

IZA DP No. 9660

When Do Gender Wage Differences Emerge? A Study of Azerbaijan's Labor Market

Francesco Pastore Sarosh Sattar Nistha Sinha Erwin R. Tiongson

January 2016

Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labor

When Do Gender Wage Differences Emerge? A Study of Azerbaijan's Labor Market

Francesco Pastore

Seconda Università di Napoli and IZA

Sarosh Sattar

World Bank

Nistha Sinha

World Bank

Erwin R. Tiongson

Georgetown University and IZA

Discussion Paper No. 9660 January 2016

IZA

P.O. Box 7240 53072 Bonn Germany

Phone: +49-228-3894-0 Fax: +49-228-3894-180 E-mail: iza@iza.org

Any opinions expressed here are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but the institute itself takes no institutional policy positions. The IZA research network is committed to the IZA Guiding Principles of Research Integrity.

The Institute for the Study of Labor (IZA) in Bonn is a local and virtual international research center and a place of communication between science, politics and business. IZA is an independent nonprofit organization supported by Deutsche Post Foundation. The center is associated with the University of Bonn and offers a stimulating research environment through its international network, workshops and conferences, data service, project support, research visits and doctoral program. IZA engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

ABSTRACT

When Do Gender Wage Differences Emerge? A Study of Azerbaijan's Labor Market

Building on recent analyses that find a sizeable, overall gender wage gap in Azerbaijan's workforce, this paper uses data on young workers in their early years in the labor market to understand how gender wage gaps evolve over time, if at all. Using a unique database from a survey of young people age 15-29 years old, we provide evidence that new labor market entrants begin with little or no gender differences in earnings, but a wage gap gradually emerges over time closer to the childbearing years. The gender wage gap grows from virtually zero, or even a small, positive gap in favor of women, until the age of 20 years to about 20% two years later and even more than 30% at the age of 29 years. The gap in labor supply rises from almost zero to about 20% during the years from 19 to 22, while the gap in hours worked falls from positive (up to 6 hours per week more than their male counterparts) to negative (up to -5 hours per week) over the same period in the life cycle. When decomposing the gap at different deciles of the wage distribution, it appears that most of it is at the lower and upper end of the distribution, among young adults and the prime-age workers. Selection of women into employment is strong and strongly skill-based: when controlling for sample selection bias, the gender gap becomes positive.

JEL Classification: I21, J13, J15, J16, J24, J31, J7, P30

Keywords: gender wage gap and dynamics, early labor market outcomes,

school-to-work transitions, earnings equations, decomposition analysis

Corresponding author:

Francesco Pastore Department of Law Seconda Università di Napoli Palazzo Melzi, Piazza Matteotti I-81055, Santa Maria Capua Vetere (Caserta) Italy

E-mail: francesco.pastore@unina2.it

Introduction

The recently published Europe and Central Asia (ECA) Regional Report on Gender (World Bank 2011) provides summary data on unconditional gender wage gaps across countries, with values ranging from a low 10 percent (Slovenia) to 50 percent (Georgia). Azerbaijan's gender wage gap (36 percent) is at the higher end of this distribution.

It is not clear whether there are large disparities between the wages of Azerbaijan's men and women throughout their careers. One possibility, which the empirical literature has started exploring systematically only in the last few years using data for a handful of industrial countries, is that gender wage gaps *evolve* over time and that the first few years in the labor market, as young people transition from school to work, are an important determinant of the emergence of overall gender wage gaps (Manning and Swaffield, 2008; Bertrand, Goldin and Katz, 2010; Del Bono and Vuri, 2011). One possibility is that young men and women earn equal wages at the beginning of their career, but the childbearing years—in the absence of suitable leave policies, child care, and other supporting mechanisms—gradually place women at a disadvantage. Because this is a fledgling literature (see, for instance, Pastore, 2010; and Pastore, Sattar and Tiongson, 2013), little is known about this possibility, particularly in developing countries and economies in transition such as Azerbaijan.

This paper aims to contribute to the literature on gender wage gaps in early career by studying wage differences among young people in Azerbaijan.

The analysis is based on an *ad hoc* nationally representative School-to-Work Transition survey carried out in the country in August 2005 on a large sample of young people aged 15 to 29. The age of individuals in the sample allows us to observe the entire process of transition from school to work and to adulthood, including the phase when the young person is going to establish a family and have children. According to official statistics, the average age of first marriage for women is 23 years, while a remarkable share of about 13% of the entire female population experience early marriage, namely when they are between 15 and 19 years of age. This allows us to study the asymmetric impact of marrying and maternal decisions by gender on labor supply and other labor market outcomes, such as wages.

The outline of the paper is as follows. Section one discusses a survey of the literature on the evolution of the gender wage gap in the early entrance in the labor market. Section two describes the data used in the econometric analysis and the methods used. Section three presents the results. Section four discusses the results while drawing some implications for national and international policy makers. Section five provides concluding remarks.

1. Survey of the Literature

In this section we discuss the main findings of the literature on both advanced economies and developing countries, though the latter is more limited. These studies have focused on the evolution of the gender age gap over the life-cycle, by asking such questions as: When does the gender wage gap emerge? Does one exist at labor market entry or does it emerge over time?

Manning and Swaffield (2008) are among the first to ask such questions using UK data. They find no gender gap at labor market entry but a gap of 25 log points emerges after 10 years. They attribute the gap to a number of factors, such as human capital differences, maternity leave, psychological factors and, to a lesser extent, the lower degree of job mobility, which prevents women from finding higher-paying jobs. Although lower, a gap also emerges ten years from the beginning of the career of women without any children.

Del Bono and Vuri (2011) also find that the gender wage gap appears not immediately but a few years after workers first join the labor market. Compared to Manning and Swaffield (2008), however, they find a greater impact of returns to job mobility on the gender wage gap. They use administrative social security data containing detailed information on job moves of men and women during the first ten years of labor market entry¹.

Bertrand et al. (2010) look at a particular sample, namely a sample of graduates from an MBA of a major American university. As such, the sample presents little heterogeneity and allows the comparison of men and women with very similar skill levels and motivation. The results of the analysis of this sample also suggest that a conditional gender wage gap emerges only after some time, after maternity and the ensuing childcare activities which apparently involve women more than men.

Such findings are echoed in a recent literature on developing countries. Pastore (2010a) finds that the gender wage gap, which is not statistically significant among young teenagers in Mongolia, becomes statistically relevant and sizeable among the adults and the prime-aged group. The paper uses a data set similar to the one used in this paper and is hence particularly interesting for comparative purposes, although cultural, economic and political differences between Mongolia and Azerbaijan are quite important, despite both having been in the Soviet (and more recently, Russian) sphere of influence.

3

¹ Kunze (2003; and 2005) is the only author who finds a gender wage gap from labor market entry on, but this is probably due to the specific sample of manual workers with education in vocational training. These workers are essentially employed in male-dominated professions, where men have a competitive advantage which apparently pays off in terms of earnings.

Pastore, Sattar and Tiongson (2013) use the same data for Kosovo, a country with documented experiences of gender discrimination and gender-based violence. Nonetheless, the authors find that there is no gender wage gap in the sample, though the sample includes only individuals under 25 years of age, when most men and women have still not experienced maternity in the country. In fact, the typical age for child birth in Kosovo is about 27.

2. Methodology and Data

2.1. Data

The econometric analysis is based on the ILO's School-to-Work Transition (SWT) survey collected in Azerbaijan on a sample of young workers aged 15 to 29 in 2005 representative of the national population. As the name suggests, the survey collects information on the labor market experiences of young workers at the beginning of their career shortly after leaving school and entering the labor force. The data is at the individual level² with a sample size of 4,972. The survey includes three age groups: "teenage workers" (aged 15-19 years), "young adults" (20-24 years), and for lack of a better-term, the "prime-age workers" (25-29 years). The sample size is large for this segment of the labor force which is generally under-represented in typical labor force surveys. The data thus provide an unusual opportunity to analyze the labor market performance of men and women in this stage of their careers.

Between 2004 and 2006, the ILO conducted SWT surveys in 8 countries (Azerbaijan, China, Egypt, Kosovo, Mongolia, Nepal, and Syria). and subsequently made the micro data publicly available.³ Although as a result of the lag in the public release of the data the data are now a few years old, the general paucity of data on earnings or wages in Azerbaijan and other countries, especially among young workers, means that SWT data provide a rare opportunity to assess the emergence of gender wage differentials.

² The survey also includes a questionnaire administered to the employers of young people in the sample. The Employer and Managers Module of the survey includes detailed information about the characteristics of enterprises including their recruitment, hiring, and training practices.

³ For further information on the SWT survey, see the following website: http://www.ilo.org/employment/areas/WCMS_159352/lang--en/index.htm.

2.2. Variables

The natural logarithm of the average total monthly labor income (in thousands of Manats⁴) is the dependent variable of our Mincerian earnings equations.⁵ The weekly hours worked are used as an independent variable, rather than as the denominator of monthly wages, in order to control for gender differences in the number of hours worked. In addition, hourly wage rates are not widely used in Azerbaijan, especially among young people. The survey provides two types of information regarding the hours worked: the normal contractual hours and the actual hours during the reference week. Estimates are often presented with both types of hours of work. Table A1 and Table A2 in the Appendix report descriptive statistics for young workers in wage employment and non-employment, respectively.

Based on characteristics of the Azerbaijan educational system⁶, the years of education have been computed as follows: The uneducated are assigned 0 years of education. The respondents holding a primary school diploma are considered to have had 4 years of education (from age 6 to 10 years). Those holding a diploma of general (low secondary) education are assigned 5 more years of education after primary education (from age 11 to 15 years). Those holding vocational diplomas are attributed 3 more years of education after primary education (from age 11 to 13 years). Those with a general high secondary education degree are assigned 2 more years of education after general education (from 16 to 17 years). Those with a specialized secondary education degree are assigned 3 more years of education after general education (from age 16 to 18 years). Those holding tertiary education diplomas (university or in 2 cases also graduate courses) are assigned 4 more years of education after general high secondary education (from age 19 to 22 years). Those holding a master's degree (in 2 cases only) are assigned 2 more years of education after tertiary education (from age 23 to 24 years).

