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LABOR MARKET INEQUALITIES IN FYR MACEDONIA: NEW EVIDENCE ON GENDER AND ETHNICITY

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Currency Equivalents

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Currency Unit	=	Macedonian Denar
1 MKD	=	0.02193 USD
1 USD	=	44.9201 MKD

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"Muslim women are in a process of struggling between the traditional and modern norms, with expectations from them to compete with men when it comes to educational aspirations, but to "leave the floor" to men when it comes to employment and especially business. [Ethinic] Macedonian women, on the other hand, struggle with the work-life balance and the norm to be successful in both spheres."

World Bank: Qualitative interviews (2013)

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List of Acronyms

AETR	Average effective tax rate
CCT	Conditional Cash Transfer
COS	Centros Operativos del Sistema
DG	Directorate General
EA	Employment Agency
EC	European Commission
ECA	Europe and Central Asia
EU	European Union
FYR	Former Yugoslav Republic
GDP	Gross Domestic Product
HBS	Household Budget Survey
HD	Human Development
IFC	International Finance Corporation
ILCS	Integrated Living Conditions Survey
ILO	International Labor Organization
KILM	Key Indicators of the Labor Market (an international ILO database)
LFP	Labor Force Participation
LFS	Labor Force Survey
LiTS	Life in Transition Survey
LMMD	Labor Market Micro-level Database
LSMS	Living Standards Measurement Study
MKD	Macedonian Denar (currency)
NEET	Not in Employment, Education or Training
NGO	Non-Governmental Organization
NMS	New EU Member States.
OECD	Organization for Economic Cooperation and Development
PFA	Permanent Financial Assistance
PISA	Program for International Student Assessment
PPP	Purchasing Power Parity
PSIA	Poverty and Social Impact Analysis
REF	Roma Education Fund
SFA	Social Financial Assistance
SMEs	Small and Medium Enterprises
SSO	State Statistical Office of FYR Macedonia
SWC	Social Welfare Center
TFESSD	Trust Fund for Environmentally & Socially Sustainable Development
TVET	Technical Vocational Education and Training
UNDP	United Nations Development Program
USD	United States Dollar (currency)

Executive Summary

Close to a quarter of the Macedonian population lives off less than $4 per day – a rate more than twice as high as the regional average for Europe and Central Asia (ECA)[1]. Similarly, income inequality is higher in Macedonia than in many other countries in the region. Joblessness, including both unemployment and inactivity, are likely to be important determinants of these outcomes. In 30 percent of all Macedonian households, none of the household members work[2], and overall employment rates are low in comparison to other countries in ECA. Although an improved general economic environment, sound macro-economic management and structural reforms (including in the labor market) have started to change the conditions for job creation in Macedonia, labor market challenges remain profound, and pre-date the recent economic crisis. Comparisons of Macedonia's employment and participation rates among the adult population (15+) with EU and non-EU OECD countries suggest a severe gap in employment, and participation outcomes comparable to these other countries. However, these aggregate labor market outcomes mask important within-country inequalities, such as gender inequalities and inequalities between different ethnic groups in terms of labor force participation.

This report looks at the two main dimensions of inequality that characterize labor market participation in Macedonia: gender and ethnicity. Almost half of the female working age population is inactive, whereas male inactivity is considerably lower. Labor market outcomes also vary significantly with ethnicity. In particular, a strong interaction exists between gender and ethnicity, with ethnic minority women forming a particularly vulnerable group.

One of the main contributions of this work is an extensive analysis on the position of the Roma with respect to labor market participation. This report uses a recent Regional Roma Survey, conducted in 2011 through a concerted effort of the United Nations Development Program (UNDP), the World Bank, and the European Commission (EC). This is the most extensive survey, to date, to exclusively focus on the situation of the Roma in Eastern Europe. Moreover, the survey includes a sample of non-Roma living nearby, allowing for a comparison between Roma and non-Roma individuals that are subject to the same local and regional conditions. In addition, this report makes use of newly collected qualitative evidence, which allows us to discuss issues that are often difficult to measure in quantitative terms, such as aspirations and job preferences.

Gender Inequalities in Labor Force Participation

Among women, the inactivity rate is 48 percent, compared to 23 percent among men. This gender gap in participation has persisted for over twenty years, and has not decreased in magnitude. Even when background characteristics are taken into account, simply being a woman is associated with a fall in the likelihood of participating in the labor market of approximately 30 percentage points. The participation gap between men and women is highest among older workers, but starts early in individuals' working lives. In particular, the gender gap in participation seems to widen in years of marriage and child bearing (25-34), during which many more women than men leave the labor market. Moreover, keeping other things constant, age and education have a much stronger correlation with female labor force participation than they do with male participation. Other factors, such as being married or living in a household

[1] World Bank: Development Research Group, 2010.
[2] LFS (2011).

with children, also correlate differently with women's likelihood to participate in the labor market than they do with men's.

Although these results reflect correlations rather than causation, findings do suggest that young women with higher levels of educational attainment constitute a potentially large and promising group to activate. Moreover, the evidence discussed in this report suggests that family responsibilities, reinforced by existing gender norms, have a considerable influence on women's labor force participation decisions.

Inequalities among Ethnic Groups in Labor Force Participation

According to official 2002 census estimates, about 36 percent of the Macedonian population belongs to an ethnic minority (mostly ethnic Albanian), and about 3 percent of the Macedonian population is Roma. However, more recent, unofficial estimates suggest that the share of Roma is much larger than the census-reported 3 percent. Labor force participation among ethnic minorities is often significantly lower than among ethnic Macedonians, especially for women. Indeed, in ethnic minority groups, the gender gaps in employment outcomes are starker than among ethnic Macedonians. Generally, activity rates among ethnic minorities are about two or three times lower among women than among men.

Labor force participation is particularly low among Roma women and ethnic Albanian women: approximately two thirds of Roma women of working age do not participate in the labor force, and this is 86 percent among ethnic Albanian women. However, when controlling for background characteristics, Roma women are more likely to participate than their female non-Roma neighbors. This indicates that the low engagement of Roma women in the labor market is likely to be related mostly to labor market entrance barriers explained by observable factors such as age, family structure and education: inequalities in these correlates of participation (especially education) generate vast differences in access to labor markets, when comparing Roma to non-Roma. At the same time, among Roma, the gender effect on participation is stronger than among non-Roma neighbors. Regardless of marital status, Roma women are 33 percentage points less likely to participate in the labor force than Roma men. Among non-Roma neighbors, this is only 30 percentage points. Critical for policy, education levels, start to have a correlation with labor force participation among Roma earlier than they do among non-Roma neighbors.

Explaining the Gaps

These patterns of inequality in labor force participation are caused by a combination of unequal incentives, skill levels, and barriers across population groups.

1. Incentives to Work

Those with low education levels, which are often women and ethnic minorities, have the lowest chances of finding work. When women and ethnic minorities do find work, they are likely to work informally or in unskilled positions, and hence can expect lower wages than men and ethnic Macedonians. Indeed, despite an overall increase in wages, median wages have remained static in lower-earning sectors. Wage disparities between the public- and private sector are particularly stark for women, providing the latter with strong incentives to pursue public sector jobs, which are much less widely available than private sector jobs. Private sector jobs, by

contrast, are generally considered to be undesirable, mainly due to employers' reported disrespect of existing labor regulations. Similarly, whereas migration abroad remains a viable option for men who don't have access to employment opportunities in Macedonia, for women, migration is much less common. Moreover, there are significant disincentives for the jobless to terminate their receipt of social assistance or unemployment support when taxes on labor and benefits lost are taken into account. This holds in particular for low wage earners, which often include women and ethnic minorities.

Macedonian taxes are not exceptionally high, but markedly less progressive than in other European countries. Macedonia also has a number of non-contributory social assistance programs, covering a total of 6.9 percent of all Macedonian households. Social assistance benefits are not extremely generous, rendering any disincentives to work based purely on the generosity of these benefits unlikely. Still, incentives to work (formally) could be strengthened: thirty one percent of all individuals receiving social assistance could be categorized as able to work, but remain out of the labor force. A sizable group among these inactive social assistance beneficiaries is made up of women: about 27 percent are poor, inactive women, often living in households with young children. This suggests that improved child- and elderly care provisions could be an important step towards activation of this group. Certain labor regulations also contribute to unequal expectations: for example, labor laws intended to protect women by providing for long maternity leave, limited working hours, and lower retirement ages can affect a firm's decision to hire female employees.

2. Education and Skills

Skills and level of education are key determinants of labor market participation. Those who complete secondary education, for example, are 20 percentage points more likely to participate in the labor force than those who do not complete any education at all. However, most women, a total of 51 percent never goes beyond primary education. Among certain ethnic minorities, the pattern is similar: for example, among Roma, 47 percent of women and 34 percent of men never completes secondary education. The most prominent reason for Roma to leave school before completion of secondary education is that costs are too high. Moreover, among young Roma aged 15-19, many who are not enrolled in school also do not have jobs: only 50 percent is either in school or has a job. The remaining half is either unemployed (8 percent) or inactive (42 percent). Among non-Roma neighbors of the same age, as much as 76 percent are in school or working. In fact, 15 to 19 year old Roma in Macedonia show the second highest level of inactivity, excluding those enrolled in school, among Eastern European countries surveyed.

The gender gap in labor force participation is also much larger for those who did not go beyond primary education as compared to higher education levels. Indeed, when controlling for background characteristics, education has a much stronger correlation with women's likelihood to participate in the labor force compared to the same correlation for men. Similarly, among working age Roma women who have not completed primary education, 70 percent do not participate in the labor force. This drops to 29 percent among Roma women with tertiary education.

In addition to formal education levels, a lack of foundational and job-specific skills can hinder labor market entrance. For example, many employers in Macedonia contend that workers often lack responsibility, reliability and commitment. Indeed, obtaining a diploma does not always

guarantee to employers that all the needed skills for the job have been obtained. Moreover, especially among women, the types of study programs chosen do not reflect what is most in demand on the labor market. Long-term joblessness further aggravates the skills disadvantage, since work experience often forms an important component of what employers take into account in hiring decisions. Although training programs are often available, awareness on the existence of such programs is low. Recent policy-measures have improved access to tertiary education, but important steps remain to be taken to complete the transition to an "access for all" model, especially at lower levels of education.

3. Barriers to Work

In addition to inequalities in incentives and skills, various barriers to participation exist among women and ethnic minorities, including social norms and discrimination, limited childcare and elderly care provisions, a lack of flexible work arrangements, and limited mobility and access to networks and productive inputs. For example, a very large group of women leave the labor force due to household and family care responsibilities. Women from ethnic minorities often face stronger pressures from their family to become housewives than ethnic Macedonian women. Moreover, social norms often determine what types of jobs are deemed appropriate for women. Ethnic minorities, as well as women in general, may also face outright discrimination on the labor market. Child and elderly care options remain scarce and preschool enrollment rates are low, standing at only 26 percent among girls and 25 percent among boys, as compared to an ECA average of 75 percent and 76 percent for girls and boys, respectively.

Flexible and part-time work arrangements are largely lacking in Macedonia, affecting women in particular. Moreover, restricted mobility, especially among women, forms an important constraint. Regional unemployment rates range from 14 to 53 percent, but this does not seem to incentivize large streams of internal migrants. Macedonians of all ethnicities and both genders also cite a lack of personal connections, nepotism, and lack of affiliation with the political parties in power as a reason for inactivity. When attempting to start a business, many cite difficulties in attempting to access capital. For women in particular, social norms that regard women as "not cut out for business" form an additional constraint. For the poor, which include, for example, many Roma, financial constraints present a significant barrier to inclusion in the labor market in general, through their impact on education.

Policy Recommendations

Based on the above, this report identifies a number of key priorities for public policy

1. Improved work incentives for individuals and employers

- Rationalize existing schemes aimed at subsidizing employment of vulnerable groups.
- Increase the level of progressivity of labor taxation, either directly (through the elimination of the reference wage, for example) or indirectly (through the introduction of a negative income tax).
- Equalize the retirement age for men and women.
- Reduce the costs associated with hiring and firing, especially those that affect youth who have a longer working live ahead of them.

    - Introduce more strict enforcement of discrimination laws and regulations on labor conditions, particularly in the private sector.

- Broader access to tools and institutions that facilitate training and jobs
    - Give priority to increasing investments in early childhood education, especially among ethnic minorities.
    - Strengthen the partnership between government, educational institutions and employers, to: 1) build a national job-search database, including information on required skills and job orientation strategies, 2) actively assist with skills development.
    - Within education and training systems, increase the focus on job-relevant skills – i.e. not only cognitive and technical, but also socio-emotional skills. These have been shown to have an equalization effect among groups with lower formal educational attainment.
    - Use the recent improvements in activation programs as a starting point for an integrated social protection model that prioritizes activation, building in conditionalities where needed.
    - Incentivize work among married women and women with children, through awareness-raising and provision of affordable care facilities outside the home.

Some of these policy recommendations can have important fiscal implications, and their desirability needs to be balanced against other priorities and fiscal sustainability goals. We highlight in the policy discussion those recommendations for which a fiscal assessment is particularly important.

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This report was written by a team comprising Barbara Kits (Consultant), Lea Tan (Consultant) and Indhira Santos (TTL, Senior Economist ECSH4). In addition, the report also reflects the work and efforts of other colleagues at the World Bank. We are especially thankful to Natasha de Andrade Falcão, Robin Audy, Cesar Cancho, Tomas Damerau, María Dávalos, Aylin Isik-Dikmelik, Joost de Laat, Mitali Nikore, Gady Saiovici and Owen Smith. Maria Davalos, David Newhouse and Truman Packard acted as peer reviewers. We are thankful to the authors of the ECA Regional Jobs Report 2014 "Back to Work: Growing with Jobs in Europe and Central Asia"[3], whose work critically informed the analysis presented in the current report. This work also reflects analytical contributions and policy expertise on issues of labor market inequality by other international institutions. Lastly, this report reflects interactions with policy-makers and academics in FYR Macedonia.

This report is part of a larger package of analytical work, which also includes a general report on inequalities in labor market participation covering ten countries in Europe and Central Asia, two other case studies on Georgia and Tajikistan, and a series of 9 country-reports based on qualitative research, including focus group discussions. The qualitative analysis was financed through country-specific as well as regional World Bank projects. In the case of Macedonia, qualitative work was financed by a PSIA grant. We are thankful to the World Bank team (María Dávalos, Giorgia Demarchi and Patti Petesch) and the local firm (the Center for Research and Policy Making) which contributed to the preparation of this qualitative survey in Macedonia, as well as to the implementation of the survey.

[3] Arias, Omar S.; Sánchez-Páramo, Carolina; Dávalos, María E.; Santos, Indhira; Tiongson, Erwin R.; Gruen, Carola; de Andrade Falcão, Natasha; Saiovici, Gady; Cancho, Cesar A.

1 Introduction

Close to a quarter of the population in Macedonia lives off less than $4 per day – a rate more than twice as high as the regional average for Europe and Central Asia (ECA).[4] Similarly, income inequality is higher in Macedonia than in many other countries in the region[5]. Even communities that assess themselves as belonging to the middle class in relative terms (because they have a job and have completed secondary education) indicate that in absolute terms, they in fact struggle with poverty:

"The middle class is a class that is fading... the dream for a comfortable middle class life is fading away"

(Jobless woman from Sveti Nikole[6])

Joblessness, including both unemployment and inactivity, is an important determinant of these outcomes. For example, focus group discussions have shown that many Macedonians identify access to jobs as the single most important condition for entering the middle class[7]. Yet, in 30 percent of all Macedonian households, none of the household members has a job[8], and overall employment rates are low in comparison to other countries in the Europe and Central Asia region. Furthermore, the majority of those who are jobless have not had work for extended periods of time: 76 percent of non-employed 15-24-year-olds have not had a job for more than a year, a figure that rises to 96 percent among jobless 55-64-year-olds[9]. Whereas unemployment rates also remain a critical issue, part of this pattern is caused by gaps in labor force participation.

This case study examines inequalities in the Macedonian labor market, focusing in particular on labor force participation. The study includes an analysis of inequality patterns in terms of labor force participation as well as a review of policy responses, and areas for possible further policy action. In particular, the report looks at the two main dimensions of inequality that characterize Macedonia's labor market: gender and ethnicity. Almost half the female working age population is inactive, whereas male inactivity is considerably lower. Labor market outcomes also vary significantly with ethnicity. In particular, a strong interaction exists between gender and ethnicity, with ethnic minority women forming a particularly vulnerable group. Hence, it is worthwhile to investigate in more detail how gender and ethnicity shape the Macedonian labor market, and how public policy could be used to increase labor market participation and job opportunities for women and ethnic minorities.

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[4] World Bank: Development Research Group, 2010. Data are in Purchasing Power Parity terms (PPP). For more information and methodology, please see PovcalNet (http://iresearch.worldbank.org/PovcalNet/index.htm).

[5] Income inequality in Macedonia, as measured by the Gini Coefficient (43.2), exceeds average inequality-levels in the original 15 EU member states (31.2), the ten new accession states that joined the Union in 2004 (32.3), as well as OECD countries outside the EU (38.9) (World Bank: World Development Indicators: 2009).

[6] World Bank: Qualitative interviews (2013). The names of actual communities have been changed to preserve anonymity. A country-report providing a more detailed account of the qualitative analysis conducted in Macedonia provides a description of the socio-economic characteristics of each community (World Bank: forthcoming).

[7] World Bank: Qualitative interviews (2013).

[8] LFS (2011).

[9] LFS (2011).

This report relies on two main sources of information. First, it takes advantage of household surveys, including, first and foremost, the 2006 and 2011 Macedonian Labor Force Survey (LFS) and the 2011 UNDP/World Bank/EC regional Roma survey (henceforth: the "regional Roma survey"). The former is a nationally representative survey conducted by the State Statistical Office (SSO) of Macedonia, capturing a variety of labor market issues for the entire Macedonian population. The latter is the most comprehensive survey effort to date to capture the situation of Roma in Macedonia[10], and the results obtained for Macedonia are being systematically analyzed here for the first time. Although the survey is not nationally representative, it accurately reflects the living conditions of the vast majority (88 percent) of Roma living in Macedonia. Second, this report relies on qualitative information, collected through focus group discussions in Macedonia in 2013[11]. Annex 1 provides a more detailed overview of the surveys and methodology used.

The main conclusions of this report are as follows. Female labor force participation lags far behind male labor force participation, across all age groups. This gap starts early in life: many young women exit the labor force when they get married or have children. Among ethnic minorities, accessing labor market opportunities is challenging, and this is particularly so for women. The challenges that women and ethnic minorities face are related to incentive structures, skills gaps and group-specific barriers. Among the incentives analyzed, the lack of progressivity in the tax system and the impact of pensions stand out as particularly influential. The skills mismatch is also limiting for many, including for those who did obtain at least secondary education: in addition to school completion. Among the group-specific barriers, social norms and discrimination stand out. Importantly, many of the other barriers faced by (ethnic minority) women are somehow induced or reinforced by commonly accepted gender norms. This is the case for childcare and elderly care options, flexible work arrangements, the gender gap in educational attainment, mobility, and access to relevant inputs and networks.

This report is organized as follows. First, the report describes the main characteristics of the Macedonian labor market, emphasizing the most important patterns of inequality in terms of labor market participation (Section 2). Section 3 addresses the possible causes of these inequality patterns. Section 4 discusses potential policy responses and concludes.

[10] This survey also includes other countries in Eastern Europe: Bulgaria, the Czech Republic, Hungary, Slovakia and Romania.
[11] World Bank: Qualitative interviews (2013).

2 The Macedonian Labor Market: Key issues

2.1 Employment and Labor Market Participation in Macedonia

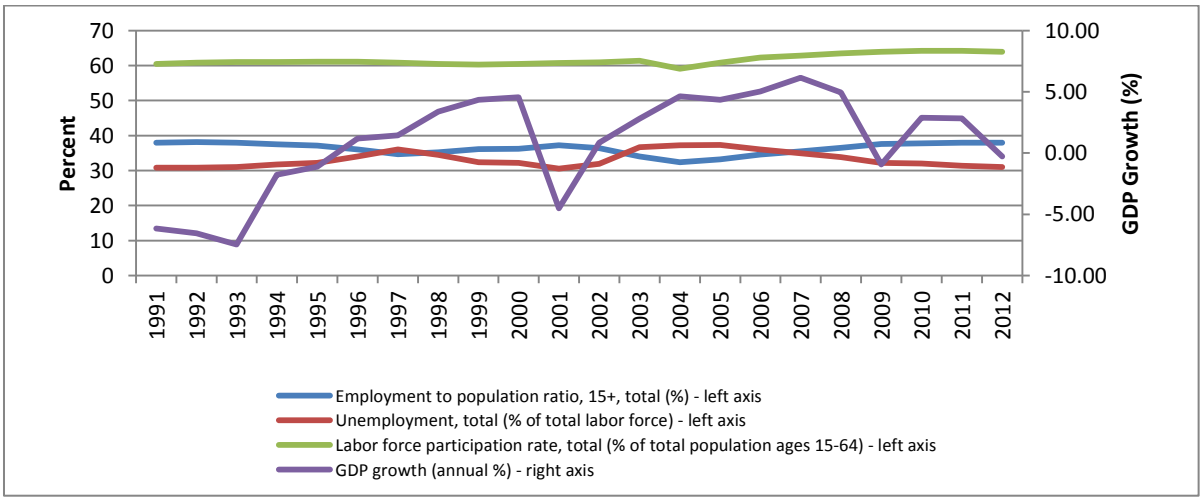
Getting a new or better job is considered one of the most important factors contributing to upward mobility in Macedonia. Women place a higher focus on the importance of this factor: among respondents between the age of 25 and 55 years old, 52 percent of men and 59 percent of women identified getting a new or better job as one of the two most important factors to promote their household's upward mobility, making it the single most important factor.[12]

All communities interviewed assessed job loss, coupled with a scarcity of job opportunities, as the main risk factor that may cause a household fall down the socioeconomic ladder. Men placed more emphasis on this factor than women: 90 percent of men felt that this was one of the largest risks to the household's economic wellbeing, as compared to 73 percent of women. Given their greater involvement in formal employment and role as breadwinner, this gender gap is not surprising. As a woman from the Tana community noted: *"Everything revolves around the same thing, if you don't have a job, you don't have money, you don't have anything."*[13]

Yet, labor market challenges in Macedonia are profound, and pre-date the recent economic crisis. Macedonia has experienced significant economic volatility associated with economic crises in both 2001 and 2009. At the same time, overall growth during the past decade has been positive: the average annual GDP growth rate stood at 5 percent between 2001 and 2011[14]. However, the core challenges faced by Macedonia in relation to labor market dynamics seem to be more structural: for example, over the last decade, the unemployment rate[15] has hovered at around 30 percent, and employment rates have remained just below 40 percent (Figure 2-1).

Figure 2-1: Macedonia's labor market challenges appear structural in nature

Employment Indicators and GDP Growth in Macedonia, 1991-2012



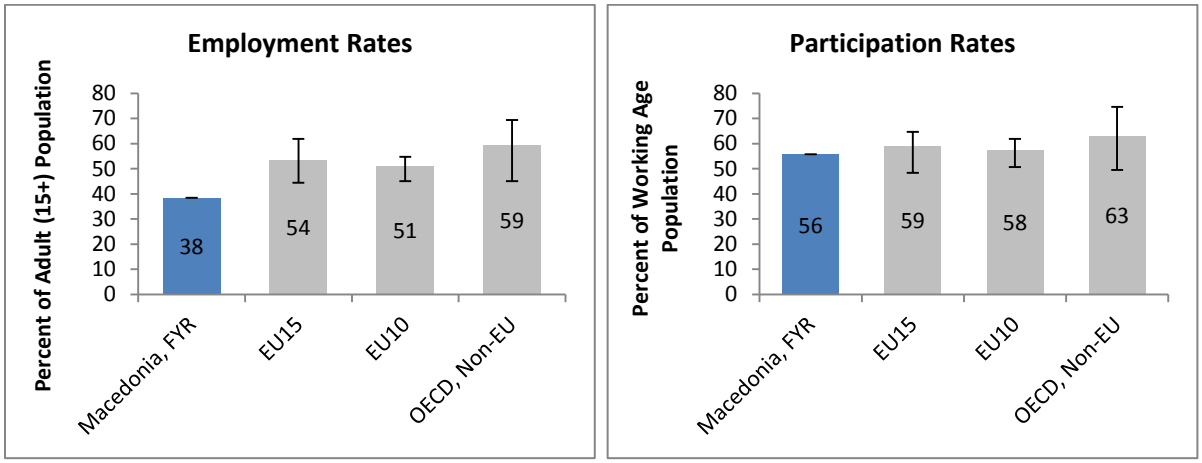
[12] Word Bank (forthcoming).
[13] Ibid.
[14] World Bank: World Development Indicators.
[15] In this case study, the main focus will be on participation gaps rather than on unemployment. For a more detailed exploration of unemployment in Macedonia, see World Bank, 2013.

