

# Armenia Country Gender Assessment

Poverty and Equity Global Practice

2016



## **ACKNOWLEDGMENTS**

This Country Gender Assessment has been prepared by a World Bank team comprising Nistha Sinha and Lourdes Rodriguez-Chamussy, under the overall guidance of Laura Bailey, Mercy Tembon, Carolina Sánchez-Páramo, and Rashmi Shankar. The peer reviewers are Sarah Michael and Tara Vishwanath. The report has benefited from comments and suggestions received from Aleksan Hovhannisyan, Nvard Manasian, Vigen Sargsyan, and participants at workshops in Yerevan, Armenia in May 2016. Paola Buitrago, Kadeem Ervyn Khan and Julianna Flanagan Thureau have provided excellent assistance. Armanda Çarçani and Arpine Azaryan have supplied overall logistical support. Robert Zimmermann copyedited this note.

## CONTENTS

<b>Executive Summary .....</b>	<b>1</b>
<i>Gender differences .....</i>	<i>1</i>
<i>Policy priorities .....</i>	<i>3</i>
<b>Introduction .....</b>	<b>5</b>
<i>Economic growth and poverty reduction .....</i>	<i>6</i>
<i>Government's commitment to gender equality .....</i>	<i>8</i>
<b>Demography and Human Capital Endowments .....</b>	<b>10</b>
<i>Demography and health.....</i>	<i>10</i>
<i>Education.....</i>	<i>18</i>
<b>Economic Opportunities.....</b>	<b>22</b>
<i>Labor markets and labor force participation .....</i>	<i>22</i>
<i>Employment.....</i>	<i>26</i>
<i>Unemployment .....</i>	<i>30</i>
<i>Entrepreneurship .....</i>	<i>32</i>
<i>Access to finance.....</i>	<i>36</i>
<b>The Economic Costs of the Gender Gaps in Labor Participation .....</b>	<b>38</b>
<b>Voice and Agency .....</b>	<b>40</b>
<b>Conclusions and Policy Priorities .....</b>	<b>42</b>
<b>Appendix A .....</b>	<b>45</b>
<b>References .....</b>	<b>46</b>

## FIGURES

Figure 1. Resident Population, by Age-Group and Gender, 2015 .....	11
Figure 2. Life Expectancy, by Gender, 2004–14 .....	12
Figure 3. Female-Male Difference in Life Expectancy, 2004–14.....	12
Figure 4. Population Growth, 2002–14.....	13
Figure 5. Dependency Ratio, 2002–14.....	13
Figure 6. Trend, Induced Abortions, 2000–15.....	15
Figure 7. Profile of Women, Induced Abortions, 2010.....	15
Figure 8. Average Sex Ratio at Birth, South Caucasus, India, and China, circa 2013 .....	16
Figure 9. Sex Preference, 2010 .....	17
Figure 10. School Enrollments, by Gender, 2011 .....	19
Figure 11. Educational Attainment, by Gender and Age, 2014 .....	19
Figure 12. Field of Study at the Tertiary Level, by Gender, Academic Year 2014/15.....	20
Figure 13. Female Labor Force Participation, by Level of GDP per Capita, EU and Europe and Central Asian countries, 2014.....	23
Figure 14. Labor Force Participation Rates, Armenia and Comparators 2014, Ages 15–64.....	24
Figure 15. Trends in Labor Force Participation Rates, Armenia 2002–14 .....	24
Figure 16. The Economically Inactive, by Marital Status, 2015 .....	24
Figure 17. The Economically Inactive, by Educational Attainment, 2015 .....	24
Figure 18. The Economically Active, by Age-Group, 2015 .....	24
Figure 19. Type of Employment, by Gender .....	27
Figure 20. Employment, by Sector and Gender, 2015.....	28
Figure 21. Employment, by Subsector and Gender, 2015 .....	28
Figure 22. Economic Activity and Average Wage, by Gender, 2015.....	29
Figure 23. Unemployment, by Education Level and Gender, 2015.....	31
Figure 24. Unemployment, by Reason and Gender, 2015 .....	31
Figure 25. Length of Job Search, by Gender, 2015 .....	31
Figure 26. Gender Norms and the Right to a Job.....	32
Figure 27. Job Satisfaction.....	33
Figure 28. Net Personal Income.....	33
Figure 29. Women’s Ownership, by Firm Size, 2013.....	34
Figure 30. Women’s Ownership, by Type of Business, 2013 .....	34
Figure 31. Women Top Managers, by Firm Size, 2013.....	35
Figure 32. Women and Men Top Managers, by Sector, 2013 .....	36
Figure 33. Access to Credit, 2014.....	37
Figure 34. Accounts at Financial Institutions, by Gender, 2014.....	37
Figure 35. Economic Cost of Gender Gaps in Labor Participation, Selected Countries .....	39
Figure 36: Women representation in institutions (2015) .....	40

## **TABLES**

Table A.1. The Probability of Female and Male Labor Force Participation, Probit Model Estimation .....	45
--	----

## **BOXES**

Box 1. Modest downward trend in poverty over recent years .....	6
Box 2. Quantifying the macroeconomic effects of gender gaps in the labor market .....	35

## **Executive Summary**

This Country Gender Assessment (CGA) reviews the state of equality between women and men in Armenia in access to opportunities, that is, equality in rights, resources, and voice (World Bank 2007). Equality in rights refers to equality under the law, whether customary or statutory. Equality in resources refers to equality in access to human capital investments, productive resources, and markets. Equality in voice refers to the capacity to make decisions about one's own life, to act on these decisions, and to influence and contribute to political discourse and the development process. Noting the government's commitment to gender equality in the legal framework and in policies, this report mainly focuses on the extent of equality in resources and voice. Specifically, the report reviews the extent of equality in the areas of demography, human capital, economic opportunities, and voice and agency. It also points to some common patterns.

### **Gender differences**

The CGA finds that, in several domains, gender equality outcomes in Armenia are broadly comparable with those in Europe and Central Asia and better than those in the group of lower-middle-income countries globally. However, in other domains, gender inequalities persist, and concerted policy efforts are required. Moreover, patterns of gender difference vary across rural and urban areas.

#### ***Demography and human capital endowments***

The sex ratio at birth in Armenia is high, at 113 boys born for every 100 girl births. The ratio is well above 106, the benchmark ratio if parental son preference is not a factor. Viewing the skewed ratio in Armenia as an indicator of the incidence of missing girls highlights the loss of girl births because of a preference for sons. Research has shown that the son preference in Armenia is heightened by low fertility and economic uncertainty. Rural areas generally show higher sex ratios than towns and cities, in particular for second births. The combination of high sex ratios at birth and continued low fertility can have adverse consequences for future population growth. Men's life expectancy has not significantly improved, and the higher risk of mortality among men results in a situation where more than 60 percent of the population ages 65+ years are women.

Although a larger share of young women relative to young men are enrolled in tertiary education, women and men specialize in different subjects and fields of study (the social sciences, education, and health care among women and technical fields among men). This lays the foundations for much of the gender-based sectoral, occupational, and wage differences observed in the labor market.

#### ***Economic opportunities***

Only 58 percent of women ages 15–64 participate in the labor market, a slightly higher share than the Europe and Central Asia average, but 17 percentage points lower than the share among men in

Armenia.<sup>1</sup> The gender difference in participation is greatest among the 25–34 age-group. Evidence suggests that childcare responsibilities likely explain this age-specific gender gap in participation: women spend about 5 times more time than men on childcare activities. In an aging population, eldercare responsibilities place additional demands on women's time.

Women are more likely than men to engage in own-account farm activities and unpaid work. Among women in the labor force, 22.3 percent are own-account farmworkers on a farm (compared with 16.8 percent of men). Especially in rural areas, women also participate much more than men as unpaid family workers (15.4 versus 4.4 percent). A larger share of working women, compared with working men, are employed in agriculture and in the service sector. In 2015, 51 percent of working women were employed in the service sector, compared with 54 percent of men. Agriculture accounted for 40 percent of women and 31 percent of men workers, while men were more well represented than women in the industrial sector (23.5 percent vs. 7.6 percent).

Unemployment rates are high for both men and women (17.6 and 19.5 percent, respectively), but unemployment appears to last longer among women than among men: the share of long-term unemployed is higher among women than among men. This is likely to be linked, among other factors, to a skills mismatch, the preference for certain types of jobs (say, with certain benefits), and the variation in the causes of unemployment. Most of the unemployed women appear to become unemployed because of job cuts and layoffs rather than the termination of temporary or seasonal work that is a more common reason among men.

Women earn an average 36 percent less than men after a steady decline from 59 percent in 2002. Some of the existing gender gap can be attributed to gender discrimination by employers. The characteristics of the jobs performed by women and men are an additional source of the earnings gap. Women typically work in jobs with shorter hours and, hence, lower pay, a reflection also of occupational segregation patterns within the functional roles or levels at which men and women engage within each economic sector or occupation.

The share of women employers is also low. In 2015, 0.6 percent of working women were entrepreneurs, compared with a similarly low share of working men (2.2 percent). Among firms with at least five employees, ownership among women is below ownership among men. The 2013 Business Environment and Enterprise Performance Survey (BEEPS) shows that less than a third of firms in Armenia have some female participation in ownership, well below the Europe and Central Asia regional average and the world average.<sup>2</sup> Lower ownership levels among women and restrictive gender norms also translate into a significantly lower presence of women in top management: 19.1 percent of firms with at least five employees are managed by women. As with

---

<sup>1</sup> Data source for labor force participation rates population ages 15-64 (modeled ILO estimate) is from World Development Indicators consulted in January 2017.

<sup>2</sup> BEEPS (Business Environment and Enterprise Performance Survey) (database), European Bank for Reconstruction and Development and World Bank, London (accessed April 2013), <http://ebrd-beeps.com/data/>.

paid employment, female participation in ownership and top management is concentrated in particular sectors; among all woman-managed or woman-owned businesses, the share in retail and in hotels and restaurants is especially high.<sup>3</sup>

These gender differences in various dimensions of economic activity reflect the barriers to participation faced by women. These barriers include restrictive social norms that guide gender roles, competing time demands associated with domestic responsibilities as well as care responsibilities that affect especially women, and lack of information on available opportunities. Gender discrimination by employers plays an additional role in discouraging participation by women.

Women's lagging participation in employment and entrepreneurship represents a misallocation of Armenia's human resource potential. Calculations suggest that the gaps result in a loss in economic output equivalent to 14 percent of gross domestic product (GDP). Nordic countries, with significantly higher participation by women, display a much smaller corresponding loss in GDP, about 4 percent.

### ***Voice***

In the public sphere as in the private sector, women's share in leadership roles is limited. The share of women in the National Assembly has remained close to 11 percent despite a quota requiring that at least 15 percent of the candidates on every party's election list be women.

### **Policy priorities**

Supporting equality between women and men is a smart development strategy for Armenia not least because of the economic costs deriving from the gender gaps in the labor market that are described above. Policy efforts would have to work on multiple fronts, from influencing norms to ensuring equal access to opportunities. Some key policy actions suggested by the empirical evidence include investing in mass media campaigns to tackle social norms and help change behaviors that are shaped by these norms. The campaigns could be used to promote the valuable potential economic and social contributions of girls, the importance of equal access to economic opportunities and assets, and the advantages of women in leadership roles. Such efforts could also be targeted at the workplace to address any biases employers might have regarding women employees. Qualitative research on Armenia has indicated that such biases might exist among employers. Experiences in other parts of the world suggest that the mass media can be powerful in shaping public perceptions about the role of men and women and in promoting positive change. By seeking to reform the views of parents on the need to ensure the birth of a boy, such media campaigns hold more promise for addressing the high sex ratios at birth than policies banning prenatal sex selection or discouraging abortions. Strengthening the availability of and access to good-quality early childhood development programs would be beneficial for young children and enable more women to enter the labor force. Adopting a parental leave concept would be crucial

---

<sup>3</sup> BEEPS (Business Environment and Enterprise Performance Survey) (database), European Bank for Reconstruction and Development and World Bank, London (accessed April 2013), <http://ebrd-beeps.com/data/>.

in supporting women's work-family responsibilities. Thus, maternity leave could be expanded to include paternal leave and give fathers incentives to take leave and share in the care of newborns.

Because of the large share of women who enroll in tertiary education, it is important to facilitate the school-to-work transition among young women by addressing the factors that discourage women's specialization in technical fields. These efforts would make women's university education more relevant to the job market. Strengthening active labor market programs and emphasizing job search assistance and counseling to help the long-term unemployed would also help women.

## Introduction

**This Country Gender Assessment (CGA) defines gender equality in terms of equal access to opportunities, that is, equality in rights, resources, and voice among women and men** (World Bank 2007). Equality of rights refers to equality under the law, whether customary or statutory. Equality of resources refers to equality of access to human capital investments, productive resources, and markets. Equality of voice refers to the capacity to make decisions about one's own life, to act on these decisions, and to influence and contribute to political discourse and the development process. Gender equality is globally recognized as a development goal. It is also widely recognized that, because of entrenched and slow-to-change social norms around gender roles and responsibilities, economic prosperity does not automatically result in greater gender equality (Duflo 2005; World Bank 2011a). Greater gender equality also pays off in supporting the achievement of other development outcomes, such as better health and education among children, better labor outcomes among workers, and greater economic growth (Morrison, Raju, and Sinha 2007; World Bank 2011a).

**Armenia ranks 102nd on the World Economic Forum's 2016 Global Gender Gap Index, which covers 144 countries** (WEF 2016). (Iceland, Finland, Norway, and Sweden top the rankings.) The country has one of the lowest rankings in the Europe and Central Asia region and among the group of lower-middle-income countries. According to the components of this Global Gender Gap Index, the indicators that present the biggest challenges in Armenia are political empowerment, the estimated earnings gap, labor force participation, and the sex ratio at birth. The main question addressed in this CGA, which builds on previous work, is what is the state of gender equality in Armenia in demography, human capital, economic opportunities, and voice and agency? The report also seeks to identify emerging patterns in the gaps or inequalities that put women or men at a disadvantage.

**Across the gender gaps, a common thread appears to be the social norms and patriarchy that shape gender roles and influence outcomes in all the domains in the analysis.** Occupational segregation, the gendered concentration in particular fields of study among students in tertiary education, the dip in female labor force participation during the childbearing years, the low representation in the political sphere: these all show this common thread. No indicator more starkly captures the impact of social norms than the sex ratio at birth, which, in Armenia in 2015, stood at 113 boys per 100 girls, much higher than the benchmark ratio of 106. The impact of these same norms is revealed also in demographic imbalances at the top of the population pyramid, where men face far greater risk of mortality in adulthood. In a country of only about 3 million people already characterized by low birthrates, these demographic imbalances can exacerbate the decline in population growth.

**Addressing unequal gender outcomes represents a key development challenge in Armenia.** The government has made commitments to address this development challenge. The Ministry of

Labor and Social Issues is currently preparing an updated version of the National Action Plan on Gender Equality. The plan is expected to be approved in late 2016 after consultations within and outside the government. The government recently approved methodological instructions for gender mainstreaming, including indicators. The instructions are now part of the curricula in training programs for civil servants. A domestic violence referral guide was also approved by the Ministry of Labor and Social Issues to be used by all public agencies. These are examples of opportunities to strengthen gender equality in institutions starting with the public sector and advancing into the areas of fair practice and antidiscrimination.

### **Economic growth and poverty reduction**

**In its second decade since independence, Armenia experienced rapid and impressive economic progress and imposing gains in poverty reduction.** Between 2001 and 2007, annual growth in gross domestic product (GDP) averaged 13 percent, and this had a visible, positive impact on the welfare of the population. Poverty incidence was reduced by half, from 54.0 percent to 27.6 percent, lifting approximately one million people out of poverty; unemployment fell; and health indicators such as life expectancy and maternal mortality improved. When the economic crisis hit, causing a 14 percent decline in GDP in 2009 and a significant increase in poverty, the country was still facing enduring challenges linked to the economic transition and the demographic dynamics typical of much of Eastern Europe and Central Asia. Today, Armenia is striving to grow and become competitive in the global market, but it remains a rapidly aging lower-middle-income country with a GDP per capita of approximately US\$3,489.<sup>4</sup> Poverty rates have followed a downward trend in the postcrisis years, though they remain high, at 29.8 percent in 2015 according to estimates based on the Integrated Living Conditions Survey (ILCS), and have not returned to precrisis levels.

**Despite economic progress, gender disparities are salient in Armenia, especially in dimensions that are powerfully influenced by social norms.** The country's economic and demographic challenges have clear gender dimensions (box 1). Some of the gender disparities have clear implications for the country. For example, the low fertility rate, combined with sex selection at birth in favor of boys is expected to exacerbate the slowdown in population growth because the missing girls who are not born today (due to a preference for sons) translate into fewer women of childbearing age in the future. Some predict that the declining share of women in the population will eventually narrow the marriage possibilities among young men (a situation referred to as the marriage squeeze), as has already been observed in parts of China and India, where skewed sex ratios at birth are at levels similar to the levels in Armenia. Indeed, the marriage squeeze is expected to encourage male emigration.