Actual work experience was computed by imposing two main corrections to potential work experience. The latter has been computed in the usual way as the difference between current age of the respondent, years of education completed, and the age when primary education starts, which, in the case of Azerbaijan is 6 years. The first correction subtracts the time that the respondents declare to have spent to find his/her current job. Question 57 in the survey asks for how long the

⁴ At the time of the survey, namely in August 2005, the exchange rate was: US\$1 = AZM 4908, which means also a US\$ / AZM exchange rate of 0.00024. Note that the exchange rate now reported is based on the old Manat, not the new one (AZN).

⁵ It is not clear from the wording of the questionnaire whether this is the gross wage or the wage net of taxes. In the other SWT surveys, wages referred to net monthly wage.

⁶ For a general description of the educational system of Azerbaijan, please see the following: http://www.classbase.com/Countries/Azerbaijan/Education-System.

individual has been seeking a job, answers are constrained within given intervals of time; the average value within the interval has been transformed into fractions of a year and subtracted from the person's age. A second correction is applied only to women with children, as suggested in Munich et al. (2005) and Pastore and Verashchagina (2011). A year per child is subtracted from the mother's age to calculate work experience. In a few cases, the implied total number of years of potential work experience turned out to be negative; we set these equal to zero.

The other variables used in the estimates are self-explanatory.

Any data source has both advantages and disadvantages. The advantages of the SWT survey are many and they include the following: the availability of a relatively large number of observations for young people rarely available in labor surveys; the availability of information on household characteristics which can be used as instruments in two-step procedures able to control for endogeneity and sample selection bias; very detailed information on demographic and individual characteristics, including aspects of young people's labor market attitudes, such as aspirations and life goals, job satisfaction, job search methods and the like. Nevertheless, some other important variables, typically used as controls in Mincerian earnings equations, are missing in the SWT survey, thus constraining our ability to explore wage differences more fully. This is the case, for instance with respect to the following variables: the ownership of firms; the sector of employment; the location of respondents, and, except for the distinction between rural and urban residential areas, information on whether they moved to their current place of residence or not.

3. Results

3.1. Descriptive Statistics

3.1.1. Demographic factors

Figure 2 reports the age distribution of first marriage by gender for the entire sample and for employed and non-employed women respectively. The average age at first marriage is different for men and women: 20.3 years for women and 22.6 years for men. It is also different from the official statistics reported in the introduction simply because the data set we use includes only the youngest age segment. Early marriages, namely marriages under the age of 19 years, are much more common among women than men in our sample: in fact, 41.2% of the women who marry do so early, while the comparable figure for men is about a fourth (10.3%). In the case of women, this is a very high share by international standards and several international organizations, including UNICEF point

out that this is an important driver of gender differences in the labor market as well as of child health and well-being.

Figure 2 also highlights the bigger-than-average share of first marriages among the non-employed women (42.9%) and the bigger share among employed men (12.5%). This confirms the finding typical of this literature according to which marriage affects positively the labor supply decisions of men and negatively those of women.

[Figure 2 about here]

We should also note that the overall share of women who marry is 22.2% for women and 15.6% for men. Women (7.4%) are also more likely to be engaged than men (5.3%) in this sample. The share of women and men who have children are 19.6% and 12.6%, respectively. As the ensuing analysis will show, decisions regarding marrying and having children have important consequences for labor supply.

Figure 3 shows that education is another important factor of labor supply but more so for men than for women. The labor supply of men with vocational education is already extremely high at this young age, over 60%. Over 50% of men with high secondary education or above are also employed, which compares with about 20% or less for men with general education or below. In the case of women the educational gap is not as striking as in the case of men although education is an important factor. The overall labor supply of women with high secondary education fluctuates between 30% in the case of women with secondary general education and 40% for those with secondary special education or above. In addition, women with vocational education diploma fare well, with about 35% employment share. The shares of employed women with general education or below is less than 15%. This confirms that most young Azerbaijani people consider education as an investment in their own future labor market outcomes.

[Figure 3 about here]

Figure 4 reports the shares of young people who participate to the labor market by age group and gender. The figure clearly shows the widening of the gender gap in labor supply decisions over the years of age. The gap is about 5% among the teenagers, about 20% among the young adults and about 40% among the oldest age group in the sample. It suggests that the school-to-work transition path is dramatically different for men and women.

[Figure 4 about here]

To explore more in-depth the previous point, Figure 5 looks at the evolution of labor supply shares of men and women over the years in the sample. The green lower line measures the gender gap in labor supply. The figure shows that the gap is strikingly small for individuals up to the age of 19 and, then, it starts increasing dramatically for the individuals aged 20 years and more. The gender gap in labor supply is steadily above 20% for those aged 20 years of age or more. There is a close correspondence between the negative gender gap in the labor supply of women and the positive

gap in the cumulative shares of age-at-first marriage by gender. In other words, the larger is the gap in the share of married women, the larger is the share of men working.

[Figure 5 about here]

3.1.2. Work differences

Both monthly and hourly wages are strongly affected by the work effort of individuals. Figure 6 reports the kernel density distribution of men and women by usual (Panel a) and actual (Panel b) weekly hours of work. The two panels suggest a typical finding in the literature on gender differences in the labor market. Panel (a) shows that the average weekly hours of work of a large share of employed men and women is the same, namely, 40 hours. Nonetheless, many men tend to work more hours per week, as much as 60 hours or more. In other words, the main gender difference in average hours worked per week is that large shares of men tend to work more than the modal value. This finding is even stronger when we compare the kernel density distribution of men and women in terms of weekly hours actually worked.

[Figure 6 about here]

Figure 7 report the hours worked by men and women along their age distributions. On the left-side vertical axis, we measure the hours worked per week, while on the right-side vertical axis we measure the gender gap in weekly hours worked. Interestingly, the gender gap in weekly hours is always in favor of women up to the age of 21 years, and is persistently in favor of men thereafter. It is notable that the gap in favor of women is much higher in absolute terms than that in favor of men.

[Figure 7 about here]

Table A2 and A3 in the Appendix provides descriptive statistics by gender for the entire sample and for each age group, whereas Table A4 does the same for the sample of employed young people. Women have lower log wages than men. The educational level of women is slightly higher in secondary general education, but lower in terms of general education and tertiary education. This is quite atypical for developing countries, where in general women have higher educational levels than men.

The actual work experience of women (about 1.6 years) is much lower than that of men (about 7.1 years). Note that, as explained in the data section, this measure takes into account also the number of children of men and women, subtracting some years to potential work experience to take into account maternity factors. This is the first evidence of the dramatic gender differences emerging in the labor market as a consequence of the commitment of women in reproductive activities in the country.

In the SWT survey data, the self-employed account for only a small share of the overall sample and about 11.9% of total employment. It is 12.5% in rural areas and 11.1% in urban areas.

The migration status is very similar by gender suggesting that migration is neither common nor an individual choice but rather a family choice. Only few individuals in the sample migrate to study or seek employment.

According to the SWT survey data, about 54.7% of young people found their jobs through friends and relatives while only 3.9% found theirs through Public Employment Service (PES) offices. The second most important channel is direct hiring (17.8%, which could be also associated with family and friends), followed by other (14.3%). Other methods are all smaller than PES. This suggests that the labor market is still much controlled by family and friend relationships, as it is generally the case in economies where unemployment is high and where family and religious ties are influential in people's lives.

Job search channels differ by gender to some extent. Women tend to find employment more frequently through direct contacts with prospective employers (37.2% of the employed); and men tend to use more frequently the public employment service (5.3%), the networks of family and friends (61.1%) and others (7.7%). Overall, this suggests that men use more the informal and the more formal channels, although women tend to generate good direct contacts with their employers.

Women typically prefer formal working contracts suggesting risk aversion. This is evident from the preponderance of formal contracts and working arrangements that provide maternity leave benefits. Over 80% of employed women hold a contract, although the composition of contracts by duration is similar among employed men and women. In the overall population, however, women tend to have higher shares of employment with contracts of unlimited and limited duration.

For similar reasons, men tend to work more in jobs in which taxes are not paid or where the worker does not know whether taxes are paid. Men are also more likely to moonlight than women, though this is still not a common phenomenon in this young age group.

Men are more likely to report dissatisfaction with their jobs than women. This also likely suggests a greater motivation to work among employed women compared to their male counterparts.

More than 50% of the employed report that they participate in on-the-job training programs. This is slightly more common among women (63.1%) than men (47.7%). Most of this training is of the apprenticeship type (86%), but men are slightly more likely to be trained in new technologies than women.

Men are more likely to be union members. They are also more frequently employed in small-sized firms (between 1 and 9 employees), whereas women tend to be more frequently employed in medium-sized firms (between 10 and 19 employees). The former represent about 40% of employed men and the latter group about 30% of employed women. The share of men and women in large-

sized firms is more or less the same, at about 11%. Again the greater risk aversion of women explains why they tend to gather in medium-sized firms. The equal shares of men and women in large firms might depend on their tendency to apply more frequently gender neutral recruitment policies.

In the SWT database, unfortunately, there is no definition of firm's ownership. Respondents are requested to declare their firm's name which may help indicate whether they work in the private sector. These represent 24% of the sample. In addition to the firms' name, respondents are requested to say whether they are: self-employed (11.9%) or "working for family income" (55.8%), which we take to mean that they are employed by a family business. The rest (8.4%) do not provide the name of their company. Surprisingly, the largest number of employed individuals in the sample "work for family income." Are they wage-employed in the usual sense of wage-employment? Moreover, are their wages driven by traditional determinants of earnings if they are paid within their households? This is unclear and the coefficients should be interpreted with caution.

3.2. The gender wage gap

Figure 8 reports kernel density estimates of monthly (panel a) and hourly (panel b) wage distributions by gender. The figures show gender differences along the entire wage distribution. It is notable that most of the difference between male and female monthly wages is in the tendency of men to have higher wages at the modal value of the distribution, and with the wages of many men closer to the modal value than those of their female counterparts. When we look at the distribution of hourly wages, we can see that now the higher wages of men are also due to a higher share of young men who have higher than modal hourly wages.