Source: World Bank: World Development Indicators.

Comparisons of Macedonia's employment and participation rates among the adult population (15+) with EU and non-EU OECD countries suggest a severe gap in employment, and a comparable outcome in participation (Figure 2-2). However, these aggregate labor market outcomes mask important within-country inequalities, such as gender inequalities and inequalities between different ethnic groups.[16] Similarly, Macedonia's employment rate is low compared to other relatively poor countries in the ECA region (Figure 2-3). Overall inactivity in Macedonia does not rank exceptionally low among these countries. However, this masks much higher inactivity rates among women and ethnic minorities. Indeed, inactivity among Macedonian women (48 percent) stands at more than double the inactivity rate among men (23 percent). Similarly, specific ethnic groups, including the Roma, often face significant barriers to labor market entry. Hence, increasing labor market participation among these specific population groups could boost employment rates significantly.

Figure 2-2: Employment and labor force participation rates are low compared to other countries

Employment and Participation rates in Macedonia and Comparator Groups, 2011

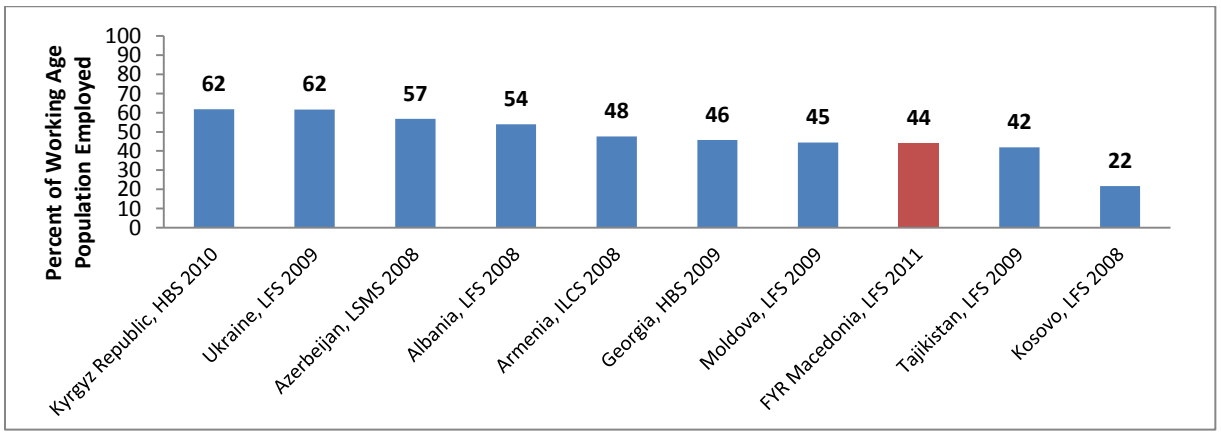


Source: Authors' calculations, based on ILO, KILM database.

Notes: Employment rates refer to the share of employed individuals among the adult (aged 15+) population. Activity rates refer to the share of active individuals among the adult (aged 15+) population.

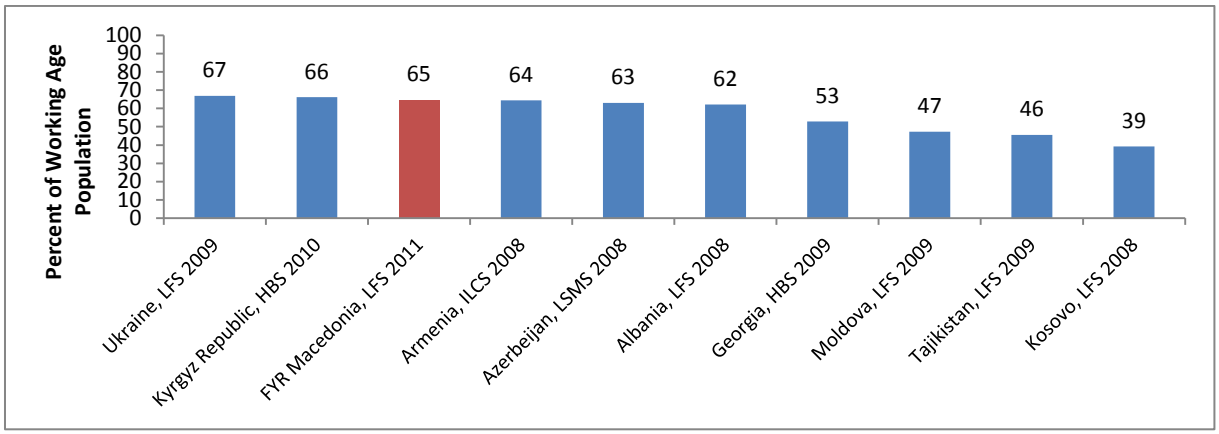
Figure 2-3: Macedonia's employment rate is low compared to other countries in ECA, but labor force participation compares more favorably

Panel A: Employment Rates, Working Age Population (15-64)



[16] World Bank, 2008; Gamberoni and Posadas, 2012; World Bank, 2013; Redzepi, 2011.

Panel B: Activity Rates, Working Age Population (15-64)



Source: Authors' calculations, based on Household Survey Data (2008-2011).

An improved general economic environment, together with sound macro-economic management and significant structural reforms (including in the labor market) have started to change the conditions for job creation in Macedonia. Indeed, in recent years, employment rates have gradually increased, whereas unemployment rates have gone down. However, improvements remain small, and inequalities in labor force participation between different population groups remain unaddressed. Recent reform efforts have been successful in improving the general business climate, and in shedding certain rigidities that previously restricted the labor market in general. However, thus far, these reforms have produced relatively modest improvements in key labor market outcomes: activity rates have remained relatively constant, standing at approximately 55 percent of the adult (15+) population. Employment rates have shown a gradual increase over the past few years, reflecting a reduction in unemployment rates from approximately 37 percent in 2005 to 32 percent in 2010 and further to 29 percent in 2013[17]. Given the poor labor market conditions at the start of the reform process, however, significant challenges remain, including important within country inequalities in labor force participation.

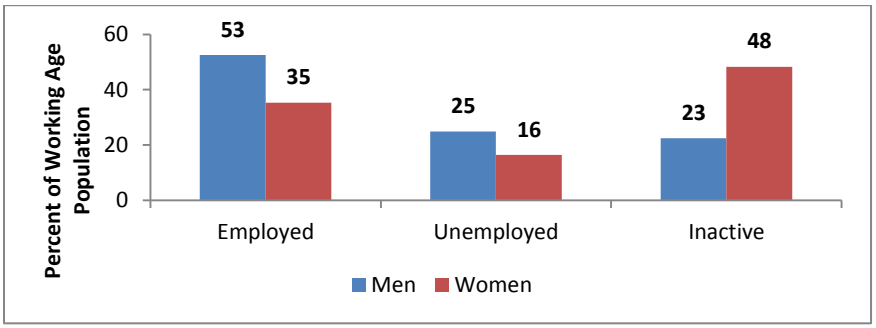
2.2 Gender Inequality and the Macedonian Labor Market

As highlighted in the above, one of the two most prominent dimensions of inequality in the Macedonian labor market is the gender dimension. The employment rate among men is much higher than among women, a trend that is largely fuelled by a gender gap in participation rather than unemployment. Although unemployment rates are slightly higher for men than for women, this difference is marginal when compared to the difference in participation rates, which stand at 48 percent for women and 23 percent for men (Figure 2-4). In fact, as of 2011, male labor force participation was similar to the regional average, which stood at 77 percent for the age range 15-64 years, while female participation remained eleven percentage points below the regional average of 62 percent for the age range 15-64 years. This gender gap in participation has persisted for over twenty years, and has not decreased in magnitude (Figure 2-5).

[17] SSO, 2005-2013.

Figure 2-4: Inactivity among women is significantly higher than among men

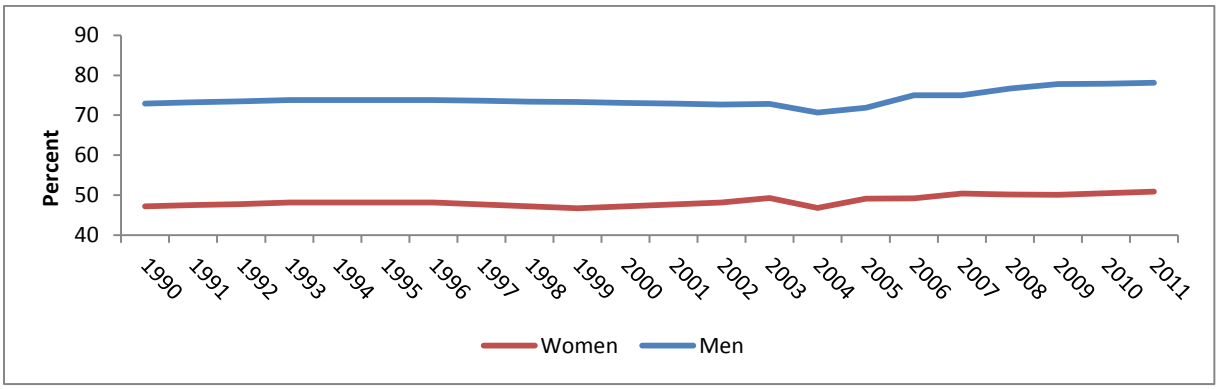
Employment, Unemployment, and Participation in Macedonia by Gender, as Share of the Working Age Population (15-64), 2011



Source: Authors' calculations, based on LFS (2011).

Figure 2-5: The gender gap in participation has not decreased since 1990

Labor Force Participation Rate by Gender, among working age individuals (15-64), 1990-2011

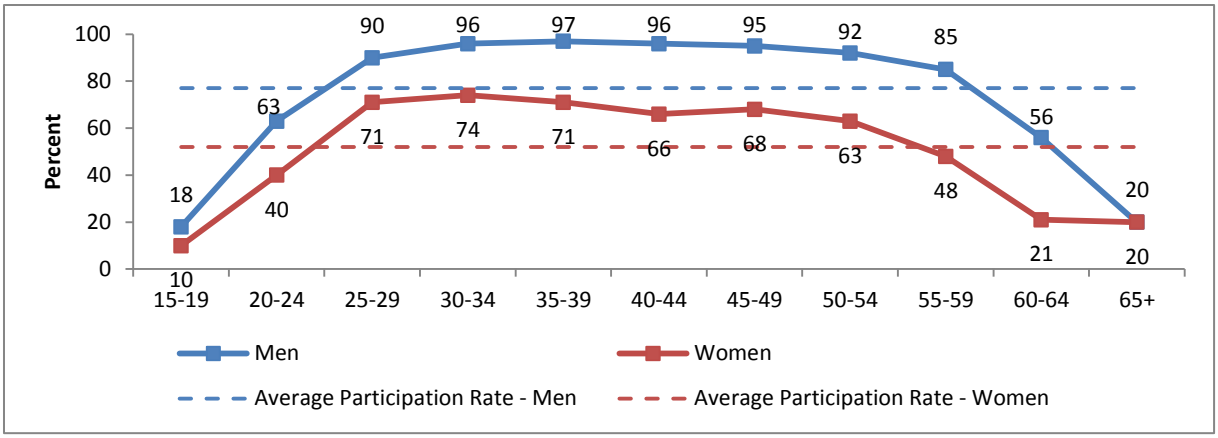


Source: ILO, KILM database.

The participation gap between men and women is highest among older workers, but starts early in individuals' working lives. In particular, the gender gap in participation seems to widen in years of marriage and child bearing (25-34), during which many more women than men leave the labor market (Figure 2-6).

Figure 2-6: The gender gap in activity rates is greatest among older workers, but starts at a young age

Inactivity Rates in Macedonia, by Age and Gender, 2011

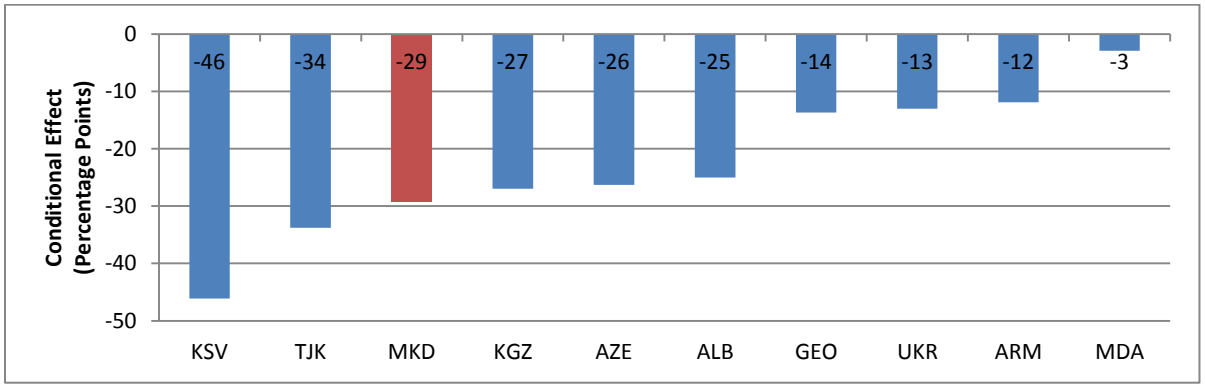


Source: Authors' calculations, based on LFS (2011).

Even when background characteristics are taken into account, simply being a woman is associated with fall in the likelihood of participating in the labor market of approximately 30 percentage points (Figure 2-7). This is the third highest rate compared to other poor countries in ECA.

Figure 2-7: Simply being a woman is associated with a lower likelihood of participation

Conditional Gender Gap in Labor Force Participation, Age Group 20-64

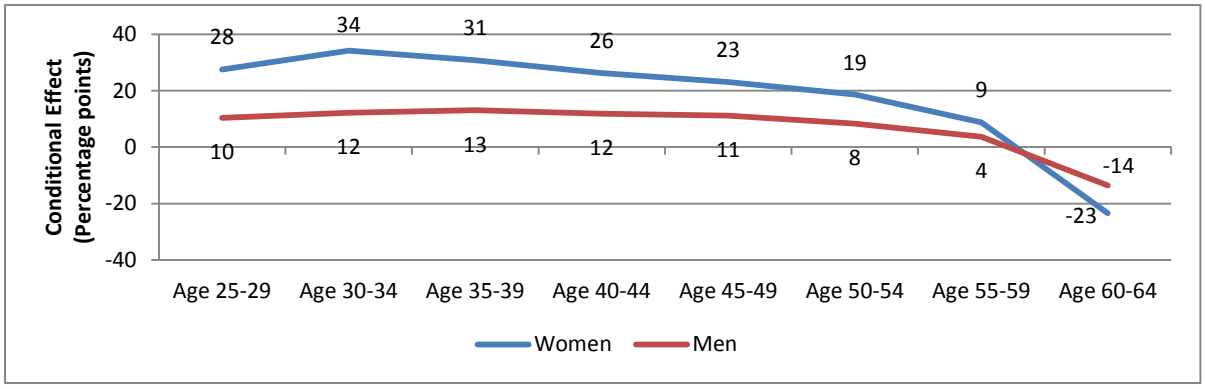


Source: Authors' calculations, based on household surveys (2008-2011).
Notes: See Annex 1 for more information on the surveys used. See Kits and Santos (forthcoming) for a detailed report of the country-specific models from which these estimates were obtained.

Moreover, keeping other things constant, age and education have a much stronger correlation with female labor force participation than they do with male participation. Among women of working age, being in the age-group 60-64 decreases one's chance of being in the labor force more than being in any other age-group (Figure 2-8). Moreover, across the board, the correlation of age with labor force participation is stronger for women than it is for men. Similarly, and keeping other relevant factors constant, the correlation between completing secondary or tertiary education with a woman's chance to participate in the labor force is about four times as big in magnitude as the same relation for men.

Figure 2-8: Age has a larger conditional effect on labor force participation among women as compared to men

Conditional Effects of Age on Men's and Women's Likelihood of Participating in the Labor Force, as Compared to the Age Group 20-24, 2011



Source: Authors' calculations, based on LFS (2011).
Notes: Results presented here refer to the estimates obtained in Annex 2, Model set 1 (Full model).

Other factors also correlate differently with women's likelihood to participate in the labor market than they do with men's. For example, in households where at least one other individual is employed, women have a much higher likelihood of participating in the labor force, possibly reflecting the fact that women are typically second-earners in the household. Among women, living in a household with young children (aged 0-6) decreases the chance to participate in the labor force by approximately 18 percentage points, and a less substantial correlation, of 6 percentage points, is observed for women living in households with school-aged children. These correlations are not statistically significant for men.

Although these results reflect correlations rather than causation, findings do suggest that young women with higher levels of educational attainment constitute a potentially large and promising group to activate (Table 2-1). Moreover, the initial evidence discussed in this section suggests that family responsibilities do influence women's labor force participation decisions; we return to this issue later in this report (see Section 3.3).

Table 2-1: Among the inactive, one third consists of young women (15-34), many of which have completed secondary education

Descriptive Breakdown of the Inactive population by gender and education, 2011

	Women aged 15-34	Women aged 35-64	Men
All	31.3	36.4	32.3
With secondary education	13.5	9.1	17.4
Without secondary education	17.8	27.3	14.9

Source: Authors' calculations, based on LFS (2011).

2.3 The Ethnic Dimension of the Gender Gap

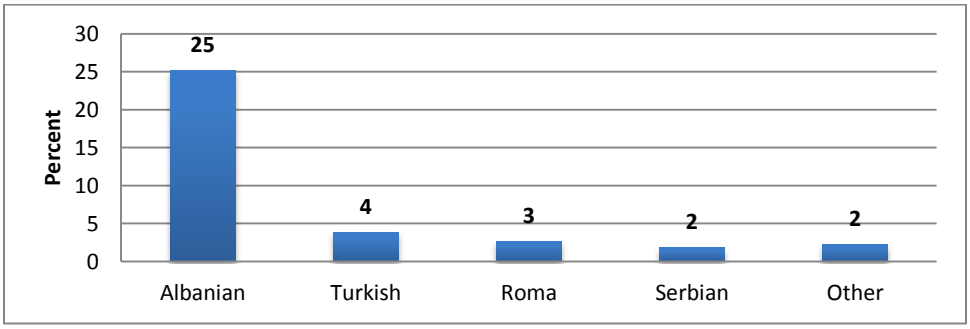
According to official 2002 census estimates[18], about 36 percent of the Macedonian population belongs to an ethnic minority, and about 3 percent of the Macedonian population is Roma (although this last number is likely to be higher). Figure 2-9 shows the official 2002 census results for ethnic backgrounds of the Macedonian population. Ethnic Albanians form the biggest ethnic minority, followed by the ethnic Turkish, Roma, and ethnic Serbians. Apart from the ethnic Albanian minority, none of the other ethnic groups exceed a

[18] This is the last population census that was conducted in Macedonia.

share of 5 percent of the total population. However, more recent, unofficial estimates suggest that the share of Roma is much larger than the census-reported 3 percent (Table 2-2)[19].

Figure 2-9: Ethnic Albanians make up the largest minority group in Macedonia

Share of Ethnic Minority-Groups in the Macedonian Population, 2002



Source: Macedonian Census (2002).

Table 2-2: Unofficial estimates suggest the Roma are under reported in the national census

Roma Population Estimates

	Count	Percent
2002 Census ([A])	53879	2.6%
2006 Liégeois (cited in UNDP, 2006)	220000 - 260000	11% - 13%
2000 Petrovski (in REF / World Bank, 2004)	150000	7.3%
2003 Elezovski (in REF / World Bank, 2004)	135490	6.6%
Average between 2000 Petrovski and 2003 Elezovski	142745	7.0%
Average between 2000 Petrovski, 2003 Elezovski and census data	113123	5.5%

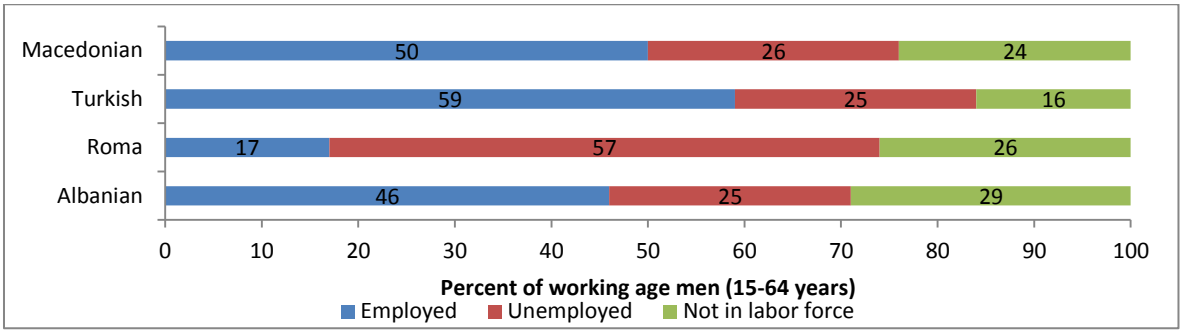
Sources: Macedonian Census (2002); UNDP (2006); REF / World Bank (2004).

To the extent that data are available, they indicate that labor force participation among ethnic minorities is often significantly lower than among ethnic Macedonians, especially among women. Even when comparing ethnic minorities to the general population without distinguishing by gender, striking inequalities appear. However, it does stand out that the participation gap is driven almost entirely by gaps among women (Figure 2-10).

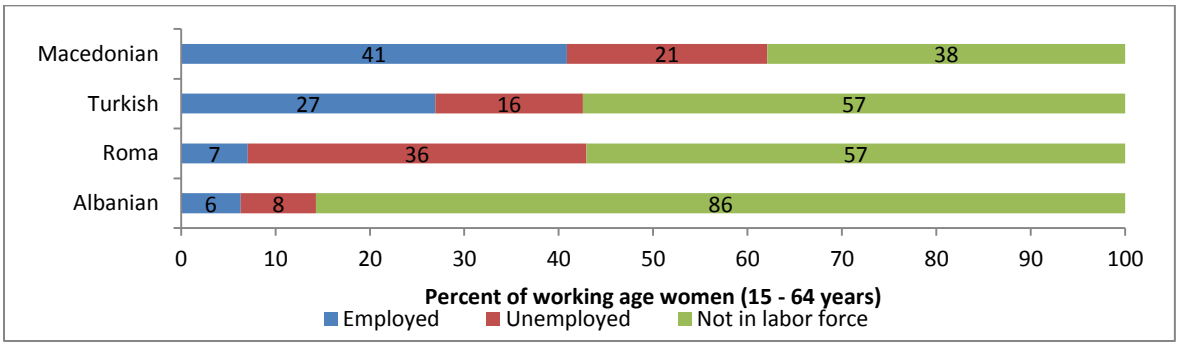
[19] Although the numbers vary to a certain extent, non-census estimates suggest that the number of Roma in Macedonia is much larger than what is reported in the census data: estimates generally range from approx. 6 percent to 13 percent (see Figure 1-1). For example, "field researches show that in R. Macedonia there are 150.000 Roma people (Petrovski, T. 2000; 56-57) or 135.490 Roma people (A. Elezovski, 2003; 1-2)." (REF / World Bank, 2004: 5) A simple average between these two research-based estimates would bring the share of Roma in the total population up to 7 percent, making it the second largest minority.

Figure 2-10: Both male and female labor force participation are lowest among Roma and ethnic Albanians

Panel A: Male Labor Force Status, by Ethnicity, 2006



Panel B: Female Labor Force Status, by Ethnicity, 2006



Source: Authors' calculations, based on LFS (2006).

Note: 2006 is the last year for which data is publicly available on ethnicity in the LFS. In these graphs, it is important to note that the LFS data is not representative by ethnicity, so there may be some discrepancies with actual data at the population level. According to the regional Roma survey (2011), the employment rate among Roma men is 35 percent; 28 percent of Roma men are unemployed, and 37 percent are out of the labor force. According to this same survey, the employment rate among Roma women is 10 percent; 25 percent of these women are unemployed, and 65 percent are out of the labor force. These numbers are not nationally representative, but rather, reflect communities where one can find a higher-than-national concentration of Roma.