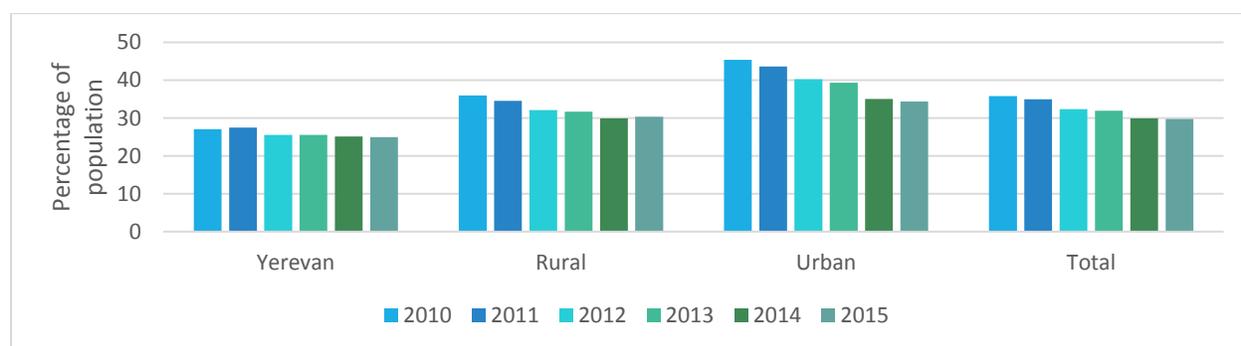
---

<sup>4</sup> In current 2015 U.S. dollars. See WDI (World Development Indicators) (database), World Bank, Washington, DC (accessed January 2017), <http://data.worldbank.org/data-catalog/world-development-indicators>.

**BOX 1. A MODEST DOWNWARD TREND IN POVERTY IN RECENT YEARS**

In the aftermath of the 2008–09 global financial crisis, the trend toward rapid poverty reduction of the 2000s was reversed; although there has not yet been a return to the precrisis levels, the poverty headcount has recovered a downward trend in recent years. The proportion of the total population living below the poverty threshold decreased from 35.8 percent in 2010 to 29.8 percent in 2015 (figure B1.1). As of 2015, approximately 900,000 people were still living below the national poverty line of 41,698 drams. The levels and trends in poverty rates are heterogeneous across regions. For instance, Yerevan, the capital, exhibited a poverty rate of 25 percent in 2015, much lower than the national average; however, this rate has remained nearly constant since 2012.

**Figure B1.1. Trends in Poverty, by Location, 2010–15**



Source: 2010–15 ILCS data.

Woman-headed households, especially those with at least one child under the age of 6, were most affected by the rise in poverty during the crisis (table B1.1). Linked to a 16.2 percent increase in poverty incidence between 2008 and 2011, over half of all woman-headed households with young children were experiencing poverty in 2010. Since then, woman headship has continued to be associated with a slightly higher probability that a household reports consumption below the poverty line relative to man headship. Between 2010 and 2014, however, the gender gap was reduced; poverty rates declined more quickly among woman-headed households than among man-headed households. Thus, while 39.5 percent of woman-headed households and 34.5 percent of man-headed households were poor in 2010, the incidence of poverty had decreased to 31.5 percent among woman-headed households and 29.4 percent among man-headed households by 2014.

According to NSS (2016) estimations, households headed by a woman in 2015 comprised 29 and 27 percent of the poor population and the total population respectively. Within woman-headed households, those with children up to 6 years of age had approximately 1.4 times higher probability of being in poverty than the national average.

**Table B1.1. Poverty Rates, by Household Demographics, Armenia, 2010, 2012, and 2014**

	(%)		
	2010	2012	2014
Woman-headed households	39.5	33.4	31.5
Man-headed households	34.5	32.3	29.4

Source: 2010–14 ILCS data.

Source: World Bank 2016 and Social Snapshot and Poverty in Armenia, NSS 2016.

This CGA follows the framework provided by *World Development Report 2012: Gender and Development* (World Bank 2011a), and it builds on the key findings of the regional gender report, “Opportunities for Men and Women in Emerging Europe and Central Asia” (Sattar 2012), as well as recent background studies on missing girls and women in the south Caucasus (Das Gupta 2015; Dudwick 2015). The analysis relies on international databases (the Business Environment and Enterprise Performance Survey [BEEPS], Findex, and World Development Indicators), the United

Nations Economic Commission for Europe's Gender Statistics, and national statistics (Armenia Demographic and Health [DHS] Survey 2010 and tabulates form the 2015 version, *Women and Men in Armenia 2015 and 2016* [NSS 2015; 2016], and, for quantitative data, results of the ILCS).<sup>5</sup> Additionally, it uses inputs from the Caucasus Barometer's qualitative data and the World Bank's Women, Business, and the Law database for information on the institutional environment.<sup>6</sup> Lastly, the note expands the analysis by examining secondary sources, which provide details useful for understanding gender disparities in the context of Armenia. Among these are the Asian Development Bank's Country Gender Assessment, reports of the United Nations Population Fund on population and sex ratios at birth, and several World Bank technical papers.<sup>7</sup>

### **Government's commitment to gender equality**

**The government is committed to promoting gender equality.** The government recognizes three key motivations for promoting gender equality: the demographic outlook of the country, which is affected by low fertility and a high ratio of women to men in the working-age population; fiscal constraints, which require the effective use of social protection budgets; and gender equality as a normative goal on its own account.

**The government adopted legislation and several strategic documents to promote gender equality in all spheres of economic, social, and political life.** Antidiscrimination legislation principles are enshrined in the Constitution and the Labor Code, which also provides for maternity and parental leave and health protection for pregnant women. The "2004–2010 National Action Plan on Improving the Status of Women in the Republic of Armenia and Enhancing Their Role in the Society," the "Gender Policy Concept Paper of the Republic of Armenia," and the "Republic of Armenia Gender Policy Strategic Action Plan, 2011–2015" are key strategic documents (Republic of Armenia 2004, 2010, 2011). Most recently, the Law on Equal Rights and Equal Opportunities for Women and Men was adopted by the National Assembly in 2013. The Gender Policy Concept Paper has served as a basis for a strategy to address gender-based violence and the approval of the Law on State Guarantees of Equal Rights and Opportunities for Men and Women by the government in 2012. The government also introduced institutional changes in 2012 to create gender councils in all municipal and regional administrations according to an approved Charter.

---

<sup>5</sup> See BEEPS (Business Environment and Enterprise Performance Survey) (database), European Bank for Reconstruction and Development and World Bank, London (accessed June 2016), <http://ebrd-beeps.com/data/>; Global Findex (Global Financial Inclusion Database), World Bank, Washington, DC, <http://www.worldbank.org/globalfindex>; WDI (World Development Indicators) (database), World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators>; Gender Statistics (database), United Nations Economic Commission for Europe, Geneva, <http://www.unece.org/statistics/areas-of-work/statsoc/gender-statistics.html>.

<sup>6</sup> Caucasus Barometer (database), Caucasus Research Resource Center, Tbilisi, Georgia, <http://www.crrcenters.org/n>; WBL (Women, Business, and the Law) (database), World Bank, Washington, DC (accessed June 2016), <http://wbl.worldbank.org/>.

<sup>7</sup> See ADB (2015); UNFPA (2012, 2013); and, for example, Das Gupta (2015) and Dudwick (2015). See also World Population Prospects: The 2015 Revision (database), Population Division, Department of Economic and Social Affairs, United Nations, New York, <http://esa.un.org/unpd/wpp/>.

The Ministry of Labor and Social Issues has likewise developed and approved criteria and guidelines for introducing gender-disaggregated monitoring system in the public sector.

Challenges remain such as implementing changes in many spheres where women are still disadvantaged and strengthening the relevant institutions and their capacity to launch, monitor, and realize a strategy and priorities on gender equality.

## Demography and Human Capital Endowments

Systematic differences in investments between males and females, independent of their underlying causes, adversely affect individual outcomes in childhood and adulthood and those of the next generation. . . . Education and health investments have a huge impact on the ability of individuals—whether men or women—to function and reach their potential in society.

—*World Development Report 2012: Gender and Development* (World Bank 2011a, 104–05)

**A clear understanding of gender differences in human capital endowments in Armenia and the reasons why they persist is important for the entire society’s growth prospects.** This understanding is crucial for achieving equality of opportunities and ultimately helps ensure that girls and women are endowed with the skills that will determine their ability to earn higher wages and to own and run enterprises and farms. This engenders opportunities for the entire population to participate in economic prosperity.

### Demography and health

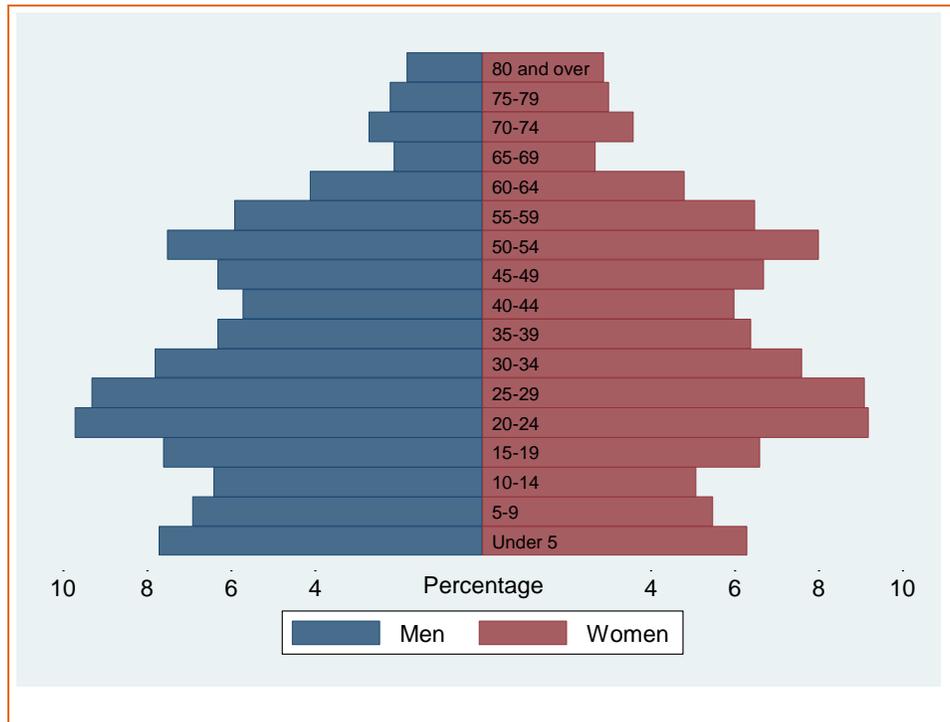
**Demographic trends in Armenia have a clear gender dimension in terms of both gender-specific health issues affecting reproduction and longevity and the gender distribution of newborns, workers, and retirees.** The government acknowledges and aims to address these issues. In the roadmap policy on gender equality, the government stresses the need for health policies and an improved health care sector that accommodates considerations of the differences between genders. The Gender Concept Paper finds that certain diseases and illnesses affect women and men differently (for instance, male HIV or tuberculosis patients vastly outnumber the female patients), and this influences their longevity and well-being; it also acknowledges that the low birthrates are having demographic consequences that need to be urgently addressed.

**With an estimated population of 3 million people, over half of whom are women, Armenia displays striking sex imbalances** (figure 1). The skewed gender demographics across age-groups are symptomatic of deeper gender inequalities and can be thought of as an aggregation of disparities in multiple domains. The 2010 DHS finds that gender disparities are more pronounced in urban than in rural areas, with 82 and 90 men per 100 women, respectively. Women, however, outnumber men only among the 20+ age-groups, not in the younger age-groups (0–19 years). Actually, the number of women age 15–19 has consistently declined over the last 15 years: from 18 percent in 2000 to 12 percent in 2015–16.<sup>8</sup> Among the missing girls in the under 14 age-group are a high number of girls who were never born because of sex selection. Shorter life expectancy among men, alongside the high levels of male migration, explain the sex imbalance among the older age cohorts.

---

<sup>8</sup> National Statistical Service [Armenia], Ministry of Health [Armenia], and ICF International. 2016. *Armenia Demographic and Health Survey 2015–16: Key Indicators*.

**Figure 1. Resident Population, by Age-Group and Gender, 2015**

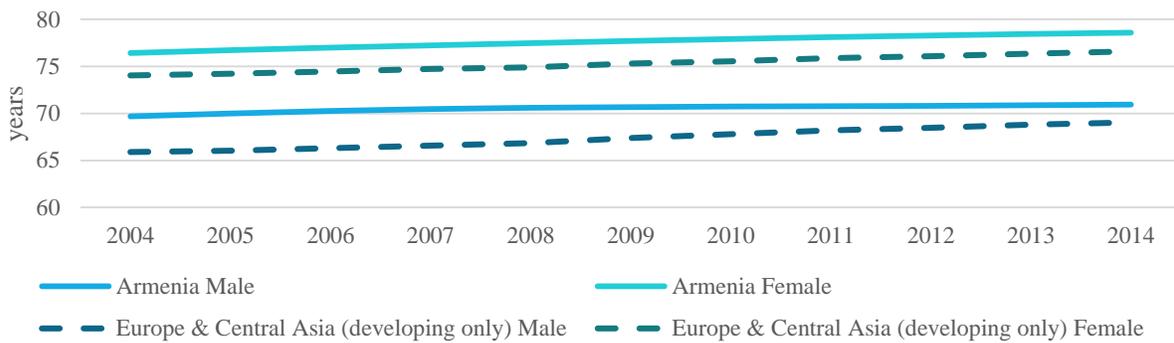


Source: NSS 2015.

Note: Data as of January 1, 2016: total population, men: 1,429.1 thousand; women: 1,569.5 thousand.

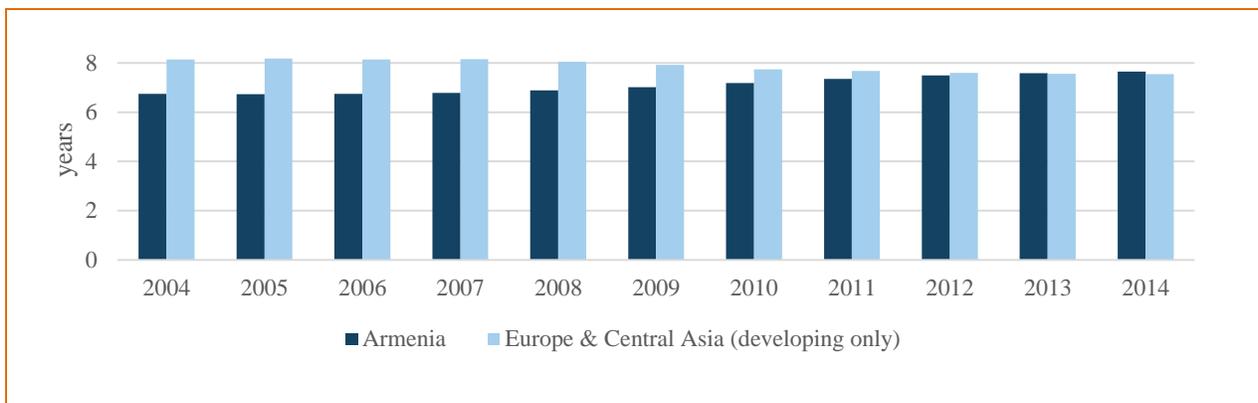
**Although life expectancy has increased over the past decade, among men it has remained almost unchanged, and, consequently, the gender gap has increased.** Gender differences in life expectancy and mortality vary by country, but in most countries men live fewer years than women. In the Russian Federation, for example, the difference between male and female life expectancy is among the highest, at 11 years. Compared with the average in developing countries in the Europe and Central Asia region, Armenia is well placed (figure 2); however, the male disadvantage has been growing (from 6.7 to 7.6 years of difference between female and male rates), mostly because of the dismal trend in the indicator for males. This is in contrast to developing countries in the Europe and Central Asia region, where the gender gap in life expectancy has decreased significantly during the last decade (figure 3). Disparities in the mortality rates of the working-age population deserve rigorous study to improve the understanding of the underlying causes of demographic imbalances and help inform policy discussions. Research suggests the existence of a strong cross-country correlation between GDP per capita and male mortality rates, but the former transition countries of Europe and Central Asia are outliers in this relationship (Lackó 2015).

**Figure 2. Life Expectancy, by Gender, 2004–14**



Source: WDI (World Development Indicators) (database), World Bank, Washington, DC (accessed June 2016), <http://data.worldbank.org/data-catalog/world-development-indicators>.

**Figure 3. Female-Male Difference in Life Expectancy, 2004–14**



Source: WDI (World Development Indicators) (database), World Bank, Washington, DC (accessed June 2016), <http://data.worldbank.org/data-catalog/world-development-indicators>.

**Health risks because of smoking are prevalent among men.** The World Health Organization estimates that 63 percent of men ages 15–49 are tobacco consumers. This is one of the potential factors behind the much higher mortality rate among men than among women at relatively young ages: in the 15–44 age-group, the mortality ratio between men and women is almost 3:1 (NSS 2013).