[Figure 8 about here]

Table 1 reports the coefficient of the gender dummy in standard Mincerian earnings equations starting from the basic version to the version augmented by weekly hours of work, educational categories, and actual work experience (as defined in the data section) and in the extended version including a number of other various characteristics relative to the individual, the family and the job. Gender wage gaps are reported for the different age groups available in the data for both the monthly and the hourly wage. The middle panel gives estimates where we control for the actual, rather than the usual hours of work.

According to the variables included in the estimates in panel (a), the gender gap in monthly wages fluctuates between about 7.7% and 16.5%. The unconditional gender gap in monthly wages suggest that without controlling for any individual characteristics, women tend to earn about 10% less than men. Adding hours of work is slightly reducing the gap, since women work a smaller number of hours per week. Adding education increases the gap: since employed women have

slightly higher educational level, this means that they are paid less for the same educational characteristics, which will be tested using the Oaxaca and Blinder decomposition in the next sections. When we consider also the actual work experience, the gap doubles as women, particularly married women, have much less actual work experience than men. The other characteristics, such as the degree of job security, which is generally associated with higher wages, reduce the gap slightly.

However, the key finding reported in the table is that the gap is statistically insignificant among the teenagers but statistically significant among older age groups. In the augmented version, the gap rises to 22.4% among the young adults and about 15.2% among the oldest age group. In the extended specification it reaches about 20% among the young adults and slightly less, about 12.8%, among the oldest age group available in the data.

The results are quite similar when we look at the gender wage gap in terms of monthly wages where we control not for the usual hours of work, but for the actual hours of work, as we do in panel (b). In this case, a gender gap emerges, although not highly statistically significant, also among the teenagers, because we consider here the much smaller actual number of hours worked by women. It may be argued that early marriages force women in this stage to adjust simply the number of hours worked (intensive margin) and only at a later stage, when children come, their availability to work (extensive margin).

The gap in terms of hourly wages presented in panel (c) is much lower mirroring the lower number of weekly working hours of women with respect to men. The gap is now not statistically significant among older age segments, suggesting the importance of controlling for the hours of work, which clearly correlate to the effort women can put in productive activities as a consequence of their increasing effort in reproductive activities. In the estimates in panel (c), the hours of work are the contractual hours.

[Table 1 about here]

The above findings suggest the existence of strong variability of wages by years of age. Figure 9 provides measures of the gender wage gap from different equations that we ran for individuals belonging to a particular age group using monthly wages. Panel (a) reports the unconditional estimates only, while panel (b) also reports conditional estimates based on basic earnings equations. The unconditional estimates confirm the impression that there is a gender gap not statistically different from zero for the youngest segment, while the gap has a clear tendency to rise over the years, with the exception of the individuals aged 26 and 27. The trend estimated by OLS and reported in the figure suggests of an increase of the gender gap by about 1.3% per year of age.

Panel (b) confirms this trend for estimates conditional on log hours of work, while the estimates conditional also on education tend to move closer to the horizontal axis, still from below, as a consequence of the slightly higher level of education of employed women.

[Figure 9 about here]

3.3. Earnings equations

Table 2 presents the results of extended earnings equations estimated by OLS for different age groups and by gender. As already noted above, there is no conditional gender wage gap among the teenagers, though the gap is quite high among the young adults, about 18%, and the prime-aged, about 26%. This is quite a large gap, considering the relatively low wages of young workers in Azerbaijan.

The role of work effort in terms of hours of work on monthly wages is confirmed by the coefficient of the weekly hours. The coefficient is statistically significant especially for men and among the young adults and the prime-age workers, a finding that Pastore, Sattar and Tiongson (2013) report relative to Kosovo, using the same types of data.

The returns to education are not particularly strong, especially for women and the youngest age group. Holding a diploma of general and specialized secondary education increases wages only by about 5% with respect to those with vocational education or below. Holding tertiary education is associated with a wage premium of about 20%, which implies quite a low annual rate of return, especially low considering that Azerbaijan is a low income country and therefore returns to education are expected to be generally high also because of the low average educational level (Psacharopoulos, 1994). The low returns to education partly explain also the low average level of education, especially in the case of women. For women, in fact, high education is associated with no wage premium, whatever the estimates.

The return to work experience is not very high: less than 1% higher wages per year of work experience. Considering the low average work experience, the squared term is not included.

We find a wage premium for self-employment of 30% on average. It is the highest among the teenagers (60%) as compared to the adults (18%) and the oldest age segment (26%). Probably, this is due to the fact that among the youngest age segment the average wage is much lower. The premium is especially high and statistically significant in the case of women.

Holding other things constant, migration is associated with a wage premium when individuals migrate for educational reasons and associated with a wage penalty when individuals move to find a job.

There is no necessary link, in principle, between job search methods and the quality of job matches and subsequent earnings. Nonetheless, in our estimates, being hired through their own educational institution brings a wage penalty, while being hired through job fairs, public employment services and public job advertisements is correlated with a wage premium. Especially sizeable is the premium associated with being hired through job fairs and public job advertisements, probably because only the best jobs are advertised using these recruitment channels. This is

different from the case of Mongolia (Pastore, 2010a), where it brings a wage penalty, but similar to Kosovo (Pastore, Sattar, Tiongson, 2013) and in other developing countries, when being hired through a network of family and friends is not associated with a wage penalty.

Job security does not come without a cost in Azerbaijan. Holding a contract implies always lower wages, especially if the contract is of unlimited duration and seasonal in nature. In other words, there is a trade-off between job security and wages. This is probably due also to the fact that in the case of informal work part of the wedge goes directly in the pockets of young workers. The same conclusion applies to the workers who do not pay taxes on their wages.

Moonlighting is associated with higher wages in the worker's main occupation. This probably indicates the greater skill level and/or motivation of the workers who moonlight. Not surprisingly, moonlighting is especially common among men, probably because women likely spend more hours engaged in reproductive and child care services.

Ceteris paribus, training brings with it a wage penalty rather than a wage premium. This may be associated with the lower productivity and work experience of those workers who require training so early in their career. Moreover, training pays off only after some time.

Union membership is associated with a wage penalty, of about 15%. The penalty is higher for young adult women and the oldest age segment in the sample.

The size of firms is associated with a wage penalty of about 20% in the case of jobs provided in very small firms and a wage premium of about 12% in the case of jobs provided by firms with more than 20 employees, holding other things constant. Meanwhile, wages in rural areas are about 12.6% lower than in urban areas, ceteris paribus. The gap is especially high among the oldest age groups probably because of the relatively better jobs available in urban areas for these age groups.

[Table 2 about here]

The Oaxaca and Blinder decomposition is the analytical tool typically used to disentangle the roles played by differences in characteristics and differences in coefficients (namely the way such characteristics are rewarded in the market) in determining the gender gap. Table 3 reports the results of such decomposition for all the age groups considered. The table has three panels. Panel (a) reports the overall results of the analysis; panel (b) shows the role of each characteristics; and panel (c) reports the coefficients of such characteristics. The characteristics are summarized for several homogeneous groups. The variables included in each group are explained in the table's accompanying footnotes. A positive coefficient can be read as increasing the gap, whereas a negative coefficient can be read as reducing the gap.

The conditional gap rises from about 6 log points among teenagers to over 10 log points among the older age groups. Among teenagers, neither the explained nor the unexplained component is statistically significant. In all other cases, the explained component reduces while the unexplained component increases the gap. This means that women have overall characteristics that

are superior to men and therefore if they were paid for those characteristics at the same rate as men they would receive higher wages, on average. The point is that in the market the same characteristics may be paid at different rates by gender and men are, on average, paid more. This explains the gender gap, which therefore has a prevailing discrimination component.

Looking at panel (b), among the characteristics that increase the gap we find the number of weekly hours, which, as we know from previous discussion, is greater for men, and the greater share of self-employed and moonlighters among men. Among the factors that tend to reduce the gap, we have the better type of contract typically chosen by women, their tendency to work in larger firms and the higher training level. Other factors are not statistically different across gender. There are not remarkable differences by age. These differences are quite stable for the young adults and the prime-aged, but not for the teenagers. As noted above, for the latter group, when maternity factors are still not at play, differences are still irrelevant.

When we look at the unexplained component of the gap, we see that differences in coefficients by gender are notable but not statistically significant. The return to a weekly hour of work is much greater for men than for women, especially among prime aged workers, which suggests that there is probably also some glass ceiling effect or, alternatively, a tendency of men to occupy higher level positions or jobs with a higher productivity level. Also human capital characteristics are paid much more to men than to women. The same type of contract, which women had with a high quality, is more rewarding to men than to women.

[Table 3 about here]

3.4. Juhn, Murphy and Pierce (1993) Decomposition

OLS earnings equations and the Oaxaca and Blinder decomposition suffer from a number of limitations which prevent us from fully understanding some important features of the wage distribution. One such limitation is that they look at the average value of the wage distribution, preventing us from exploring whether the wage gap varies at different quantiles of the wage distribution. The empirical literature provides compelling evidence of the different size of the gender wage gap at different quantiles of the wage distribution. In addition, they do not tell us anything about the impact of quantity and price differences at different deciles of the wage distribution. To address these shortcomings, we now turn to the Juhn, Murphy and Pierce (1993) decomposition analysis which allows us to look at the gender wage gap and its components at different percentiles of the wage distribution.

Table 4 reports the results of the Juhn, Murphy and Pierce (1993) decomposition analysis of the gender wage gap in monthly wages. The procedure is implemented for each age group.

The results are striking: While price effects go always in the direction of increasing the gap, as shown by the positive sign of price effects, the individual characteristics, meanwhile, tend to have different effects by age groups. Such individual characteristics serve to reduce the gap among the teenagers and the young adults, but they also tend to increase the gap, although only slightly so, for the oldest age group (the prime age workers). The residual wage inequality does not seem to affect in any important way the gender wage gap.

The role of price effects is strong in all the estimates, generating most of the gender gap. This suggests that an important component of the gap is not so much the difference in characteristics of men and women, but the way similar characteristics are rewarded in case of men and women. The price effect explains most of the average gender gap in the entire sample and for each age group. If men were paid the same price as women for the same characteristics, they would receive a wage about 11.3% lower. When we focus on the young adults, the wage gap in favor of women if they were paid the same as men for the same characteristics would be 22.4%.