Critically, in ethnic minority groups, the gender gaps in employment outcomes are much starker than among ethnic Macedonians. As for the general population, low employment rates among ethnic minority women are driven by higher inactivity rates rather than by higher unemployment. Unemployment rates are generally lower among ethnic minority women than among ethnic minority men, whereas inactivity rates are much higher. Whereas ethnic Macedonian women have an employment rate of 41 percent, only 10 percentage points lower than their male counterparts, women who are ethnically Turkish only have an employment rate of 27 percent - a 32 percentage point gap with men with the same ethnic background. Roma and ethnic Albanian women lag even further behind in terms of employment, with employment rates of only 7 and 6 percent, respectively. These trends are mirrored by those in labor force participation rates: ethnic Macedonian women lag behind men of the same ethnic group the least, and have, overall, a much higher activity rates than other ethnic groups in the country. Generally, activity rates among ethnic minorities are about two or three times lower among women than among men.

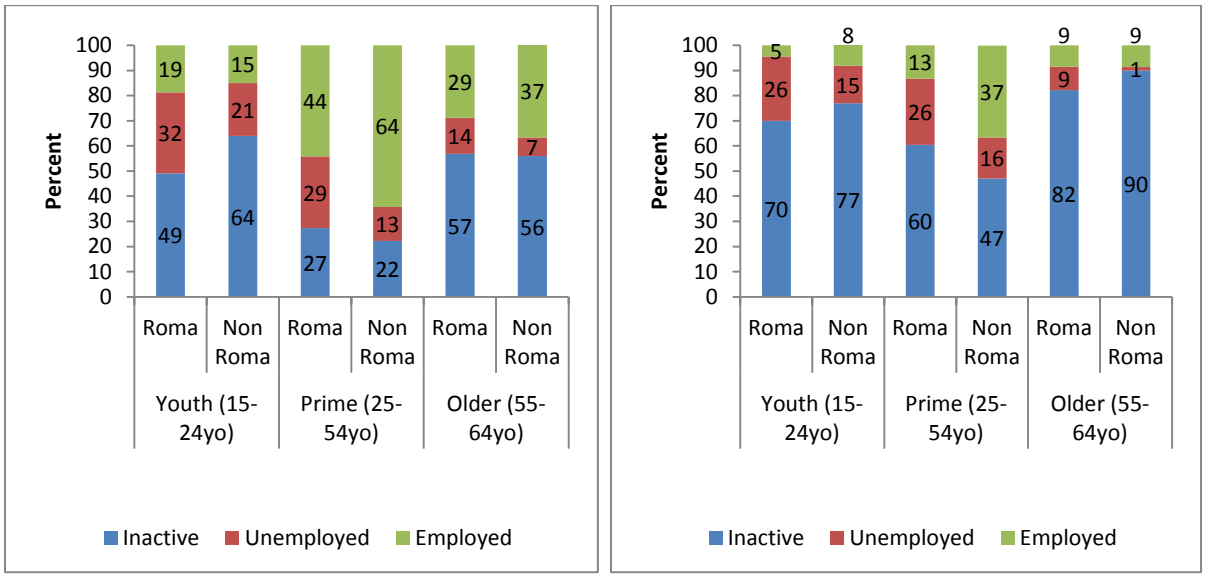
We focus mostly on the Roma in the rest of this report given their poor labor market outcomes, and the lack of detailed data on the drivers of these outcomes for this population. Employment rates among Roma are not only much lower than among non-Roma in

general, but also when compared only to non-Roma living nearby. Figure 2-11 illustrates that this is particularly the case for prime age workers (for men, this is driven by differences in unemployment rates, while for women it is driven by differences in activity rates). Interestingly, among older women, this pattern is reversed, with an 8 percentage point difference in inactivity rates between Roma and non-Roma women (82 percent among Roma, and 90 percent among non-Roma neighbors). The latter possibly reflects higher levels of poverty among older Roma women.

Figure 2-11: Employment among Roma is lower than among Non-Roma neighbors

Labor Market Outcomes among Roma and Non Roma Neighbors, by gender, 2011

A. Men *B. Women*



Source: Authors' calculations, based on UNDP/World Bank/EC regional Roma survey (2011).
Notes: Data are not nationally representative, but reflect rates in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1).

However, when controlling for background characteristics, Roma women are more likely to participate than their female non-Roma neighbors. This indicates that the low engagement of Roma men and women in the labor market is likely to be related mostly to labor market entrance barriers explained by observable factors such as family and age structure or education. Such barriers may include education, gender-norms, and access to relevant networks and inputs (see Section 3). Indeed, when keeping factors such as age, education, marital status and family composition constant, Roma women *and* their female non-Roma neighbors remain over 30 percentage points less likely to participate in the labor force than men in the same communities. Moreover, for these women, a much stronger correlation of higher education with labor force participation is observed than for men, whereas marital status has a much weaker

relation with labor force participation for women than it does for men (after controlling for dependents). These relations strongly resemble those obtained for women in the general Macedonian population.

At the same time, among Roma, the gender effect on participation is stronger than among non-Roma neighbors (Annex 2). Regardless of marital status, Roma women are 33 percentage points less likely to participate in the labor force than Roma men. Among non-Roma neighbors, this is only 30 percentage points. Critical for policy, education levels, on the other hand, start having a positive correlation with labor force participation earlier among Roma than they do among non-Roma neighbors: among Roma, achieving primary education already has a positive association with labor force participation, whereas among non-Roma neighbors, this effect does not exist.

3 Explaining Labor Force Participation Gaps across Gender and Ethnicities in Macedonia

The previous section has shown that inequality in labor force participation in Macedonia is driven mainly by gaps between men and women, and that there is an important ethnic dimension to this pattern. The factors behind these gaps are multiple and interrelated. First, work incentive structures vary significantly across gender and ethnic groups, reflecting different labor market aspirations and expected wages, as well as the design of the tax-benefit system and of labor regulations. Second, gaps in formal education (and skills more broadly) hamper access to economic opportunities for the more disadvantaged groups. Third, women and ethnic minorities are likely to face additional barriers to participation and employment related to social norms, but also to a lack of flexible work arrangements, the unavailability of affordable child- and elderly care options, and limited access to productive inputs and networks. This section discusses these issues in more detail, starting with an exploration of incentive structures (section 3.1), and then discussing education and skills gaps (Section 3.2) and additional barriers to work[20] (section 3.3).

3.1 Incentives to Work

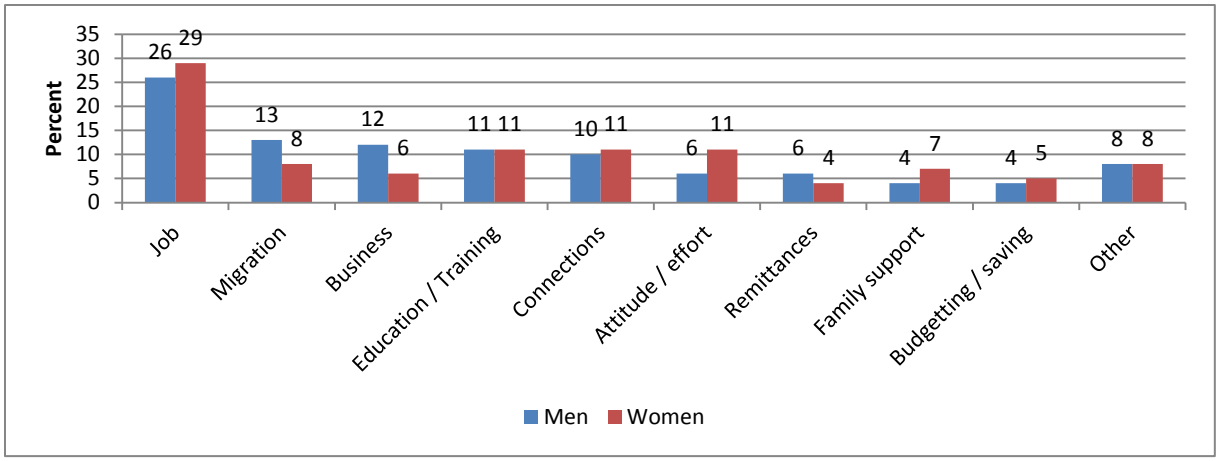
3.1.1 Expectations & Wages

Both men and women consider jobs to be the most important channel to move up the economic and social ladder. In qualitative interviews, approximately 30 percent of respondents considered a job to be the main avenue for getting ahead in life, compared, for example, with 11 percent who saw education as the main ingredient for moving up (Figure 3-1).

Figure 3-1: Both men and women consider jobs to be the most important channel to move up the social ladder

Channels to Move up the Social Ladder according to male and female focus group participants, 2013

[20] This conceptual framework draws on Arias, et.al (2014).



Source: World Bank: Qualitative interviews (2013).
Notes: This figure reflects the share of respondents that chose each option when asked: "What do you think are the two most important channels for women / men [corresponding to gender of the respondent] to move up the social ladder in this community?". Respondents include both employed and jobless individuals.

When overall labor market conditions are depressed or when expectations are low, however, workers can get discouraged. Between 2007 and 2011, nearly 60,000 jobs were created in Macedonia, primarily in agriculture, trade, and the public sector. Most job creation was informal, and even though required skill levels were often not very high, the majority of new jobs were taken up by those with tertiary education, either among well-educated, older workers, or among younger workers with tertiary education (World Bank, 2013). Two thirds of new jobs in this period were accounted for by informal employment in the agriculture and trade sectors. Focus group discussions have pointed out that ethnic Albanian and ethnic Turkish women in particular felt that they were unable to find jobs with their qualifications, regardless of their level of education (World Bank, 2008 and forthcoming). Indeed, lower labor force participation associated with relatively high levels of unemployment seems to be a much stronger factor for women than for men: when the regional unemployment rate for women with a certain level of education is high—reflecting local labor market opportunities, participation among women with that same level of education is much lower, with a much larger effect size than is found for men.

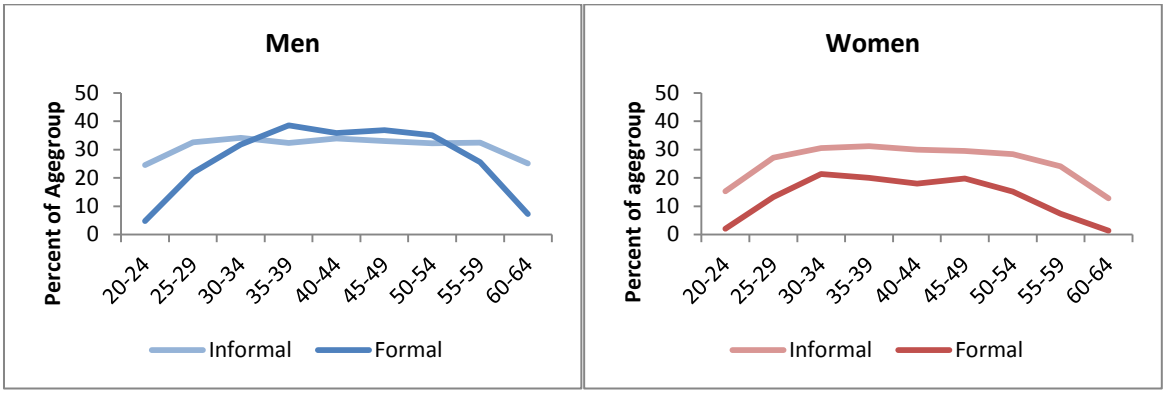
When women and ethnic minorities do find work, they are disproportionately likely to work informally (Figure 3-2) or in unskilled positions, and can expect lower wages than men and ethnic Macedonians with similar characteristics. Keeping constant educational and socio-economic characteristics and correcting for low labor force participation, employed women in Macedonia earn less on their jobs than men, although inequalities have been reduced over time.[21] Similarly, among all working women in Macedonia, 17 percent are employed as family workers, whereas this value stands at only 6 percent among men. Since family workers are often paid a very low wage or no wage at all, this pattern exemplifies the low expectations that women may have regarding potential earnings. In turn, this could help explain why women are more likely to become inactive, and exhibit a lower propensity to want to re-enter the labor force once out. This was clearly seen during the economic crisis: between 2008 and 2011, unemployed women were almost twice as likely as men to drop out of the labor force. Those

[21] The gender analysis draws on Gamberoni and Posadas (2012), *Gender gaps in labor market outcomes: participation, unemployment, and wage gaps in FYR Macedonia*, mimeo prepared for the programmatic work on labor markets in FYR Macedonia.

previously employed in the informal sector were six times more likely to become inactive than those previously employed in the formal sector (World Bank, 2013).

Figure 3-2: Female informal employment is higher than formal employment for all age groups

Formal and informal employment in Macedonia, 2011

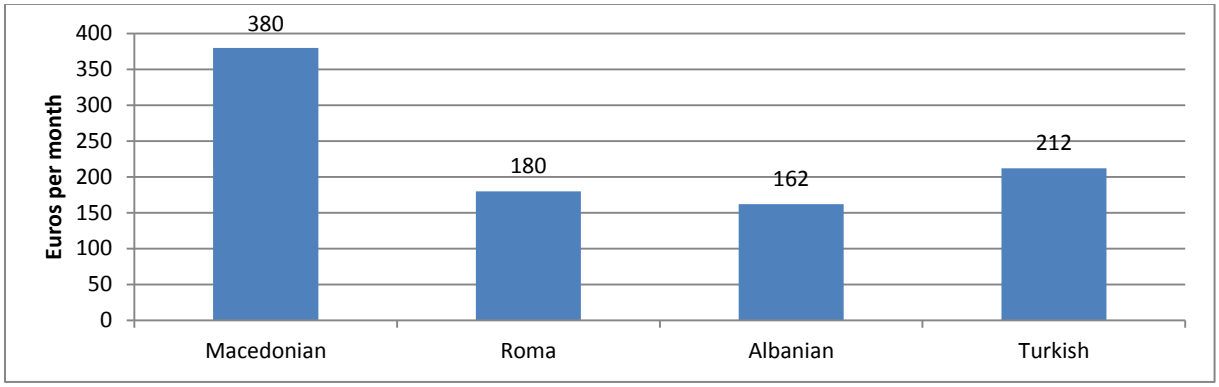


Source: Authors' calculations, based on LFS (2011).

Wages are also lower for ethnic minorities, especially Roma (Figure 3-3). One important driver of this effect is a gap in education between men and women, particularly among ethnic minorities, which gets partly reflected in self-selection of ethnic minorities into lower skilled, lower paying occupations (Figure 3-4). Among ethnic Macedonians, the largest proportion (44 percent) of the population work as skilled workers, while among their Roma neighbors, this figure falls to 21 percent. By contrast, 12 percent of ethnic Macedonians work as unskilled or landless workers, while among the Roma, this figure stands at 48 percent, four times greater. The Roma are also the least likely among all groups to be civil servants or business owners, and only 4 percent of the Roma population work as managers or other types of professionals (18 percent among ethnic Macedonians).

Figure 3-3: Ethnic Macedonians earn the highest average income from employment

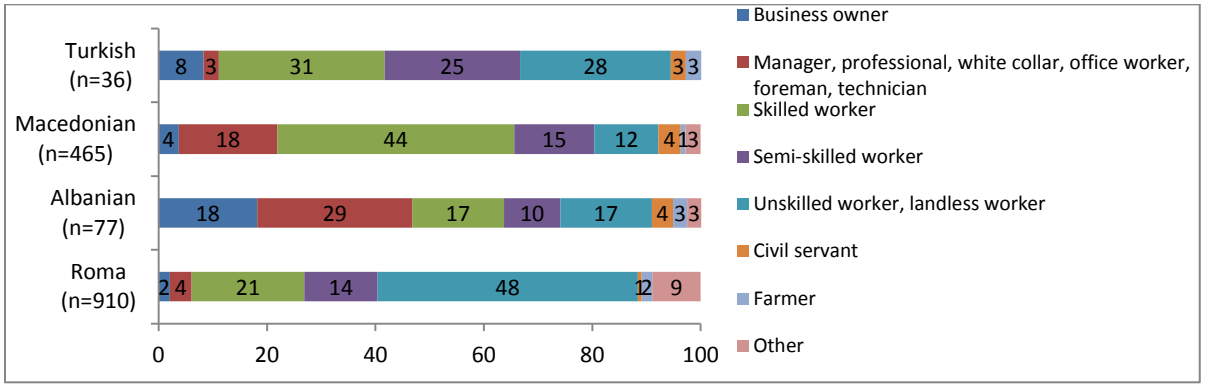
Average income from employment by ethnicity, 2011



Source: Authors' calculations, based on UNDP/World Bank/EC regional Roma survey (2011).
Notes: Data are not nationally representative, but reflect wages in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1).

Figure 3-4: A disproportionate number of Roma (almost half) are employed as unskilled workers

Distribution of types of employment by ethnicity, 2011

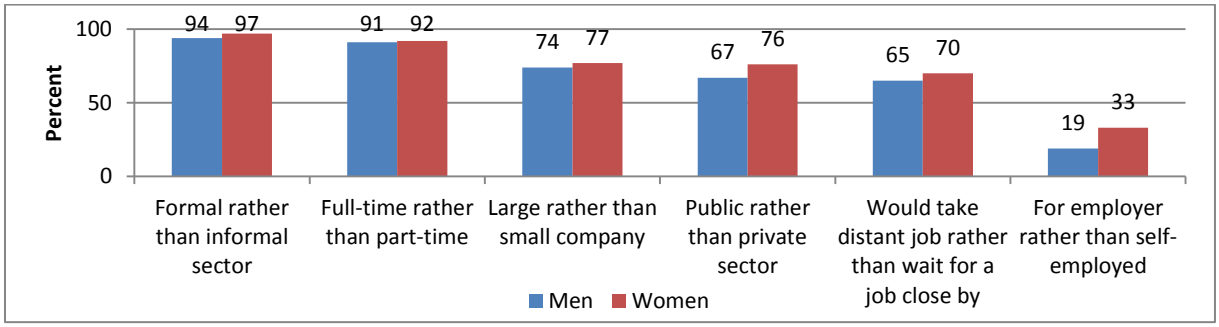


Source: Authors' calculations, based on UNDP/World Bank/EC regional Roma survey (2011).
Notes: Data are not nationally representative, but reflect rates in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1).

People's expectations and labor market decisions are also likely to be shaped by their aspirations and views on what makes a job desirable. Figure 3-5 shows focus group participants' job preferences: Almost three quarters of participants preferred a public to a private job; more than 90 percent preferred a full time job and employment in the formal sector to their alternatives. This job preference reflects both a concern for job security and actual higher wages in the public sector, even after controlling for differences in workers' education levels in the public and private sectors (World Bank, 2013). This holds particularly for women, as public sector jobs pay women at levels that are on par with their male colleagues, which is often not the case in the private sector. Indeed, women often want to work, but only desire jobs in the public sector.

Figure 3-5: Both men and women overwhelmingly prefer public sector jobs and full time work

Distribution of job preferences by respondents (percent of total responses), 2013



Source: World Bank: Qualitative interviews (2013).
Notes: For each category, this figure reflects the share of respondents that chose the displayed option as opposed to the alternative (e.g. formal instead of informal work) when asked: "What type of employment would you prefer?" Respondents include both employed and jobless individuals.

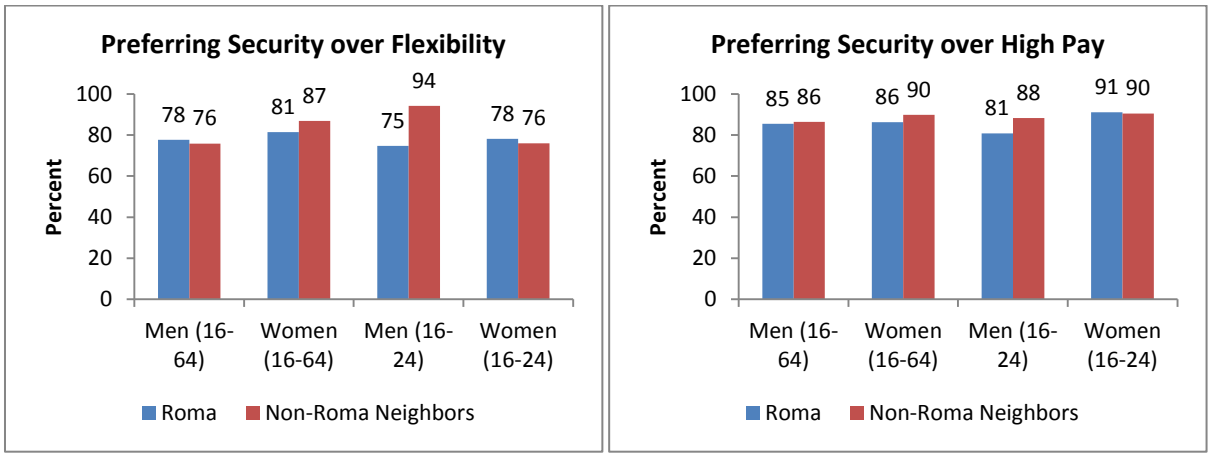
Focus groups indicate that applying for desirable public sector jobs in particular is viewed as an unfair and discouraging process. Focus group discussions also confirm that private sector jobs are seen as undesirable by many. Among both genders, focus group participants have highlighted a perceived unfairness in the application process for public jobs, as well as a relatively high cost involved in applying for such jobs. Reasons for this include the

perception that public sector job vacancies are often fake and already filled prior to the publication of job advertisements. Such views are more prevalent in smaller towns, where people know each other well. Hence, interested candidates are often discouraged from applying in the first place. The costs of public sector applications is also a deterring factor, as applications require spending on notarization of documents, photocopies, and so on (World Bank, 2008). Private sector jobs, by contrast, are generally considered to be undesirable, mainly due to employers' reported disrespect of existing labor regulations or harassment, especially among women.[22]

These job preferences and aspirations are very consistent across ethnic groups. Figure 3-6 illustrates that by far most Roma, both male and female, would prefer a secure, low-paid job over an insecure, higher paid job. Similarly, most would prefer a secure job over a flexible job. These preferences are very similar to those displayed by non-Roma neighbors.

Figure 3-6: Across ethnic groups most prefer secure, low-paid jobs over insecure, higher paid jobs

Job Preferences among Roma and Non-Roma Neighbors (percent of respondents), 2011



Source: Authors' calculations, based on UNDP/World Bank/EC regional Roma survey (2011).
Notes: Data are not nationally representative, but reflect rates in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1).

Moreover, women aged 35 or older, as well as newlywed women and young mothers are particularly likely to face rejection when looking for jobs, resulting in very low expectations among these groups in particular. Women aged 35 and over report that they find it difficult to find work due to the strong preference of employers for younger workers. Young, newly married women, or women with small children, are also often discouraged as private employers regularly express unwillingness to hire them. Such women often decide to leave the labor market until their children grow older (World Bank, 2008).

[22] World Bank: Qualitative interviews (2013).

Finally, and related to low expectations of gainful employment in Macedonia, many men express a strong desire to move abroad. Those who do express a desire to migrate have generally completed higher-than-average levels of education. A recent paper on migration in Macedonia estimates the annual number of emigrants to be approximately 10,000 individuals, which amounts to roughly 0.5 percent of the overall Macedonian population (Bornarova and Janeska, 2012). In a community in Skopje, young men claim that: *"Because the state won't help us… That's why we must migrate"*[23]. Their ethnic Albanian urban and rural peers tend to agree: *"Migration is a good way to have a normal life and secure one's family and oneself, so that's why young men see migration as a solution and best option"*. Similarly, young Roma men explain: *"Most of the young Roma people want to go abroad; they think there is a better future."* Some, though not all, young women also consider migration to be a crucial factor for getting ahead. For instance, a young urban woman stated: *"I would rather emigrate than try to succeed here, because I believe that the highly educated people have a better chance at succeeding abroad than here. Even the professors at my college keep telling us to move abroad. If someone offered me to leave, I wouldn't think twice, and I wouldn't waste time on packing either."* Ethnic Albanian rural women seem to share the same view: *"From what I see, those who live abroad have a better life…"*. Yet, for women, migration is still less common than for men.

In short, low expectations and possibly higher reservation wages associated with job preferences are likely to be one explanatory factor behind low labor force participation in Macedonia, especially among women and ethnic minorities.

3.1.2 Labor Taxation and the Benefit System

3.1.2.1 Taxes

Despite labor taxation reforms in the past decade, the Macedonian tax and benefit system still has elements that could be a barrier to employment. There are potentially important work disincentives associated with moving out of social assistance or the unemployment registry and into (formal) employment when taxes on labor and forgone benefits are taken into account. This is clearly illustrated by the response of a woman receiving social assistance, when asked why she did not work: *"I can earn 3000 dinars a month working in a manufacturing factory; from all social assistance programs, I receive 2300 dinars. For 700 dinars a month, I will not leave my family and children."*[24] Such disincentives are often particularly severe for the members of society for whom employment could have important social spillovers, such as low-wage and second- earners.