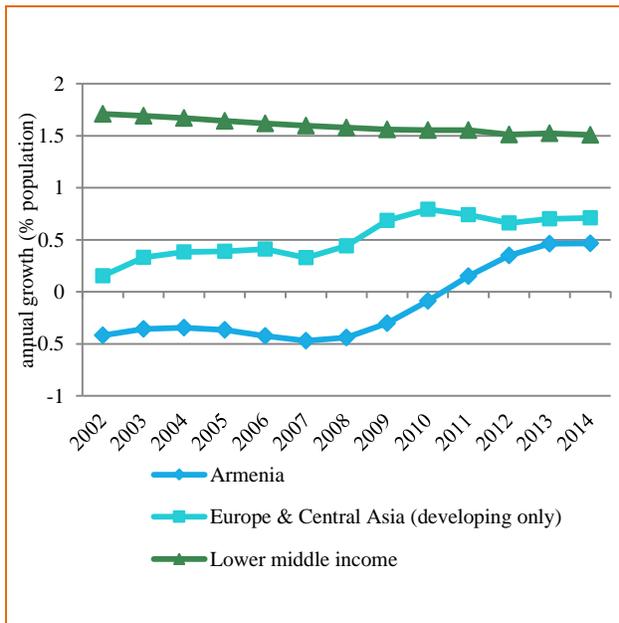
**The likely consequences of this demographic outlook are a rising share of woman-headed households, women’s greater vulnerability to old-age poverty, and particular concerns about men’s health.** In 2010, approximately 37 percent of households were headed by women; the share appears stable compared with 2005, but much higher than the share in 2000 (29 percent).<sup>9</sup> Such a

<sup>9</sup> DHS 2000, 2005, 2010. Data from ILCS show in 2015 a proportion of 34.4 percent of female headed households in Armenia, (37.7% in urban and 27.8% in rural communities).

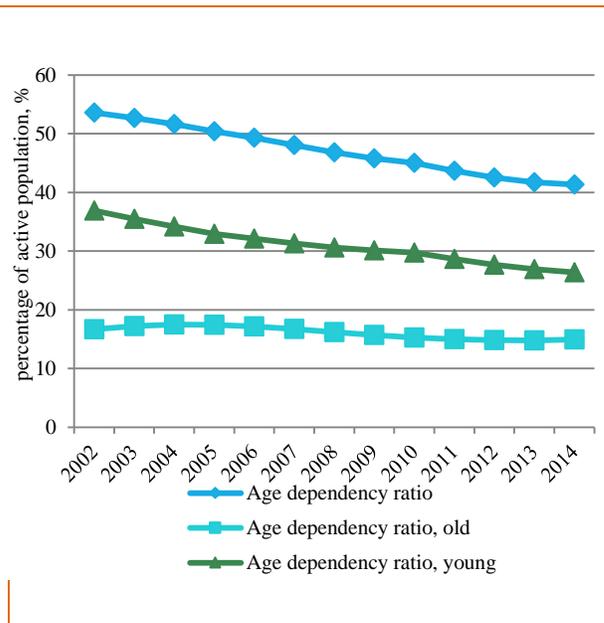
high figure, exacerbated also by men’s outmigration, raises concerns about the vulnerability to poverty, given women’s lower participation in the labor market and lower wages. A second concern that appears from these demographic data is the high proportion of elderly women. The issue of old-age poverty therefore takes a gender dimension, not least because it is likely women pay lower pension contributions during their active working lives.

**Armenia has long been affected by low fertility rates and a rapidly aging population.** In 2014, the birthrate was 13.2 (per 1,000 population), similar to the rate in 2000; there was a brief period of increase between 2004 and 2010 to close to 14 births per 1,000 people. Measured another way, the fertility rate was 1.5 births per woman in 2014; demographers calculate that a fertility rate of about 2 births per woman is needed to maintain the population. Indeed, population growth in the country is low. The annual population growth rate is approximately 0 (0.02 percent in 2011), a significant improvement compared with the previous 10 years, which had negative population growth (figure 4). Even today, however, fertility level is much lower in Armenia than in other lower-middle-income countries (where the birthrate averages 24 per 1,000 people), although they are in line with the Europe and Central Asia average (15.8 per 1,000 people).<sup>10</sup> To encourage fertility, the government has been offering incentives such as birth grants for low-income families.

**Figure 4. Population Growth, 2002–14**



**Figure 5. Dependency Ratio, 2002–14**



Source: WDI (World Development Indicators) (database), World Bank, Washington, DC (accessed April 2016), <http://data.worldbank.org/data-catalog/world-development-indicators>.

<sup>10</sup> Data of WDI (World Development Indicators) (database), World Bank, Washington, DC (accessed April 2016), <http://data.worldbank.org/data-catalog/world-development-indicators>.

**This trend of negative and then slow population growth is having significant consequences for fiscal sustainability.** Low fertility has led to a decrease in the child dependency ratio from 54 percent to 41 percent of the population, while the share of older people continues to be stable at about 15 percent of the working-age population, twice as high as the average in countries at similar income, though in line with most countries of Europe and Central Asia (figure 5). As elsewhere in Europe and Central Asia, this raises key challenges for fiscal sustainability mainly because of the need to provide old-age pensions, which can be claimed by both men and women at age 63.<sup>11</sup> Official data suggest that 283,127 women and 180,018 men were receiving some form of pension in December 2014. The vast majority of the women were retirement and old-age pension recipients (about 281,231) (NSS 2015).

**Use of modern contraceptives is low, leaving abortion as the main method to deal with unintended pregnancies.** One pregnancy in three ended in abortion in 2015 (figures 6 and 7). According to the 2010 DHS, only 15.5 percent of the abortions were for medical reasons, such as the mother's health or a risk of birth defects. This is not surprising, given the low levels of contraceptive use, 57.1 percent of women ages 15–49, compared with the Europe and Central Asia average of 74 percent. The 2015 DHS, however, found that the use of modern contraceptive methods has increased since 2000.<sup>12</sup> Family planning and reproductive health services are available to all women in Armenia, although rural and, especially, highland areas are underserved. The share of pregnancies ending in induced abortion increases dramatically with the order of pregnancy and women's age, while it is negatively correlated with education. A striking improvement was registered in the 2000s: the abortion rate was reduced by more than half between 2000 and 2010. The high abortion rate is one of the ways in which couples have achieved a low fertility rate (1.7 children per woman) and small mean household size (3.6 members, according to the DHS 2015).

**Despite the low level of contraceptive use and the consequences, reproductive health care standards are in line with regional average levels and visibly better than in other lower-middle-income countries.** Virtually all women (99.6 percent) receive antenatal care, and most women interviewed during the 2015 DHS declared they had received delivery services free of charge. The maternal mortality ratio declined steadily from 1990 to 2015 and is at 25.0 per 100,000 live births, compared with 16.0 in Europe and Central Asia and 253 in countries at similar income.<sup>13</sup>

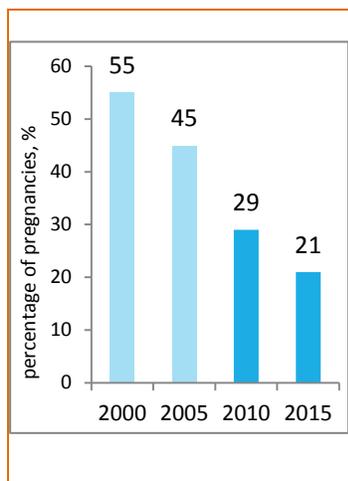
---

<sup>11</sup> WBL (Women, Business, and the Law) (database), World Bank, Washington, DC (accessed April 2016), <http://wbl.worldbank.org/>.

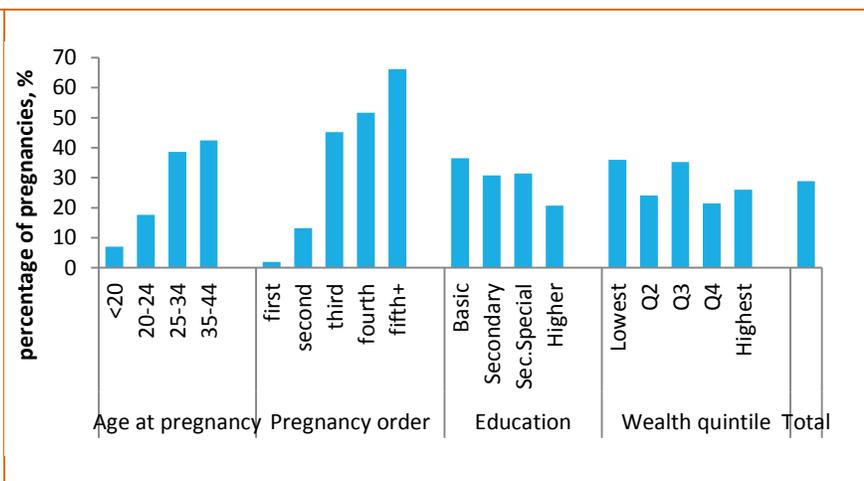
<sup>12</sup> Armenia Demographic and Health Survey, 2015-16 Key Indicators Report, National Statistical Service of Armenia, Ministry of Health of Armenia and the DHS Program ICF International (accessed March 2017) <https://dhsprogram.com/pubs/pdf/PR79/PR79.pdf>

<sup>13</sup> Data of Maternal Mortality Estimation Inter-Agency Group (2015).

**Figure 6. Trend, Induced Abortions, 2000–15**



**Figure 7. Profile of Women, Induced Abortions, 2010**

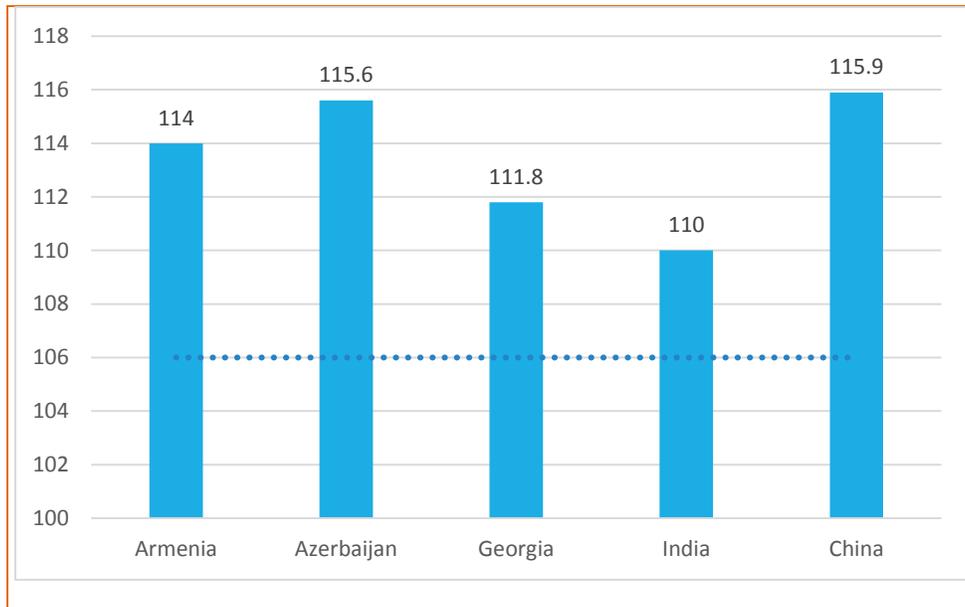


Source: 2000–15 DHS

**Armenia is one of a handful of countries where a sufficient number of couples act on their preference for sons such that the demography of births is skewed toward far more boy births than girl births** (figure 8). The most recent estimate shows that sex ratio at birth is 113 boys for every 100 girls.<sup>14</sup> If parents did not follow through on their wish to ensure the births of sons, then research suggests that this ratio would have been 106. Following Sen (1990) and the concept of missing women, this deviation in Armenia from a sex ratio of 106 can be used to calculate the number of missing girls, that is, girls who would have been born in the absence of the preference for sons. Das Gupta’s (2015) background paper for the World Bank’s Missing Girls Project shows that in the three south Caucasus countries (Armenia, Azerbaijan, and Georgia), sex ratios at birth rose sharply starting in the 1990s. Indeed, the sex ratio at birth in Armenia today is close to the ratios in India and China, countries that are known for their strong son preference. Son preference exists in many countries of the world (as evidenced in the differential treatment of women and men and of girls and boys), but a sufficient number of parents act to shape the gender composition of births in only a few countries. Das Gupta (2015) suggests that a combination of falling fertility rates and rising economic uncertainties have led to the emergence of skewed sex ratios at birth in the south Caucasus. The issue of missing girls in Armenia has been the subject of research and public attention in recent years. Although data suggest an improving trend, the higher-than-expected ratio of boys to girls at birth requires a focused policy effort to address the root causes of son preference and the associated gender inequalities.

<sup>14</sup> Estimate used for the calculation of the Global Gender Gap 2016, WEF (2016)

**Figure 8. Average Sex Ratio at Birth, South Caucasus, India, and China, circa 2013**



*Source:* UNFPA (2016). Note that estimates for Armenia are based on Birth registration and correspond to the period 2012-2013. In the case of Azerbaijan, estimation is based in Birth registration for 2013; Georgia, based on Birth registration for the period 2008-2012; India, based on sample registration for 2011-2013; and China, based on annual estimate for 2014.

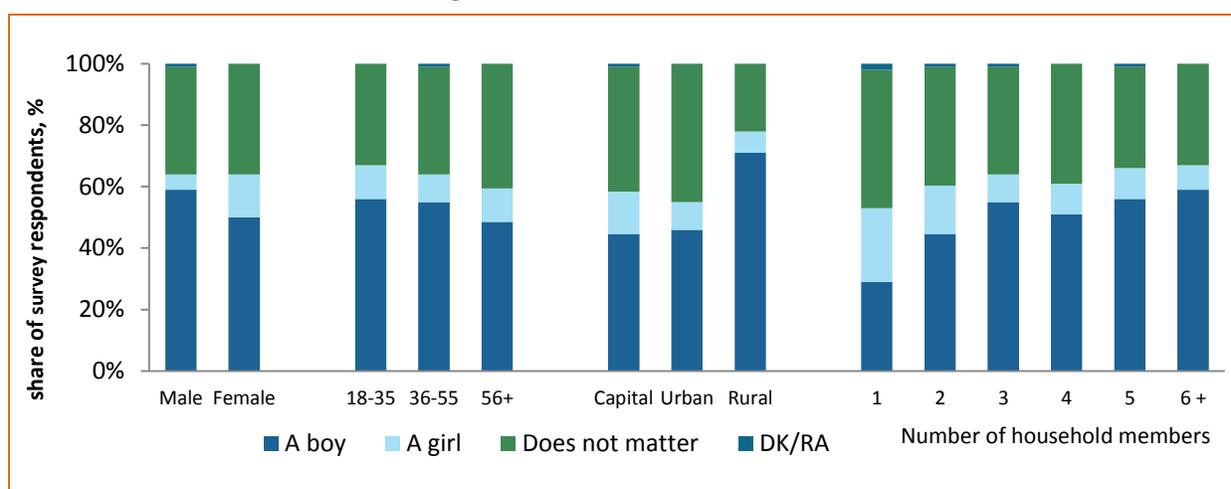
**A culture of strong son preference and pervasive patriarchal norms, the use of abortion as the most common family planning technique, and the availability of ultrasound technology characterize the context of gender and birth in Armenia.** The sex preference of sons plays a crucial role. Sex ratios at birth increase with birth order, as parents try to ensure that they have a son in this low fertility setting. The sex ratio is almost balanced among first births, but skewed among second births (107 and 111) and then jumps to over 150 among the third and fourth births.<sup>15</sup> In aiming to have small families, parents likely resort to sex selection to ensure the birth of sons. The self-reported preference for sons appears to be associated with rural and less well educated households (figure 9). A rich body of qualitative data on this and other issues was gathered by the Caucasus Barometer Survey in 2010.<sup>16</sup> Asked about the preferred gender of a child, respondents

<sup>15</sup> Calculations based on NSS (2013).

<sup>16</sup> Caucasus Barometer (database), Caucasus Research Resource Center, Tbilisi, Georgia, <http://www.crrcenters.org/n>.

in rural areas indicated preference for a boy in 71 percent of cases, as opposed to 46 percent in urban areas. Similarly, women respondents and people who had completed higher education were less likely to express a preference for sons. Social and gender norms, alongside reasons of economic necessity, that is, males tend to be viewed as more likely to provide financial support to the household, appear to be at the basis of the parental son preference. These motivations persist despite the availability of a social protection system consisting of pensions and other social transfers (Das Gupta 2015).

**Figure 9. Sex Preference, 2010**



Source: Caucasus Barometer (database), Caucasus Research Resource Center, Tbilisi, Georgia, <http://www.crrccenters.org/n>.  
 Note: The survey question was “If a family has one child, what would be the preferred gender of the child?”

**Qualitative research conducted by the Caucasus Research Resource Center and the World Bank and reported in Dudwick (2015) shows that the complex socioeconomic dynamics and the role of social norms determine son preference.** Although the cause of the skewed sex ratios at birth has typically been attributed to the ready availability of antenatal sex selection technology, Dudwick (2015) shows that the root cause is the prevailing social norms that promote son preference. One of the central findings of Dudwick is that son preference does not necessarily reflect personal preferences so much as strong social pressure. Sons are viewed as supporters of their parents and valued for their role as protectors. After marriage, a daughter is generally expected to internalize the interests of her husband’s family and is therefore considered to have fragile ties with her own parents and siblings. Both men and women express a strong desire to have at least one son, although Dudwick’s analysis of the interviews in the study show that women often feel pressured to produce sons.