[Table 4 about here]

This finding, namely the marginal role of Q factors and the important role of P factors, suggests that analyzing quantity effects in great detail may not be useful. Table 5 suggests that the quantity effects are close to zero, except in the case of the young teenagers, for whom, however, the number of observations is probably not large enough to disentangle all the quantity effects.

[Table 5 about here]

One advantage of the Juhn, Murphy and Pierce (1993) methodology compared to the standard Oaxaca and Blinder decomposition is the possibility of decomposing the gap at different quantiles of the wage distribution. Omitted findings of the decomposition at the 25th, 50th and 75th percentile show that the gap is particularly high at the lowest and highest ends of the wage distribution across all age groups⁷. This is supportive of the hypotheses of sticky floor and glass ceiling observed in other countries (see, for instance, Arulampalam et al. 2007). In other words, most of the gender gap reflects the disadvantage experienced by women at the lowest and top ends of the wage distribution.

To explore this issue in a more systematic way, we implement the Machado and Mata (2005) decomposition of the gap at each percentile of the wage distribution. The panels of Figure 10 show the decomposition for the entire sample (panel a) and then separately for each age group, including the teenagers (panel b), young adults (panel c) and prime-aged (panel d). The figures suggest the following conclusions:

- a) there is little gender wage gap among teenagers;
- b) most of the gap can be found among young adults and prime-aged young people;

-

⁷ The results are available on request from the authors.

- c) the gap is particularly wide at the top and bottom end of the wage distribution, confirming yet again the sticky floor and glass ceiling. In other words, women tend to be paid less than their male counterparts both when they are employed in low-skill, low-productivity jobs and when they are employed in high skill, high productivity jobs; and
- d) the gap at the bottom of the wage distribution rises to about almost 40% while at the top of the wage distribution, the gender gap is about 20%.

Overall, the Machado and Mata (2005) decomposition analysis confirms the impression that the main differences between men and women emerge when women reach the child-bearing years. We have noted that women tend first to adjust the number of hours worked per week and then subsequently also the decision itself whether to work or not. We now study labor supply decisions by gender and the impact of different variables on these decisions.

[Figure 10 about here]

3.5. Labor supply decisions

As noted in the previous sections, labor supply decisions diverge early in the careers of young people in Azerbaijan. Young men and women start having children at a slightly different ages, which then affects their labor market outcomes. Early marriages, particularly among women, are quite common in the country and in our sample represent an important share.

In order to assess the importance of marital status and other demographic characteristics on the labor market experience of young people, we first estimate by Probit a labor supply equation and then decompose using the Fairlie (2005) decomposition technique the impact of different covariates on the gender gap in labor supply for different age groups, namely the teenagers, young adults, prime-aged, and for the entire sample. The results of this exercise are reported in Table 6. The regressors include a number of variables grouped into clusters such as age, education, marital status, children, early marriage, being parentless, number of siblings, household size, education of father, education of mother, worked while studying, living in rural areas. In the table's accompanying footnote, we report all the variables included in each group.

The first important point to report is the generally low pseudo-R² of the underlying Probit estimates, which ranges between the 0.10 of the prime-aged group to the 0.18 of the overall sample⁸. This is mirrored also in the low share of the gender gap in labor supply which is explained by all the variables we include in the estimates. As reported in Table 6, in fact, the explained

⁸ We do not report these estimates, which are, however, available on request, because in the next section we report the results of the Heckman sample selection procedure, which includes also a labor supply equation as selection equation.

component of the gap, ranges from 8.9% in the case of the prime-aged workers to 24.9% of the entire sample.

Among the covariates, marital status contributes the most to the explained component of the gap. Surprisingly, the effects are mainly due to the positive impact of being married on male labor supply rather than to the negative impact of being married on female labor supply. Also the role of children is to some extent unexpected. Having more children reduces the reservation wage of young men pushing them to seek labor, but does not seem to affect the probability of mothers to participate in the labor market. When one disentangles the differences in labor supply of individuals associated with different marital statuses, it appears that the gender difference in good part come from a large share of women who do not participate in the labor market because they are housewives. But only about half of the women are married. One possibility is that some young women withdraw from the labor market though they are not married and do not yet have children, probably because they expect to marry and to have children soon.

[Table 6 about here]

Overall, the decomposition of the factors affecting the labor supply of men and women in their early career suggests that labor supply decisions are dramatically different among women, likely due to the lack of services to support childbearing and childcare. In other words, the choices for women are stark: either start a family or continue working. In the following section we attempt to assess the impact of such labor supply decisions on wages and especially the conditional gender gap.

3.6. Sample selection correction

In order to assess the impact of selection into employment of men and women on the gender wage gap, we implement the sample selection procedure. The selection arises from the fact that the Mincerian earnings equations and, hence, also the gender wage gap are estimated only among the sub-sample of employed individuals, not for the entire sample. However, if, by chance, employed men and women are systematically different with respect to some unobservable characteristics from the sample of the non-employed, then the earnings equation may yield biased estimates of the coefficients, including the gender gap. The most obvious reason why the two samples might be different is that, in the case of the decision to participate in the labor market, both men and women may have higher skill levels than their counterparts who are not employed. If this is true and if the non-employed ever find a job, they would likely receive a lower-than-average wage, the consequence being a higher gender wage gap.

To estimate the impact on the gender wage gap of selection into employment, we use the Heckman procedure. It implies estimating two equations – either simultaneously by maximum

likelihood or sequentially in a two-step procedure – of which the first equation, called the selection equation, is a labor supply equation, where the dependent variables is a dummy variable taking on a value of one if the individual earns an income and zero if not; the second equation, called the main equation, is the usual Mincerian earnings equation augmented of an additional term – the inverse Mills ratio – which measures the probability that an individual be employed rather than not. This term accounts for the impact of the unobservable factors that may cause some individuals to be employed and others to be non-employed. Once we control for such unobservable factors, the coefficient of each variable becomes unbiased, including the coefficient of the gender dummy. Our expectation is that the new coefficient will be lower than the OLS coefficient or greater in absolute value, considering that it is negative.

The success of this modeling strategy depends on the effectiveness of the instruments used to explain selection into employment. Because non-employment is due to two distinct phenomena in our sample, namely unemployment and inactivity, on the one hand, and study, on the other hand, we imagine two sets of instruments. Set one includes civil status variables, such marital status and the number of children; set two includes family background variables. To work effectively, instrumental variables need to affect the selection equation – labor supply decisions – but not earnings, the dependent variable of the main equation.

In our estimates reported in Table 7, civil status is explained by such variables as early marriage, having three children or more, being married or engaged rather than single. All these variables may be considered endogenous to the decision to participate to the labor market, since people may decide whether to have children while also deciding whether to participate in the labor market, particularly women. In addition, their decision might also be affected by wages, the dependent variable of the main equation. Nonetheless, in the literature, these are the typical variables used to instrument for labor supply decision. The second set of instrumental variables include the number of siblings, the educational level of fathers and mothers, and being parentless. These variables are less likely to be endogenous.

The results of the Wald test do not always reject the hypothesis of absence of sample selection bias, suggesting that the coefficients estimated by OLS may be biased in some cases. Such cases include the young teenagers, both men and women, the young adults, entire sample, and the primeaged women. These are in fact the cases when the *athrho* is statistically significant.

We can explain the correlation between the main equation and the selection equation by looking at the instruments that are statistically significant. The variable early marriage is never statistically significant in the case of men and is statistically significant and positive in the case of women only for the group of the young adults. The likely reason is that experiencing early marriage affects only the period immediately after marriage. Moreover, contrary to expectations, early

marriage encourages some girls to work rather than to leave the labor market, but this impact seems to be only temporary.

Being married or engaged implies a strong, positive impact on male labor supply, but not as much on female labor supply. This may be an interesting indicator of the direction of the bias due to sample selection on the gender wage gap.

Having 3 children or more implies a statistically significant reduction in the probability to work for teenage women, but not for women of other ages in the sample. Also men are statistically unaffected by the number of children in their household.

As to family background variables, being fatherless has a strong positive impact on male, more than female labor market participation. Men bear the responsibility of the family when fathers pass away.

Having a mother with a university level of education is associated with a statistically significant reduction in the probability to work (rather than study) for the young teenagers. Having a mother with a university degree likely encourages teenagers to continue their education. The impact is however, particularly strong in the case of the educational level of fathers. In this case the effects spread also among young adults. Again, the higher is the educational level of fathers, the lower the probability to study rather than work.

What is the impact on the gender wage gap? Interestingly, the gender gap is always reduced, rather than increased. In the overall estimates, the coefficient is still negative, but smaller in absolute terms. It becomes statistically insignificant for teenagers and prime aged, while becoming positive for the young adults. In unreported estimates of the Heckman procedure, we find a positive gender gap in favor of women. This suggests that in fact a strong selection into employment is important not for the women, but rather for men. In other words, the changed civil status and the establishment of a family affects the men in particular, who self-select themselves into the labor market in such a way that they find the best jobs and are paid more. Even assuming that such selection mechanism is not happening to women, the selection of the most motivated and skilled men into marriage and work is causing in fact a gender gap in their favor. Once we control also for the least motivated who neither marry nor work, then the gap is in favor of women.

[Table 7 about here]

4. Discussion and policy implications

The previous analysis has shown that the early stages of a woman's labor market experience are critical. It is at this stage that women are to take important decisions regarding their family life and the labor market, generating lasting consequences for their work experience and earnings. In fact,

maternity seems to generate a wage penalty years after entering the labor market. The gap between men and women emerges among young adults, namely in the early 20s, when the gap in labor supply goes up at 29 per cent. Also the gap in hours of work turns from positive for women, by up to 6 weekly hours on average, to positive for men, by up to 4.6 weekly hours. These differences affect wages immediately. The unconditional wage gap which is positive in favor of women for the teenagers who work, turns negative for the young adults and prime-age workers. In their late 20s, the gender wage gap approaches 35%, consistent with other studies of wage gaps among adults. In fact, of the 40% of women in our sample who marry in their early 20s, most make decisions about family life at that point.