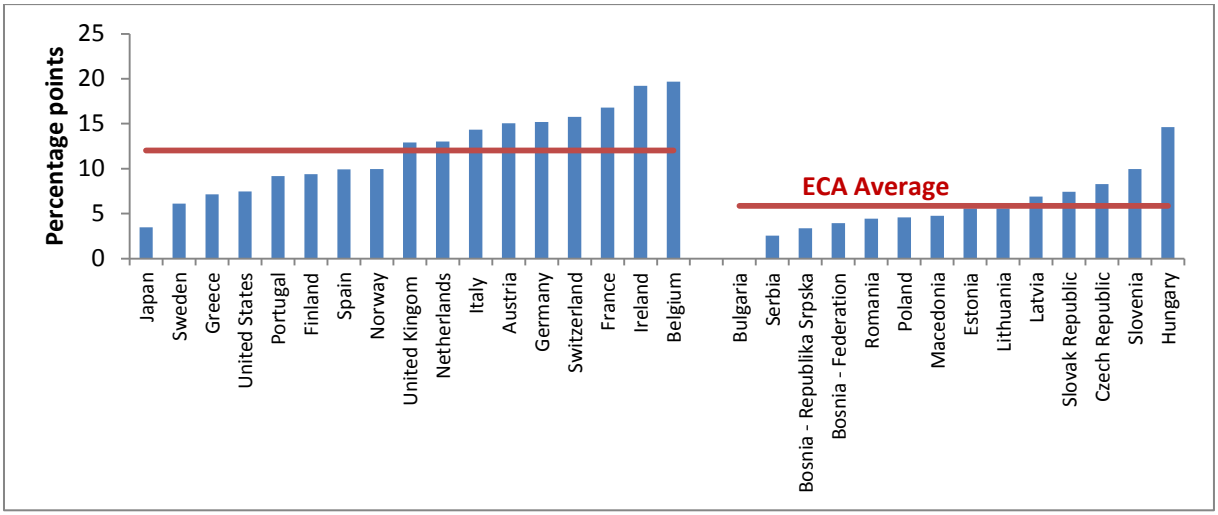
Macedonian labor tax rates are not exceptionally high compared to other countries in the region, but they are markedly less progressive than in other European countries. The tax wedge increases with wages, but less than in Western Europe. Average effective tax rates in 2010 stood at 73 percent of gross labor income for people earning half of the average wage, decreasing to 54 percent of gross labor income at the average wage (Figure 3-7). This is partly the result of disproportionately high social contribution rates for low-wage earners, through the so-called reference wage[25]. Low progressivity in labor taxes results in disincentives for low-wage earners to work (formally), as well as making them relatively more expensive to hire.

[23] World Bank: Qualitative interviews (2013).
[24] Arias et al., 2014.
[25] The reference wage is a wage floor for reporting social contributions. In Macedonia, it is set at 50 percent of the average wage.

Those who are most likely to be low-wage or part-time workers are most affected: as shown earlier in this report, these are often women, youth and ethnic minorities.

Figure 3-7: Labor taxation is less progressive in Macedonia than in most other European countries

Gap in tax wedge between average and low wage earners (percentage points)



Source: Arias, et.al (2014), adapted from Koettl 2012 based on OECD Tax and Benefit Models.

3.1.2.2 Social Assistance

Macedonia has a number of non-contributory social assistance programs, covering a total of 6.9 percent of all Macedonian households.[26] These include means-tested benefits, such as a last resort program called Social Financial Assistance (SFA), Permanent Financial Assistance (PFA), and targeted non-contributory disability benefits. They also include a means-tested child allowance, a one-off monetary payment for newborn children, and a parental allowance. Lastly, Macedonia has personal, family, and disability allowances for war veterans, civilians handicapped during war, and participants in the war.

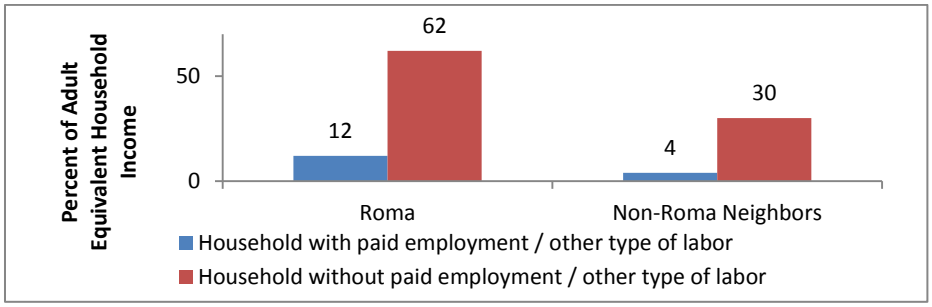
Social assistance benefits are not very generous compared to other countries in the region. Hence, based simply on generosity, any disincentives to work would be unlikely. A jobless woman from a village near Tetovo explains: *"The help that [the] state gives is very small considering the needs that a family has. But without this assistance the family is in a much worse situation, so it is welcomed"*.[27] Among the poorest quintile, social assistance benefits account for an average of 24 percent of total household post-transfer consumption. This is relatively low in comparison to many other countries in the region. In fact, many beneficiaries of social assistance are "working poor": employed individuals who, in spite of their jobs, fall below the poverty line.[28] Employment agency officials recognize this situation, and agree that social assistance alone is not enough to survive. Many argue that households would benefit from a situation in which they could find formal employment, without their benefits being cancelled immediately.[29]

[26] World Bank (2014). This number rises to 32 percent among the poorest quintile (ECA Social Protection Expenditure and Evaluation database, World Bank, 2006).
[27] World Bank: Qualitative interviews (2013).
[28] World Bank, 2014.
[29] World Bank: Qualitative interviews (2013).

Reflecting high poverty rates and joblessness, many Roma depend on social assistance, although they often lack access to this safety net. Data from the regional Roma survey suggest that households with labor income receive hardly any social benefits: on average, only 12 percent of their total adult equivalent income is made up of social benefits in the case of Roma, whereas this is 62 percent for Roma households that do not earn any income from employment or other types of labor (Figure 38). For non-Roma neighbor households, this pattern holds as well, although the share of income made up of social benefits is smaller than for Roma in both groups. These findings point, on the one hand, to widespread poverty among the Roma: on average, adult equivalent income among Roma households is 49 Euros per month, whereas this is 118 Euros for non-Roma neighbors. On the other hand, they also underscore the low employment rates found among the Roma population. At the same time, when keeping background characteristics constant, achieving at least some education seems to reduce the likelihood of depending on social benefits; this effect is actually much higher among Roma than among the non-Roma (Annex 1, Model set 3).

Figure 3-8: Reflecting high levels of poverty and low employment, the Roma often depend on social benefits

Social Benefits as Share of Adult Equivalent Income (percent), 2011



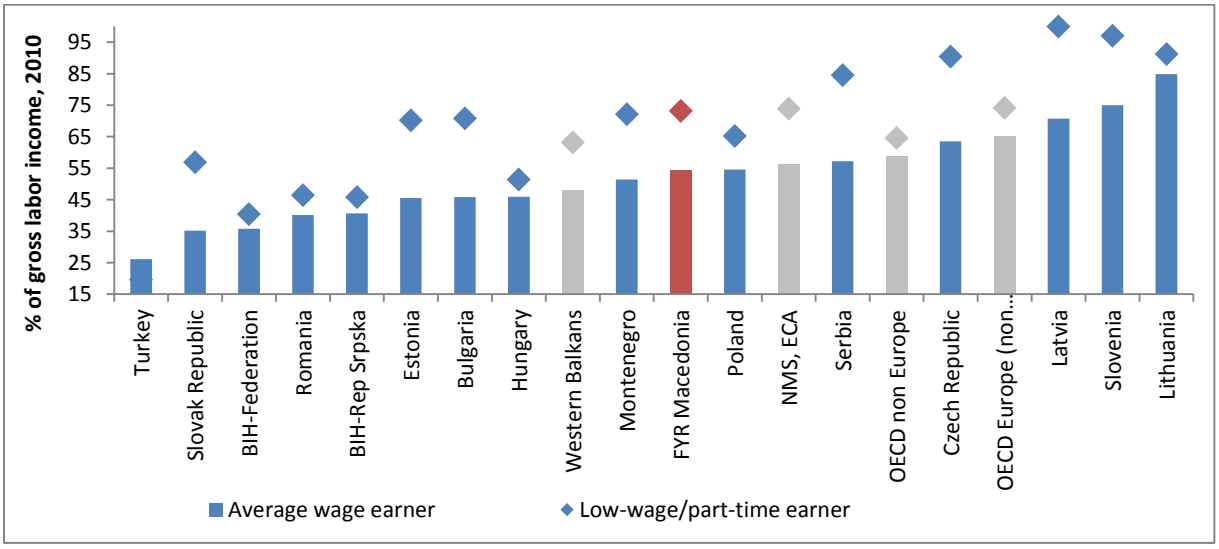
Source: Authors' calculations, based on UNDP/World Bank/EC regional Roma survey (2011).
Notes: Data are not nationally representative, but reflect rates in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1). 'Social assistance' also includes child allowance and unemployment benefits.

This said, incentives to work (formally) could be strengthened. Thirty one percent of all individuals receiving social assistance could be categorized as able to work, but remain out of the labor force. Among individuals in households receiving these benefits, 54 percent are of working age, not disabled, and not engaged in full-time study or training. Within this group, however, approximately 57 percent does not participate in the labor force. This amounts to almost one third (31 percent) of all individuals receiving social assistance. A comprehensive latent class analysis exercise has shown that a sizable group among these inactive social assistance beneficiaries is made up of women: about 27 percent are poor, inactive women, often living in households with young children. Childcare responsibilities are one of the most prominent barriers to labor force participation for this group. Incorporating complementary

child care services in activation programs could, therefore, be helpful in increasing incentives to work.

Figure 3-9: Macedonia has relatively low progressivity in labor taxes

Average effective tax rate (AETR): income tax plus lost benefits as a percentage of gross labor income, 2010



Source: Arias et al. (2014), based on OECD and World Bank calculations.
Notes: Calculations are based on one-earner couples with two children. They measure the share of gross income of the accepted formal job—including in-work benefits—that is taxed away through personal income tax, social security contributions, and lost benefits (social assistance, family, and housing benefits).

In particular, the design features of Macedonia's Last Resort Social Assistance program—the SFA— can be improved, especially in areas that are likely to have a disproportionate effect on women and ethnic minorities. On the one hand, beneficiaries of SFA receive special support in terms of job search (for example, personal action plans and monitoring job search). Benefits also decrease over time, and entry into the pool of recipients is relatively restrictive and based on a comprehensive evaluation of household welfare. These features are likely to encourage, and make it easier to, search for a job. On the other hand, there is no maximum duration to receiving the benefit, and sanctions for non-compliance are not strictly enforced. In addition, SFA beneficiaries are entitled to other special provisions, such as a reimbursement for energy bills, which increase the net value of monthly benefits received, and hence, make termination of the benefits a financially unattractive option. Finally, although a number of employment training- and incentive schemes are provided, in addition to job-search coaching, the financial incentives to start working when initially receiving SFA are sub-optimal: when accepting a low-wage job, there is only a limited possibility to top up the wage earnings with the cash transfer[30]. These income disregards could be expanded or converted into a negative income tax, in order to increase the expected net gains from a formal job. Since women and ethnic minorities are disproportionately likely to go to these low-wage jobs, it is likely that these design features of the SFA are particularly restrictive to labor force participation among these groups.[31]

In terms of unemployment insurance and benefits, design features could be improved but their low prevalence makes it unlikely that they have a large effect on aggregated

[30] This "income disregard" was introduced in 2013.
[31] World Bank (2014).

unemployment. Being registered as unemployed is only possible when certain conditions are met: the individual may not be holding a job, must be able and willing to work and "actively searching for a job", and must be ready to accept work offered by the Employment Agency (World Bank, 2014). However, the definition of active job searching is rather flexible: an individual who regularly renews his or her registration with the employment agency is considered to be an active job searcher[32], even if the same individual does not engage in any direct job-search activities. The Government has recently implemented reforms to separate active and passive job seekers to try to get a clearer picture of the actual registered unemployed.

Despite these design issues, only a fraction – less than 10 percent - of those registered as unemployed actually receive the unemployment benefit[33]: many others are ineligible for the benefit, as conditions for receipt include a record of at least 9 months of continuous work in the past, or 12 months with breaks in the last 18 months (by default excluding new labor market entrants). Moreover, the benefit has a maximum duration of 18 months, which is in stark contrast with the long-term joblessness confronting many Macedonians. For example, among both Roma and their non-Roma neighbors, more than 90 percent of all working age, inactive women have been jobless for at least 2.5 years, whereas among men, this is only slightly below 90 percent.[34]

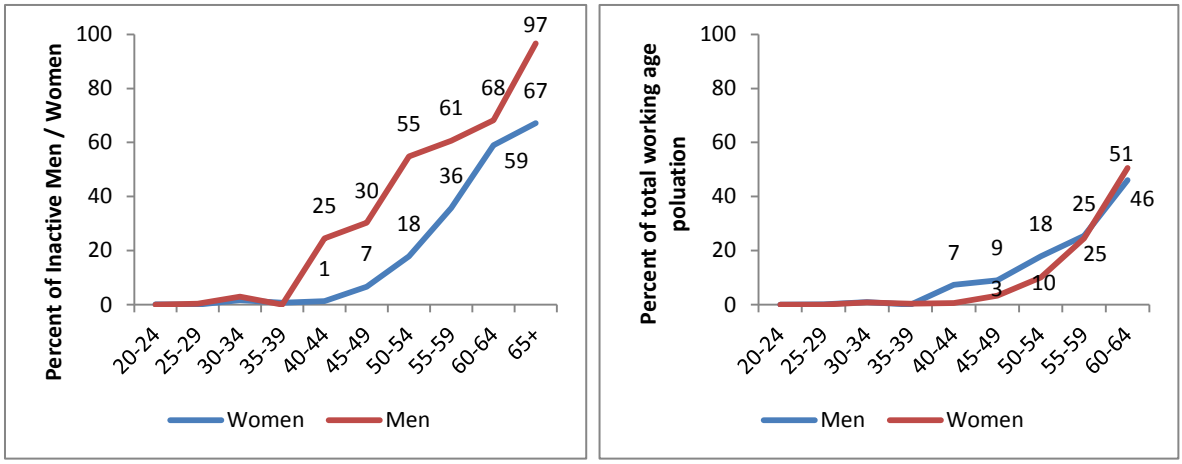
3.1.2.3 Pensions

Pensions, while providing supporting income, could also reduce labor market participation, among working age individuals who retire (early). This holds for women in particular. Pensions are widespread in Macedonia: they are received by 42 percent of all Macedonian households. Even among households with at least one member of working age (15-64), 36 percent receive pensions.[35] While the official retirement age stands at 62 for women and 64 for men, a substantial share of inactive men and women below these ages report that they are not looking for jobs because of retirement (Figure 3-10). This share is particularly high among women. This partly reflects financially attractive early retirement schemes, and relatively lax eligibility rules not linked to employment conditions for those below retirement age. Moreover, retirement at the official retirement age is compulsory for those employed in the private sector, further driving up inactivity rates among older workers.

[32] Re-registration is required every 30 days for those receiving the unemployment benefit, and every 60 days for the remainder of registered individuals (World Bank, 2014).
[33] Free health insurance was linked to formal 'unemployment' status until 2011, which potentially inflates the number of registrants to this day.
[34] UNDP/World Bank/EC regional Roma survey (2011).
[35] LiTS (2010).

Figure 3-10: A substantial share of the working age population is inactive due to retirement or pensions

Share of (inactive) men and women not looking for jobs due to retirement / pensions (percent), 2011



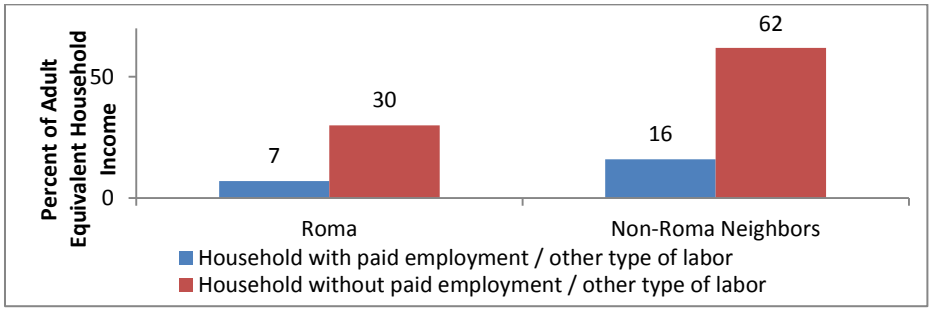
Source: Authors' calculations, based on LFS (2011).

Notes: Data are based on self-reported reasons for inactivity: this figure reports the share of respondents that indicated 'retirement' to be their main reason not to (look for) work.

Households with pensioners also have significantly lower participation rates among the remaining household members than households without pensioners. A woman living in a household with at least one pensioner is much less likely (almost 6 percentage points) to participate in the labor force than a woman living in a household without pensioners. Among men, a slightly weaker correlation exists. Among both Roma men and Roma women, these correlations are stronger for both genders (Annex 2, Model set 3). It should be noted, however, that for the Roma in particular, these effects may be less relevant at the aggregate level than for the rest of the population. The Roma receive, on average, a much smaller share of their income from pensions compared to non-Roma neighbors, especially in households with no income from work: among these households, only 7 percent of total adult equivalent income comes from pensions (Figure 3-11). More in-depth work would be needed to better understand what the mechanisms are through which pensions may impact labor force participation.

Figure 3-11: Pensions make up only a limited proportion of household income among Roma

Pensions as Share of Adult Equivalent Income (percent), 2011



Source: Authors' calculations, based on UNDP/World Bank/EC regional Roma survey (2011).

Notes: Data are not nationally representative, but reflect rates in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1). 'Social assistance' also includes child allowance and unemployment benefits.

3.1.3 Labor Market Regulations

Several gender equality and anti-discrimination laws, as well as related governmental action plans, have recently been implemented in Macedonia. As such, the basic legislative framework underpinning gender-equality and non-discrimination based on ethnicity are currently in place.[36] However, in more subtle ways, certain laws and other labor market regulations may still actively contribute to unequal labor market outcomes.

In 2005, the Labor Relations Act was implemented, providing a legislative framework for various forms of employment contracts. Reforms focused on four key issues. First, more flexibility was introduced in the types of labor contracts permitted and clarified the language of provisions governing part-time and fixed-term contracts. Second, more flexibility was built into overtime provisions. Third, they simplified redundancy procedures to make compliance easier and less costly. Fourth, they made changes to the collective bargaining framework, including reforms that secured the law's compliance with International Labor Organization standards (Kuddo, 2013: 11). In 2012, reforms were also enacted to make seasonal contracts more effective. Table 3-1 provides an overview of key labor regulation indicators.

Table 3-1: Labor Regulations are at par with neighboring countries; firing regulations are a possible exception

	FYR Macedonia	Montenegro	Serbia
Fixed-term contracts prohibited for permanent tasks?	No	No	Yes
Maximum length of fixed-term contracts, including renewals (months)	60	24	12
Ratio of minimum wage to value added per worker	0.30	0.34	0.29
Ratio of minimum wage for a 19-year old worker or an apprentice to minimum wage of prime age worker	0.50	1.00	0.80
Premium for night work (% of hourly pay)	35	40	26
Premium for work on weekly rest day (% of hourly pay)	50	0	26
Third-party notification if 1 worker is dismissed?	No	No	No
Third-party notification if 9 workers are dismissed?	Yes	No	No
Third-party approval if 9 workers are dismissed?	No	No	No
Retraining or reassignment obligation before redundancy?	No	Yes	Yes
Priority rules for redundancies?	No	Yes	No
Priority rules for reemployment?	No	No	Yes
Notice period for redundancy dismissal (salary weeks)	4.3	4.3	0
Severance pay for redundancy dismissal (for a worker with 1 year of tenure, in salary weeks)	4.3	1.3	1.4
Severance pay for redundancy dismissal (for a worker with 5 years of tenure, in salary weeks)	8.7	6.5	7.2
Severance pay for redundancy dismissal (for a worker with 10 years of tenure, in salary weeks)	13.0	13.0	14.4

Source: Kuddo (2013), based on World Bank Doing Businesss Employing Workers indicators.

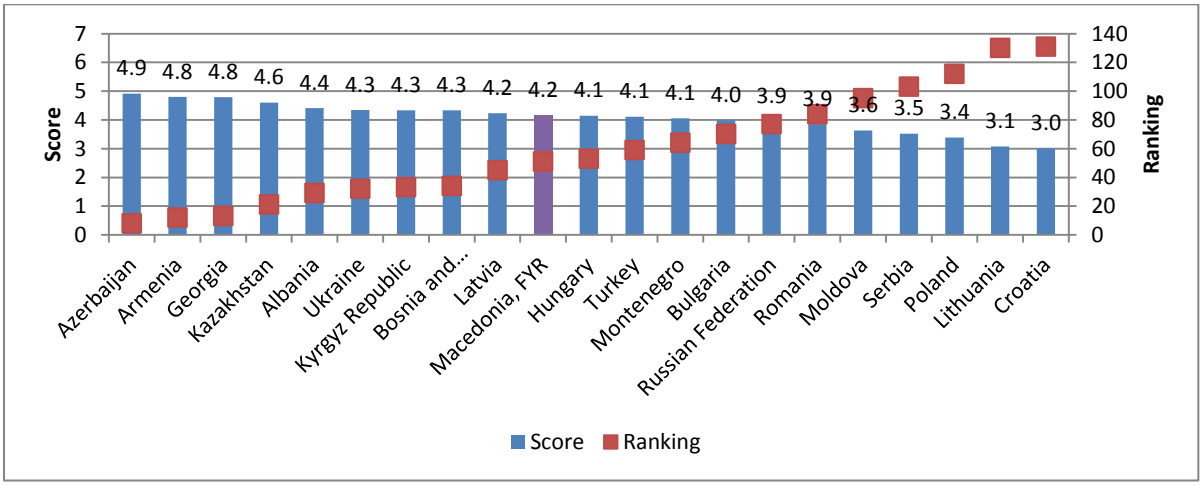
[36] Law on Equal Opportunities of Women and Men. Official Gazette of RM, no.6/12 and Law on Prevention and Protection against Discrimination. Official Gazette of RM, no. 50 from 13.04.2010.

However, in spite of these recent reforms, key sources of rigidity remain linked to a firm's limited ability to hire and fire staff, and treatment of female employees. Severance pay is high by international standards, affecting a firm's ability to fire and hence hire new employees. Further regulations linked to duration of staff probationary periods and layoffs can especially hamper the dynamism of small firms (Kuddo, 2013). Women in particular are affected; labor laws intended to protect women, for example through the provision of relatively long maternity leave, limited working hours, and lower retirement ages, can affect a firm's decision to hire female employees (World Bank, 2013).

Still, overall hiring and firing legislation in Macedonia has become relatively flexible over the years. As Figure 3-12 shows, overall legislation governing hiring and firing is considered relatively flexible by the private sector, when compared to other countries in the region. That said, private sector firms do complain about uncertainty in the interpretation of legislation, and unevenness in its application (Kuddo, 2013). Hence, strengthening labor inspectorates, tackling information asymmetries in terms of rules and regulations and improving transparency remain important parts of the reform agenda in Macedonia.

Figure 3-12: Macedonia's hiring and firing practices are relatively flexible overall

Index of Flexibility in Hiring and Firing Practices, 2013-2014: High scores indicate high flexibility



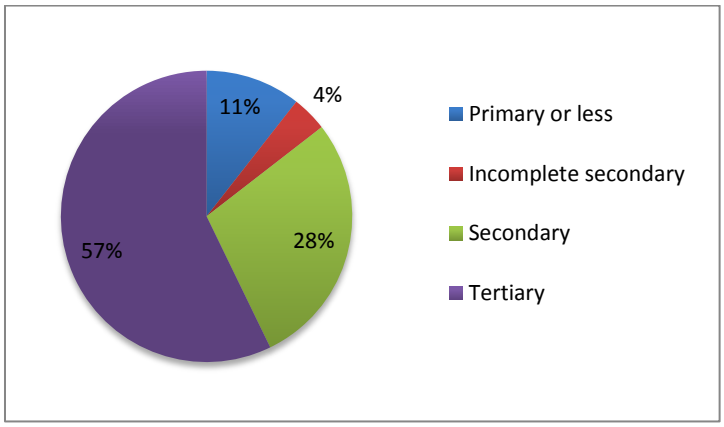
Source: Authors' calculations, based on World Economic Forum Competitiveness Index.
Notes: Ranking includes all economies measured in the world. The country with the highest score in the world receives ranking no. 1.