**There is evidence of heterogeneity in the incidence of the skewed sex ratios by economic characteristics, education, and location.** Guilмото (2013) finds evidence of regional differences in Armenia in the sex imbalances at birth. The highest sex ratios are in the center of the country, particularly Aragatsotn, Armavir, Gegharkunik, and Shirak. Rural areas in general show higher

sex ratios than towns and cities, in particular among second births. The data suggest a link between lower educational attainment and higher sex imbalances at birth; the gap is substantial between people at the lowest educational attainment and the rest of the population.

**There are, however, indications that attitudes are slightly shifting toward overriding the importance of sons.** Qualitative research show that respondents of all ages observed relationships between in-laws and daughters-in-law shifting toward more independence and taking on the responsibility for their own parents. Young women more often expressed the desire to work outside the home, to contribute more to family finances, and to live apart from their in-laws after marriage. The incidence of these changing attitudes seems to be higher in urban areas and among young women.

**The demographic impact of the sex imbalance and the implications of the underlying preference for sons may be significant and potentially reinforce gender inequality.** A missing generation of young women is likely to worsen the already low fertility rates in the country. The projected reduction in the future number of prospective mothers has been estimated to cause a decline in the number of births approximately 25 years later. Estimations by Guilamoto (2013) point to a reduction of about 3 percent of the population during the next 50 years.

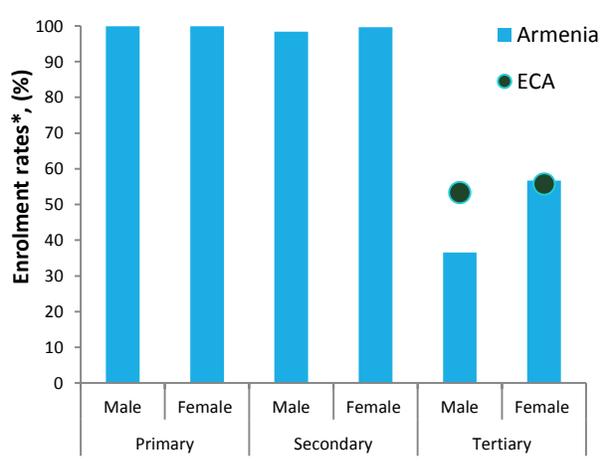
**To address the issue successfully in a sustainable way, policy makers in Armenia could focus their efforts on multiple avenues to strengthening the value of girls in society.** Media campaigns promoting the value of girls, eradicating gender inequalities in economic opportunities and access to assets, and strengthening the protection of women experiencing violence and suffering from lower voice and agency within the household would be useful. Corroborating evidence on India, Dudwick (2015) maintains that banning abortions or preventing parents from knowing the sex of the fetus will not have positive outcomes on sex ratios. It is widely believed among women and men interviewed that women would find illegal, more risky ways to realize sex selection and selective abortions.

## **Education**

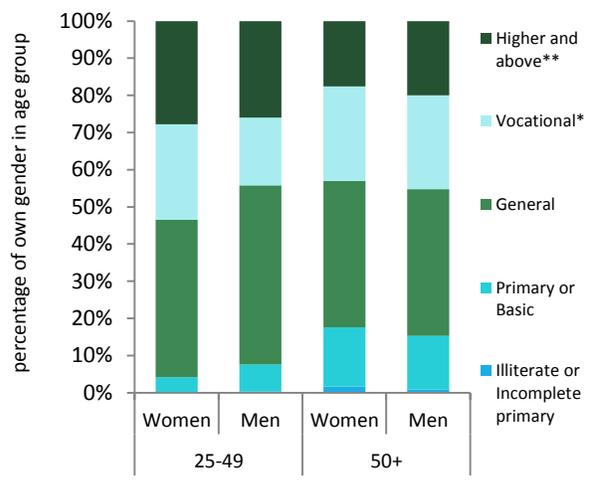
**Education plays an important role in raising the quality of human capital, and has direct effects on men and women's lives as workers, citizens, and family members.** The importance of education is therefore twofold. First, according to the government, the education system is a formative experience that shapes the belief in democracy and fosters civil values (Republic of Armenia 2010). The government's gender equality agenda reflects on the need for an improved education system "to convey gender balanced expectations as to the role of women in society or ideals of their equality with men" (Republic of Armenia 2010, 2015). Second, education is valuable in the acquisition of competencies and skills. These are key assets for every individual, who, by participating in labor markets, can enhance their household income generation capacity and thus contribute to the country's growth (Bussolo and López-Calva 2014).

**Substantial investment in the education of men and women before the collapse of the Soviet Union endowed Armenia with a population that is more well educated than the populations of most countries at a similar stage of development.** For instance, illiteracy rates are negligible, and well over 50 percent of men and women over age 50 have continued beyond basic schooling, the education of 6- to 17-year-olds (figure 11). However, Armenia must confront challenges if it is to maintain equal educational outcomes among both men and women.

**Figure 10. School Enrollments, by Gender, 2011**



**Figure 11. Educational Attainment, by Gender and Age, 2014**



Sources: Figure 10, for net primary- and secondary-school enrollments: 2011 data of National Statistical Service; for gross tertiary enrollments in Europe and Central Asia (developing countries only): 2014 data of WDI (World Development Indicators) (database), World Bank, Washington, DC (accessed April 2016), <http://data.worldbank.org/data-catalog/world-development-indicators>. Figure 11: calculations based on NSS 2015.

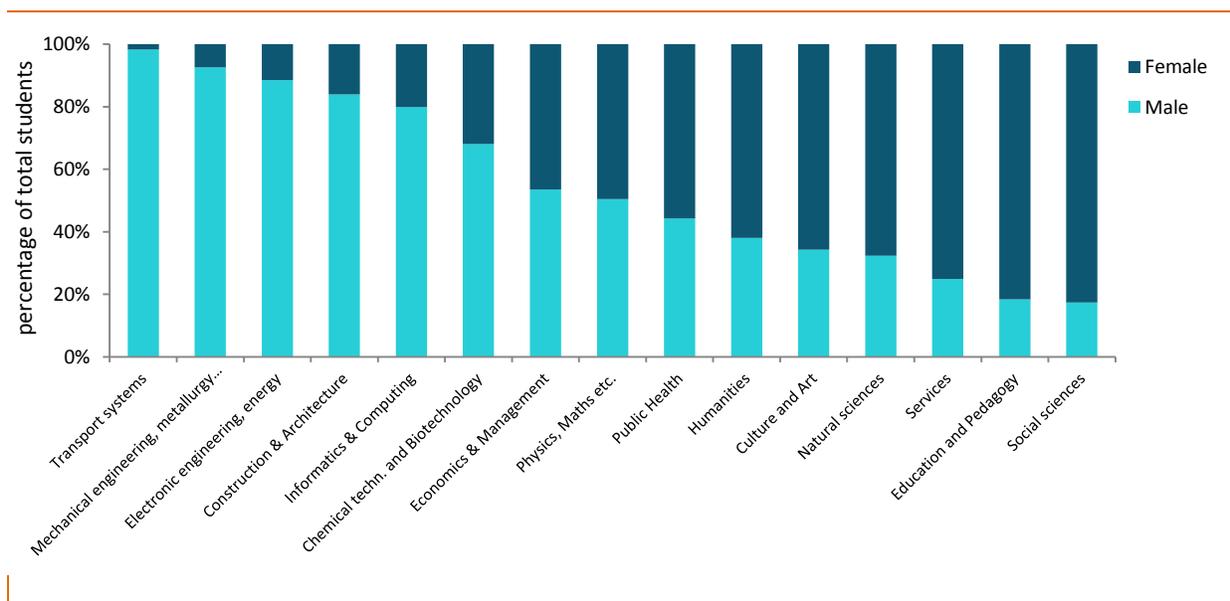
\*Vocational education includes preliminary and middle vocational school. \*\* Includes incomplete higher education.

**Primary and secondary enrollment rates are high among both boys and girls.** The National Statistical Service reports virtually universal enrollment rates among both girls and boys at the primary level and enrollment rates of 99.6 percent among girls and 98.4 percent among boys at the secondary level (figure 10) (NSS 2011). A slight majority of pupils in school are boys (about 52 percent of the total number of pupils in general education in 2012/13), reflecting the unbalanced sex ratio among the young population (NSS 2015).

**Gender outcomes are more unequal at the university level.** First, the large increase in the share of students attending tertiary education over the last decade was mostly caused by greater participation by girls than boys. As in most countries of Europe and Central Asia, the 2000s have witnessed a dramatic growth in the number of students. In 2012/13, about 57 percent of women

and 38 percent of men of university age were enrolled in higher education, which is striking compared with, respectively, the 42 percent and 31 percent of 10 years earlier.<sup>17</sup> Second, the choice of fields of study at the tertiary level varies significantly between young women and young men. Young women tend to choose subjects in the social sciences, education, and health, while young men appear more likely to major in engineering, technology-related areas, information technology, and the natural sciences (figure 12). This is a common pattern within the region and lays the foundation for much of the gender-based job segregation in the careers of university graduates in Armenia. A World Bank study currently under way aims to analyze the possible factors leading to the concentration of young women in fields other than science, technology, engineering, and mathematics (STEM) and young men in STEM-related fields.<sup>18</sup> The study analyzes three types of factors: aspirational (behavioral), informational, and institutional. The project is also investigating policy interventions that could help effectively address the phenomenon.

**Figure 12. Field of Study at the Tertiary Level, by Gender, Academic Year 2014/15**



Source: NSS 2015.

**As elsewhere in the world, teachers in Armenia are mostly women.** The university specialization pattern ensures women’s overrepresentation as teachers. Virtually all primary-school teachers and about half of tertiary education instructors are women. Local statistics, however, reveal that women employed as science specialists—instructors and science staff in institutions of higher education are generally concentrated in the most junior categories, while they

<sup>17</sup> Gross tertiary education enrollment indicators, WDI (World Development Indicators) (database), World Bank, Washington, DC (accessed April 2016), <http://data.worldbank.org/data-catalog/world-development-indicators>.

<sup>18</sup> Beyond Women in STEM Fields: Gender Differences in Field of Study and the Labor Market in Countries of the Europe and Central Asia Region, P158454, World Bank, Washington, DC.

are underrepresented in management positions. The government took a stance on this situation, acknowledging that this reinforces gender stereotypes among the new generation. In the “Gender Policy Concept Paper,” the government sets out the aims of training more women to take on management positions in the education sector and creating incentives so that more men pursue teaching careers (Republic of Armenia 2010).

## **Economic Opportunities**

“Creating equal opportunities and equal accessibility to economic resources for women and men in the spheres of labor market and employment” is among the goals of the government’s gender policy (Republic of Armenia 2010, 3). The “Gender Policy Concept Paper” acknowledges the disproportionately high level of unemployment among women, the segregation in job, the unequal pay, and the discriminatory practices in hiring and firing whereby layoffs primarily affect women. Additionally, it recognizes the need to strengthen institutional mechanisms for the enforcement of legislation on equal opportunity and labor issues. Overcoming unequal gender outcomes is viewed by the government as fundamental to addressing the high risk of poverty among woman-headed households.

### **Labor markets and labor force participation**

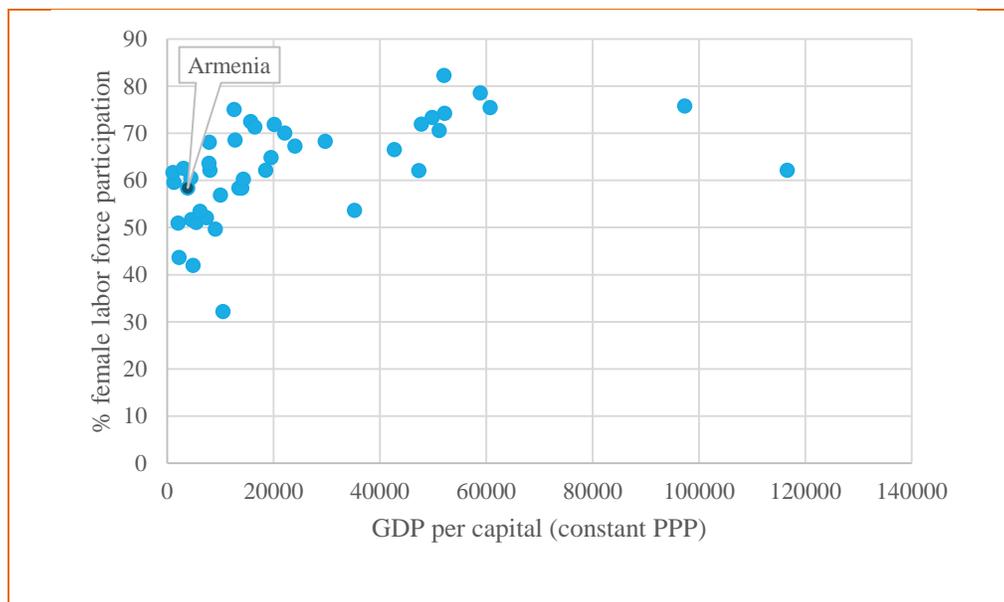
**Men-women gaps in labor market participation, as well as women’s limited presence in entrepreneurship, persist in Armenia.** According to the most recent available data, there are 1.5 women for every man in tertiary education. Yet, almost half the women with intermediate education, and more than a third of women with advanced education do not participate in paid work.

**Although female labor force participation is relatively good in Armenia relative to countries at the same level of income per capita, the gender gap in participation is about 18 percentage points** (figures 13–15). At close to 60 percent, Armenia displays high female labor market participation compared with lower-middle-income countries (40 percent of women ages 15–64 in 2014). Yet, the gender gap in Armenia among the 15–64 age-group is much larger than in high income Organisation for Economic Co-operation and Development (OECD) countries (13 percentage points). Data of the 2015 Labor Force Survey (LFS) show that the gender gap in labor force participation among the population ages 15–64 is 17 percentage points: 57.3 percent of women and 74.7 percent of men were active in the labor market. The gap is slightly higher among the 15–75 age-group, at 19.4 percentage points. Despite the much lower share of women compared with men in the labor force, women represent a higher share of the total active population because of the larger share of women in the working-age population. These high figures are partly driven by the migration of economically active men, one of the main causes of the skewed sex ratio in favor of women within the country. Women are 54 percent of the working-age population (15–64), but only 40 percent of those employed or looking for work.

**Household dynamics influence female labor force participation, and migration decisions are closely linked with labor decisions among household members.** One-quarter of the population ages 15–64 live in households with at least one migrant, and 13 percent live in households that receive remittances regularly. The share of women participating in the labor market is significantly

higher among women in households that receive some remittances (62.8 percent versus 45.7 percent).<sup>19</sup>

**Figure 13. Female Labor Force Participation, by Level of GDP per Capita, EU and Europe and Central Asian countries, 2014**

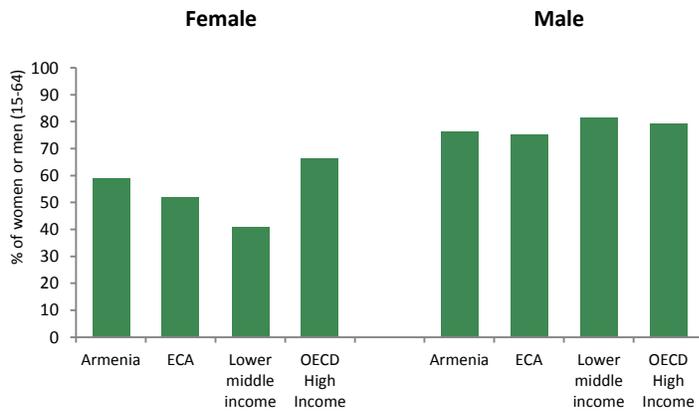


*Source:* WDI (World Development Indicators) (database), World Bank, Washington, DC (accessed April 2016), <http://data.worldbank.org/data-catalog/world-development-indicators>.

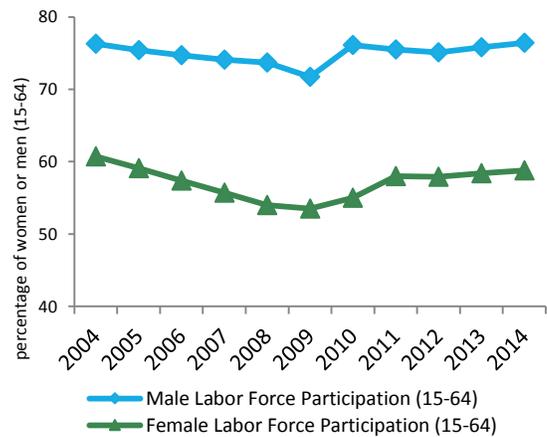
**Women out of the labor force are more likely than men to be married or widowed, and the gap in labor force participation is greatest among the 25–34 age-group** (figures 16–18). The World Bank (2011b) estimates that women with young children under 5 were 17 percent less likely than women with no children to be economically active at similar age, educational attainment, and household composition. Although extensive research is lacking on the reasons for nonparticipation, this profile suggests that women who have invested the most in their education are more likely to be working or looking for work. The greatest share of inactive women is represented by housewives (32.2 percent of women ages 15–75), followed by pensioners (13.4 percent of the same group). Given that women represent the highest share of inactive pensioners over age 55 (well above 60 percent of the total population in this age-group), there are concerns that women might be disproportionately vulnerable to old-age poverty.