Maternity affects the gender wage gap in part by apparently eroding women's advantage in terms of readiness to work and speed in finding a job. This is also related to their tendency to work in sectors that provide more maternity benefits, such as large firms and jobs covered by formal work arrangements. In such protected sectors, women generally tend to earn more, but most of those who do not find these types of jobs remain non-employed (either unemployed or inactive). It would be important to increase the extent to which each job provides maternity benefits to reduce the tendency of young women to self-select themselves into a limited number of sectors, where they are not necessarily best placed to find a job.

Interestingly, the results of the procedure implemented to control for sample selection suggest that we observe selection into employment by skill and motivation among men, rather than among women. Skills and motivation do not seem to matter as much in the case of women. This is also confirmed by the finding, quite atypical in the current literature, according to which women do not have a particular advantage with respect to men in terms of human capital accumulation, just the opposite. While their educational level is not superior to that of men, their level of actual work experience is much lower, driven by lower average level of labor supply and by interruptions due to maternity. Reducing the length of such interruptions through child care services should be a top priority for policy makers aware of the drivers of gender differences.

Another important field of intervention is granting equal pay at work. In the case of Azerbaijan, the gender gap in earnings is mainly due to the way the market rewards the same characteristics differently for men and women. The results of the Oaxaca and Blinder decomposition analysis show that both their human capital and their hours of work are rewarded more in the case of men. Discrimination against women is confirmed by the size of the so-called sticky floor and glass ceiling effect based on the Machado and Mata decomposition analysis. Women are paid much less than men both at the bottom and at the top of the wage distribution.

Concluding remarks

This paper is the first to explore the emergence of gender differences in the labor market in Azerbaijan. A further novelty of the paper is the focus on early career, made possible by the ILO's SWT survey, a unique source of information both for the size of the sample and the wealth of information on young people's individual and demographic characteristics and labor market activity.

We address the question of whether gender wage differences appear from the beginning of the careers of young men and women or whether they emerge later in their careers. The analysis suggests that at the point of entry into the labor market, differences between men and women are marginal. However, measurable differences emerge as workers begin making choices between family formation and work. The Oaxaca and Blinder decomposition analysis shows that women have better productivity-related characteristics than their male counterparts but are paid less for the same characteristics. This points to a sizeable unexplained component of the gap. The Juhn, Murphy and Pierce decomposition confirms these results at different quantiles of the earnings distribution. In fact, quantity effects - differences by gender in productivity characteristics - are almost invariably irrelevant. Overall, both the Oaxacha and Blinder and the Juhn, Murphy and Pierce decomposition analyses suggest that differences in pay may be due to the way the labor market rewards the same characteristics depending on whether it is a man or a woman who possesses them. This case is generally associated with the phenomenon referred to as "sticky floor and glass ceiling", namely the tendency of men and women to be paid differently especially at the bottom and at the higher end of the earnings distribution, where differences in pay are more striking. This hypothesis is strongly confirmed by Machado and Mata decomposition analysis at each percentile of the earnings distribution.

One surprising result is the selection into employment of young men and women. Contrary to expectations, it is the men, rather than the women, who experience more self-selection based on skill and motivation. The selection is based on civil status and having children. Men who start a family tend to work more and earn more than average.

The results, in addition to contributing to an important, fledgling literature, also has important policy implications for promoting gender equality. First, it is important to reduce the labor market disadvantage of women linked to maternity and try to increase their labor supply. To reduce the tendency of women to withdraw from the labor market it is important to provide more maternity services than are currently available.

In addition, the tendency of women to work in highly protected jobs, namely jobs in large sized firms and jobs with formal contracts, suggests that in other types of jobs and especially in the informal sector and in small firms, rights linked to maternity are not always granted. Implementing

the current legislation throughout the entire productive sector might increase the labor supply of women, especially those who prefer not to work instead of working in non-protected sectors.

Third, equal-pay-at-work measures should be implemented to grant the same pay for the same productivity characteristics of men and women. This point is related to the previous one. The tendency of women to work in highly protected sectors might be also due to the tendency to get paid unequally in other sectors.

Fourth, efforts should be made to reduce the exclusion of women from highly paid jobs, which is apparent from the confirmation of the glass ceiling hypothesis when we implement the Machado and Mata decomposition analysis.

References

- Arulampalam, W., A. L. Booth and M.L. Bryan (2007). "Is There a Glass Ceiling over Europe? Exploring the Gender Pay Gap across the Wage Distribution," *Industrial and Labor Relations Review*, 60(2): 163-186.
- Bertrand M, Goldin C, Katz LF (2010) "Dynamics of the gender gap for young professionals in the corporate and financial sectors," *American Economic Journal: Applied Economics* 2(28): 228–255.
- Del Bono, E. and D. Vuri (2011) "Job mobility and the gender wage gap in Italy," *Labour Economics*, 18(1): 130-142.
- Fairlie, Robert W. (2005). "An extension of the Blinder-Oaxaca decomposition technique to logit and probit models," Journal of Economic and Social Measurement 30: 305-316.
- Juhn, C., Murphy, K.M. and B. Pierce (1993). "Wage Inequality and the Rise in Returns to Skill," The Journal of Political Economy, 101(3): 410-442.
- Kunze, A. 2003. "Gender Differences in Entry Wages and Early Career Wages," *Annales d'économie* et de statistique, 71/72: 245-265.
- Kunze, A. 2005. "The Evolution of the Gender Wage Gap," in Labour Economics, 12(1): 73-97.
- Machado J, Mata J (2005), "Counterfactual decompositions of changes in wage distributions using quantile regression," *Journal of Applied Economics*, 20(4): 445–465
- Manning A, Swaffield J (2008) "The Gender Gap in early-career wage growth," *Economic Journal*, 118(530): 983–1024.
- Munich, D., Svejnar, J. and Terrell, K. (2005). "Is women's human capital valued more by markets than by planners?" *Journal of Comparative Economics*, 33(2): 278-299.
- Pastore F (2010a) "The Gender Gap in Early Career in Mongolia," *International Journal of Manpower* 31(2): 188–207.
- Pastore F (2010b) "Returns to Education of Young People in Mongolia," *Post-Communist Economies*, 22(2): 247-265.
- Pastore F, Sattar S and Tiongson E (2013) "Gender Differences in Earnings and Labor Supply in Early Career: evidence from Kosovo's School-to-Work Transition Survey," *IZA Journal of Labor & Development* 2:5.
- Pastore, Francesco and Alina Verashchagina (2011) "When Does Transition Increase the Gender Wage Gap? An Application to Belarus" *The Economics of Transition*, 19(2): 333-369.

Psacharopoulos, G. 1994. "Returns to investment in education: a global update", World Development, 22(9): 1325-1343.

Tables and Figures

Table 1. The Gender Wage Gap by Age Group

	Monthly wages (with contractual hours of work)							
Panel (a)	All	Teenagers (15-19)	Young adults (20-24)	Prime age (25-29)				
Unconditional	-0.1013***	-0.0559	-0.1125***	-0.1059***				
Conditional on: hours of work	-0.0765***	-0.0847	-0.0831**	-0.0694**				
Conditional on: hours of work, education	-0.0828***	-0.094	-0.0848**	-0.0776**				
Conditional on: hours of work, education, actual work experience	-0.1645***	-0.1315	-0.2235***	-0.1516***				
Conditional on: hours of work, education, actual work experience, work and study, self-employment, migration status, job search method, type of contract, formal / informal work, moonlighting, job satisfaction, training, union membership, firm's size, goal in life, rural area	-0.1204***	-0.0697	-0.1959***	-0.1279***				
Panel (b)	Monthly wages (with actual hours of work)							
	All	Teenagers (15-19)	Young adults (20-24)	"Young old" (25-29)				
Conditional on: hours of work	-0.0947***	-0.0852	-0.1081***	-0.0963***				
Conditional on: hours of work, education, actual work experience	-0.0698**	-0.1395*	-0.1284*	-0.0612				
Conditional on: previous variables, plus worked while studying, migration status, job search method, goal in life, rural area	-0.1531***	-0.2121**	-0.2244***	-0.0883*				
Conditional on: previous variables, plus self-employment, type of contract, formal / informal work, moonlighting, job satisfaction, training, union membership, firm's size	-0.1275***	-0.0753	-0.2161***	-0.1337***				
Panel (c)		Hour	ly wages					
	All	Teenagers (15-19)	Young adults (20-24)	"Young old" (25-29)				
Unconditional	-0.0489*	-0.1025	-0.0454	-0.026				
Conditional on: education	-0.0536**	-0.0976	-0.0455	-0.0340				
Conditional on: hours of work, education, actual work experience	-0.0353	-0.1565*	-0.0460	-0.0205				
Conditional on: previous variables, plus worked while studying, migration status, job search method, goal in life, rural area	-0.0823**	-0.1412	-0.1154**	-0.0909*				
Number of observations	1896	316	703	877				

Note: * p<.1; ** p<.05; *** p<.01.
Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