3.2 Education and Skills

Levels of education remain a key determinant of labor market participation and earnings in Macedonia. Regression analysis shows that people with primary education are 22 percentage points more likely than those without completed primary education to participate in the labor market. Completion of secondary education has a similar correlation with labor force participation, and completion of tertiary education raises this figure to 29 percentage points (Annex 2, Model set 1). Indeed, a majority of newly created jobs benefit those with higher levels of education (Figure 3-13). Furthermore, and despite a tremendous expansion in tertiary education in recent years, returns to education, in the form of higher wages, have increased more for the tertiary educated as compared to less skilled workers, emphasizing the divergence between educated/higher earning and less educated/lower earning groups (Figure 3-14).

Figure 3-13: A majority of jobs created in 2007-2011 are for those with tertiary education

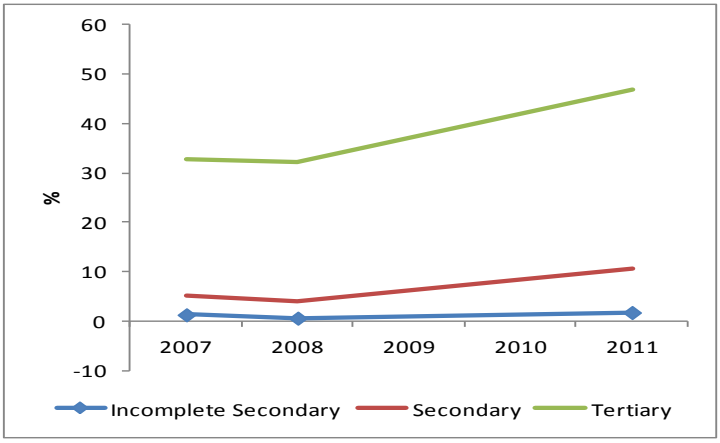
Net Jobs Created in 2007-2011, by Education Level



Source: World Bank (2013).

Figure 3-14: Returns to education have increased more for tertiary educated than other groups

Returns to education (percent increase compared to having no education or only completed primary education), 30-40 years age cohort: 2007-2011



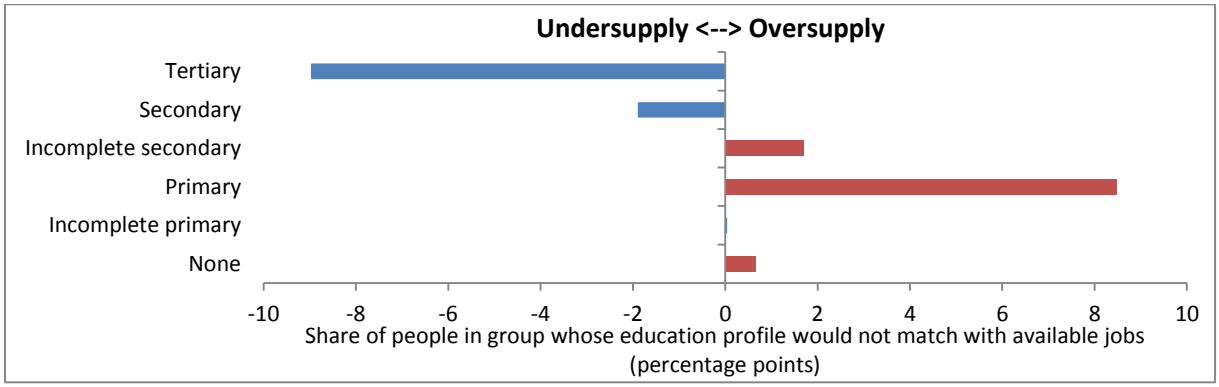
Source: Estimates based on LFS (2007-2011).

Notes: Returns to education are expressed relative to wages of workers with no education or primary education.

For those who are jobless and do not have the appropriate levels of education, getting a job would not be easy even if the economy were creating jobs. Analysis shows that the education profile of the unemployed does not match the profile of jobs that the Macedonian economy has created in recent years (Figure 3-15). While those with tertiary and secondary education would find jobs, those with less education would not be able to find any jobs. Skills upgrading is, therefore, critical, as the country moves forward.

Figure 3-15: The education profile of the unemployed does not match the profile of jobs created

Simulation of skills of unemployed Macedonians compared to today's pattern of job creation

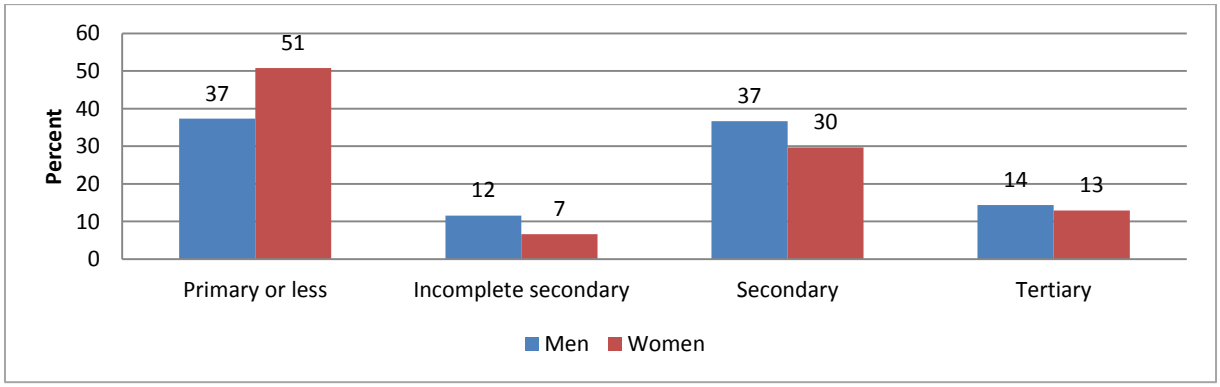


Source: World Bank (2013).

While education is critical for accessing economic opportunities, women and ethnic minorities have less formal education. A far lower share of women than men completes at least some education: most women, a total of 51 percent, does not go beyond primary education (Figure 3-16). In addition to the potential direct effect of low education levels on participation – i.e. a lack of job-relevant skills, there seems to be a second restriction: traditional norms preventing integration into the workforce generally have a more potent effect on women with low education levels. Indeed, among individuals with tertiary and secondary education, the gender gap in participation disappears or becomes much smaller (Gamberoni and Posadas, 2012). The good news here is that educational attainment has increased significantly among women in recent years: younger generations of women are increasingly well educated (Arias, et.al, 2014).

Figure 3-16: A lower share of women than men complete higher levels of education

Educational Attainment by Gender, 2011



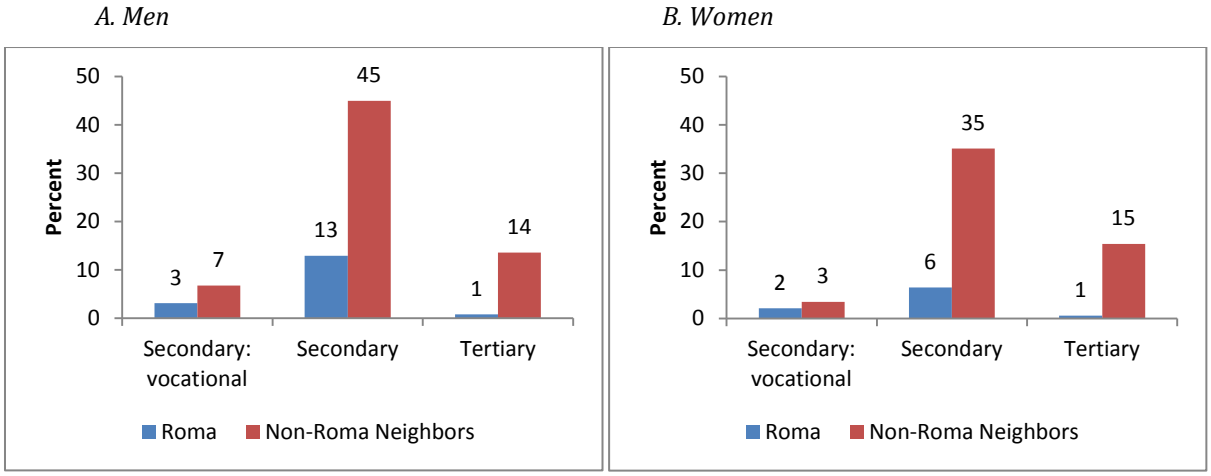
Source: Authors' calculations, based on LFS (2011).

In terms of ethnicity, the regional Roma survey shows that Roma attain much lower levels of education than their non-Roma neighbors (Figure 3-17). More than half of all Roma surveyed have not completed primary education, as compared to 28 percent of their non-Roma neighbors. Conversely, only 1 percent of Roma have completed tertiary education, compared to 14-15 percent of their non-Roma neighbors. Education levels are also lower among Roma women as compared to Roma men, with a much stronger gender gap than that found among both non-Roma neighbors and the general population. This affects both their expectations for

employment (see Section 3.1.1) and the jobs that they are qualified to attain. Among youth, many are not only jobless, but are also out of school (Box 3-1).

Figure 3-17: Roma attain lower levels of education than their Non-Roma neighbors

Highest Completed Education Level among working age individuals (15-64), by Gender and Ethnicity (percent), 2011



Source: Authors' calculations, based on UNDP/World Bank/EC regional Roma survey (2011).
Notes: Data are not nationally representative, but reflect rates in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1).

Box 3-1: NEET among Roma and Non-Roma Neighbors in Macedonia

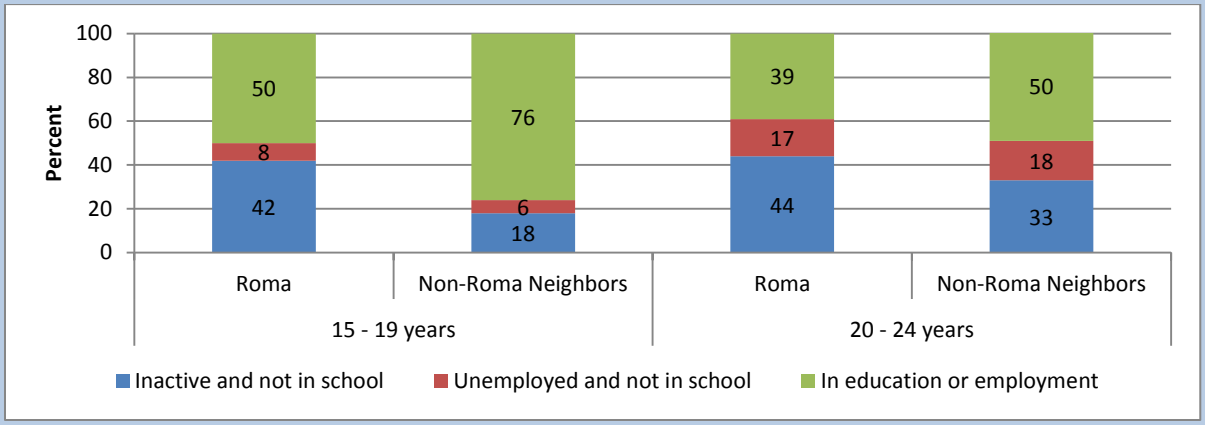
In other countries in the region, like in Macedonia, Roma households still face extremely high levels of insecurity in relation to very basic needs. In Bulgaria, the Czech Republic, Hungary, Romania and Slovakia, more than two third of all Roma describe their economic situation as 'unsafe'. Similarly, many Roma families depend on social assistance. This lack of economic safety reflects low levels of disposable income and employment. Across countries in the region, the Roma have a per capita disposable income that is less than half of the average disposable income in these countries – and as little as 26% in Romania. As for employment rates, it stands out that in all countries surveyed, the Roma are lagging behind as compared to the general population. This gap is particularly large among women. Roma women in Macedonia have an extremely low employment rate, with only Slovakia showing an even slightly lower outcome for this group.

Among young Roma aged 15-19, only 50 percent is either in school or has a job. The remaining half is either unemployed (8 percent) or inactive (42 percent). Among non-Roma neighbors of the same age, as much as 76 percent are in school or working (Figure 3-18). 15 to 19 year old Roma in Macedonia show the second highest level of inactivity, excluding those enrolled in school, among Eastern European countries surveyed. Non school-related inactivity rates are also significantly higher among the Roma in the 15 to 19 year age bracket compared to non-Roma neighbors within Macedonia, for which this figure is only 18 percent. Among 20 to 24 year olds, this gap narrows to 11 percentage points (44 percent of Roma and 33 percent of non-Roma report non school-related inactivity). Moreover, it should be

noted that differences between Roma and non-Roma that are not in school show up mainly in terms of labor force participation, whereas levels of unemployment are very similar.

Figure 3-18: Many Roma youth are out of education and employment

Distribution of youth by activity among Roma and non-Roma youth (percent), 2011

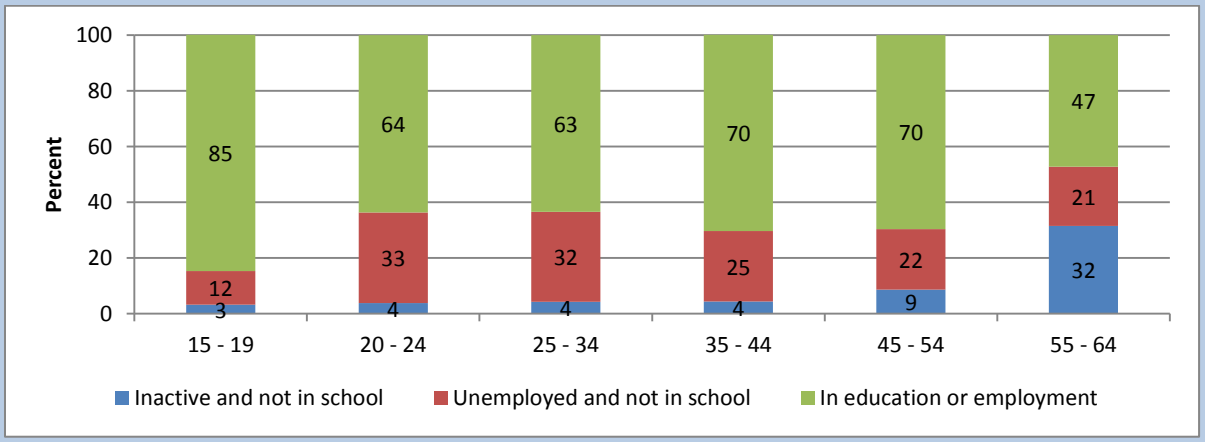


Source: Authors' calculations, based on UNDP/World Bank/EC regional Roma survey (2011).
Notes: Data are not nationally representative, but reflect rates in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1).

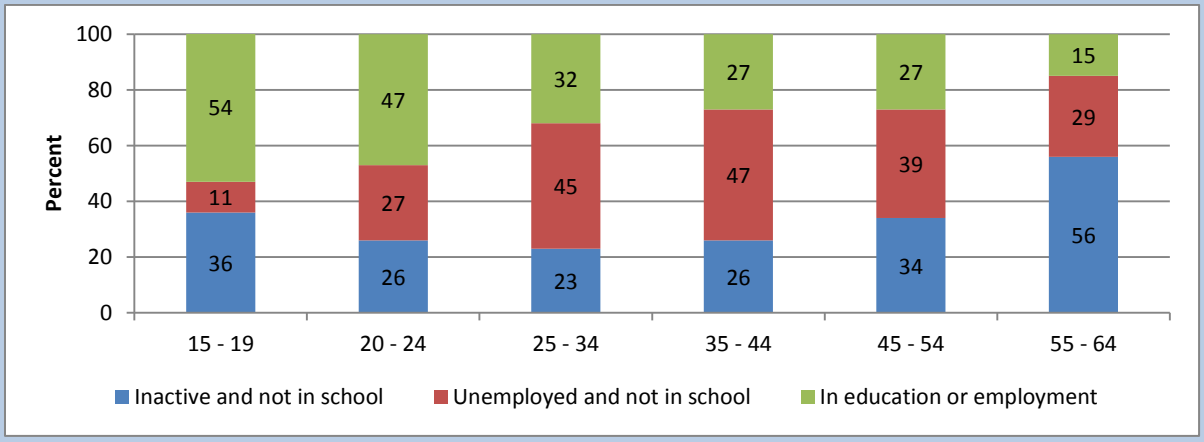
Mainly for women, this pattern among younger age groups sets in motion a cycle of inactivity throughout the rest of their lives: among both male and female Roma, the share of individuals that is Not in Employment, Education or Training (NEET), increases with age. However, for men, this increase is largely driven by unemployment, whereas for women, the main driver is inactivity (Figure 3-19 & 3-20). The percentage of individuals who are NEET increases with advancing age for both men and women. Among this group of NEET individuals, between the ages 15-54, the proportion of men who are unemployed increases much more than among women. For NEET women, inactivity increases from 50 percent to 65 percent over this period, whereas unemployment remains low. Above the age of 54, the proportion of men and women who are in education and / or employment, or are unemployed, decreases drastically, while the proportion of men and women who are inactive increases. Compared to the general population, Roma women are much more likely to be inactive and not in school across all age groups. For men, non-school related inactivity and unemployment are both higher among Roma as compared to the general population.

Figure 3-19: The proportion of NEET men increases with age due to unemployment

Panel A: NEET and Activity status among Men, General Population (percent), 2011



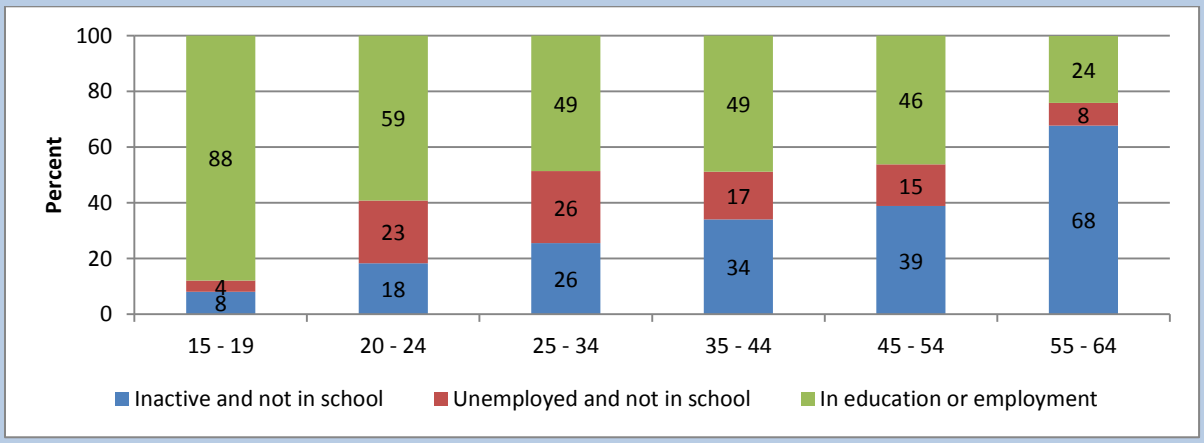
Panel B: NEET and Activity status among Men, Roma Population (percent), 2011



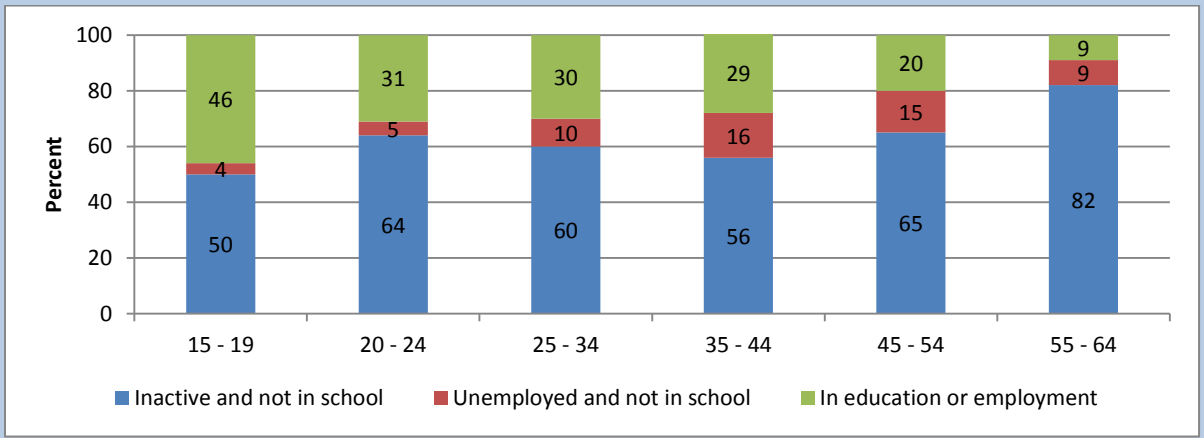
Source: Authors' calculations, based on LFS (2011) (general population) and UNDP/World Bank/EC regional Roma survey (2011) (Roma population).
Notes: Data on Roma are not nationally representative, but reflect rates in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1).

Figure 3-20: The proportion of NEET women increases with age due to inactivity

Panel A: NEET and Activity status among women, General Population (percent), 2011



Panel B: NEET and Activity status among women, Roma Population (percent), 2011

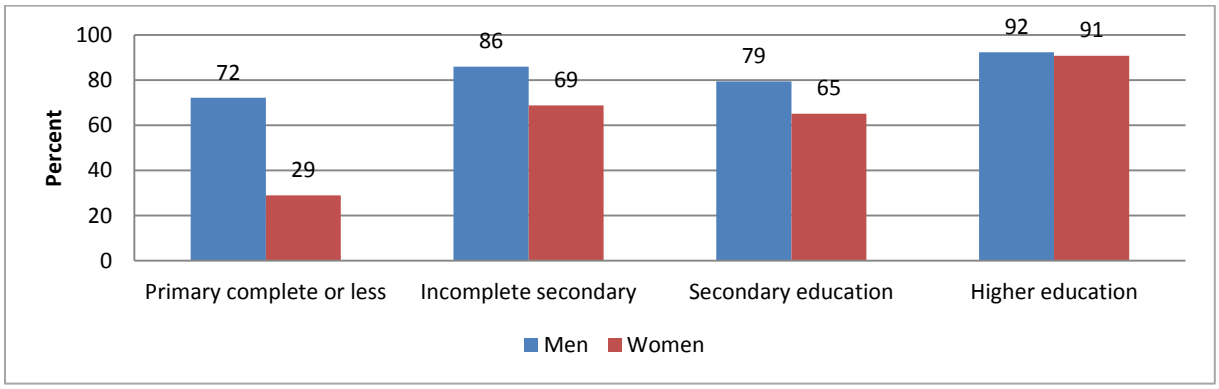


Source: Authors' calculations, based on LFS (2011) (general population) and UNDP/World Bank/EC regional Roma survey (2011) (Roma population).
Notes: Data on Roma are not nationally representative, but reflect rates in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1).

Overall, ethnic Macedonians achieve higher levels of education than any other ethnic group. For ethnic Albanians and the ethnic Turkish, the share of the population with at least secondary education is approximately 20 percent: for ethnic Roma, it is just over half that figure, at 12 percent. As shown in Figure 3-21, the gender gap in labor force participation is much larger among those who did not go beyond primary education**.** Women with only primary education or less are 2.5 times less likely than men with the same level of education to participate in the labor force, whereas this number shrinks to approximately 1.2 times for those with incomplete or complete secondary education. An increase in the level of education appears to have a greater impact on female than on male labor force participation; among those with tertiary education, the gender gap is almost non-existent. Indeed, when controlling for background characteristics, education has a much stronger correlation with women's likelihood to participate in the labor force than with men's. For both completion of secondary and tertiary education, this effect is almost four times as big for women as it is for men (Figure 3-22). This could potentially be related to the fact that women without any education have poorer employment prospects and are also more likely to accept and adhere to traditional gender norms.