<sup>19</sup> Estimates based on 2014 data of the ILCS.

**Figure 14. Labor Force Participation Rates, Armenia and Comparators 2014, Ages 15–64**

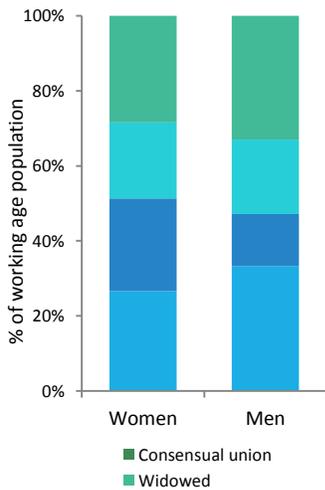


**Figure 15. Trends in Labor Force Participation Rates, Armenia 2002–14**

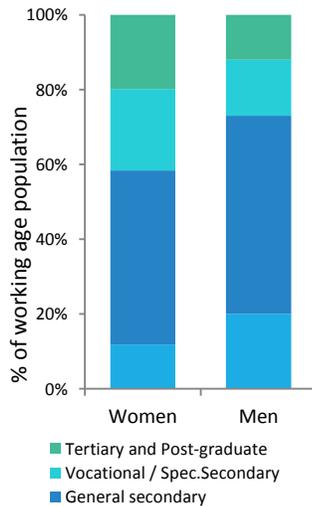


Source: WDI (World Development Indicators) (database), World Bank, Washington, DC (accessed April 2016), <http://data.worldbank.org/data-catalog/world-development-indicators>.

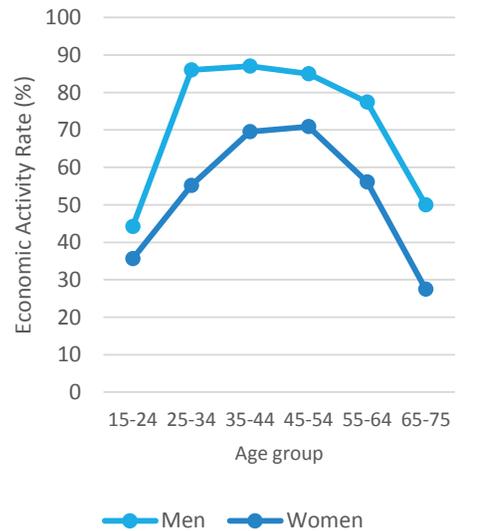
**Figure 16. The Economically Inactive, by Marital Status, 2015**



**Figure 17. The Economically Inactive, by Educational Attainment, 2015**



**Figure 18. The Economically Active, by Age-Group, 2015**



Source: NSS 2016.

**Traditional gender roles that allocate the main responsibility for housework and childcare to women appear to be a key factor behind women’s lower labor force participation compared with men.** The largest gap in economic activity is registered by the 25–34 age-group (figure 18), that is, during the childbearing years. Women’s greater responsibility in household and family care, reflected in their lower labor participation rates, is visible also in time use patterns: by a factor of five, women spend more time than men on these activities.<sup>20</sup> The persistence of gender norms emphasizing women’s roles as mothers and household caretakers is difficult to break: preschool institutions, which could help women balance work and childcare responsibilities, are operating at 75 percent capacity. Preschool attendance is extremely low by international standards, particularly in rural areas (14 percent of children) (ILO 2010).

**Education is positively correlated with female labor force participation, particularly among women in urban areas.** Higher educational attainment, measured in years of schooling, is related with the higher probability that women engage in paid work (appendix A). However, the influence of this variable is mediated by income and location and is more important among women in higher-income households and urban households.

**Marriage and the presence of young children are negatively associated with the probability that a woman participates in the labor force.** A simple Probit model estimation of the determinants of participating in the labor force shows that marriage and motherhood are strongly associated with less labor force participation; married women or women living with a partner and mothers of young children show less probability of engaging in the labor market (appendix A). Similarly, there is a negative correlation between the proportion of household members ages 6–14 and the participation of women in the labor market.

**If children attend preschool, women tend to work more than if the children are not attending school, indicating that the expansion of preschools plays an important role in the probability that mothers increase their labor supply.** In urban areas, the negative relationship between the probability that a woman is working or looking for work and the presence of children ages 0–3 in the household (as a proxy for the motherhood of young children) is mediated by preschool attendance and reliance on childcare services (appendix A). In contrast, among men, there is no significant relationship with the presence of young children or attendance at preschool. In general, the demographic and socioeconomic characteristics of the household, such as the presence of the elderly in the household, an absent member because of migration, and the share remittances represent in total household income, represent factors that influence the labor supply of women, but not men.

**The presence of elderly members in the household does not appear to have a significant relationship with the participation of women in the labor market.** The elderly in a household

---

<sup>20</sup> Time Use statistics reported in NSS (2015).

could help as alternative caregivers of young children if the mother works, but could also represent another care obligation for women to meet health care and age-related needs. Seasonal migration by male members also affects women's participation decision mainly in urban areas. In absence of a member of the household due to migration, urban women are more likely to participate in the labor force but this effect is counterbalanced by the larger negative impact of remittances such that a woman from a migrant-sending household is significantly less likely to be in the labor market if her household also received remittances.

**Legislation is in place to help women combine their dual roles as mothers and workers, but further efforts are needed to close the gender gap in labor force participation.** Legal provisions to allow women to combine their dual role of mothers and workers are in place. The Labor Code allows 140 days (28 weeks) of paid maternity leave, prevents the dismissal of pregnant women, obliges employers to guarantee nursing mothers break time, and entitles women employees with under-1-year-olds to undertake part-time work arrangements. However, while the generous maternity leave allows mothers to take care of newborns, traditional gender roles are also promoted within this framework in that the law does not incentivize fathers to take leave; it only provides for unpaid paternal leave of 60 days and unpaid parental leave of 1,025 days. The Nordic countries, which have generous paid leave systems, have shifted away from maternity leave systems toward parental leave systems with the goal of involving fathers in childcare and household work (Ekberg, Eriksson, and Friebe 2005). Research shows that the duration of maternity leave is also important in determining the probability that mothers will return to work postleave. One estimate suggests the guaranteed paid leave of 40 weeks would significantly raise women's employment rate. Another study in 17 OECD countries finds that more than 20 weeks of leave reduces women's labor force participation (Gornick and Hegewisch 2010).

To translate this legislation and the government's recent commitment set forth in the Gender Policy Concept Paper into enhanced participation by women in the labor force requires additional legislative efforts. Thus there are currently no provisions to ensure nondiscrimination against women in hiring. There are also no prohibitions on employers who wish to ask prospective employees about their family status. These loopholes could allow firms to discriminate against women with children or pregnant women.<sup>21</sup>

## **Employment**

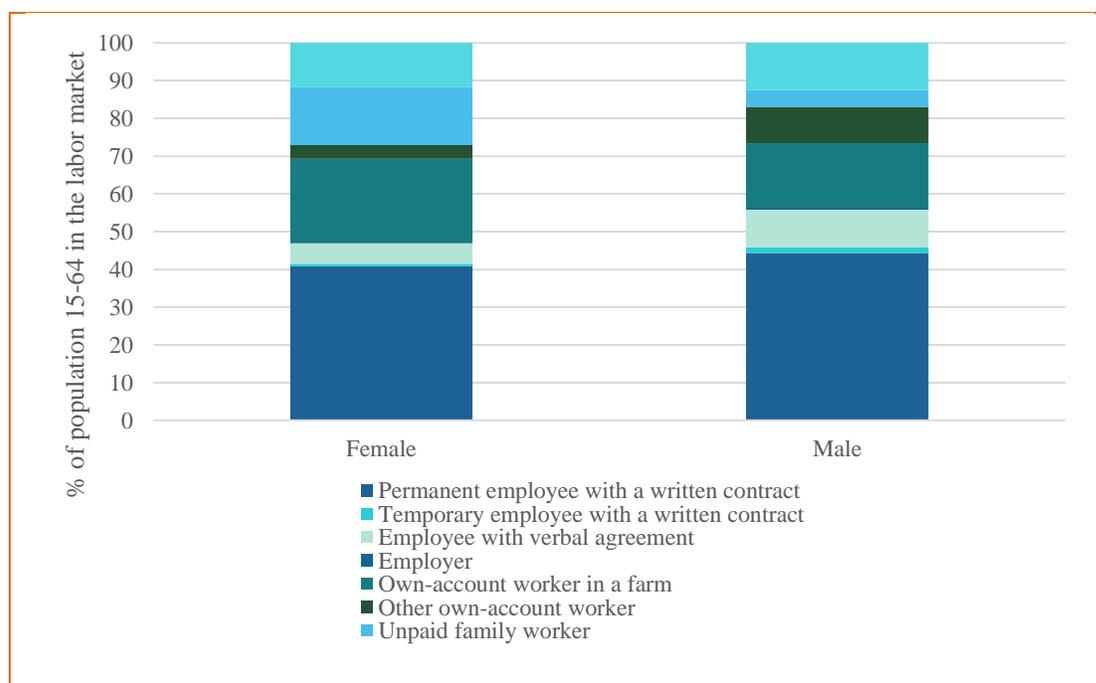
**Gender inequalities in the labor market also affect the employed.** Sector of employment, type of employment (full- or part-time), and wage levels are closely linked to gender and determine unequal gender outcomes in the access to economic opportunities, higher income, and better welfare.

---

<sup>21</sup> Data on 2016 in WBL (Women, Business, and the Law) (database), World Bank, Washington, DC, <http://wbl.worldbank.org/>.

**Women are much less likely to be employers than men; however, they are more likely to engage in own-account farm activities and unpaid work** (Figure 19). Participation in entrepreneurship is low in Armenia among both men and women (0.8 percent of men in the labor force and 0.1 percent of women). Of the total women in the labor force, 22.3 percent are own-account workers on a farm, compared with 16.8 percent of men. Especially in rural areas, women also participate much more than men as unpaid family workers (15.4 percent versus 4.4 percent).

**Figure 19. Type of Employment, by Gender**



Source: WDI (World Development Indicators) (database), World Bank, Washington, DC (accessed April 2016), <http://data.worldbank.org/data-catalog/world-development-indicators>.

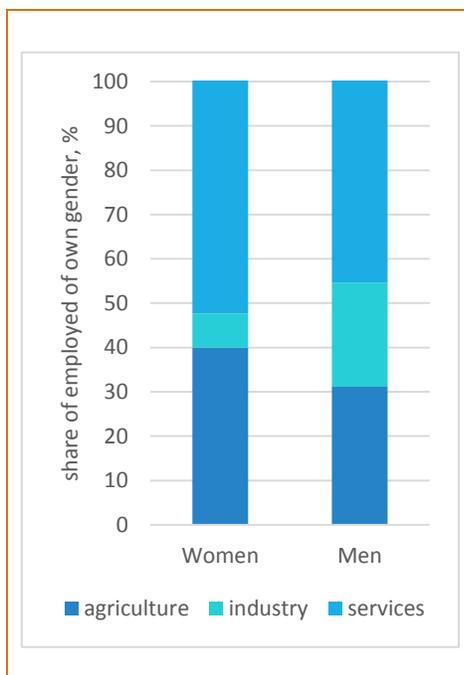
**A larger share of working women, compared with working men, are employed in agriculture and in services** (figure 20). As in most of Europe and Central Asia, the economic and social transition opened new employment opportunities in the service sector, which accommodated a high share of women. As of 2015, 52 percent of working women were employed in the service sector, compared with 46 percent of men. Agriculture accounted for 40 percent of women workers and 31 percent of men workers, while men were more well represented than women in the industrial sector (15 percent vs. 7 percent).

**There appears to be no large gender gap in informal sector employment.** Data on informality are limited, but national data show that women and men represent fairly similar shares of total informal employment (47.6 percent and 47.7 percent, respectively). Men are between two and three times more likely than women to work as wage-employed in the informal sector. Women

make up the largest share of informal agricultural workers, who account for 86.1 percent of total informal employment among women, while men represent the totality of informal sector construction workers (NSS 2016).

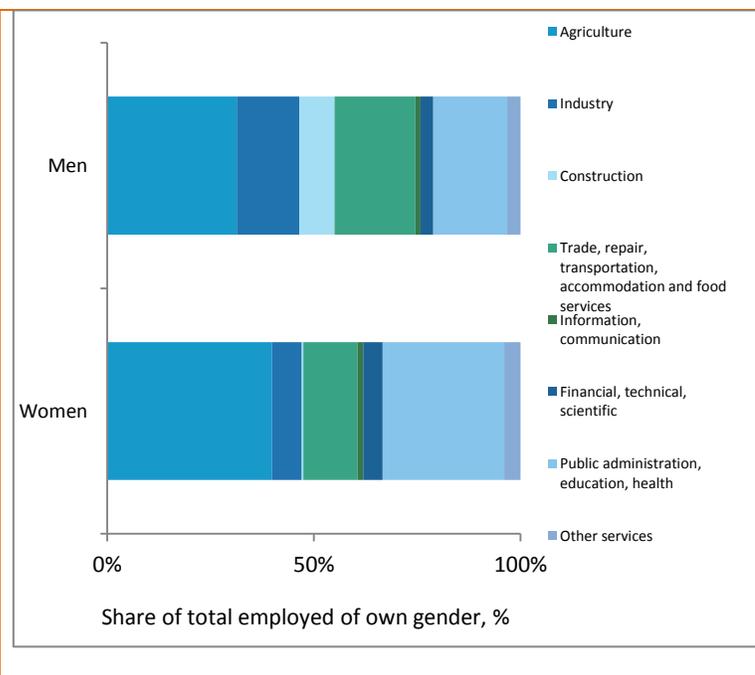
**The overrepresentation of women in the public sector, particularly in education, health care, and social work, explains much of the gender segregation in jobs, and it contributes to reinforcing traditional gender norms.** Job segregation occurs at two levels. First, women are much more likely than men to be employed in the public sector: 30 percent of working women and 19 percent of working men are employed in this sector. Second, the kind of occupations men and women perform often varies. In 2015, as many as 29.4 percent of employed women, compared with only 17.9 percent of employed men, work in education, health care, or public administration. Construction, transportation, wholesale trade, public administration, and defense employ mainly men (figure 21).

**Figure 20. Employment, by Sector and Gender, 2015**



Source: NSS 2016

**Figure 21. Employment, by Subsector and Gender, 2015**



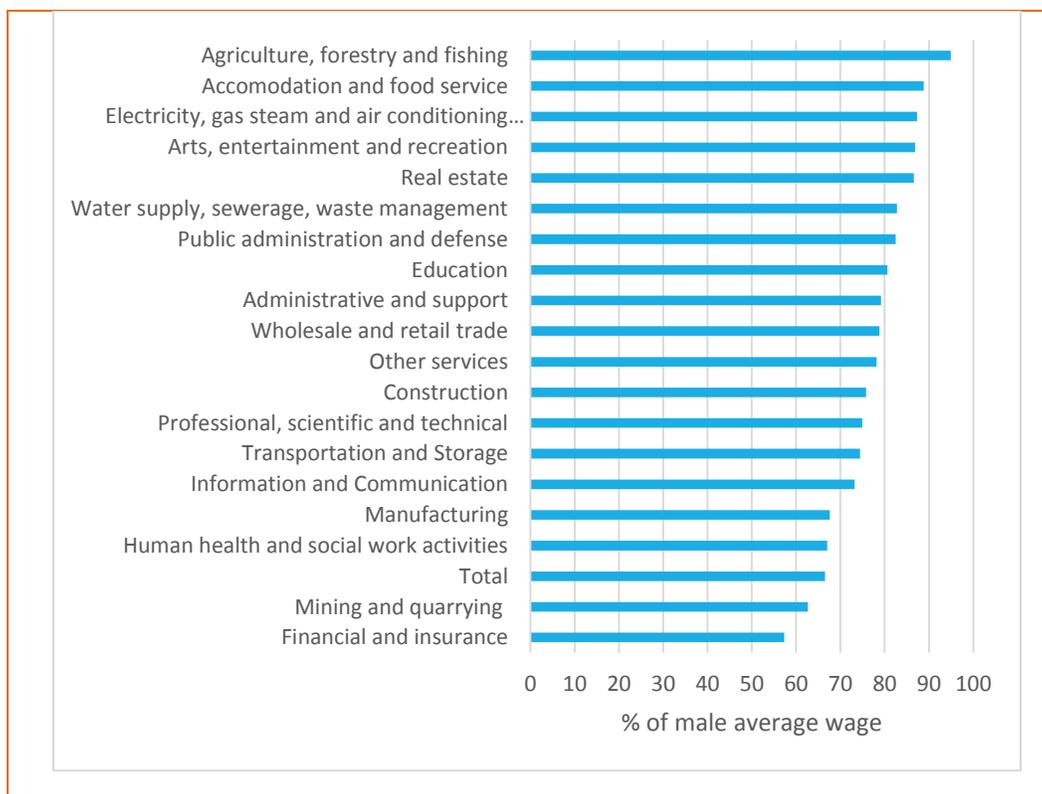
Source: NSS 2016.