Table 2. Extended Mincerian earnings equations by age group and gender

Variable	All	Teenagers (15-19)	Young adults (20-24)	Prime- aged (25-29)	All women	All men	Teenagers women	Teenagers men	Young adults women	Young adults men	Prime- aged women	Prime-aged men
Women	-0.1204***	-0.0697	-0.1959***	-0.1279***								
Log of weekly hours of work	0.2042***	-0.126	0.1777**	0.2613***	0.0334	0.2394***	0.0562	-0.1592	0.1439*	0.0972	-0.0293	0.3636***
Education (baseline: vocational or below)												
General education	0.0182	-0.0274	0.0562	-0.0431	-0.0434	0.0241	0.0069	-0.0962	0.0409	0.0646	-0.0735	0.0077
Secondary general education	0.0514**	0.0224	0.1133**	-0.0508	-0.0123	0.0763**	0.013	-0.0252	0.0544	0.1685*	-0.0598	0.0009
Secondary specialised education	0.0676*	-0.1376	0.117	-0.038	-0.0458	0.1279***	-0.1134	-0.166	-0.0666	0.2399**	-0.0537	0.0447
University and Master programme	0.1870***	0.0343	0.1786**	0.1089*	0.0963	0.2454***	-0.0479	-0.0825	0.0588	0.2874**	0.0582	0.2142*
Actual work experience ¹	0.0091***	0.0021	0.0008	0.0038	0.0057**	0.0108***	-0.1323	-0.0045	-0.0131*	0.0128	0.0038	0.0083
Work and study	0.0714	0.3084**	-0.0025	0.0857	0.1320*	0.0506	0.3232*	0.138	-0.0194	0.0305	0.1138	0.0567
Self-employed	0.2969***	0.6135***	0.1784***	0.2620***	0.2822*	0.2953***	0.9774	0.4879**	0.1587	0.1253*	0.0424	0.3020***
Immigrant of which (baseline: not an immigrant)												
With family	0.1116	0.0485	0.0986	0.1349	0.029	0.3289**	0.1377	0.0643	0.0741	0.6759***	0.04	0.3048*
For educational reasons	0.1424***	0.0741	0.2063	(omitted)	(omitted)	0.1484**	(omitted)	0.0423	(omitted)	0.2037	(omitted)	(omitted)
Looking for a job	-0.2109**	-0.1418**	-0.2251***	-0.1775	-0.4030***	-0.0393	(omitted)	-0.1258	-0.3525**	-0.0495	-0.3273**	-0.0717
For other reasons	-0.0071	0.032	-0.0257	0.0054	-0.0171	-0.0197	0.1088	-0.0276	0.0756	-0.0473	-0.1142	-0.0051
Job search method (baseline: other job search channels)												
Educational institutions	-0.2732***	-0.1375	-0.0985	-0.3818***	0.0199	-0.3960***	0.4684	-0.1944	0.4103**	-0.2312*	-0.0742	0.0533
Job fairs	0.4754***	1.0122**	0.6354***	0.3209**	0.8445***	0.2695***	(omitted)	0.5532	1.2074***	0.4175***	0.9737***	0.089
Public Employment Offices	0.3322***	1.2733**	0.5321***	0.1287	0.5626**	0.2412***	2.3288**	1.036	1.3043***	0.3569**	0.262	-0.0316
Labor contractors	0.0007	0.6069***	-0.1533	-0.026	0.0642	-0.0325	1.0267**	(omitted)	0.2891	-0.168	-0.296	-0.0631
Direct call by the employer	0.1007*	0.1555	0.1842**	0.0129	0.2465*	0.01	0.7066*	0.0616	0.5250**	0.0649	0.0842	0.2355**
Public job adverts	0.4896***	0.6739***	0.6360***	0.2892***	0.7031***	0.3251***	1.6686*	0.9002*	0.9488***	0.4209***	0.5992***	-0.0405
Personal network of friends and relatives	0.0193	0.2651	0.0151	-0.0312	0.1446	-0.0098	0.5229	0.1121	0.4520**	-0.0916	-0.0196	0.0533
Type of working contract (baseline: no contract)												
Contract of unlimited duration	-0.4508***	-0.8260***	-0.5109***	-0.3386***	-0.6407***	-0.3591***	-0.1498	-0.8312***	-0.6103***	-0.4810***	-0.6819***	-0.1708**
Contract of limited duration	-0.2661***	-0.3867*	-0.2913***	-0.1762*	-0.3801***	-0.2186***	0.3814	-0.5883	-0.2806*	-0.2850***	-0.4548**	-0.0768
Seasonal contract	-0.3837***	-0.5263***	-0.3182***	-0.3445***	-0.5343***	-0.3237***	0.3531	-0.6724***	-0.2869	-0.3256***	-0.7947***	-0.1939**
Oral contract	-0.0636	(omitted)	-0.3214*	0.1141	(omitted)	0.11	(omitted)	(omitted)	(omitted)	-0.2721	(omitted)	0.4621**
Formal / informal work (baseline: formal work)												
Paid no tax on her / his job	-0.1063**	-0.4123***	0.0319	-0.0957	-0.2278***	-0.0592	-0.4992**	-0.2621	-0.1465	0.0871	-0.0344	-0.1073

Does not know whether paid tax	-0.0337	-0.5255***	0.0549	-0.0149	0.1136	-0.0973	-0.6057**	-0.3462	0.0527	0.0359	0.4970**	-0.1551**
Moonlighting	0.2581***	0.0479	0.3305***	0.1704**	0.0997	0.3115***	(omitted)	0.295	0.1782	0.4322***	0.0987	0.2103**
Dissatisfied with her / his job	-0.0771**	-0.0276	-0.0853	-0.0902*	-0.107	-0.071	-0.256	0.0739	-0.0648	-0.1042	-0.1177	-0.0681
On-the-job training (baseline: no training)												
Training of which apprenticeship	-0.0994	0.2872	0.2352	-0.1044	-0.1474	0.2818*	0.3917	1.2057	0.3337	0.2764	-0.3269	-0.1473
Mentoring	-0.4067***	0.3651	(omitted)	-0.4783***	-0.4231*	(omitted)	(omitted)	(omitted)	0.0991	(omitted)	-0.9145**	-0.4374**
Training in new technologies	(omitted)	(omitted)	0.2657	(omitted)	(omitted)	0.3811**	(omitted)	(omitted)	(omitted)	0.2211	(omitted)	(omitted)
Other type of training	-0.1494**	0.217	0.1795	-0.1799**	-0.1146	0.2439	0.0869	0.3671	0.3544	0.1377	-0.3705	-0.1634*
Union Membership	-0.1494***	-0.4996**	-0.1696**	-0.1327**	-0.2089***	-0.1088*	-0.3896	-0.7352*	-0.0828	-0.1596*	-0.2347**	-0.0957
Firm size (baseline: does not know the firm's size)												
5 workers or less	-0.1940***	0.0358	-0.2565***	-0.1098	-0.1278	-0.2669***	-0.2985	0.5928	-0.2390*	-0.2303**	0.0111	-0.2599***
From 5 to 9	0.0399	0.4455	-0.1363	0.1630*	-0.0066	0.0147	-0.3247	1.0852**	-0.325	0.0044	0.3022	0.0159
From 10 to 19 size_10t19	0.0959**	0.1822	0.0727	0.1117	0.0165	0.0597	-0.2876	1.3500**	0.0138	0.1187	0.0485	-0.0308
More than 20	0.1187**	0.7575**	0.0975	0.1001	-0.0098	0.1255*	0.0111	1.7452**	-0.1852	0.2978***	0.1899	-0.0388
Living in rural areas	-0.1260***	-0.0874*	-0.1507***	-0.1178***	-0.1611***	-0.1064***	0.0129	-0.0926	-0.1209*	-0.1359***	-0.1941**	-0.1214***
Constant	5.5152***	6.1937***	5.3133***	5.4711***	6.1275***	4.9538***	5.0654**	5.5964***	4.9288***	5.4960***	6.7281***	5.0239***
N	1896	316	703	877	658	1238	129	187	240	463	289	588
3.7 1/2 1 1 1/2 1 2 0 7 1/2/2/2 2 0 4												

Note: *p<.1; **p<.05; ***p<.01.

¹ For the definition of actual work experience adopted see the data section.

Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

Table 3. Oaxaca and Blinder decomposition of the gender gap in monthly wages

Wage	A11	Teenagers	Young adults	Prime aged					
	Panel (a)								
Overall									
Men	5.971***	5.924***	5.963***	5.992***					
Women	5.869***	5.865***	5.850***	5.886***					
Difference	0.102***	0.059	0.113***	0.106***					
Explained component	-0.066***	0.013	-0.081**	-0.060**					
Unexplained component	0.168***	0.045	0.194***	0.166***					
		Panel ((b)						
Explained component									
Log of weekly hours	0.012***	0.007	0.014**	0.022***					
Human capital	0.002	-0.013	0.001	-0.005					
Self-employment	0.041***	0.082***	0.036***	0.025***					
Migration	-0.005	0.000	-0.003	-0.010					
Search method	-0.018	0.076	-0.027	-0.008					
Type of contract	-0.041***	-0.047	-0.022	-0.040***					
Moonlighting	0.011***		0.014**	0.007*					
Training	-0.019**	-0.016	-0.027**	-0.017*					
Union membership	0.002	-0.009	0.003	0.005					
Firms' size	-0.053***	-0.066	-0.070***	-0.042**					
Rural area	0.002	0.000	-0.001	0.004					
		Panel ((c)						
Unexplained component									
Log of weekly hours	0.761*	-1.052	-0.017	1.378**					
Human capital	0.103	0.300	0.278	0.540					
Self-employment	0.001	0.001	-0.008	0.016					
Migration	0.007	-0.015	-0.005	0.018					
Search method	-0.222*	-0.362	-0.556	-0.076					
Type of contract	0.091***	-0.034	0.063	0.132*					
Moonlighting	0.008**		0.010	0.006					
Training	-0.114	0.455	0.000	-0.352					
Union membership	0.022	-0.042	-0.005	0.034					
Firms' size	0.014	0.296	0.127	-0.097					
Rural area	0.013	-0.023	-0.011	0.013					
Constant	-0.514	0.522	0.318	-1.445*					

Note: *p<.1; **p<.05; ***p<.01.

Human capital: General secondary education, Secondary general, Specialized secondary, University, potential work experience, Work and study while at school; Migration: Immigrant with family, Immigrant looking for a job, Immigrant for other reasons; Job search: Search through the educational institution, Search through job fairs, Search through the public employment services, Direct search, Search through the internet, Search answering job advertisements, Search through informal network or friends and relatives; Type of contract: Unlimited, Seasonal; Tax type: no taxes, don't know whether paid taxes on his/her job; Training type: Apprenticeship, In new technologies, Other; Frms' size: 5 or less, 5 trough 9, 10 trough 19, 2 or plus.

Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

Table 4. Juhn, Murphy and Pierce (1993) decomposition

		Т	Q	P	U
All	mean	0.1013	-0.0156	0.1129	0.0040
Teenagers	mean	0.0559	-0.4840	0.5368	0.0031
Young adults	mean	0.1125	-0.1174	0.2243	0.0056
Young old	mean	0.1059	0.0188	0.0838	0.0033

Note: T = Total difference (All_extm-All_extw); Q = Contribution of differences in observable quantities; P = Contribution of differences in observable prices; U = Contribution of differences in unobservable quantities and prices.

Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

Table 5. Quantity effects on the gender pay gap based on JMP (1993)

Group of variables	All	Teenagers	Young adults	Young old
	mean	Mean	Mean	mean
Working hours	0.003177	-0.00072	0.002501	0.010033
Education	-0.00081	0.004885	0.000876	-0.0031
Work experience	0.046255	-0.21316	-0.00104	0.036798
Work and study	-0.00083	-0.01337	0.000129	-0.00142
Self-employed	0.038368	0.09482	0.025849	0.016266
Migration	-0.00797	0.000867	-0.01404	-0.01261
Search	-0.01934	-0.02834	-0.03817	-0.01025
Contract	-0.03571	0.011321	-0.03382	-0.04297
Tax	-0.01459	-0.05151	-0.00211	0.003799
Moonlight	0.008394	0.007887	0.012853	0.005201
Job dissatisfaction	-0.00881	-0.01152	-0.00864	-0.00846
Training	0.002281	-0.06683	-0.01398	-0.00084
Union	0.001759	-0.00858	0.001654	0.005738
Firm's size	-0.03722	-0.14764	-0.0644	-0.01389
Goal	0.006756	-0.05809	0.015847	0.028457
Rural area	0.002582	-2.8E-05	-0.00083	0.006074

Note: decomposition of the Q effects in Table 3.

Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

Table 6. Fairlie decomposition of the gender gap in labor supply

Sample used for coefficients	Women/men	Women/men	Women/men	Women/men
	pooled	teenagers	young adults	prime-aged
	(1)	(2)	(3)	(4)
Number of observations	4972	1708	1715	1549
Women	2650	878	913	859
Men	2322	830	802	690
Probability of labor supply of men	0.4672	0.2130	0.5071	0.6845
Probability of labor supply of women	0.2834	0.1554	0.2993	0.4188
Difference between men and women	0.1838	0.0576	0.2079	0.2657
Explained component of the gap	0.0458	-0.0135	0.0510	0.0237
	24.9%	-23.5%	24.5%	8.9%
Variables:	21.770	23.370	21.370	0.270
Age	0.0077	-0.0049	0.0040	0.0012
s.e.	0.0007	0.0021	0.0040	0.0012
	0.0007	0.0021	0.0009	0.0003
% contribution to the gender	17.00/	26.20/	7.00/	E 00/
gap	16.9%	-36.2%	7.8%	5.0%
Education	0.0024	-0.0127	0.00	0.0044
s.e.	0.0007	0.0028	0.0024	0.0015
% contribution to the gender	E 00/	02.007	0.407	40 507
gap	5.3%	-93.9%	8.1%	18.7%
Marital	0.0328	-0.0026	0.0544	0.0309
s.e.	0.0132	0.0061	0.0183	0.0415
% contribution to the gender				
gap	71.6%	-19.3%	106.7%	130.4%
Children	-0.0035	0.0027	-0.0152	-0.0197
s.e.	0.0105	0.0036	0.0129	0.0328
% contribution to the gender				
gap	-7.7%	20.0%	-29.8%	-83.2%
Early marriage	-0.0061		-0.0159	0.0028
s.e.	0.0042		0.0085	0.0088
% contribution to the gender				
gap	-13.2%		-31.2%	11.7%
Parentless	0.0007	-0.0007	0.0003	0.0010
s.e.	0.0002	0.0005	0.0003	0.0007
% contribution to the gender				
gap	1.5%	-5.3%	0.5%	4.1%
Number of siblings	-0.0039	-0.0080	-0.0062	-0.0007
s.e.	0.0013	0.0037	0.0027	0.0018
% contribution to the gender				
gap	-8.6%	-59.3%	-12.2%	-3.1%
Household size	0.0032	0.0021	0.0071	0.0011
s.e.	0.0012	0.0039	0.0024	0.0011
% contribution to the gender	0.0012	0.0037	0.0021	0.0011
gap	6.9%	15.2%	13.9%	4.7%
Education of father	0.0014	0.0012	0.0016	0.0003
	0.0005	0.0012	0.0010	0.0003
S.e.	0.0003	0.0012	0.000	0.0010
% contribution to the gender	2.00/	0.00/	2 10/	1 E0/
gap Education of mother	3.0%	9.0%	3.1%	1.5%
	0.0004	0.0008	-0.0016	0.0000
s.e.	0.0004	0.0005	0.0011	0.0005
% contribution to the gender	0.007	E 00/	2.407	2.22
gap	0.8%	5.9%	-3.1%	0.2%
Worked while studying	0.0013	-0.0011	0.0035	0.0006
s.e.	0.0004	0.0006	0.0020	0.0005
% contribution to the gender				
gap	2.9%	-8.5%	6.9%	2.5%
Rural areas	0.0095	0.0097	0.0151	0.0017
s.e.	0.0009	0.0018	0.0020	0.0013
% contribution to the gender				
gap	20.6%	71.6%	29.6%	7.1%

Note: The educational group includes such variables as seegen specsec univ. The marital status group: wengaged mengaged marrdivwid1w marrdivwid1m. The children group: children: kid1w kid2w kid3w kid1m kid2m kid3m. The early marriage group: earlymarrw earlymarrm. The parentless group: nofather nomother. The education of father: vocsec_f univ_f. The education of mother: vocsec_m univ_m.

 $Source: own\ elaboration\ on\ the\ ILO\ School-to-work\ transition\ survey\ of\ Azerbaijan.$

Table 7. Heckman sample selection procedure: instruments for civil status and family background (hourly wages)

Variable		Entire sample	e	Teenagers				Young adults	3	Prime aged workers			
	All	Women	Men	All	Women	Men	All	Women	Men	All	Women	Men	
Wage													
Women	-0.0836**			-0.0954			0.1709***			0.0323			
Log hours	0.4459***	0.5276***	0.3775***	0.5752***	1.0319***	0.1508	0.2603**	0.6830***	-0.073	0.4192***	0.2934**	0.4444***	
Age of the respondent	0.0035	0.0129	0.0025	-0.0255	0.0247	-0.0934**	-0.0695***	0.0144	-0.0741***	-0.0295*	-0.0864***	-0.0013	
General Secondary	-0.1351***	-0.1823***	-0.0793*	-0.1317*	-0.3072***	-0.2609**	-0.0605	-0.0649	-0.0644	-0.1929***	-0.1587**	-0.1846**	
Specialised secondary	-0.1682***	-0.3657***	0.0014	0.0291	-0.0292	-0.0497	-0.1963**	-0.29	0.0083	-0.2540***	-0.5069***	-0.1186	
University	-0.0602	-0.2380***	0.085	0.3790**	0.3042	-0.1677	-0.1435	-0.1298	0.0914	-0.1444**	-0.4112***	0.0088	
Immigrated with the family	0.1618**	0.1532	0.2509*	0.2974***	0.3926**	0.6503*	0.1556	0.1354	0.5745*	0.1850*	0.1964	0.2658	
Immigrated to find better educion	0.0834	(omitted)	0.12	0.3159***	(omitted)	0.304	0.3412	(omitted)	0.2012	(omitted)	(omitted)	(omitted)	
Immigrated to look for jobs	-0.1926	-0.3748	0.0637	0.0628	(omitted)	-0.8968**	-0.7379**	-0.9890**	-0.1552	-0.1821	-0.387	-0.0751	
Immigrated for other reasons	0.036	0.1146*	0.0138	0.0366	0.2574*	0.019	0.0863	0.1545	0.1215	0.0302	0.0659	0.0394	
Work and study	-0.0286	0.0025	-0.0266	-0.1219	0.0284	-0.3637	-0.154	-0.2844	-0.0708	0.0106	0.028	0.0209	
Rural area	-0.1614***	-0.0467	-0.1939***	-0.1699*	-0.1962**	-0.7442***	-0.4743***	-0.004	-0.4455***	-0.2400***	-0.3332***	-0.2560***	
Constant	4.4525***	3.7364***	4.6558***	4.3039***	1.5026	8.7065***	7.3784***	3.1653	8.5908***	5.6872***	8.0920***	4.7627***	
Selection equation					= -								
Women	-0.4408***			-0.3150***			-0.4096***			-0.6801***			
Age of the respondent	0.0819***	0.0650***	0.0954***	0.1068***	0.1295**	0.0773*	0.1124***	0.0979***	0.1325***	0.0794***	0.0950**	0.0709*	
General Secondary	0.3278***	0.2658***	0.3717***	0.4237***	0.4537***	0.4396***	0.1291	0.081	0.137	0.2494**	0.0594	0.4700***	
Specialised secondary	0.5303***	0.5384***	0.5079***	0.4126*	0.6897**	0.2019	0.2653**	0.3725*	0.0612	0.4713***	0.4798*	0.6540***	
University	0.6433***	0.6916***	0.5883***	0.6310*	0.5968	0.3338	0.4041***	0.7583***	0.2384	0.3816***	0.3184*	0.5234***	
Immigrated with the family	-0.2380**	-0.0807	-0.5392**	-0.4999	-0.4311	-0.5355	-0.3244	-0.1393	-1.1142**	-0.112	-0.0476	-0.215	
Immigrated to find better educion	-0.8475**	-5.1852***	-0.6441	-0.1897	-4.7273***	-0.1954	-1.4518***	-4.7356***	-1.4092***	(omitted)	(omitted)	(omitted)	
Immigrated to look for jobs	0.5041*	0.4275	0.7106	0.3804	-5.1428***	1.0657*	0.7467	0.8243	0.1749	0.4647	0.4092	0.5137	
Immigrated for other reasons	-0.0064	0.0871	-0.0528	0.1433	0.2714	0.1207	-0.1277	0.1246	-0.2553*	0.0032	-0.0271	0.1452	
Work and study	0.2648***	0.4646***	0.1229	0.3599**	0.5774**	(omitted)	0.5208***	0.7220**	0.4063*	0.185	0.5606	-0.0195	
Rural area	0.5708***	0.6116***	0.5420***	0.6381***	0.5607***	(omitted)	0.5425***	0.6740***	0.5113***	0.5252***	0.6139***	0.4401***	
Number of brothers and sisters	0.0454**	0.0543	0.0359	0.1058**	0.0588	0.1206***	-0.0057	0.0402	-0.0177	-0.0164	-0.0259	-0.0442	
Vocational secondary education offather	-0.0455	0.0589	-0.1177	-0.1424	-0.1482	0.0884	0.0082	0.1374	-0.0375	0.0597	0.0055	0.0797	
Iniversity of father	-0.2211***	-0.1371	-0.2785***	-0.4557***	-0.2777*	-0.1452*	-0.1383***	-0.2267	-0.1157**	0.0516	-0.0285	0.0552	
Vocational secondary education offather	-0.0232	0.0094	-0.0612	0.0795	-0.1122	0.1484**	0.0039	-0.0634	-0.0589	0.0457	0.1121	-0.1098	
Iniversity of father	-0.0979	-0.0937	-0.1257	-0.3022**	-0.4695**	-0.0011	0.0402	0.0491	0.0417	0.0044	0.0804	-0.0437	
Fatherless	0.2118***	0.1953**	0.2349***	0.2856**	0.4581***	0.3396*	0.0934*	0.2655	0.1161	0.1828**	-0.0403	0.4039***	
Mptherless	0.0803	0.0439	0.0895	0.3950**	-0.0131	0.5570	0.1209*	0.2000	0.1194	-0.2419	0.0.103	-0.2643	
Early marriage of woman	0.1669	0.0 107	0.0000	0.4037	0.1064		0.1734***		0.117	0.0265		0.2015	
Early marriage of men	0.0325			0.3194	0.1001		-0.0624		-0.0616	0.307		0.247	
Woman engaged	0.0165		(omitted)	0.2948		(omitted)	-0.1176		0.0010	-0.0056		0.217	
Man engaged	0.5183***		0.5148***	1.1813***		0.2548*	0.3214***		0.3424***	0.1166		0.1812	
Married, divorced or widowed woman	0.0004		(omitted)	(omitted)		(omitted)	-0.0162		U.JT2T	0.1100		0.1012	
Married, divorced or widowed man	0.3678***		0.3201***	(omitted)		0.0294	0.1138		0.0837	0.1366		0.2282**	
Man with 3 kids or more	-0.4907		-0.4744	(omitted)		(omitted)	-0.7446***		-0.8188***	-0.4269		-0.3867	
Woman with 3 kids or more	0.0003	0.0618	-0.4744	-3.8360***	-4.4723***	(omitted)	-0.0831	-0.503	0.0100	0.3421*	0.2377	-0.5007	
Non single woman	0.0003	0.0018		5.0500	0.2913		-0.0031	0.1259		U.JT41	0.2377		
Constant	-2.5761***	-2.7156***	-2.8087***	-3.2805***	-3.8996***	-3.0119***	-2.9181***	-3.2729***	-3.2295***	-2.2773***	-3.2630***	-2.1520**	
Athrho	-2.3/01	-2./130	-2.0007	-3.2003	-3.0770 ***	-3.0117	-2.7101	-3.4147	-3.4473	-4.4113	-3.2030	-2.1320	
Constant	0	0.2314	0.0462	0.2572	0.5773***	-2.3781***	-2.3886***	0.0009	-2.3261***	-0.6569	-1.3615*	-0.5931	
Lnsigma	0	0.2314	0.0402	0.4312	0.5775	22.5701	-2.3000	0.0009	-2.5201	-0.0509	-1.5015	-0.3931	
Constant	-0.7301***	-0.6445***	-0.7919***	-0.5399***	-0.4381***	-0.0952	-0.3354***	-0.7632***	-0.4331***	-0.6987***	-0.4037**	-0.7938***	
Statistics	-0.7501	-0.0443	-0.7919	-0.3399	-0.4301	-0.0932	-0.3334	-0.7032	-0.4331	-0.020/****	-0.403/***	-0.7930	
N Statistics	4972	2322	2650	1708	830	878	1715	802	913	1549	690	859	
11	49/2	2322	2000	1708	830	8/8	1/15	802	913	1549	090	839	