Figure 3-21: The gender gap in labor force participation falls with education

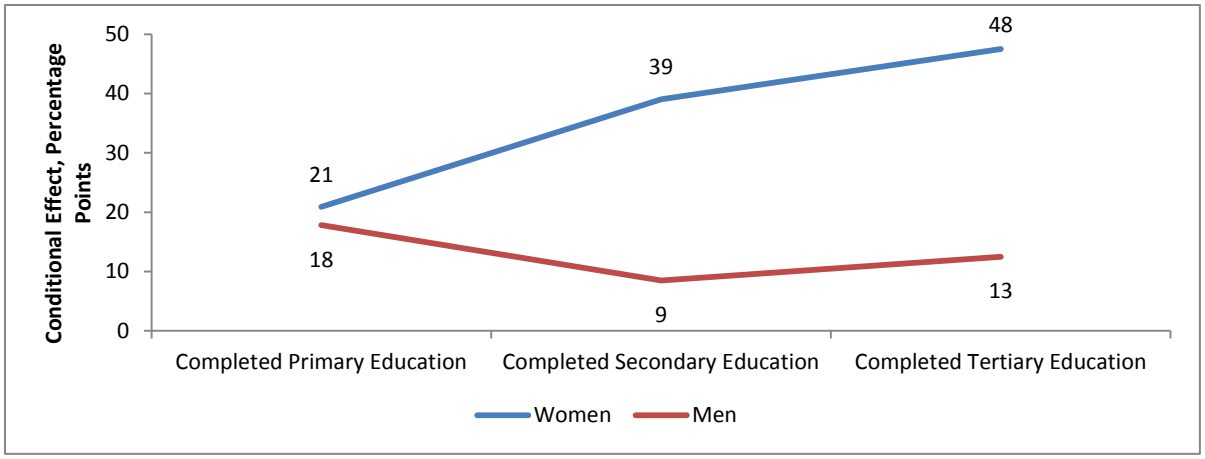
Labor Force Participation by Gender and Level of Education (percent), 2011



Source: Gamberoni and Posadas (2012), based on LFS (2011).

Figure 3-22: Education has a stronger correlation with female labor force participation than male participation, taking background characteristics into account

Conditional Effects on Likelihood of Participating in the Labor Force: Education (percentage points), 2011



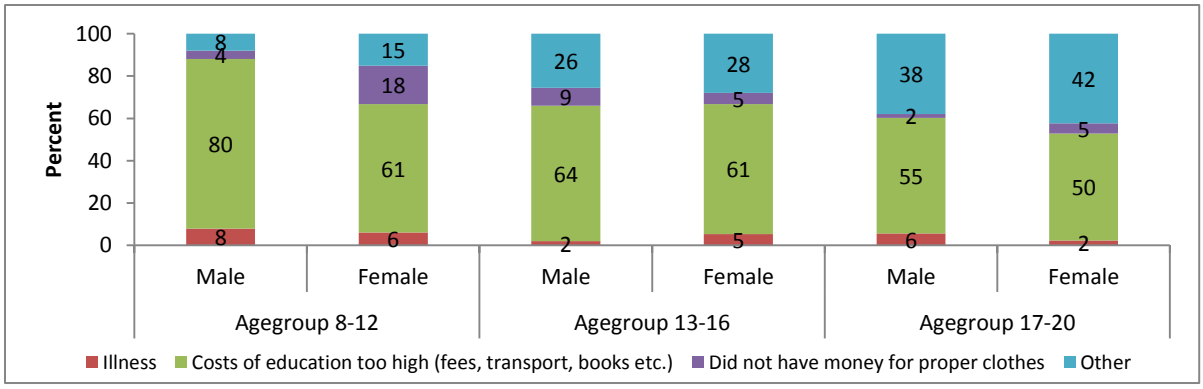
Source: Authors' calculations, based on LFS (2011).
Notes: Results presented here refer to the estimates obtained in Annex 1, Model set 1 (Full model).

Roma with low levels of education are particularly unlikely to participate in the labor force. This holds primarily for Roma women and to a lesser extent for Roma men. Among working age Roma women who have not completed primary education, 70 percent does not participate in the labor force. This drops to 29 percent among Roma women with tertiary education. At the same time, unemployment rates among those with tertiary education are extremely high, for both Roma men and Roma women.

Among Roma, the most prominent reason to leave school before completion of secondary education appears to be linked to school costs (Figure 3-23). The families of 80 percent of Roma boys and 61 percent of Roma girls who stopped attending school between the ages 8 - 12 reported this reason; these figures drop to 55 percent of boys and 50 percent of girls among those aged 17 - 20. More Roma boys report this reason across all age groups compared to Roma girls. On the other hand, Roma girls are more likely to quote other reasons: 6 percent of Roma girls between the ages 8-12 indicate that they stopped going to school due to safety concerns, while no Roma boys in the same age group see this as a reason to stop school. Among older girls, a substantial proportion stopped attending school due to marriage – 7 percent of 13-16 year olds and 11 percent of 17-20 year olds. Another commonly reported reason for leaving school among 13-16 and 17-20 year olds of both genders is that they are judged to be sufficiently educated (17 percent of 13-16 year old Roma boys and 22 percent of 17-20 year old Roma boys; 9 percent and 15 percent among Roma girls, for the respective age groups). Addressing these constraints will be key in improving the chances of younger generations of Roma.

Figure 3-23: The largest share of Roma in all age groups terminate education due to high fees

Reasons for terminating education among Roma, 2011



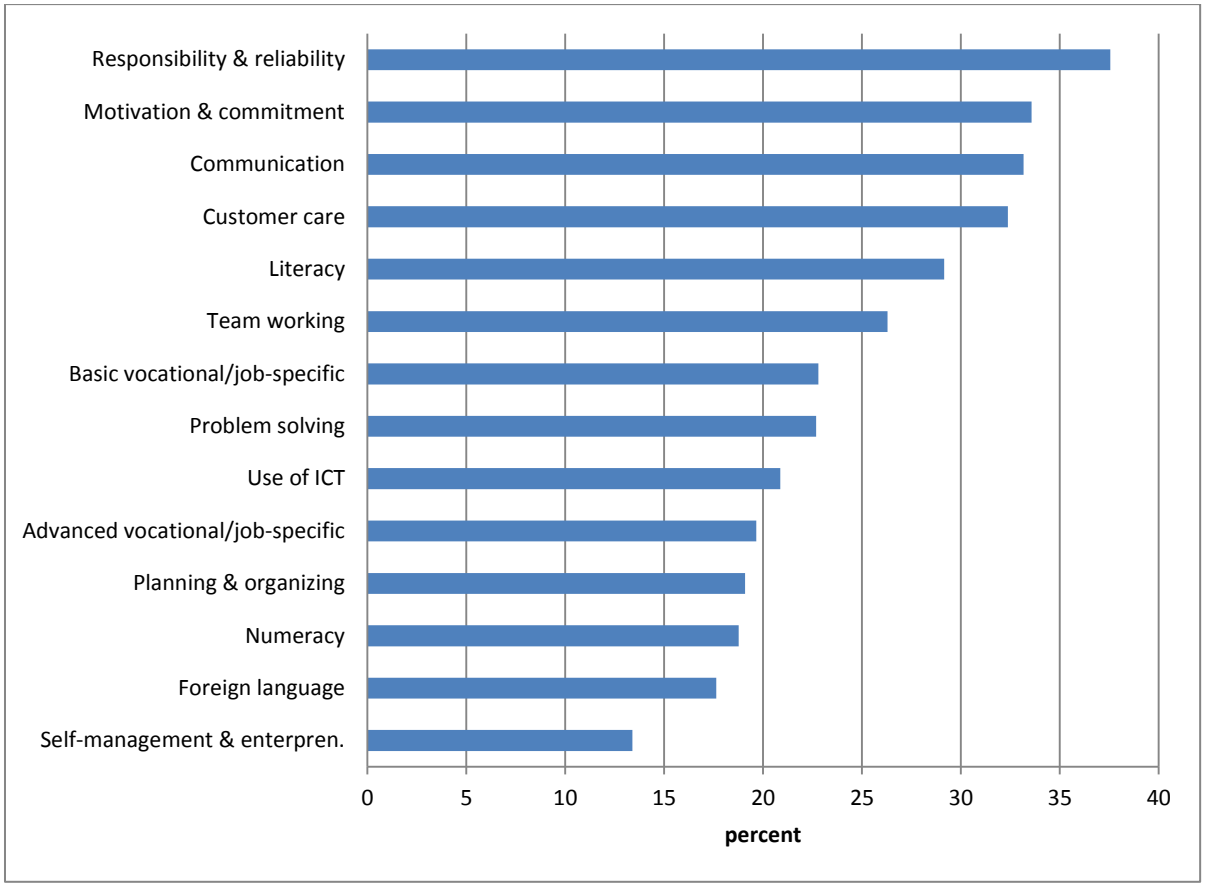
Source: Authors' calculations, based on UNDP/World Bank/EC regional Roma survey (2011).
Notes: Data are not nationally representative, but reflect rates in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1).

Being a well-educated worker in the 21st century requires more than formal educational attainment, and this could be particularly important for traditionally disadvantaged groups. In Macedonia, like in many other countries, employers not only look for technical skills, but also for soft skills. Employers in Macedonia report that, across ethnic groups, both men and women lack certain essential skills despite increasing levels of formal education (Figure 3-24). Over 35 percent of firms reported that young people lacked responsibility and reliability, while over 30 percent indicate that young workers needed to show more motivation and commitment (World Bank, 2013). A lack of such fundamental skills can be expected to seriously impair career prospects, especially as the economy modernizes and skills demanded by employers become less routine and more complex, requiring workers that are adaptable and with transferable skills. These skills of the 'new economy' are complex cognitive skills but also socio-emotional ones such as grit, discipline, ability to work in teams, manage relationships with clients, showing up on time, etc. Critically, the international evidence suggests that the gains from improving these socio-emotional sills can be particularly important for disadvantaged groups, such as youth out of school and work or those with lower levels of education.[37]

[37] Vezza, Cruces and Amendolaggine, 2013.

Figure 3-24: Employers report that most young workers lack many of the soft skills needed on the job

Skills lacking among young workers (Percent of firms reporting), 2009

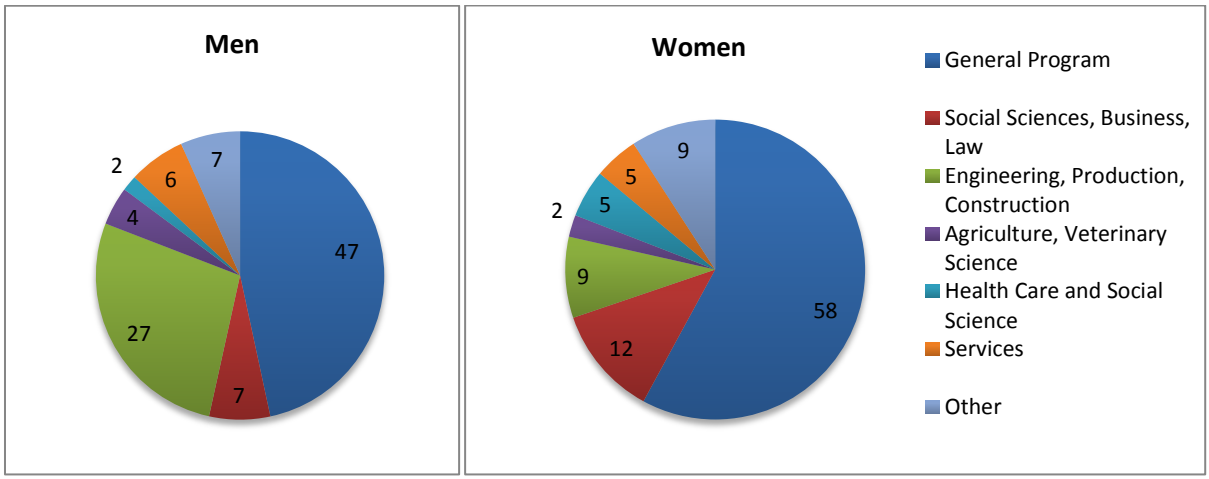


Source*:* World Bank, 2010: "Demand for Skills in Macedonia" in World Bank (2013).

Specific types of skills acquired by women may be less in demand among employers, which may result in their departure from the labor force over time. Women tend to achieve qualifications in different subjects than men, generally with a less quantitative focus. In total, 70 percent of women choose to study either a general program, or a program in a social science related field such as business or law. Contrastingly, only 54 percent of men choose to study these subjects. By contrast, three times more men than women choose to study engineering, production, or construction (Figure 3-25). Both men and women who complete general programs have lower employment and participation rates than those who complete other fields of study: the employment rate among women who complete general programs is 19 percent, and the participation rate is 27 percent among this group. This is much lower than for other fields – employment rates for women who study other fields range between 42 and 53 percent, while participation rates range between 62 and 76 percent (Figure 3-26).

Figure 3-25: A relatively large proportion of students—especially women— study general programs

Distribution of Fields of Education by Gender (percent), 2011

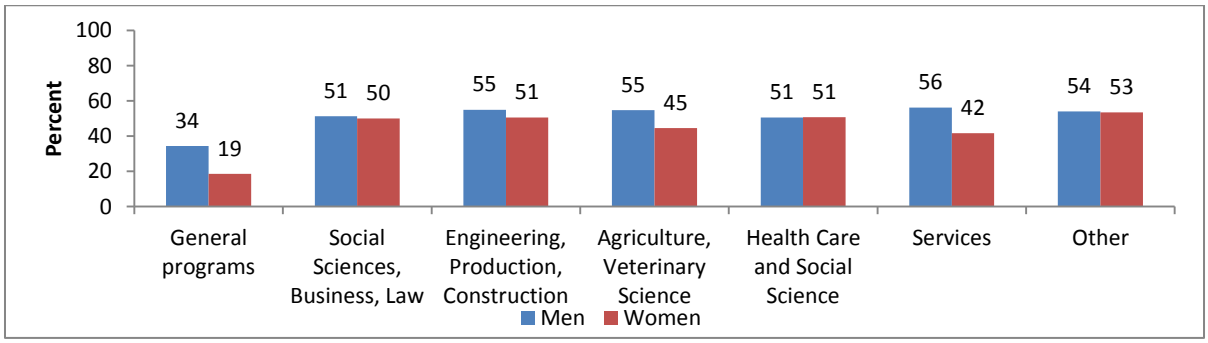


Source: Authors' calculations, based on LFS (2011).

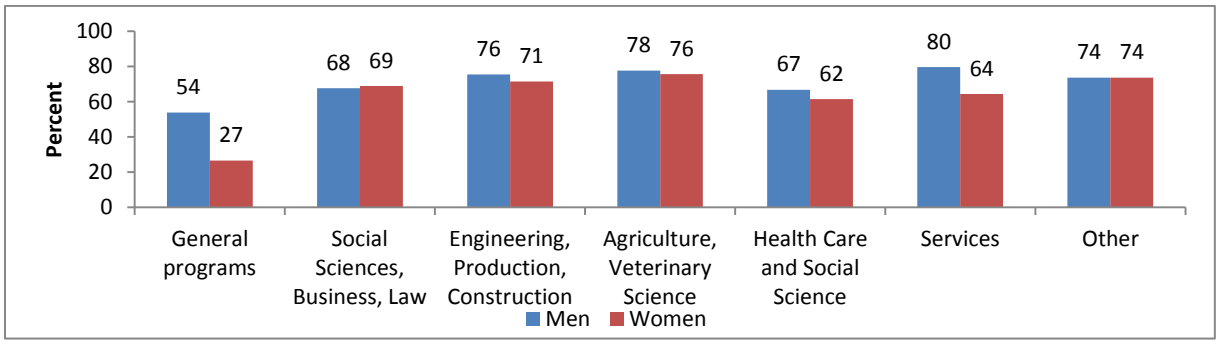
Notes: 'Other' includes the following subjects: Unknown, None, Education, Humanities, Arts, Languages (including Foreign Languages), Computers, Informatics, Life Sciences, Physical Sciences, Mathematics, Statistics. All of these categories were studied by 3 percent or less of both genders. Study programs include all levels of study, i.e. not just tertiary education.

Figure 3-26: Employment rates are lowest among men and women who complete general programs

Panel A: Employment rate by field of study, by gender (percent), 2011



Panel B: Participation rate by field of study, by gender (percent), 2011



Source: Authors' calculations, based on LFS (2011).

Notes: 'Other' includes the following subjects: Unknown, None, Education, Humanities, Arts, Languages (including Foreign Languages), Computers, Informatics, Life Sciences, Physical Sciences, Mathematics, Statistics. All of these categories were studied by 3 percent or less of both genders.

Once out of the formal education system, few men and women undertake further training. One of the key reasons for not furthering one's education in the past month, for both men and women, is a lack of interest. In addition, significantly more women than men cite 'family obligations' as a primary reason not to undertake educational activities in the past month (18.5 percent among women and 1.8 percent among men) (Gamberoni and Posadas, 2012). Men and women also appear to have differing attitudes to additional training. In focus groups, ethnic Macedonian, Roma, and ethnic Serbian women with various levels of educational attainment seemed very open to the idea of additional training, provided that their prospects of future employment would improve – some noted that they would need to have a guarantee of employment or free training, as they are unable to take on the financial burden. Younger, more educated ethnic Albanian women were also enthusiastic towards training, but others were hesitant, citing that they believed they may not get approval from their husbands, that they would not have time for training in addition to their domestic responsibilities, or that they do not actually want to work.[38]

Moreover, women of all ethnicities generally have low awareness of the training opportunities available to them. Most women in focus group discussions were aware of the importance of languages and computer literacy, but few were involved in training in these areas. Women from ethnic minorities in the sample were often unaware of the possibilities for professional enhancements available to them, frequently at no cost. Several participants noted that they did not even attempt to enroll in training organized for free by the Macedonian government, as they are certain that only members of the political parties in power would be invited to participate. However, should they be available, low skilled participants (especially ethnic Albanian and ethnic Turkish women) felt most comfortable visiting training sessions organized by local female NGO's rather than other organizations (World Bank, 2008).

Lack of work experience and the skills that are gained on the job are additional obstacles to employment, which are more likely to affect women and ethnic minorities. In 2011, for example, 33 percent of men, and 34 percent of women, participating in the labor force, were unemployed. However, among women, a much larger share of the unemployed has never had a job than among men (71 percent versus 49 percent). Hence, it is likely that a lack of relevant skills obtained through work experience is much more constraining for women than for men.

Recent policy-measures have improved access to tertiary education, but important steps remain to be taken to complete the transition to an 'access for all' model, especially at lower levels of education. Secondary education has recently been made compulsory (Angel-Urdinola, 2008), and local university branches have been established in the smaller towns and cities, broadening access to those in the countryside. As pointed out by an urban ethnic Albanian woman, *"Nowadays, going to university is a trend and everyone enrolls"*. Young Roma women noted that Roma students have a possibility to obtain free books and there are scholarships for Roma students to enroll in university. Young Roma men confirmed that: *"In recent years there is bigger number of people who finish high school and university"*. Focus group participants across communities also noted that increasingly, women actually achieve higher levels of education than their male counterparts[39]. While these trends have an important effect on the gender-norms that used to keep women out of the labor force, there is also a darker side to this

[38] World Bank, 2008.
[39] World Bank: Qualitative interviews (2013).

development: although educational institutions are available, many youth still do not manage to find work after they graduate. This is fueled by both a mismatch in skills, as described earlier, and a generally low demand for workers. Macedonian rural women participating in a focus group discussion underlined this: *"They [men] work at [a] car wash after finishing college..."*, and a young man from Skopje added: *"It's under-appreciating… no one would like to work a hard-labor job if he finished economics…"*. In spite of the fact that gender norms seem to be changing slowly, the norm is still that when a girl graduates, she should either look for work, or get married, especially in rural and poor urban communities – and most girls continue to join the second group[40]. We now turn our attention to these other barriers to work.

3.3 Barriers to Work

Various barriers to participation exist among women and ethnic minorities including social norms, a lack of flexible work arrangements, limited child and elderly care options, and limited access to professional networks and productive inputs(see Box 3-2), . For example, the gender gap in labor market participation seems to be driven, in part, by women who, within their households, are held responsible for taking care of the family. The following sections will discuss these various barriers, and the interactions between them.

Box 3-2: Examples of Barriers to Work among Women and Ethnic Minorities

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Women of different ethnic minority backgrounds report different reasons for not looking for work. Focus group discussions indicate that being married and advanced age are discouraging factors specific to ethnic Macedonian and ethnic Serbian women, while ethnic Albanian women are hampered by the attitudes of their families and husbands toward female employment (Gamberoni and Posadas, 2012; Angel-Urdinola, 2008). Discussions also revealed that women's preconceived notions discouraged them from participating in the labor market: for example, ethnic Turkish and ethnic Albanian women with lower education stated that they did not believe they would get jobs with their qualifications. Meanwhile, educated women of these ethnicities in the focus groups indicated that they were only willing to work under certain conditions, namely in public sector jobs with full benefits (Gamberoni and Posadas, 2012). Some ethnic Albanian, ethnic Turkish, and Roma women find that issues related to their ethnicity limit their employment possibilities (Angel-Urdinola 2008). Key issues included traditional norms limiting women to household work and preventing education, and discrimination.

3.3.1 Social Norms and Discrimination

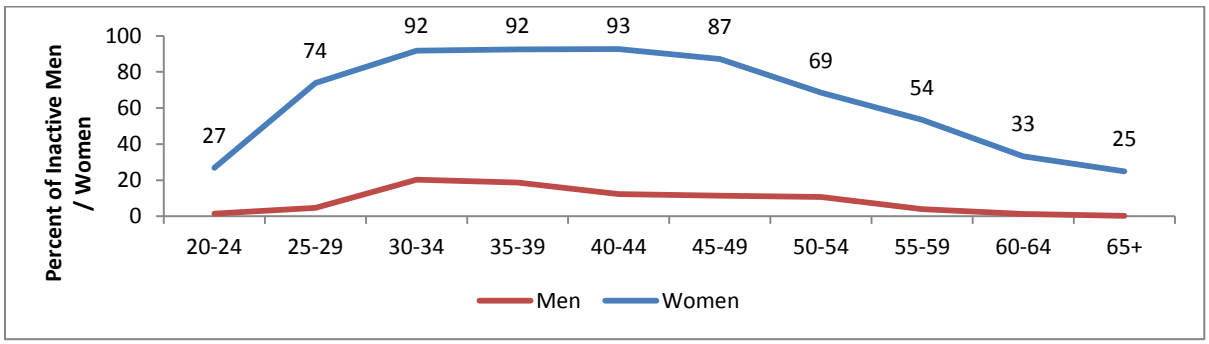
Many women leave the labor force, or do not join it in the first place, due to household- and family care responsibilities. *"It is more difficult for a woman, especially with a young child. She is responsible for the childrearing, the domestic activities. Men don't face these barriers"*[41] (48 year old mother of two from a community in Skopje)[42]. Close to half of all inactive women report

[40] World Bank: Qualitative interviews (2013).
[41] World Bank: Qualitative interviews (2013).
[42] Roma women in particular often feel a strong pressure to marry young and bear children soon afterwards. Reports on whether or not women have a say in decisions on family formation are mixed. On average, sampled Roma individuals expect girls to marry by the age of 21, and have children by 22 years old, while their non-Roma neighbors expect, on average, girls to bear children two years later, at the age of

that they are inactive because of family reasons, compared to only a few percent of men. Among women aged 30 - 44, this share rises to 92 - 93 percent of all women outside the labor force (Figure 3-27), and inactive women citing this reason comprise just under half of the entire female population between the ages 25 - 49. By contrast, men often exit the labor force to study or – among older age cohorts – to retire. In addition, women often cite their marital status as a restrictive factor to working or looking for work (Gamberoni and Posadas, 2012).

Figure 3-27: Many women indicate family duties to be their main reason for leaving the workforce

Share of Inactive Men and Women Reporting "Care for Children / Elderly or Other Personal or Family Responsibilities" as a Reason not to Look for Work, percent, 2011

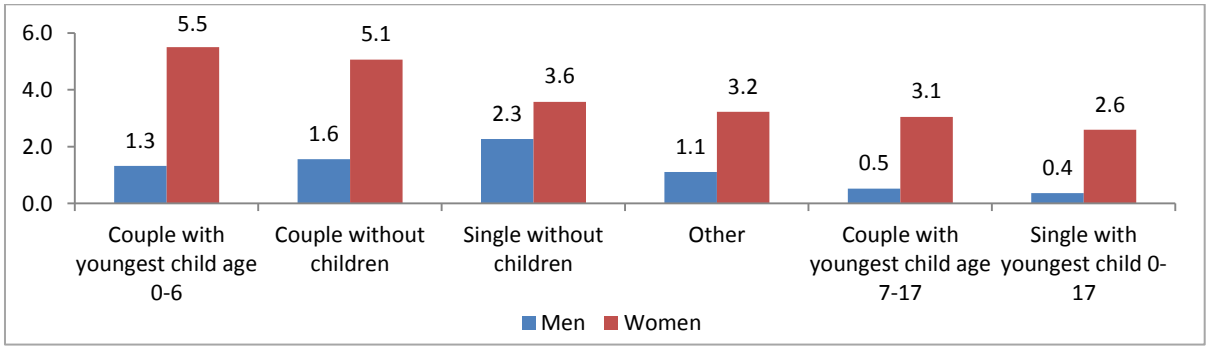


Source*:* Authors' calculations, based on LFS (2011).