**Occupational segregation is linked to traditional household roles and gender norms and is evident at first entry in the labor market.** Women’s greater representation in professions in education, cultural activities, health care, and the social sciences is partly determined by the gender differences in specializations in higher education (see figure 12). Professions such as teaching and other work in the public sector, which are secure and guarantee short, stable working hours, are

generally viewed as more well suited for women, who need to balance household work with paid employment. Reports of the unlawful termination of pregnant employees in the private sector are not uncommon, pointing to the fact that maternity benefits are not always offered outside the public sector (USAID 2010). Women’s preference for shorter working days is also reflected in the higher incidence of part-time work among employed women, at 62.1 percent of total part-time work.

**Following these employment patterns and the entrenched gender norms affecting women’s involvement in the labor market, Armenia presents one of the highest gender wage gaps in the Europe and Central Asia region.** The United Nations Economic Commission for Europe finds that women in Armenia earned a per month average 36 percent less than men in 2010.<sup>22</sup> Local labor statistics show that women earned on average 33.5 less than men in 2015 (figure 22). Though this gender wage gap represented a decrease from 44 percent during the previous decade, Armenia is still among the least well performing countries in Europe and Central Asia. Women’s overrepresentation in less well paying sectors explains much of the average national wage gap, but further insights are needed to draw a full picture of this issue.

**Figure 22. Economic Activity and Average Wage, by Gender, 2015**



Source: Data in NSS (2016).

Note: The total is a weighted average calculated by the National Statistical Service.

<sup>22</sup> Gender Statistics (database), United Nations Economic Commission for Europe, Geneva (accessed March 2013), <http://www.unece.org/statistics/areas-of-work/statsoc/gender-statistics.html>.

**First, self-selection among women into jobs characterized by shorter hours (and lower pay), reflected in the occupational segregation patterns observed above, might explain much of the gender wage gap.** The gender gap in hours worked is over seven hours in both the formal and informal sectors. In the formal service sector, where workers are mostly women, women tend to work about 10 hours less than men every week (40.1 hours vs. 48.2 hours).<sup>23</sup> The gap is larger in the informal sector (26.7 hours vs. 36.7 hours). Even if men and women are working in the same economic activity, there are large wage gaps. Figure 22 shows monthly nominal wages for women as percentage of men's average wage in selected economic activities in 2015. In all fields, men earn more than women, with a smaller difference in agriculture, utilities and accommodation and food services; and a larger gap in mining and financial activities.

**Second, discrimination by employers might contribute to explaining the inequality in average wages.** Discrimination in the labor market is difficult to assess. Labor market discrimination appears to be linked to differences in the perceived productivity of men and women, as well as to traditional gender norms. Article 178 of the Labor Code mandates equal pay for equal work, but shortcomings in enforcement may be at play.<sup>24</sup>

**Third, the functional roles of men and women within each economic activity are likely to be at the root of the wage gap.** Although recent data on women's positions within each activity are missing, 2001 data of the United Nations Economic Commission for Europe indicate substantial gender inequality depending on the kind of occupation. Men represented 76 percent of all managers, legislators, and senior officials, while women were more well represented among professional and clerical staff (respectively, 65 percent and 73 percent of the total).<sup>25</sup> Such a large gap is unlikely to have closed completely over the last decade.

## **Unemployment**

**Unemployment rates are high among both men and women (17.6 percent vs. 19.5 percent); the profile of the unemployed presents gender differences, and the declared reasons for unemployment vary by gender as well** (figures 23 and 24). Official national data indicate that total unemployment increased slightly between 2014 and 2015, reversing the downward trend of the previous four years (NSS 2016). Unemployed women are more likely than unemployed men to have higher educational attainment (tertiary or specialized vocational or secondary); 54.9 percent of unemployed men vs. 35.3 percent of unemployed women have, at most, general secondary educational attainment (NSS 2016).

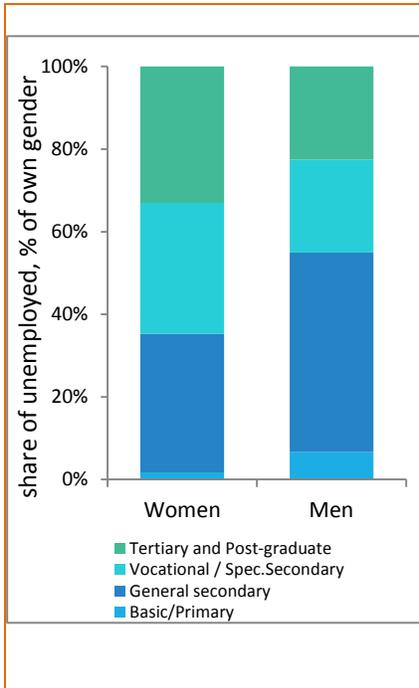
---

<sup>23</sup> NSS (2015), referring to 2014 data.

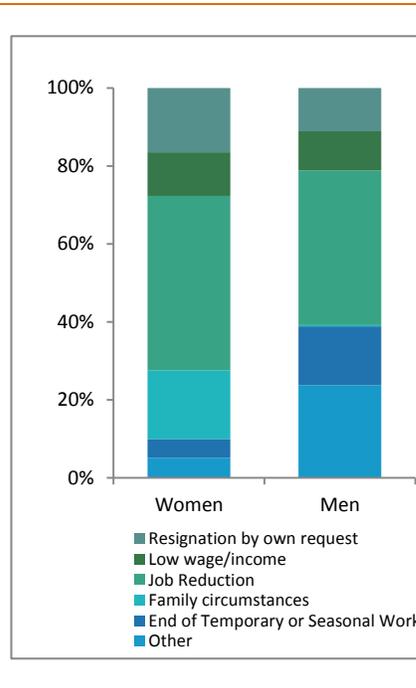
<sup>24</sup> WBL (Women, Business, and the Law) (database), World Bank, Washington, DC, <http://wbl.worldbank.org/>.

<sup>25</sup> Gender Statistics (database), United Nations Economic Commission for Europe, Geneva (accessed April 2016), <http://www.unece.org/statistics/areas-of-work/statsoc/gender-statistics.html>.

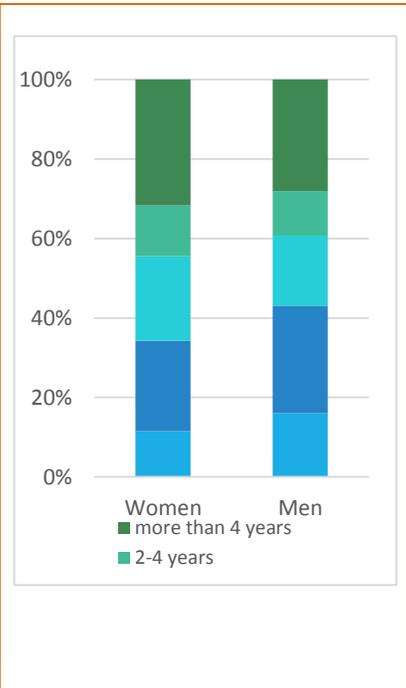
**Figure 23. Unemployment, by Education Level and Gender, 2015**



**Figure 24. Unemployment, by Reason and Gender, 2015**



**Figure 25. Length of Job Search, by Gender, 2015**

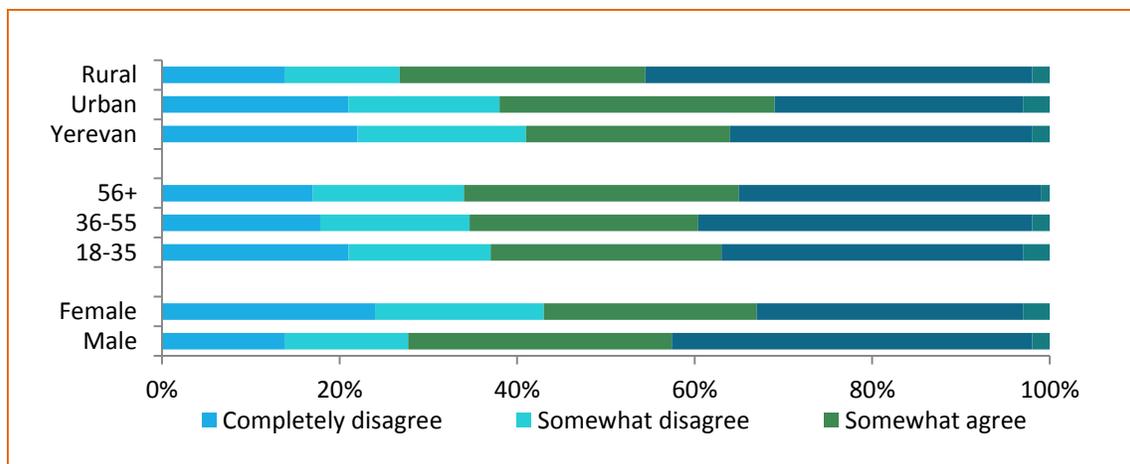


Source: NSS 2016.

**The gender gap in unemployment is particularly high among youth; the gap then narrows and is finally reversed among older age-groups.** The LFS reports a 9 percentage point gap, with women displaying the worse outcome, in the 15–24 age-group. Unemployment among women is visibly higher among all age-groups, except older people: among the 50-64 age-group, the gender gap in unemployment is reversed, as well as among the economically active in the 65–75 age-group (where 9.9 percent of men and 6.9 percent of women are unemployed) (NSS 2016).

**Unemployment appears to last longer among women than for men, which is likely to be linked, among other factors, with a skills mismatch, preference for certain types of jobs, and different reasons for unemployment.** Close to 60 percent of unemployed women spend more than a year searching for a job. This share is smaller, at close to 50 percent, among unemployed men. Most unemployed women appear to become unemployed because of job cuts and layoffs, rather than the end of temporary or seasonal work, which tends to represent another key reason for unemployment among men (along with job cuts and layoffs). Furthermore, there is a widespread feeling among Armenians that men should have priority over women in obtaining jobs. The vast majority of respondents to the Caucasus Barometer Survey agree with the statement that “when jobs are scarce, men should have more right to a job” (figure 26).

**Figure 26. Gender Norms and the Right to a Job**



Source: Caucasus Barometer (database), Caucasus Research Resource Center, Tbilisi, Georgia, <http://www.crrcenters.org/n>.

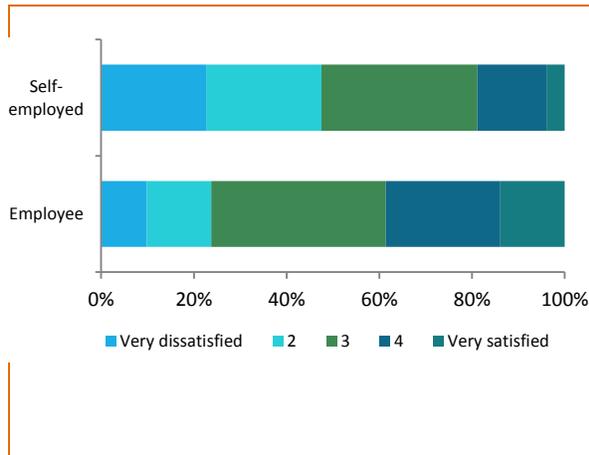
Note: The question respondents were asked was “To what extent would you agree or disagree with the following statement: ‘When jobs are scarce, men should have more right to a job’.”

## Entrepreneurship

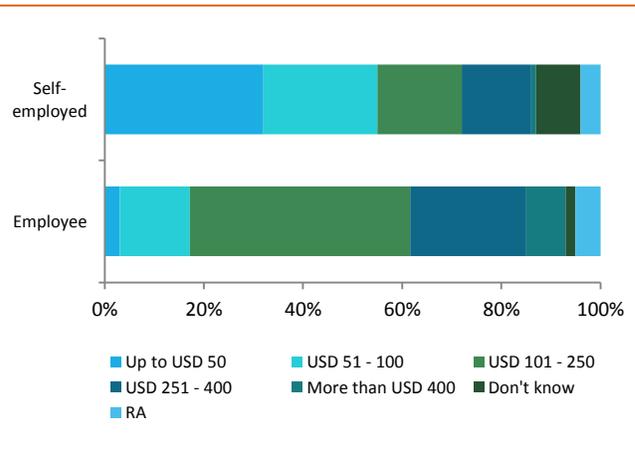
**Like men, women’s engagement in self-employment is high in Armenia, higher than the average in other Europe and Central Asian countries, and is often caused by a lack of other employment opportunities.** Data show that 34.9 percent of working women are reportedly own-account workers, compared with 35.3 percent of working men in Armenia and about 14 percent of women in Europe and Central Asia.<sup>26</sup> Qualitative research indicates that the self-employed in Armenia are twice as likely as employees to be dissatisfied with their work (figure 27). Lower income, a higher likelihood of accumulating debt, and financial instability are possible explanations (figure 28).

<sup>26</sup> Armenian data refer to 2013 and are from NSS (2015); Europe and Central Asia data and OECD data refer to 2011 and are from WDI (World Development Indicators) (database), World Bank, Washington, DC (accessed April 2016), <http://data.worldbank.org/data-catalog/world-development-indicators>.

**Figure 27. Job Satisfaction**



**Figure 28. Net Personal Income**



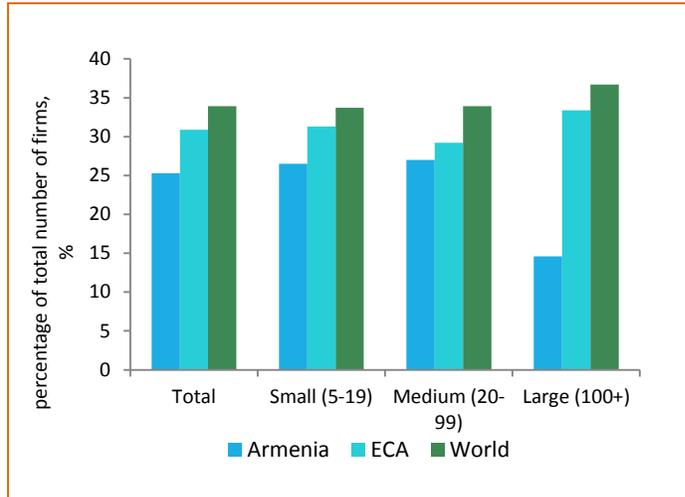
Source: Caucasus Barometer (database), Caucasus Research Resource Center, Tbilisi, Georgia, <http://www.crrccenters.org/n>.

**The share of women employers among all workers is low, however.** In 2014, 0.6 percent of working women were entrepreneurs, compared with an almost equally low share of working men (2.2 percent).<sup>27</sup> Within firms with at least five employees, women’s ownership continues to be less likely than men’s (figure 29). According to the 2013 BEEPS, less than a third of firms in Armenia have some female participation in ownership, well below the Europe and Central Asia and world averages. However, as the Life in Transition Survey suggests, women are, overall, less likely to become entrepreneurs (Kuriakose 2013). Firms with less than 19 or over 100 employees are slightly more likely than medium-size firms to be at least partly owned by women. Similarly, firms in the retail business are slightly more likely than others to display female participation in ownership (figure 30).<sup>28</sup>

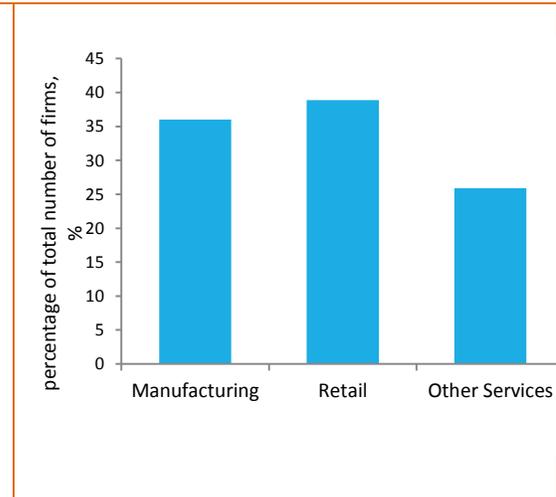
<sup>27</sup> NSS (2015). The data in figure 19 describe slightly different, but consistent results.

<sup>28</sup> BEEPS (Business Environment and Enterprise Performance Survey) (database), European Bank for Reconstruction and Development and World Bank, London (accessed April 2013), <http://ebrd-beeps.com/data/>.

**Figure 29. Women’s Ownership, by Firm Size, 2013**



**Figure 30. Women’s Ownership, by Type of Business, 2013**



Source: BEEPS (Business Environment and Enterprise Performance Survey) (database), European Bank for Reconstruction and Development and World Bank, London (accessed April 2013), <http://ebrd-beeps.com/data/>.

