications by women entrepreneurs who have no previous industry knowledge.
- ◆ In the eastern German state of Mecklenburg-Pomerania, the *state investment bank gives loans directly to women entrepreneurs, provided their loan requests have previously been rejected by a bank*.
- ◆ Various ministries have undertaken initiatives to *encourage women to take advantage of new opportunities* and to mainstream women in *chambers of commerce and business associations*.
- ◆ *Eight federal and two state awards* have been established for women to recognize innovative business ideas and new products, services, or innovative ways of combining work and family, as well as employment creation through new enterprises. There are also *several public-private initiatives* to increase the visibility of women entrepreneurs by *giving awards to women entrepreneurs and women business founders*. Many of these awards are sponsored by well-known public and private companies or mass media companies. This

helps create public recognition and visibility among women entrepreneurs.

The Slovenian government supports women entrepreneurs by facilitating business support services, as follows:

- ◆ Under business support schemes, women entrepreneurship promoters have been trained to build networks of experts.
- ◆ The Small Business Development Center sponsors business support schemes aimed at women entrepreneurs.

The Lithuanian government has initiated several measures to foster the development of small and medium enterprises (SMEs). European Union membership has represented an impetus for women entrepreneurship in Lithuania, and several SME development programs have been aimed at women entrepreneurs under the auspices of the Lithuanian Development Agency for Small and Medium Enterprises, including:

- ◆ Subsidized consulting services for SMEs and start-ups aimed at rural and urban start-ups, especially women and youth business founders
- ◆ A government-supported guarantee fund through the agency Invega to assist SMEs in gaining access to bank loans
- ◆ The development of business incubators in seven Lithuanian cities
- ◆ A separate page on the website of the SME development agency with information on success stories, statistics on women entrepreneurs, and so on

Source: Welter et al. (2006).

## Annex C: Selected Donor Initiatives

A publicly owned loan guarantee fund for small and medium enterprises (SMEs) in Poland assists small enterprises in gaining access to commercial bank credit by establishing a network of approximately 100 local and 16 regional credit guarantee funds for SMEs and approximately 100 local and 16 regional credit funds for small companies. Entrepreneurship First, an enterprise development package in Poland, includes the following policy components:

- ◆ Simplification of the tax system
- ◆ Lowering labor costs and making employment relations more flexible
- ◆ Simplification of the social security system
- ◆ Simplification of the regulations for applications for various procedures
- ◆ New legal regulations
- ◆ A review of procedures, instructions, and other internal regulations meant to remove the potential barriers in the contacts between administrative offices and entrepreneurs

Women's World Banking, a Spanish program, helps women who lack collateral to access bank loans, and the European Bank for Reconstruction and Development's lending packages target woman-owned SMEs, provide women entrepreneurs with information, counseling, and guidance to ensure that they are aware of existing resources, and help women navigate the loan application process. The bank's program also works directly with the staff of financial institutions to educate them about women's financing needs and help them tailor their services and financial tools to the needs of women entrepreneurs.

Among targeted financial tools for women entrepreneurs are the pilot project of the Nordic Investment Bank and the Council of Europe Bank for the Baltic States, as well as the loan package provided by the lending agency Finnvera, which is funded by the Finnish government (Hellen and Seppälä 2004). The Women's Cooperative Bank, a nonprofit lending institution in Cyprus, does not exclusively target women in its services, but prioritizes women through its mission. Among nonprofit

initiatives, nongovernmental organizations in the Kyrgyz Republic and Serbia attempt to raise awareness about women's property rights and land ownership rights so as to change patterns of ownership. Similarly, the Pink Card Project of the Province of Milan educates women about the importance of establishing a credit history and managing their personal finances.

The United Nations Economic Commission for Europe and the Regional Cooperation Council are supporting a women entrepreneurs' forum in southeastern Europe. Set up in the context of the crisis, the forum seeks to tackle the main obstacles faced by women entrepreneurs in southeastern Europe, to strengthen women's economic position, enhance the contribution of women to their economies, and help promote economic cooperation and stability in southeastern Europe. The project aims to achieve this through the following:

- ◆ By improving women's access to networking opportunities
- ◆ By facilitating women's access to credit through innovative financing
- ◆ By improving women's skills and capacity to develop their businesses

Among other examples of public-private partnership to support women entrepreneurs is the Alliance for the Support of Women in Business in Astana through programs at the Enterprise Development Center of Astana, in Kazakhstan (USAID 2011). The United States Agency for International Development partnered with the ExxonMobil Foundation and the Kazakhstan Loan Fund to establish the initiative. The United States Agency for International Development and the ExxonMobil Foundation provided funding and technical support. The program is managed by two local organizations. By the end of 2009, the Enterprise Development Center had trained about 4,500 entrepreneurs (over 75 percent of whom were women) in strategic and business planning, financial management, marketing, human resources management, taxes, and law. Over 130 small and medium businesses have since received business consulting services through the alliance.

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