These gender roles are buttressed on strong social norms, which also affect many employed women and women who are not (yet) married. Even among the employed, women spend more time on family obligations than men. The largest disparity exists between couples whose youngest child is 0-6 years: on average, Macedonian women in such circumstances spend five more hours per day on housework than men (Figure 3-28). Even among unmarried women, participation in the labor market may not be approved by the family: *"If she is married, her husband may not allow her to work, so that is the main reason why young girls here in [the village] will not be looking for a job. In some cases, the parents of the young woman may also not allow her to work"*[43] (young woman from a Roma community in Skopje).

Figure 3-28: Women spend significantly more time than men on domestic activities

Average Hours Spent per Day on Domestic Activities, 2009



Source: Gamberoni and Posadas (2012).

24 (UNDP/World Bank/EC regional Roma survey, 2011). Moreover, in Roma households, the average number of children is almost twice as high as in neighboring non-Roma households.

[43] World Bank: Qualitative interviews (2013).

Traditional gender roles are often more strongly entrenched among ethnic minorities in Macedonia. In focus group discussions, many men of Roma and Albanian ethnicity express strong approval of traditional gender relations Especially in ethnic Albanian communities, the family patriarch has a strong influence and is able to impact issues such as who will be educated, who will work, and which professions are 'suitable' for women. The practice of men or elderly family members deciding on female employment issues also remains in some Roma and ethnically Turkish families. In focus groups, ethnic Albanian and ethnic Serbian women indicate that they are most discouraged from work by traditional norms in their community, and the corresponding restrictive attitudes of their marital partners. At the same time, focus group discussions show that many ethnic Macedonian men do not see female employment as contradictory to women's domestic tasks, and believe that female employment should be supported for reasons of financial security (World Bank, 2008).

Women's own beliefs regarding their place in society may act as a barrier to participation, especially for some ethnic minorities. Some women in these communities do not even consider the possibility of working, due to their belief that their primary responsibility is to be a good housewife. Low skilled women from ethnic Albanian and Roma communities in particular report to feel less comfortable working outside their homes and communities, though they do not object to working per se, since they consider their domestic tasks to be work (World Bank, 2008).

In addition to social norms that govern attitudes towards female employment generally, these norms also affect what types of jobs are considered appropriate for women. For example, men are deemed fit for physically demanding jobs, whereas women are often seen as only qualified for lighter types of work, preferably in a closed environment. This distinction is much more pronounced among the poor[44]. Similarly, some men indicate that they believe women should only work for a few hours a day and not full time (Government of Macedonia, 2008). Often it is not well regarded for women to fulfill low-skilled occupations such as a waitress, cleaner, or bus driver. Women themselves may be willing to work in such roles, but the threat of community disapproval is a strong deterrent to employment. Matching these traditional gender roles, many also believe that women are less suitable for starting a business than men[45]. Tellingly, some men, especially among ethnic Albanian, ethnic Turkish, and Roma communities, report that they would allow their wives to work if they were working alongside their husbands, for example, in running a joint business, or if they were highly educated, as long as they did not have many contacts with men and were able to find appropriate transport (World Bank, 2008).

Although social norms can take time to change, they can change. In focus group discussions, across ethnic communities it becomes clear that traditional gender norms are more strongly supported by older generations, including older women. Similarly, gender roles also differ significantly by levels of education (World Bank, 2008).

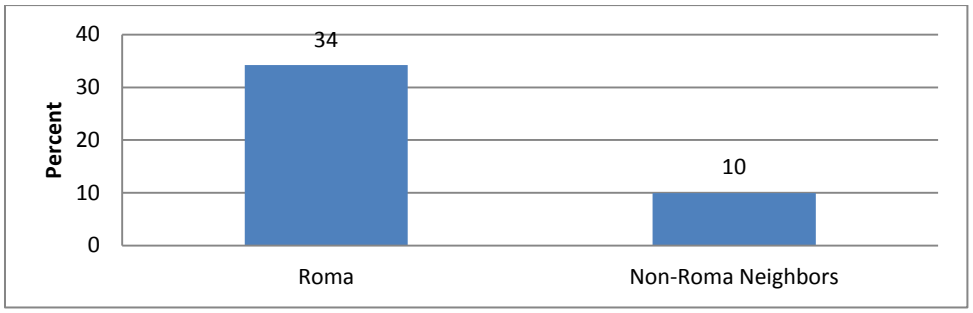
Beyond traditional social norms, discrimination remains an issue for women in general. Despite appropriate legislation against discrimination, survey results show discrimination towards women in the job market in Macedonia: in 2001, 43 percent of survey respondents agreed that men should have more right to a job than women when jobs are scarce.

[44] World Bank: Qualitative interviews (2013).
[45] World Bank: Qualitative interviews (2013).

Discrimination based on ethnicity also exists. One third of Roma report feeling discriminated against in the last 12 months due to their ethnicity, while only one in ten of their non-Roma neighbors report feeling the same (Figure 3-29). In addition, Roma men report higher levels of discrimination than Roma women (38 percent of men and 31 percent of women)[46]. When background characteristics are taken into account, statistical analysis shows that Roma are still 25 percentage points more likely to feel discriminated against compared to their non-Roma neighbors (Annex 2, Model set 5).

Figure 3-29: Reported incidence of discrimination is higher among Roma than among their Non-Roma neighbors

Reported incidence of discrimination in the last 12 months (percent), 2011



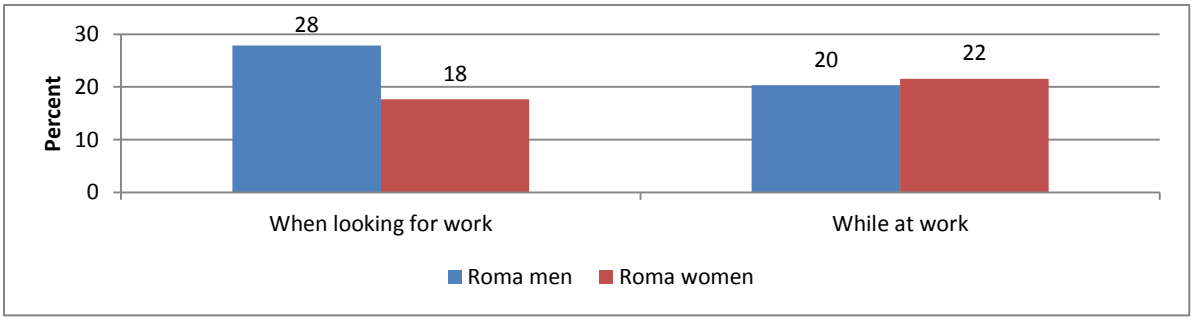
Source: Authors' calculations, based on UNDP/World Bank/EC regional Roma survey (2011).
Notes: Data are not nationally representative, but reflect rates in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1). Data are only available for one randomly selected adult (15+) individual per surveyed household.

Discrimination on the labor market remains an important issue for Roma. Just over a quarter of all Roma who looked for a job in the past 12 months reported experiencing discrimination. Of these, men were more likely to report discrimination than women – 28 percent of men reported experiencing discrimination, compared to 18 percent of women (Figure 3-30). Discrimination when searching for a job is much more prevalent in urban than rural areas, with 25 percent of respondents reporting discrimination in the last 12 months among urban Roma, as compared to 12 percent among rural Roma. Once at work, discrimination continues to be reported: 21 percent of Roma report experiencing discrimination at work in the last 12 months on the basis of ethnicity. Women are more affected than men, with 22 percent of working Roma women reporting ethnic discrimination in the last year, compared to 20 percent of men.

Figure 3-30: Roma men and women report discrimination on the labor market

Incidence of discrimination on the labor market in the last 12 months among Roma

[46] This gender difference may be explained by the fact that Roma women often remain in the home and in the community more than their male counterparts, and as such, may have less contact with other communities.



Source: Authors' calculations, based on UNDP/World Bank/EC regional Roma survey (2011).
Notes: Data are not nationally representative, but reflect rates in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1). Data are only available for one randomly selected adult (15+) individual per surveyed household.

Few incidents of discrimination are reported to the authorities, however. Only 5 percent of Roma who report discrimination in the last 12 months while searching for a job reported the incident to officials. This figure rises to 11 percent among Roma who experience discrimination at work. Such low levels of reporting may be due to the mistaken assumption among the Roma that they have no recourse in cases of discrimination. 40 percent of Roma surveyed believed that no laws exist in Macedonia forbidding discrimination. A majority (65 percent) of Roma also do not know of any organizations that can provide support in cases of discrimination.

3.3.2 Availability of Affordable Child and Elderly Care Options

Child and elderly care options are often limited. A large proportion of ethnic Albanian women, as well as a smaller number of women from other ethnic communities, notes that their care responsibilities do not allow them to work. These women are generally responsible for the care of small children or of ill or elderly family members, or both (World Bank, 2008). Preschool enrollment rates also remain low in Macedonia, standing at only 25 percent compared to an average enrollment of 75 percent in Europe and Central Asia[47]. Furthermore, qualitative data shows that even when children do attend preschool, women are still expected to stay at home, in case the children are unable to attend, for example due to illness[48]. Similarly, focus group discussions show that Macedonians are generally unsatisfied with the help provided for older community members: for example, one focus group participant remarked that *"social assistance for an older person cannot help you a lot, because that money is not enough for medicine [...] and you have other necessary things to buy or to provide for an older person"*[49].

This lack of affordable child and elderly care options can also a barrier to participation for women. This can be binding, especially where gender-norms are relatively flexible and would allow women to work if they found adequate solutions for child and elderly care (World Bank, 2013).

3.3.3 Flexible Work Arrangements

Flexible and part-time work arrangements are largely lacking in Macedonia, affecting women in particular. Part-time labor makes up 6 percent of employment in Macedonia, much lower than the EU-27 rate of 20 percent. The disparity in these figures is driven by a large

[47] World Bank: World Development Indicators.
[48] World Bank: Qualitative interviews (2013).
[49] World Bank: Qualitative interviews (2013).

difference in rates of part time employment among women: in 2011, 32 percent of employed women in EU-27 were employed part-time, as compared to only 7 percent of Macedonian women[50]. This low prevalence of part-time employment may arise from a combination of tax and benefit incentives, labor regulations and social attitudes towards work that favor full-time employment.

Encouraging flexible work arrangements in Macedonia would allow more women to enter the work force. Part-time or home-based work allows women to combine a job with taking care of their families or with studies. It can also help women transition into full time work should they decide to do so (Arias et al., 2014). At present, no laws exist in Macedonia to give employees with minor children the right to request part time or flexible work[51]. Such provisions would also help keep older workers active for longer (Arias et al., 2014).

3.3.4 Mobility and Access to Networks / Inputs

Internal labor mobility, i.e. the movement of workers to cities and regions where most job opportunities exist, is limited in Macedonia. Among the overall Macedonian population, about 40 percent of those aged 18-64 indicates a willingness to move to another city for work, but only slightly more than 10 percent did indeed move for work in the past two decades (Arias et al., 2014)[52]. This low internal mobility rate stands in contrast with the relatively high differences in labor market conditions across regions in Macedonia. For example, compared to an average unemployment rate of 31 percent for the country as a whole, the region with the highest unemployment rate, the Northeast, stood at 53 percent in 2012, whereas the lowest regional unemployment rate, recorded in the Southeast, was 14 percent[53]. With these gaps, one would expect more people to move from regions with high unemployment rates to regions with low unemployment rates.

Access to transportation in particular is seen as a constraint, both for internal mobility of workers and for commuting within the city or area of residence. This is clearly an issue among Roma[54]. Infrastructure is also particularly problematic for women living in larger cities like Skopje and Bitola, or in nearby villages. The lack of (affordable and safe) transportation is a constraint to commuting. In Bitola, women in focus groups explain that the lack of bus stations in the area means that they are more likely to remain at home as caregivers. Ethnic Albanian men note that one of the reasons why their wives do not work is the lack of adequate transportation – namely women-only buses, as social norms dictate that women should not ride in buses with men (World Bank, 2008).

As discussed in Arias et al. (2014), barriers to internal labor mobility—in addition to fear of losing personal connections— are usually associated with the poor functioning of housing and rental markets, mortgage and credit markets, the existence of administrative barriers or difficulties in accessing social benefits when moving. In Macedonia, the traditional geographic concentration of ethnic groups may also be a factor contributing to low

[50] Eurostat (2011).
[51] Gender Law Library.
[52] There is a significant literature analyzing patterns and reasons for international migration in Macedonia. See, for example, Bornarova and Janeska (2012). Here, we focus mostly on internal labor mobility, a much less studied area.
[53] SSO (2012).
[54] UNDP/World Bank/EC regional Roma survey (2011).

internal mobility. Although some of the barriers to internal mobility have been researched, more detailed analysis is needed to fully determine what restricts Macedonians in moving internally for work-related reasons.

Even if people move to the most dynamic areas, personal and political networks are seen as critical for getting a job. Macedonians of all ethnicities and both genders cite a lack of personal connections, nepotism, and a lack of affiliation with the political parties in power as a reason for inactivity (World Bank, 2008; Angel-Urdinola, 2008): *"Hard working men, capable, skilled, seeking work and who really need a job to raise their families cannot get a job only because of the political parties. The people in position first employ their family, then relatives, then friends, and at the very end if something is left it is for those people,"*[55] (Key Informant from a village near Kičevo). With this in mind, young people often become members of political parties, in the hope that this will lead to employment.

Strong connections are also considered pivotal to gain employment in private companies: employment prospects are considered poor unless one is a close friend or relative of the employer[56] (World Bank, 2008). Employment Agency officials confirm that companies primarily recruit their staff through *"informal channels and … contacts with relatives and friends"*[57], sidelining recruitment agencies as a potential source of hires. Ethnic minorities, such as the Roma and ethnic Albanians, particularly report suffering from a lack of connections (World Bank, 2008).

Beyond personal and professional networks, limited access to productive inputs – especially capital – can be a constraint to labor market participation, in particular among women, youth and ethnic minorities. Both men and women highlight a lack of capital as the main reason for business failure, though once in business, there does not appear to be a difference between genders in the ability to access credit (Gamberoni and Posadas, 2012). In addition, qualitative research highlights the risk of debt as an additional factor that discourages potential entrepreneurs[58].

4 Increasing Labor Force Participation: Policy Entry Points

This report has highlighted a number of features of labor force participation in Macedonia, emphasizing gender and ethnicity gaps. Furthermore, the report has identified a number of causes for these patterns, including policy-induced incentive structures, skills gaps, and group-specific barriers. Among the incentives analyzed, the lack of progressivity in the tax system and the impact of pensions stand out as particularly influential. Skills and educational constraints are also limiting, and are likely to become increasingly so as the Macedonian economy modernizes. Among the group-specific barriers, social norms and discrimination stand out. Importantly, many of the other barriers faced by (ethnic minority) women are somehow induced or reinforced by commonly accepted gender norms. This is the case for childcare and elderly care options, flexible work arrangements, and access to relevant inputs and networks.

[55] World Bank: Qualitative interviews (2013).
[56] World Bank: Qualitative interviews (2013).
[57] Key informant, World Bank: Qualitative interviews (2013).
[58] World Bank: Qualitative interviews (2013).

In this light, the current section identifies a number of key priorities for public policy to increase labor force participation among disadvantaged groups. These cover measures aimed at (i) improving work incentives for individuals and employers; and (ii) broadening access to training and jobs for women and ethnic minorities. Some of these policy recommendations can have important fiscal implications, and their desirability needs to be balanced against other priorities and fiscal sustainability goals. We highlight when a fiscal assessment is particularly important.

4.1 Improving Work Incentives for Individuals and Employers

Recommendation 1: Rationalize existing schemes aimed at subsidizing employment of vulnerable groups. Macedonia has multiple programs in place that subsidize employment among youth, those with low levels of education and those receiving social assistance. Yet, these programs are very fragmented and often show overlap. This increases costs and complexity, and makes it difficult to determine which programs or elements of programs really work. While employment subsidies can play a role in providing workers obstructed by weak social or professional ties or by social stigma with an entry point into the labor market, they can also have a displacement effect. Moreover, these programs can be expensive, making monitoring and evaluation of their success, and of any displacement effects, all the more crucial. A first step in establishing priorities and clear objectives for these programs could consist of a critical assessment of what exists, followed by the design of mechanisms to measure which programs are most cost-effective. Fiscal savings could then be redirected at other priority areas.

Recommendation 2: Increase the level of progressivity of labor taxation. There are two major benefits to introducing a more progressive tax system in Macedonia. First, this would incentivize second earners and part-time workers (who are usually low wage earners) to enter the labor force instead of remaining inactive. Second, this measure could reduce informal employment, if combined with a strengthening of the Public Revenue Office and the offering of useful business services conditional on formalization. A detailed fiscal assessment to determine appropriate rates and tax bases is necessary. Concretely, the government could consider relaxing the current reference wage system. To limit underreporting of wages and hours, the government could try a 'double reporting' system as in the Netherlands, letting both the employer and the employee report the number of hours worked and earnings independently from one another. Finally, the government can explore options for establishing either a negative income tax or an earned income tax credit that essentially reduce tax liabilities for people who work but have low earnings. The US and the UK have these tax credits, which have been shown to increase participation especially among women[59].

Recommendation 3: Raise awareness of the benefits of formalization, and reduce the costs associated to the informal-formal transition, especially for start-ups and other small businesses. Almost 55 percent of formal businesses in Macedonia currently identify their competition with informal businesses as a major constraint[60]. Almost 3 out of 4 formal businesses face competition from informal businesses. An initial reduction in tax rates over the past few years has been associated with more hiring in formal firms, and a reduction in wage

[59] These tax credit schemes are discussed in a number of papers: see Blundell and Brewer 2000; Blundell, Duncan, and Meghir 2002; Chetty and Saez 2009; Hotz and Scholz 2001; Meyer and Rosenbaum 2001; and Trampe 2007.
[60] World Bank Enterprise Surveys.

arrears (Kuddo, 2013). However, the costs of formalization could be decreased further. This could be accompanied by incentives for currently informal firms to transition, such as a one-time tax benefit upon formalization, combined with business services of use to the firms. On the side of workers, allowing families to combine social benefits with work at low wages, at least for some time, upon transitioning to formal work may be a powerful incentive. In particular, income disregards which are new in Macedonia remain small, and could be expanded. Mojsoska (forthcoming) examines the particular case of the Earned Income Tax Credit in Macedonia, including different possible structures and their fiscal and labor force participation implications.

Recommendation 4: Equalize the retirement age for men and women. With the current two-year gap in retirement age for men as compared to women, there are strong incentives for women to leave the labor force much earlier than men. Increasing the official retirement age would allow women to remain active for longer. In order to lower government expenses related to retirement, a proxy-means test based pension structure could be considered (Schwarz and Arias, 2014). Savings from this and extended working lives could be then redirected to other priorities.

Recommendation 5: Reduce the costs associated with hiring and firing. Reducing severance pay, in combination with a strengthening of the unemployment benefit system, could induce firms to hire more workers formally while still providing workers with appropriate protection. As discussed in Kuddo (2013), there are many different ways in which countries have gone about accomplishing these twin goals, including in the presence of large informal sectors. In addition, the government could consider rethinking the legal framework governing apprenticeships, in order to give youth an entry point into the world of work. As we have argued in this report, this could be particularly beneficial for youth from disadvantaged backgrounds. See Kuddo (2013) for a detailed discussion on labor regulation options for Macedonia.

Recommendation 6: Introduce more strict enforcement of discrimination laws and regulations on labor conditions, particularly in the private sector. Private sector violations of worker's rights are widely recognized among Macedonians[61], and cited in the relevant literature (e.g. Kuddo, 2013). Weak enforcement of discrimination laws and labor regulations in the private sector exerts significant downward pressure on workers' motivation to look for jobs outside the government. Regarding labor inspections in particular, adequate recruitment, staffing and resources – including training – are crucial. Moreover, the inspection-burden on businesses could be reduced by integrating various types of risk-based inspections, and compliance could be facilitated through a more elaborate focus on prevention and education (Kuddo, 2013). With respect to discrimination, an accessible channel to report offences, with adequate follow-up procedures that include disciplinary action towards the offender could be a welcome first step.

4.2 Broadening Access to Training and Jobs for Women and Ethnic Minorities

Recommendation 1: Continue to reform the education sector, to become more inclusive with respect to both women and ethnic minorities. Recent trends in increased educational enrolment are welcomed, but further improvement is needed to give women and ethnic minorities a fair chance on the labor market. This starts with access to preschool and early-

[61] World Bank: Qualitative interviews (2013).

childhood education. Compulsory attendance of primary and secondary education is a step in the right direction. Implementation would further benefit from a critical analysis of potential cost barriers to education, including the opportunity cost associated with not contributing to the household's overall income. Macedonia's Conditional Cash Transfer (CCT) program has proven to be successful in increasing secondary school enrollment among families receiving social assistance, and especially among older youth who usually drop out before finishing (Armand and Carneiro, forthcoming). Ensuring resources for this program, beyond ongoing World Bank support, will be an important challenge. So will be linking this program with an effective transition to the labor market for beneficiaries (see more on this below). Beyond enrollment, there is also an important agenda in monitoring quality, especially gaps in quality across relevant socio-economic groups. The participation of Macedonia in the Program for International Student Assessment (PISA), starting in 2015, will be an important opportunity to identify critical inequalities in terms of the quality of the more 'technical' aspects of education. At the same time, socio-emotional skills, such as independent learning or organization skills, are not yet measured.

Recommendation 2: Within education and training systems, increase the focus on job-relevant skills – i.e. not only cognitive and technical, but also socio-emotional skills. A well-educated worker today is one that can quickly adapt to a changing labor market: employers increasingly cite skills such as discipline, client orientation, teamwork and perseverance as critical for productivity and employment. In designing policies that tackle these issues, Macedonia can look to many other countries that face the same problems, and have come up with innovative approaches. As discussed in Mourshed, Farrell and Barton (2012), innovative and effective programs around the world have two important elements in common. First, they share a strong collaboration between education providers and employers. Employers might help to design curricula and offer their employees as faculty, for example, while education providers may have students spend half their time on a job site, and secure them hiring guarantees. Second, employers and education providers work with their students early and intensely, sometimes with employers committing to hire youth before they are enrolled in a program to build their skills.

This agenda also calls for the design training programs that target the specific employability constraints of youth from disadvantaged backgrounds. Several programs aimed at youth from disadvantaged backgrounds have been carefully evaluated, especially in Latin America. These programs combine technical training with interventions specifically designed for the target group and focus, for example, on building networks or self-esteem. The example of such a 'Jovenes' program in the Dominican Republic could be useful (Box 4-1).

Box 4-1: Juventud y Empleo

Aiming to improve the employability of youth at risk, the Dominican Republic started implementing a labor market insertion program in 2002, called *Juventud y Empleo*. It provides life- and technical skills training combined with private sector internships. The target individuals are young Dominicans aged 16-29 who dropped out of school before finishing secondary education. To qualify, these youth must be unemployed, underemployed or inactive and below a certain poverty threshold, defined based on their residential area and household

income. The program consists of 225 hours of in-class training, divided into Life Skills training (75 hours) and Technical Vocational Education and Training (TVET, 150 hours), complemented by 2 months (224 hours) of on-the-job learning through and internship. The life skills module focuses on four competencies: motivation (self-esteem, interpersonal relationships and self-fulfillment), life at work, social skills and job search. The courses offered in the TVET immediately relate to a specific job family, like salesman, beautician, waiter or pharmacy clerk. These courses are matched to private sector demand. The average cost per participant is estimated to be USD 400, which includes a daily stipend, transportation subsidies and medical and accident insurance. The COS (*Centros Operativos del Sistema*), pre-certified private training providers, and the Ministry of Labor are in charge of implementation.

From the pool of eligible applicants, participants are selected randomly for two different treatments, and some are assigned to a control group: the first group receives only the life skills training while the second group benefits from both the life skills and the TVET modules. Additionally, some applicants are left aside from the intervention and considered the control group. *Juventud y Empleo* incorporated its random design from the very beginning, allowing for rigorous impact evaluations. Given that there are two treatment groups, the effects from both learning modules can be isolated. The effects can be estimated by comparing 'baseline information', gathered at the moment of application to the program, to the data collected from three longitudinal phone interviews, as well as from a final household survey.

The availability of impact evaluations allowed for continuous improvements according to the lessons learned from previous cohorts. As of today, three impact evaluations have been conducted: Card et al. (2011) studied the effects of the program on the 2004 cohort, Ibarraran et al. (2012) analyzed the 2008 cohort and Vezza, Cruces and Amendolaggine (2013) studied the 2008-2009 cohorts. For example, after the first impact evaluation showed limited impact on employment and wages, the program was modified, focusing on the key components identified by employers, such as closer collaboration with the private sector and a stronger life skills component.