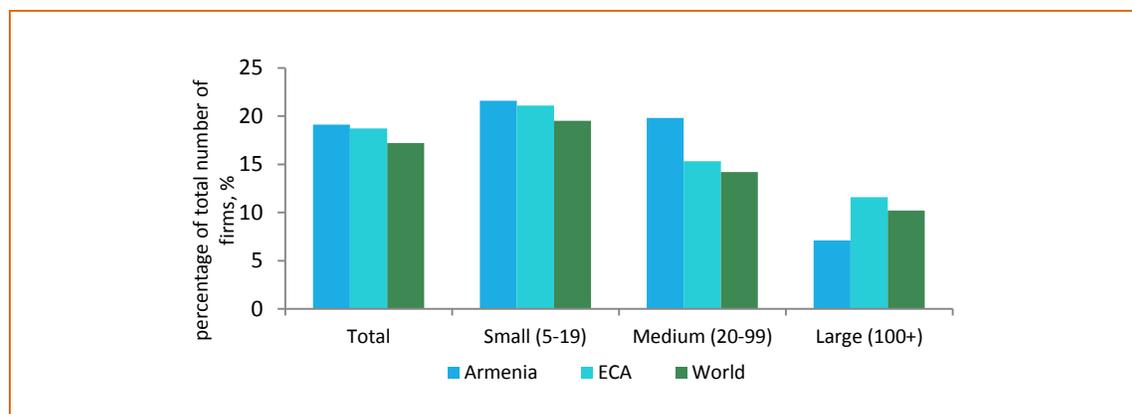
**There are no legal impediments to opening and owning a business that would affect only women. Landownership and property ownership by women are nonetheless low.** While the law gives equal rights to men and women in the ownership and disposal of land and property, as well as in inheritance, women tend to have more limited access. They earn less than men, and thus save less for future investment, and the privatization of land in 1991–92 assigned property to each household head. Women therefore acquired land exclusively in the absence of a man-headed household.<sup>29</sup> Moreover, recent qualitative research by the World Bank suggests that, though inheritance rights are equal for sons and daughters, local customs often result in sons inheriting property and money, thus limiting women’s land, business, and capital ownership (Dudwick 2015).

**Lower ownership levels among women and gender norms also translate into significantly lower presence of women in top managerial positions: 19.1 percent of firms with five or more employees are managed by women** (figure 31). Though different educational paths and lower labor market participation among women might explain part of the gender gap, traditional gender roles and norms are also likely to contribute to this unequal outcome. The limited presence of women at the top of firms has a clear impact on the large gender gap in average wages. As in the case of ownership, small firms and firms operating in the retail sector show a higher presence of

<sup>29</sup> 2012 data on Armenia in SIGI (Social Institutions and Gender Index) (database), Development Centre, Organisation of Economic Co-operation and Development, Paris, <http://www.genderindex.org/content/team>.

women in top management. Firms owned by women also appear more likely than firms managed by men to be at least partly managed by women.<sup>30</sup>

**Figure 31. Women Top Managers, by Firm Size, 2013**



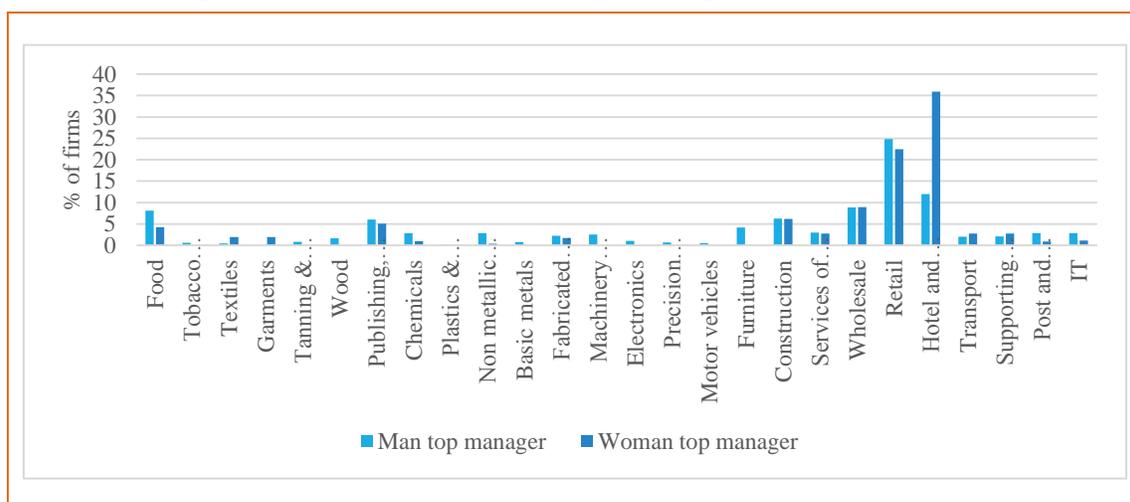
*Source:* BEEPS (Business Environment and Enterprise Performance Survey) (database), European Bank for Reconstruction and Development and World Bank, London (accessed April 2013), <http://ebrd-beeps.com/data/>.

**Female participation in entrepreneurship is not only limited, but concentrated in certain economic activities.** Firms with women top managers are underrepresented in every sector except in the textile and garment industry and in hotel and restaurant services, where 35 percent of firms have women in top management positions (figure 32). Data of the 2013 BEEPS show that the high female participation in top management and ownership in hotel and restaurant services is particular to Armenia relative to the other 29 countries on which data are available.<sup>31</sup>

<sup>30</sup> BEEPS data indicate that 82.5 percent of firms with a woman in the top management position are at least partly owned by women, compared with just 11.5 percent of firms with a man as the top manager.

<sup>31</sup> Countries on which 2013 BEEPS data are available include Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, the former Yugoslav Republic of Macedonia, Georgia, Hungary, Kazakhstan, Kosovo, the Kyrgyz Republic, Latvia, Lithuania, Moldova, Mongolia, Montenegro, Poland, Romania, Russia, Serbia, Slovenia, Tajikistan, Turkey, Ukraine, and Uzbekistan.

**Figure 32. Women and Men Top Managers, by Sector, 2013**



Source: BEEPS (Business Environment and Enterprise Performance Survey) (database), European Bank for Reconstruction and Development and World Bank, London (accessed April 2013), <http://ebrd-beeps.com/data/>.

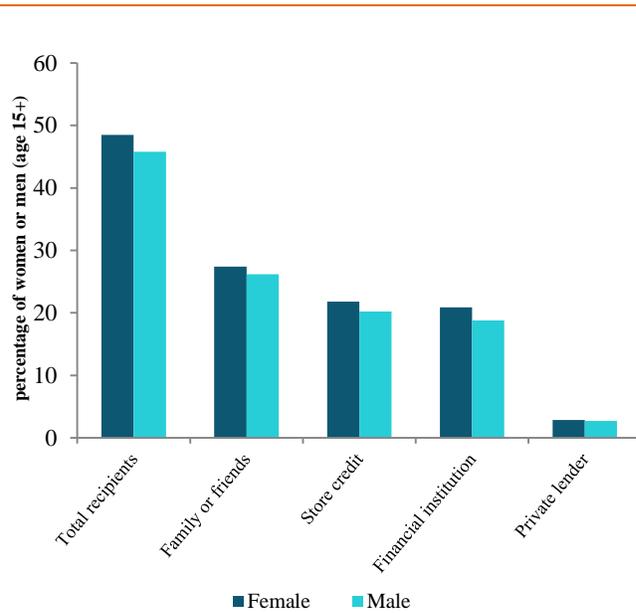
## Access to finance

**Together with taxes and corruption, accessing finance represents one of the greatest difficulties encountered by firms: 58 percent indicate it as a problem.**<sup>32</sup> Whether for private or business purposes, 48.4 percent of women and 45.8 percent of men reported they had obtained a loan during the year before the Findex survey.<sup>33</sup> There appears to be no gender inequality in accessing credit at formal institutions (figure 33): a slightly larger share of women than men borrowed from financial institutions or private lenders, while proportionately more men obtained credit from friends and family.

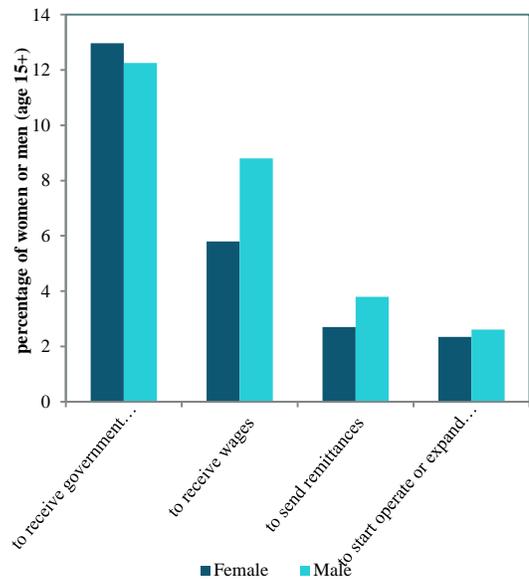
<sup>32</sup> BEEPS (Business Environment and Enterprise Performance Survey) (database), European Bank for Reconstruction and Development and World Bank, London (accessed April 2013), <http://ebrd-beeps.com/data/>. Only firms with at least five employees were surveyed.

<sup>33</sup> Global Findex (Global Financial Inclusion Database), World Bank, Washington, DC (accessed April 2013), <http://www.worldbank.org/globalfindex>.

**Figure 33. Access to Credit, 2014**



**Figure 34. Accounts at Financial Institutions, by Gender, 2014**



Source: Global Findex (Global Financial Inclusion Database), World Bank, Washington, DC, <http://www.worldbank.org/globalindex>.

Similarly, Findex survey data suggest that men and women are equally likely to hold bank accounts; among both, the percentage of account holders is extremely low by regional standards. Only 17.6 percent of adults have accounts at formal financial institutions (14.3 percent of women and 20.7 percent of men); urban residents and the more well educated are more likely to have accounts.

The ways men and women use their bank accounts, however, differs and reflects the average employment status and income level of each sex. While men are more likely to use their accounts at formal financial institutions to receive wages and for business purposes, a larger share of women than men use bank accounts to receive government transfers and remittances. The higher employment rates and average income of men also allow them to save more and deposit or withdraw money more often than women (figure 34).

## The Economic Costs of the Gender Gaps in Labor Participation

**On average, the loss associated with the gender gap in labor market participation is around 14 percent of income per capita.** Estimates of Cuberes and Teignier (2016a) using national data from the 2013 ILCS point to significant GDP per capita losses from gender gaps in the labor market. If working-age women who are not participating in the labor market were to do so at the same rates as their men counterparts, then there would be a gain of 14.3 percent of Armenia’s GDP per capita (box 2). The average economic cost estimate of 14 percent is comparable with average losses among OECD countries. With narrower gender gaps in entrepreneurship and labor participation, Nordic countries show lower losses (figure 35).

### BOX 2. QUANTIFYING THE MACROECONOMIC EFFECTS OF GENDER GAPS IN THE LABOR MARKET

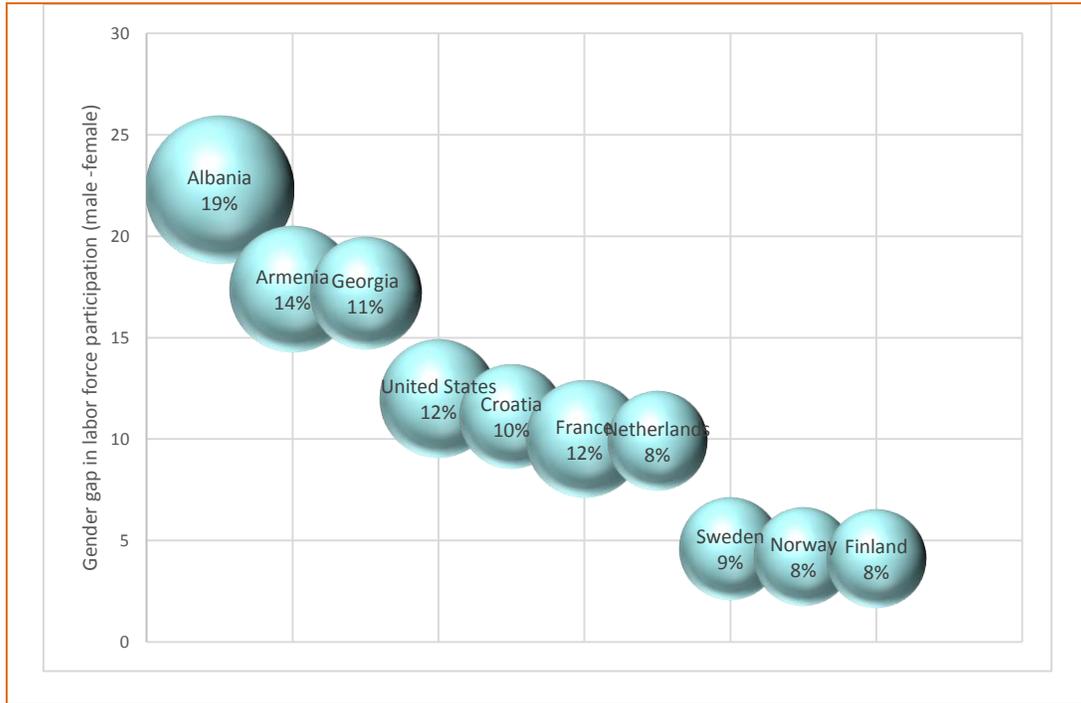
Estimations of the loss associated with gender gaps in the labor market are based on the estimation of a general equilibrium occupational choice model developed by Teignier and Cuberes (2016). In this model, agents are endowed with a random entrepreneurship skill. The agents with the highest skill optimally choose to become employers, while those with the least skill become workers, leaving the self-employed occupation to agents with intermediate skills. The model assumes that men and women are identical in terms of managerial skills; however, women are subject to several exogenous constraints in the labor market. The model also assumes that a share of women are entirely excluded from participating in the labor market, which results in a reduction in output per capita.

Intuitively, the model of Teignier and Cuberes (2016) implies that men with less managerial skill will take the positions that women with exceptional managerial skills will not, given the constraints that restrict the opportunity of women to become employers (for example, women are constrained by social norms, regulations, discrimination, and so on). From the model, less-talented managers run smaller firms, which has implications in terms of the amount of output produced, wages, and firm profits. Teignier and Cuberes (2016) show that output or income per worker would be lower in an economy with this restriction.

Following this methodology and adapting the parameters of their model to country-specific data on Armenia, Cuberes and Teignier (2016a) measure the aggregate economic loss by taking the ratio between output or income per worker in the counterfactual case of no gender gaps and the corresponding output or income per worker given the gender gaps observed in the data. Their estimates using ILCS 2013 data indicate a loss in GDP per capita of 14.3 percent. About 40 percent of this loss, 5.07 percent of GDP per capita, is derived from the gender gap in entrepreneurship.

The model implies that, in the absence of gender gaps, the occupational choices of women would be the same as those of men; aggregate production is the sum of output by men employers and self-employed men, as well as output by women employers and self-employed women. In this case, agents choose their occupation optimally, and, in the short run, entrepreneurs (employers) choose the amount of labor to maximize their profits (capital does not change in the short run). If the magnitudes of the observed gender gaps are introduced, efficient allocation is distorted, and, as a result, there is a decline in aggregate income. To quantify these income effects, the variables used from national data are labor force participation by gender, the share of employers by gender, and the share of the self-employed by gender.

**Figure 35. Economic Cost of Gender Gaps in Labor Participation, Selected Countries**



Sources: Based on Cuberes and Teignier 2016, 2016a.

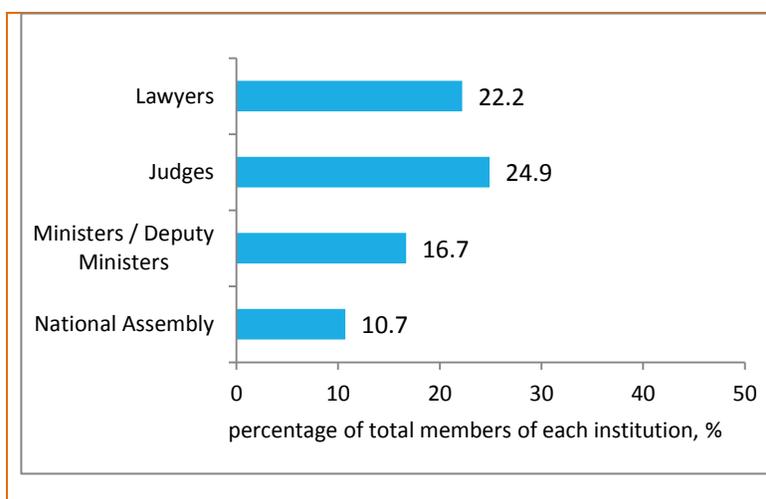
**About 40 percent of this loss in GDP per capita derives from distortions in the choice of occupations by women relative to men; the remaining 60 percent corresponds to the costs associated with gaps in labor force participation.** In general, income growth depends on factor intensity and productivity. The model estimation implies that there are two factors leading to the income loss. First, the fact that there is a misallocation of entrepreneurial talent affects the productivity of the economy. Second, the fact that women participate less in the market leads to the underutilization of the available human capital.

**Increasing labor force participation among women and capitalizing the investments of valuable resources in women’s education requires the implementation of policies that remove barriers on both the demand side and the supply side.** Policy efforts aimed at adequate job creation need to be accompanied by policies to help balance care and work responsibilities. Women tend to reduce their supply of labor (dropping out of the labor force or reducing the hours spent on paid work) if market, institutional, or cultural factors reinforce their caregiving and domestic role in households (see appendix A).

## Voice and Agency

**The gender gap in participation in the country’s political life is striking, although it improved consistently over the last decade.**<sup>34</sup> The Election Code establishes that women must constitute 15 percent of candidates on every party’s election list, but women’s representation in public office, though slowly increasing, is much more limited than men’s. In 2015, women represented only 10.7 percent of the National Assembly and occupied 3 of 18 ministerial posts (figure 36). This implies significant progress since 2001, when only 3 percent of the National Assembly were women. Representation in local politics is lower; there were no women members of community councils in Yerevan (Republic of Armenia 2010). There are more women among judges and lawyers. In 2015, 25 percent of judges were women.

**Figure 36: Women representation in institutions (2015)**



Source: NSS 2016.

**Although much smaller than the gap in active participation in politics, the gender gap in political awareness and participation also persists.** Women appear less likely than men to discuss politics with friends and colleagues (22 percent vs. 40 percent, respectively), less likely to have an opinion on the direction of domestic politics in the country (30 percent of women “do not know”, as opposed to 20 percent of men respondents), and seem slightly less likely than men to vote (79 percent vs. 83 percent).<sup>35</sup>

**The “Gender Policy Concept Paper” acknowledges the need to enhance women’s representation at the higher levels of civil service and women’s professional development and career advancement** (Republic of Armenia 2010). It sets out the ambitious goal of a National

<sup>34</sup> This section is based mainly on 2015 political participation data in NSS (2016).

<sup>35</sup> Caucasus Barometer (database), Caucasus Research Resource Center, Tbilisi, Georgia, <http://www.crrcenters.org/n>.

Assembly with 30 percent women members and government bodies with 25 percent women. Additionally, it commits to women accounting for 30 percent of top civil servants, compared with the estimated 11 percent when the concept paper was written.

**Women's lower levels of engagement in public and political life mirror gender inequalities in endowments and economic life.** Similar to scarce representation in public office, there is more moderate female participation in the labor market and higher unemployment, compared with men, as well as women's disadvantage in career development. Additionally, the preference for sons rather than daughters and the high outmigration among men also point to the persistence of traditional social norms. These continue to affect gender outcomes and often represent barriers to the equal enjoyment and pursuit of opportunities among men and women.

## Conclusions and Policy Priorities

The CGA finds that there are several domains where gender equality outcomes in Armenia are broadly comparable with those in Europe and Central Asia and better than those in lower-middle-income countries globally. However, gender inequalities persist in some areas, and concerted policy efforts are required to address these inequalities, as follows:

- The sex ratio at birth is high, at 113 boys born for every 100 girl births. The ratio is much higher than 106, the benchmark sex ratio at birth if parental son preference is not a factor. Viewing this skewed sex ratio at birth as missing girls highlights the loss of girl births deriving from the preference for sons. Research has shown that this son preference is heightened by low fertility and greater economic uncertainties. The combination of high sex ratios at birth and continued low fertility may have adverse consequences on population growth.
- Men’s life expectancy has not significantly improved, and men’s greater risk of mortality results in a situation where more than 60 percent of the 65+ age-group is accounted for by women.
- Although a larger share of young women than young men are enrolled in tertiary education, women and men specialize in different subjects and fields of study (the social sciences, education, and health care among women and technical fields among men). This sets the stage for much of the gender-based sectoral, occupational, and wage differences observed in the labor market.
- Only 54.3 percent of women ages 15–64 participate in the labor market, which is slightly higher than the Europe and Central Asia average, but 18 percentage points lower than the share among men in Armenia. The gender difference in participation are greatest in the 25–34 age-group. Evidence suggests that childcare responsibilities likely explain this age-specific gender gap in participation: by a factor of five, women spend more time than men on these activities. Preschool institutions, which could help women balance work and childcare responsibilities, are available, but they operate at 75 percent capacity, and preschool attendance is extremely low by international standards, particularly in rural areas (14 percent of children).
- Unemployment rates are high among both men and women (19.5 percent and 17.6 percent, respectively), but unemployment appears to last longer among women than among men (the share of the long-term unemployed is higher among women than men), which is likely to be linked, among other factors, to a skills mismatch, a preference for certain types of jobs with certain benefits, and different reasons for unemployment. Most unemployed women appear to become unemployed because of job cuts and layoffs, rather than the end of temporary or seasonal work as in the case of men. The vast majority of respondents to the Caucasus Barometer Survey agree with the statement that “when jobs are scarce, men should have more right to a job.”<sup>36</sup>

---

<sup>36</sup> Caucasus Barometer (database), Caucasus Research Resource Center, Tbilisi, Georgia, <http://www.crrcenters.org/n>.

- Women earn an average 33.5 percent less than men, a steady decline from the 59 percent in 2002. There could be several reasons for this wage gap. First, self-selection among women into jobs with fewer hours (and lower pay), reflected in the occupational segregation patterns that have been observed, might explain much of the gender wage gap. Second, discrimination by employers might contribute to explaining the inequality in average wages. Third, the functional roles of men and women within each economic activity are likely to be at the root of the wage gap.
- In the private sector and in public life, women's share of leadership roles is limited. Within firms with at least five employees, women's participation in ownership is less likely than men's participation. The share of women in the National Assembly has remained close to 11 percent despite a quota requiring 15 percent of candidates on every party's election list to be women.

A common thread tying all the gender gaps are social norms governing gender roles that also work to reinforce the perceptions of parents about the value of sons and daughters. Policy efforts would therefore have to work on multiple fronts, from influencing a change in the norms to ensuring equal access to opportunities. Some key policy actions suggested by the empirical evidence include the following:

- Invest in mass media campaigns to tackle the social norms and help change behaviors that are shaped by these social norms. These campaigns can be used to promote the value of girls and the equal access of girls to economic opportunities and assets, while increasing the public acceptability of women in leadership roles. Such efforts can also be targeted at the workplace to address any biases employers might have regarding women employees; qualitative research on Armenia has indicated that such biases might exist among employers. Experience in other parts of the world suggests that the mass media can be powerful in shaping norms about the role of men and women and promoting change. By seeking to reform the views of parents on their preference for sons, media campaigns hold more promise than bans on prenatal sex selection or policies aimed at discouraging abortions in the effort to address the high sex ratios at birth.
- Strengthen the access to and availability of quality early childhood development programs that will be beneficial for young children and enable more women to enter the labor force.
- Consider adopting a family leave concept that expands maternity leave to include paternal leave and gives fathers incentives to take leave and share in the care of newborns. This will have the dual effect of ensuring the parental care of babies and facilitating an early return of mothers to the labor market, preventing any possible loss of earnings or tenure.
- Facilitate the school-to-work transition among young women by addressing the factors that discourage the specialization of women in technical fields. These efforts would make women's university education more relevant to the job market.
- Strengthen active labor market programs, emphasizing job search assistance and counseling to help the long-term unemployed. Recent efforts to strengthen the State Employment Service are

particularly beneficial among unemployed women, who, as the data show, are more likely to have become unemployed because of job cuts and layoffs.

## Appendix A

**Table A.1. The Probability of Female and Male Labor Force Participation, Probit Model Estimation**

	Female labor force participation, women ages 25–64			Male labor force participation, men ages 25–64		
	(1) All	(2) Rural	(3) Urban	(4) All	(5) Rural	(6) Urban
Ln (years of education)	0.193*** (0.0405)	0.268*** (0.0623)	0.262*** (0.0516)	0.128*** (0.0253)	0.0492* (0.0296)	0.178*** (0.0328)
Ln (age)	0.273*** (0.0413)	0.558*** (0.0596)	0.0849 (0.0534)	-0.112*** (0.0273)	0.00997 (0.0318)	-0.192*** (0.0378)
Married or living with a partner	-0.129*** (0.0321)	0.00511 (0.0574)	-0.231*** (0.0395)	0.0968** (0.0421)	-0.0156 (0.0316)	0.165*** (0.0612)
Number of household members absent/migrated	0.0596** (0.0250)	-0.0267 (0.0247)	0.0857** (0.0348)	-0.00249 (0.0141)	-0.00593 (0.0149)	-0.0313 (0.0191)
Proportion of household members aged 0 to 3	-0.187 (0.124)	-0.243 (0.190)	-0.0855 (0.152)	0.0616 (0.0819)	-0.00426 (0.102)	0.160 (0.107)
Proportion of children 5 and less attending preschool	0.0499 (0.0316)	0.0340 (0.0556)	0.115*** (0.0376)	0.00149 (0.0207)	-0.0109 (0.0302)	0.0318 (0.0269)
Proportion of household members aged 6 to 14	-0.224** (0.111)	-0.123 (0.172)	-0.227 (0.140)	0.0121 (0.0709)	0.148 (0.0953)	-0.00871 (0.0914)
Proportion of household members aged 65+	0.0921 (0.153)	0.163 (0.218)	0.0584 (0.199)	0.123 (0.114)	0.203 (0.166)	0.0910 (0.151)
Access to a computer in the home	-0.0751*** (0.0257)	-0.0571 (0.0366)	0.00792 (0.0348)	0.00109 (0.0160)	0.00701 (0.0194)	0.0372 (0.0235)
Remittances as proportion of total household income	-0.190*** (0.0636)	0.0607 (0.0818)	-0.318*** (0.0885)	-0.0634 (0.0462)	0.0278 (0.0636)	-0.129** (0.0617)
Observations	1,680	633	1,047	1,462	578	884

Marginal effects reported.

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Probit estimates using data of the 2013 ILCS.

Note: Marginal effects are shown.

## References

- ADB (Asian Development Bank). 2015. "Armenia: Country Gender Assessment." July, ADB, Manila.
- Armenia Demographic and Health Survey 2015-16. 2016. Key Indicators Report, National Statistical Service of Armenia, Ministry of Health of Armenia and the DHS Program ICF International, September 2016. <https://dhsprogram.com/pubs/pdf/PR79/PR79.pdf>
- BEEPS (Business Environment and Enterprise Performance Survey) (database), European Bank for Reconstruction and Development and World Bank, London (accessed April 2013), <http://ebrd-beeps.com/data/>.
- Bussolo, Maurizio, and Luis F. López-Calva. 2014. *Shared Prosperity: Paving the Way in Europe and Central Asia*. Europe and Central Asia Studies. Washington, DC: World Bank.
- Caucasus Barometer (database), Caucasus Research Resource Center, Tbilisi, Georgia, <http://www.crrccenters.org/n>.
- Cuberes, David, and Marc Teignier. 2016. "Aggregate Effects of Gender Gaps in the Labor Market: A Quantitative Estimate." *Journal of Human Capital* 10 (1): 1–32.
- . 2016a. "Quantitative Estimates of the Economic Costs of Gender Gaps in the South Caucasus." Unpublished working paper, Universitat de Barcelona, Barcelona.
- Das Gupta, Monica. 2015. "Missing Girls' in the South Caucasus Countries: Trends, Possible Causes, and Policy Options." Policy Research Working Paper 7236, World Bank, Washington, DC.
- Dudwick, Nora. 2015. "Missing Women' in the South Caucasus: Local Perceptions and Proposed Solutions." Report 94705, World Bank, Washington, DC.
- Duflo, Esther. 2005. "Gender Equality in Development." BREAD Policy Paper 11, Bureau for Research and Economic Analysis of Development, Brown University, Providence, RI.
- Ekberg, John, Rickard Eriksson, and Guido Friebel. 2005. "Parental Leave: A Policy Evaluation of the Swedish 'Daddy-Month' Reform." IZA Discussion Paper 1617 (May), Institute for the Study of Labor, Bonn, Germany.
- Gender Statistics (database), United Nations Economic Commission for Europe, Geneva, <http://www.unece.org/statistics/areas-of-work/statsoc/gender-statistics.html>.
- Global Findex (Global Financial Inclusion Database), World Bank, Washington, DC, <http://www.worldbank.org/globalfindex>.
- Gornick, Janet, and Ariane Hegewisch. 2010. "The Impact of 'Family-Friendly Policies' on Women's Employment Outcomes and on the Costs and Benefits of Doing Business." World Bank, Washington, DC.
- Guilmoto, Christophe Z. 2013. "Sex Imbalances at Birth in Armenia: Demographic Evidence and Analysis." United Nations Population Fund, Yerevan, Armenia.
- . 2010. "Work and Family Relations in Armenia." ILO, Moscow.
- Kuriakose, Smita, ed. 2013. *Fostering Entrepreneurship in Armenia*. Directions in Development: Private Sector Development Series. Washington, DC: World Bank.
- Lackó, Mária. 2015. "Some Explanations of Disparities of Mortality Rates of Working Age Population in Eastern, Central, and Western Europe." IEHAS Discussion Paper 1535, Institute of Economics, Centre for Economic and Regional Studies, Hungarian Academy of Sciences, Budapest.
- Maternal Mortality Estimation Inter-Agency Group (World Health Organization, United Nations Children's Fund, United Nations Population Fund, World Bank, and United Nations

- Population Division). 2015. “Maternal Mortality in 1990–2015: Armenia.” World Health Organization, Geneva. [http://www.who.int/gho/maternal\\_health/countries/arm.pdf](http://www.who.int/gho/maternal_health/countries/arm.pdf).
- Morrison, Andrew, Dhushyanth Raju, and Nistha Sinha. 2007. “Gender Equality, Poverty and Economic Growth.” Policy Research Working Paper 4349, World Bank, Washington, DC.
- National Statistical Service [Armenia], Ministry of Health [Armenia], and ICF International. 2016. *Armenia Demographic and Health Survey 2015-16: Key Indicators*. Rockville, Maryland, USA: National Statistical Service (NSS), Ministry of Health (MOH), and ICF International
- NSS (National Statistical Service of the Republic of Armenia). 2011. “Social Situation of Armenia in 2011.” [In Armenian.] NSS, Yerevan, Armenia. [http://www.armstat.am/file/article/soc\\_11\\_3-4.pdf](http://www.armstat.am/file/article/soc_11_3-4.pdf).
- . 2013. *Women and Men in Armenia, 2013*. Statistical Booklet. Yerevan, Armenia: NSS.
- . 2014. *Women and Men in Armenia, 2014*. Statistical Booklet. Yerevan, Armenia: NSS.
- . 2015. *Women and Men in Armenia, 2015*. Statistical Booklet. Yerevan, Armenia: NSS.
- . 2016. *Social Snapshot and Poverty in Armenia, 2016*. Statistical Booklet. Yerevan, Armenia: NSS.
- Republic of Armenia. 2004. “2004–2010 National Action Plan on Improving the Status of Women in the Republic of Armenia and Enhancing Their Role in the Society.” Decision of the Government of the Republic of Armenia No. 645–N (April 8), Yerevan, Armenia.
- . 2010. “Gender Policy Concept Paper of the Republic of Armenia.” Yerevan, Armenia.
- . 2011. “Republic of Armenia Gender Policy Strategic Action Plan, 2011–2015.” May 20, Yerevan, Armenia.
- Sattar, Sarosh. 2012. “Opportunities for Men and Women: Emerging Europe and Central Asia.” World Bank, Washington, DC.
- Sen, Amartya. 1990. “More Than 100 Million Women Are Missing.” *New York Review of Books* 37 (20): 61–66.
- Serriere, N. 2014. “Labour Market Transitions of Young Women and Men in Armenia.” Work4Youth 21 (October), International Labour Organization, Geneva.
- UNFPA (United Nations Population Fund). 2012. “Report of the International Workshop on Skewed Sex Ratios at Birth: Addressing the Issue and the Way Forward.” UNFPA, New York.
- . 2016. “Gender-biased Sex Selection in Georgia. Context, Evidence and Implications”, UNFPA, Tbilisi, Georgia.
- . 2013. “Factsheet on ‘Sex Imbalances at Birth in Armenia: Demographic Evidence and Analysis’ Report.” May 2, UNFPA, Yerevan, Armenia.
- USAID (United States Agency for International Development). 2010. “Gender Assessment, USAID/Armenia.” August. USAID, Washington, DC. [http://pdf.usaid.gov/pdf\\_docs/Pdacr978.pdf](http://pdf.usaid.gov/pdf_docs/Pdacr978.pdf).
- WBL (Women, Business, and the Law) (database), World Bank, Washington, DC, <http://wbl.worldbank.org/>.
- WDI (World Development Indicators) (database), World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators>.
- WEF (World Economic Forum). 2016. *Insight Report: The Global Gender Gap Report 2015*. Geneva: World Economic Forum.
- World Bank. 2007. *Global Monitoring Report 2007, Millennium Development Goals: Confronting the Challenges of Gender Equality and Fragile States*. Washington, DC: World Bank.
- . 2011a. *World Development Report 2012: Gender and Development*. Washington, DC: World Bank.

- . 2011b. “Armenia, Demographic Change: Implications for Social Policy and Poverty.” Report 63154-AM, World Bank, Washington, DC.
- . 2011c. “Armenia: Poverty Update Using Revised Poverty Lines.” Report 63111-AM, World Bank, Washington, DC.
- . 2016. “Armenia: Poverty Update.” April 2016, World Bank, Washington, DC
- World Population Prospects: The 2015 Revision (database), Population Division, Department of Economic and Social Affairs, United Nations, New York, <http://esa.un.org/unpd/wpp/>