The impact evaluation conducted by Vezza, Cruces and Amendolaggine on the 2008-2009 cohorts found that *Juventud y Empleo* had heterogeneous effects, both by gender and between the short and the medium run. In the short run, women were found to benefit the most, experiencing an increase in probability to be employed as well as in their job satisfaction and expectations to improve their quality of life. Additionally, the probability of having a child decreased for women participating in both life skills and TVET modules. On the other hand, for men, increased participation in the labor market was observed in the short run, but this change was translated into higher unemployment rates for the participants in the life skills module. No effects were found on the weekly hours worked or on the monthly income for those individuals who were already working. In the medium run, the impact on labor market participation faded out and the lower probability to have children for women was reversed. Informality among working men raised but there was an increase in the expectations to progress both professionally and economically. Other programs with similar characteristics that have been implemented in Latin America are *Chile Joven*, *Jóvenes en Acción* in Colombia and *PROJOVEN* in Peru.

Lastly, incentivizing men and women to participate in training programs that counter existing gender norms could facilitate a change in these normative beliefs[62].

Recommendation 3: Use the recent improvements in activation programs as a starting point for an integrated social protection model that prioritizes activation, building in conditionalities where needed. A recent World Bank study has highlighted important limitations to Macedonia's current activation policies and programs (Box 4-2). Recent improvements in the functioning of Macedonia's public employment agency – including more communication with, and mediation between, employers and job seekers – could provide a good starting point to change this. By creating an integrated model for social protection, in which any individual seeking social benefits first goes through a screening to explore possibilities to seek work, these recent improvements could be leveraged to connect more people to jobs and/or job-relevant training. Various initiatives implemented in other European countries, such as the UK's 'Jobcentre Plus' model could be seen as examples.

Box 4-2: Macedonia's Public Employment Agency: the Road to Active Mediation

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There is significant room to build on recent reforms in the public employment agency in Macedonia. In recent focus group discussions, the Public Employment Agency was only rarely perceived as a meaningful partner in finding a job. In most cases, focus group participants evaluate the agency as 'inefficient'. The Employment Agency (EA) representatives are usually aware of their image among Macedonian citizens, and identify the roots of the problem in the past inefficiency of the Agency. As the EA representative from a community in Skopje noted: *"There is [a] huge number of people who do not respond to our invitations (…). The problem is that they still do not trust the Agency: the credibility of the agency has been ruined in the past and we have to fix this problem. But we are on the right track."* Furthermore, the EA representatives express dedication to *"a new phase in which we are active mediators in the process of employing. Companies start to believe in us as a good roster for potential workers,"*[63] (EA representative, Skopje).

A new World Bank report highlights a number of areas in which the Employment Agency could make further improvements (World Bank, 2014), and suggests policy measures in these areas:

1) Tackling the issue of understaffed local offices
2) Reducing staff time spent on administrative issues
3) Increasing input from local offices in evaluating the EA's effectiveness
4) Setting up evaluations of specific programs offered by the EA
5) Differentiating cost models by locality
6) Increasing the accuracy of job descriptions of EA staff
7) Increasing the focus on interaction with employers
8) Increasing possibilities for the outsourcing of placement services

[62] Additional recommendations in the area of skills development and education can be found in Arias, et al. (2014).
[63] World Bank: Qualitative interviews (2013).

9) Increasing cooperation with social welfare centers (SWC's), and more frequent data sharing between these two institutions.

Recommendation 4: Initiate a partnership between government, educational institutions and employers, to: 1) build a national job-search database, including information on required skills and job orientation strategies, 2) actively assist with skills development. Based on examples from across Europe and around the globe, Macedonia could consider building a national job-search database, linking job seekers to useful resources (including websites where vacancies can be found) and providing them with information on job orientation and skills requirements for specific functions and industries. Using an integrated approach, schools could apply this material in the classroom, raising awareness among students on how to go about making educational and labor market decisions, and what kind of training to look for during or after upper secondary school. Employers could assist by identifying relevant skill-sets. In addition, job-search skills, including interviewing techniques and tips for writing resumes could be helpful.

Recommendation 5: Increase the professionalization and transparency of public employment. Institutionalizing public service and increasing transparency in the posting and filling up of public employment positions, with clarity in terms of job requirements, can be an important step in improving meritocracy in the system. At the same time, it can also reduce rent-seeking in job search, and improve perceptions of fairness in the distribution of public jobs.

Recommendation 6: Address entrepreneurship constraints that particularly affect women. More in-depth work is needed to better understand which constraints to entrepreneurship are the most binding in Macedonia. Globally, many microfinance schemes have attempted to tackle credit-related constraints, often with success. Examples of these include the Grameen Bank in Bangladesh, the Kashf Foundation in Pakistan, and the MI-BOSPO in Bosnia and Herzegovina. Recent evidence in this area suggests that credit has a larger effect when credit amounts are sufficiently large, and when loan disbursement is combined with business training – covering the fundamentals of accounting and running a business. Moreover, successful examples of female entrepreneurs can contribute to a change in commonly held beliefs on the 'desirability' of female entrepreneurship[64]. Entrepreneurship as a skill [also] needs to be more specifically developed within the national curriculum, not necessarily as a separate subject, but throughout different subject areas. The curriculum needs to be gender sensitive, discuss the existent gender stereotypes with regards to entrepreneurship and include examples of successful female business owners. In addition, accreditation systems could be put in place for individuals who have skills related to crafts, enabling women who cannot work outside the home to earn an income (Angel-Urdinola, 2008: 1; see World Bank, 2008).

Recommendation 7: Incentivize work among married women and women with children, through awareness-raising and provision of care facilities outside the home. Raising awareness among women on the benefits of work, for both their own welfare and the financial status of the household, could be an important first step. An important complement to these awareness-raising activities is the provision of affordable care facilities for children and the elderly, which could decrease women's care obligations in the household. Vouchers or subsidies for low-income families could be helpful in ensuring that disadvantaged groups have access.

[64] 'Miss Entrepreneur Africa' is an example of a project that achieves such a change in gender norms. See http://missentrepreneurafrica.net/.

Moreover, such facilities would create welcome new jobs. A thorough fiscal assessment and study of different models for the provision of child care would be the first step.

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Annex 1: Methodology and Data Sources

The Regional Roma Survey

The regional Roma survey, referenced in this report as UNDP/World Bank/EC regional Roma survey (2011), is a comprehensive survey that is representative of approximately 88 percent of the Macedonian Roma population, including Roma living in mixed, separated and segregated neighborhoods. The survey questionnaire was designed by the World Bank and UNDP in partnership, and implemented by UNDP through the IPSOS polling agency in May-July 2011 on a random sample of Roma living in communities with concentrated Roma populations in Bulgaria, the Czech Republic Hungary, Macedonia, Romania and Slovakia. The European Commission DG Regional Policy financed the survey. In each of the countries, approximately 750 Roma households, including over 3,500 individuals, and approximately 350 non-Roma households living in the same neighborhoods or vicinity were interviewed. More detailed sampling information on Macedonia specifically can be found in Table A1-1. The sample is not representative of all Roma in these countries, but rather includes those communities where the share of the Roma population equals or is higher than the national share of Roma population. This covers 88 percent of the Roma population in Macedonia. Once identified, a random sample of these areas was drawn, and households were randomly sampled within these enumeration areas.

Table A1-1: Sampling covers 88 percent of the Roma population in Macedonia

Sampled Roma and Non-Roma in Macedonia, 2011

	Roma			Non-Roma			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Households	694	94	788	317	41	358	1011	135	1146
Individuals	3230	466	3696	1203	171	1374	4433	637	5070

Source: UNDP/World Bank/EC regional Roma survey (2011).

The regional Roma survey data provide reliable estimates of the conditions in which the vast majority of the Roma in Macedonia live, compared to the conditions of their non-Roma neighbors. Comparisons with non-Roma living nearby provide a crucial frame of reference, since the sampled non-Roma households live in the same or proximately located municipalities, and thus share local labor markets, community-, school-, and health facilities as well as other services and collective infrastructure. Hence, if we observe differences in e.g. education, or employment between Roma and non-Roma households, these are highly likely to reflect particular disadvantages faced by Roma.

Qualitative surveys on "Jobs, Mobility and Gender"

The qualitative surveys cited in this paper, referred to in the text as "World Bank: Qualitative interviews (2013)", refer to data collected in the framework of the cross-country project "Qualitative Assessment of Economic Mobility and Labor Markets in ECA: A Gender Perspective". Macedonia was one of nine countries where the qualitative survey (a mix of focus groups, in-depth interviews and key informant interviews) took place between May and August 2013. Two rural and four urban communities were covered in Macedonia, and

women and men, both in and out of the labor force, participated in separate focus group discussions.

Annex 2: Regression Models

Model Set 1: Labor Force Participation, 2011, General Population

Dependent Variable: Labor Force Participation (1= the individual reported to be either employed or looking for work in the past 4 weeks; 0= otherwise)

DProbit models, Marginal effects for the overall Macedonian population (Age group: 20-64)

	LFP – Basic			**LFP – Full Model**		
	All	Women	Men	All	Women	Men
Male	.297***			.292***		
	(.007)			(.007)		
Age 25-29 [A]	.178***	.239***	.105***	.187***	.275***	.104***
	(.008)	(.018)	(.005)	(.008)	(.018)	(.005)
Age 30-34 [A]	.217***	.309***	.123***	.228***	.342***	.122***
	(.007)	(.017)	(.005)	(.007)	(.016)	(.005)
Age 35-39 [A]	.210***	.287***	.129***	.223***	.308***	.131***
	(.007)	(.017)	(.005)	(.007)	(.018)	(.005)
Age 40-44 [A]	.190***	.266***	.112***	.198***	.262***	.118***
	(.008)	(.018)	(.006)	(.008)	(.019)	(.005)
Age 45-49 [A]	.180***	.259***	.104***	.181***	.231***	.111***
	(.008)	(.018)	(.006)	(.008)	(.020)	(.006)
Age 50-54 [A]	.143***	.228***	.073***	.138***	.186***	.083***
	(.010)	(.019)	(.009)	(.010)	(.022)	(.008)
Age 55-59 [A]	.057***	.111***	.022*	.058***	.088***	.037***
	(.013)	(.022)	(.013)	(.013)	(.024)	(.012)
Age 60-64 [A]	-.254***	-.251***	-.184***	-.225***	-.234***	-.136***
	(.019)	(.025)	(.023)	(.021)	(.030)	(.024)
Complete primary educ. [B]	.283***	.309***	.202***	.217***	.209***	.178***
	(.030)	(.036)	(.045)	(.031)	(.039)	(.043)
Complete secondary educ. [B]	.235***	.414***	.094***	.217***	.390***	.085***
	(.006)	(.008)	(.010)	(.008)	(.013)	(.011)
Tertiary educ. [B]	.318***	.520***	.135***	.293***	.475***	.125***
	(.007)	(.012)	(.009)	(.009)	(.015)	(.010)
Married	.071***	-.016	.116***	.071***	.021	.089***
	(.009)	(.016)	(.011)	(.010)	(.018)	(.011)
Household Head	.022**	-.108***	-.001	.035***	-.046**	-.001
	(.009)	(.022)	(.010)	(.009)	(.022)	(.011)
Youngest child 0-6 [C]				-.061***	-.177***	.028***
				(.010)	(.016)	(.009)
Youngest child 7-17 [C]				-.023***	-.061***	-.000
				(.009)	(.014)	(.008)
Hh has pensioner(s)				-.028***	-.056***	-.016**
				(.008)	(.013)	(.008)
Hh employment [D]				.203***	.289***	.095***
				(.009)	(.013)	(.009)
Observations	33,973	16,866	17,107	33,973	16,866	17,107

Source: Authors' calculations, based on LFS, 2011.

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. [A] Age-groups are compared to those of 20-24 years old. [B] Marginal effects for mentioned education levels are with reference to having no formal education /

incomplete primary education. [C] Households with children – with the youngest child being 0-6 year sold or 7-17 years old – are compared to households with no children. [D] 'Hh employment' refers to at least one other person, besides the individual for which labor force participation is being predicted, being employed in the household, as opposed to nobody else being employed in the household.

Model Set 2: Labor Force Participation, 2006, General Population

Dependent Variable: Labor Force Participation (1= the individual reported to be either employed or looking for work in the past 4 weeks; 0= otherwise)

DProbit models, Marginal effects for the overall Macedonian population (Age group: 20-64)

Regional Effects

Reference category: Skopje

	LFP – Basic			**LFP – Full Model**		
	All	Women	Men	All	Women	Men
Pelagoniski	.209***	.318***	.109***	.160***	.228***	.080***
	(.006)	(.012)	(.005)	(.008)	(.016)	(.006)
Vardarski	.099***	.135***	.064***	.100***	.135***	.067***
	(.009)	(.017)	(.007)	(.010)	(.018)	(.007)
North-East	.123***	.136***	.091***	.152***	.179***	.106***
	(.008)	(.017)	(.006)	(.008)	(.017)	(.005)
South-West	.056***	.036**	.065***	.047***	.020	.059***
	(.009)	(.015)	(.007)	(.009)	(.016)	(.007)
South-East	.214***	.352***	.096***	.115***	.194***	.016
	(.006)	(.012)	(.006)	(.012)	(.023)	(.013)
Poloshki	-.053***	-.239***	.072***	-.164***	-.356***	.020**
	(.009)	(.013)	(.006)	(.013)	(.016)	(.009)
East	.109***	.168***	.054***	.102***	.159***	.051***
	(.008)	(.014)	(.007)	(.008)	(.015)	(.007)

Source: Authors' calculations, based on LFS, 2006.

	LFP – Basic			**LFP – Full Model**		
	All	Women	Men	All	Women	Men
Urban	.016***	.053***	-.008	.029***	.067***	.002
	(.006)	(.010)	(.006)	(.006)	(.010)	(.006)
Regional unempl. rate for relevant educ. level				-.445***	-.571***	-.326***
				(.032)	(.053)	(.033)

Source: Authors' calculations, based on LFS, 2006.

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. The two tables above reports selected marginal effects for the 2006 equivalent of the 2011 model shown above. The only difference between these two models, besides the year, is the exclusion of regions, urban/rural and the regional unemployment rate for the relevant education level in the 2011 model. 2006 is the last year for which data is publicly availabel on regions and urban / rural location in the Macedonian LFS.

Comparison between Model Set 1 and Model Set 2: Labor Force Participation, 2011 and 2006, General Population

In the 2006 model, some of the marginal effects obtained were found to differ from those obtained for 2011 due to the inclusion of regions, urban / rural location and regional unemployment rates for specific levels of education. The table below reports increases and decreases in effect size of the 2006 model as compared to the 2011 model, as well as changes in significance of marginal effects. In summary, the following changes occurred:

1) Older age groups were found to be less likely to participate in the labor market in the 2006 model as compared to the 2011 model;
2) Primary education was found to make less of a difference in the 2006 model;
3) The effect of living in a household with (young) children, mainly on labor force participation among women, became less pronounced in the 2006 model;
4) The effect of living in a household with pensioners became more pronounced in the 2006 model;
5) The effect of living in a household with at least one other employed household member disappeared in the gender specific models, and became much less pronounced in the aggregated model.

Comparison between 2006 and 2011 models: changes in effect size and significance in 2006 model as compared to 2011 model.

	All	Women	Men	All	Women	Men
Male	-1			1		
Age 25-29 [A]	-2	-1	-1	-2	-4	-1
Age 30-34 [A]	-2	-6	1	-2	-9	1
Age 35-39 [A]	-1	-1	-1	-2	-4	0
Age 40-44 [A]	1	2	0	1	1	1
Age 45-49 [A]	0	1	0	1	3	0
Age 50-54 [A]	-5	-7	-3	-3	-2	-2
Age 55-59 [A]	-13	-18	-9	-9	-14	-5*
Age 60-64 [A]	-14	-10	-20	-11	-9	-13
Complete primary educ. [B]	-21	-20	-19*	-14	-10	-16
Complete secondary educ. [B]	0	-1	-6	-1	-4	-8*
Tertiary educ. [B]	-2	-1	-2	-3	-2	-6
Married	4	7*	1	3	3*	4
Household Head	-1	4	1	-5*	-3	-3*
Youngest child 0-6 [C]				8	17*	-2*
Youngest child 7-17 [C]				7	12	2*
Hh has pensioner(s)				-10	-5	-11
Hh employment [D]				-23	-29*	-10*

Source: Authors' calculations, based on LFS, 2006 and LFS, 2011.

Notes: A negative number refers to a decrease in effect size in the 2006 model as compared to the 2011 model; a positive number refers to an increase in effect size. A * refers to a marginal effect that was not significant ($p>0.1$) in the 2011 model, but became significant in the 2006 model. A * refers to a marginal effect that was significant ($p<0.1$) in the 2011 model, but became insignificant in the 2006 model. [A] Age-groups are compared to those of 20-24 years old. [B] Marginal effects for education levels are with reference to having no / incomplete primary education. [C] Households with children – with the youngest child being 0-6 year sold or 7-17 years old – are compared to households with no children. [D] 'Hh employment' refers to at least one other person, besides the individual for which labor force participation is being predicted, being employed in the household, as opposed to nobody else being employed in the household.

Model Set 3: Labor Force Participation, 2011, Roma and Non-Roma Neighbors

Dependent Variable: Labor Force Participation (1= the individual reported to be either employed or looking for work in the past 4 weeks; 0= otherwise)

DProbit models, Marginal effects for Roma and their non-Roma neighbors (Age group: 20-64)

	All	Roma	Non-Roma	Men	Women
Roma	.047*			.003	.080**
	(.027)			(.034)	(.035)
Female	-.312***	-.326***	-.295***		
	(.022)	(.026)	(.044)		
Age 25-29 [A]	.055	.042	.077	-.020	.117**
	(.037)	(.043)	(.077)	(.050)	(.053)
Age 30-34 [A]	.086**	.046	.196***	.024	.132**
	(.039)	(.046)	(.070)	(.050)	(.055)
Age 35-39 [A]	.085**	.066	.151*	-.048	.178***
	(.040)	(.047)	(.078)	(.058)	(.055)
Age 40-44 [A]	.078*	.012	.247***	-.050	.165***
	(.042)	(.050)	(.071)	(.062)	(.057)
Age 45-49 [A]	.018	-.053	.176**	-.152**	.144**
	(.043)	(.051)	(.078)	(.065)	(.058)
Age 50-54 [A]	-.029	-.087*	.112	-.126**	.044
	(.044)	(.052)	(.084)	(.064)	(.059)
Age 55-59 [A]	-.253***	-.268***	-.226**	-.408***	-.123**
	(.044)	(.050)	(.093)	(.064)	(.058)
Age 60-64 [A]	-.307***	-.289***	-.361***	-.451***	-.168***
	(.045)	(.054)	(.088)	(.065)	(.063)
Complete primary educ. [B]	.077***	.065**	.106	.060**	.074**
	(.024)	(.026)	(.065)	(.030)	(.032)
Complete secondary educ. [B]	.205***	.173***	.258***	.111***	.288***
	(.029)	(.037)	(.060)	(.034)	(.044)
Tertiary educ. [B]	.197***	.304***	.293***	.021	.322***
	(.045)	(.112)	(.058)	(.065)	(.067)
Married	.091***	.030	.209***	.180***	-.020
	(.027)	(.032)	(.055)	(.041)	(.039)
Household Head	.044	.043	.059	.077**	-.078
	(.028)	(.032)	(.058)	(.034)	(.049)
Youngest child 0-6 [C]	.001	-.039	.129**	.018	-.024
	(.028)	(.033)	(.054)	(.034)	(.037)
Youngest child 7-17 [C]	.034	.021	.036	.065*	.000
	(.029)	(.035)	(.053)	(.034)	(.039)
Hh has pensioner(s)	-.089***	-.102***	-.080*	-.099***	-.062**
	(.021)	(.024)	(.043)	(.027)	(.028)
Hh employment [D]	.103***	.089***	.131***	.109***	.095***
	(.022)	(.025)	(.044)	(.027)	(.028)
Northwest	.039	.005	.135***	.088***	-.024
	(.025)	(.030)	(.047)	(.029)	(.033)
Southwest [E]	-.046	-.109***	.099*	-.073*	-.018
	(.031)	(.037)	(.055)	(.040)	(.041)
East [E]	.190***	.159***	.265***	.163***	.178***
	(.028)	(.034)	(.050)	(.031)	(.042)
Rural [E]	-.014	.023	-.109*	-.006	-.029
	(.031)	(.037)	(.062)	(.041)	(.040)
Observations	2,889	2,058	829	1,449	1,440

Source: Authors' calculations, based on UNDP/World Bank/EC regional Roma survey, 2011.

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Data are not nationally representative, but reflect rates in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1). [A] Age-groups are compared to those of 20-24 years old. [B] Marginal effects for mentioned education levels are with reference to having no formal education / incomplete primary education. [C] Households with children – with the youngest child being 0-6 year sold or 7-17 years old – are compared to households with no children. [D] 'Hh employment' refers to at least one other person, besides the individual for which labor force participation is being predicted, being employed in the household, as opposed to nobody else being employed in the household. [E] The reference region is Skopje.

Model Set 4: Social Assistance, 2011, Roma and Non-Roma Neighbors

Dependent Variable: Receipt of Social Assistance as a Major Source of Income (1= reported social assistance to be one of the household's main sources of income; 0= otherwise)

DProbit models, Marginal effects for Roma and their non-Roma neighbors (household level)

	All: Base Model	**Roma**	**Non-Roma neighbors**
Roma	.256***		
	(.031)		
Gender - Female	-.034	-.039	-.032
	(.031)	(.039)	(.042)
Rural household	-.013	.038	
	(.047)	(.059)	
Age	-.004***	-.003***	-.005***
	(.001)	(.001)	(.001)
Income quintile: 2	-.050	.066	-.128***
	(.044)	(.063)	(.035)
Income quintile: 3	-.187***	-.146***	-.140***
	(.035)	(.056)	(.032)
Income quintile: 4	-.265***	-.264***	-.174***
	(.031)	(.051)	(.034)
Income quintile: 5	-.329***	-.378***	
	(.026)	(.044)	
Education level: Primary	-.133***	-.151***	-.089**
	(.031)	(.040)	(.040)
Education level: Secondary	-.193***	-.149**	-.195***
	(.036)	(.061)	(.048)
Education level: Tertiary	-.276***	-.284*	-.128***
	(.041)	(.151)	(.028)
Region: North West	.040	.055	-.001
	(.040)	(.050)	(.052)
Region: South West	-.020	-.019	.010
	(.045)	(.059)	(.058)
Region: East	-.096**	-.099*	-.086**
	(.040)	(.055)	(.039)
Observations	1,140	784	265

Source: Authors' calculations, based on UNDP/World Bank/EC regional Roma survey, 2011.
Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Data are not nationally representative, but reflect rates in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1). Reference categories: Income quintile: 1 (poorest); Education level: None; Region: Skopje.

Model Set 5: Discrimination, 2011, Roma and Non-Roma Neighbors

Dependent Variable: Self-reported discrimination (1= reported discrimination in the past 12 months based on ethnicity; 0= reported not to have experienced such discrimination in the past 12 months.)

DProbit models: Marginal effects for Roma and their non-Roma neighbors.

	All: Base Model	**Roma**	**Non-Roma**
Roma	.252***		
	(.027)		
Gender - Female	-.051*	-.073**	-.003
	(.028)	(.036)	(.030)
Rural household	.014	.051	-.056*
	(.042)	(.056)	(.030)
Age	-.001	-.000	-.002**
	(.001)	(.001)	(.001)
Income quintile: 2	.013	.069	-.046
	(.043)	(.059)	(.033)
Income quintile: 3	-.104***	-.142***	.007
	(.036)	(.049)	(.048)
Income quintile: 4	-.088**	-.086	-.061*
	(.037)	(.053)	(.032)
Income quintile: 5	-.122***	-.165***	-.029
	(.036)	(.051)	(.039)
Education level: Primary	-.015	-.010	-.018
	(.031)	(.039)	(.041)
Education level: Secondary	.008	.031	-.011
	(.043)	(.063)	(.041)
Education level: Tertiary	.114	.010	.050
	(.088)	(.188)	(.068)
Region: North West	-.064*	-.066	-.052*
	(.033)	(.046)	(.031)
Region: South West	.020	.006	.047
	(.041)	(.054)	(.051)
Region: East	.065	.081	.027
	(.042)	(.053)	(.048)
Observations	1,116	766	350

Source: Authors' calculations, based on UNDP/World Bank/EC regional Roma survey, 2011.

Notes: Dprobit estimations. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Data are not nationally representative, but reflect rates in neighborhoods and communities where one can find a higher-than-national concentration of Roma (see Annex 1). Reference categories: Income quintile: 1 (poorest); Education level: None; Region: Skopje.