Wald test of independent equations	0.04	2.46	0.21	0.88	6.65***	12. 01***	48.11***	0.19	0.02	0.41	25.26***	0.51

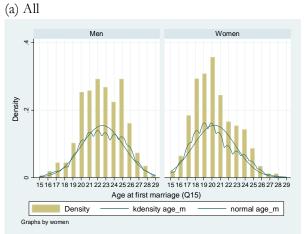
Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

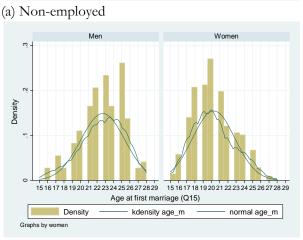
0 1 2 3 4 19 20 21 22 0 1 2 3 4 Density 23 25 0 1 2 3 4 28 29 2 - 3 - 4 wage Density kdensity wage normal wage Graphs by Age of respondent

Figure 1. Kernel density distribution of wages by year of age

 $Source: own\ elaboration\ on\ the\ ILO\ School-to-work\ transition\ survey\ of\ Azerbaijan.$

Figure 2. Age at first marriage





Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.



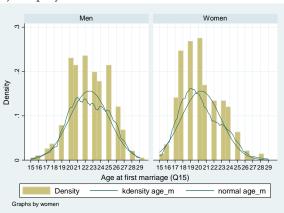
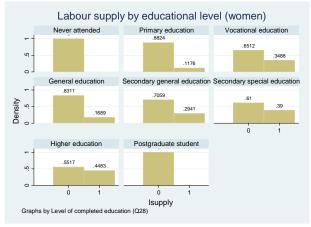


Figure 3. Labor supply by educational level

(a) Women



Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

(b) Men

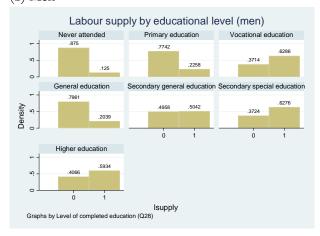
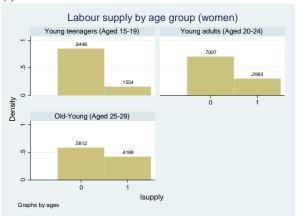


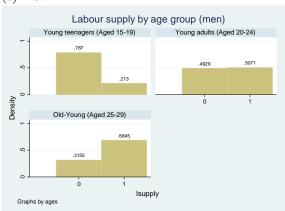
Figure 4. Labor supply by age group and gender

(a) Women



 $Source: own\ elaboration\ on\ the\ ILO\ School-to-work\ transition\ survey\ of\ Azerbaijan.$

(b) Men



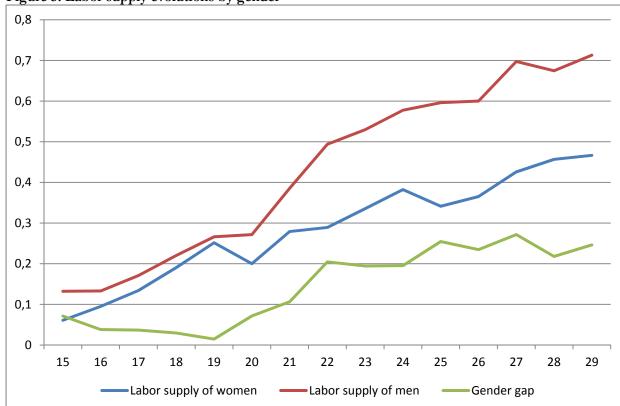
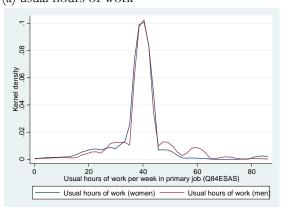


Figure 5. Labor supply evolutions by gender

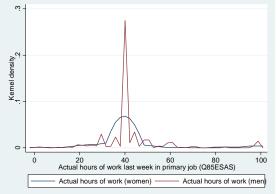
Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

Figure 6. Hours worked per week by gender, contractual and actual

(a) usual hours of work

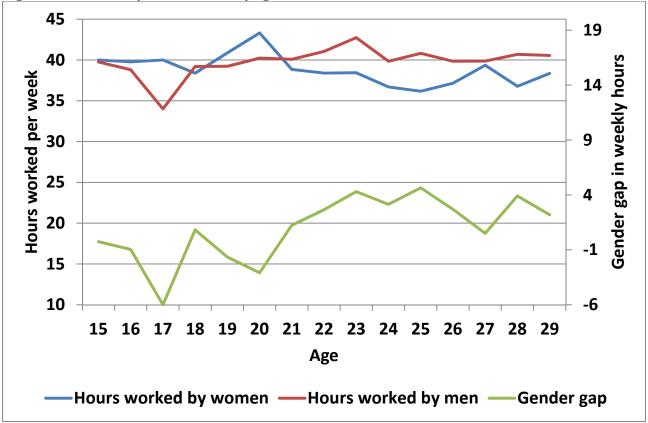


(b) actual hours of work



Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

Figure 7. Usual weekly hours of work by age

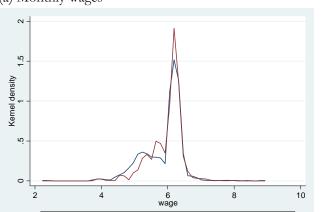


Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

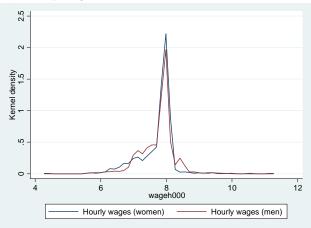
Figure 8. Kernel density function of monthly and hourly wages by gender

Monthly wages (men)

(a) Monthly wages



(b) Hourly wages

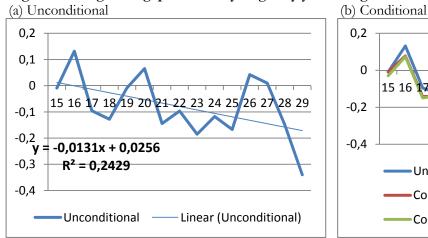


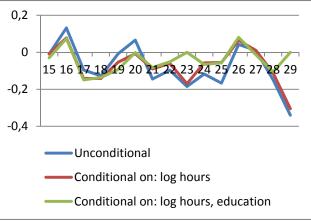
Note: In order to avoid negative values in the hourly wage distribution, we multiply by 1000 the Manats of monthly wages before dividing by the hours worked. The monthly wahes are the log transformation of thousands of Manats.

Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

Monthly wages (women)

Figure 9. The gender gap in monthly wages by years of age





Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

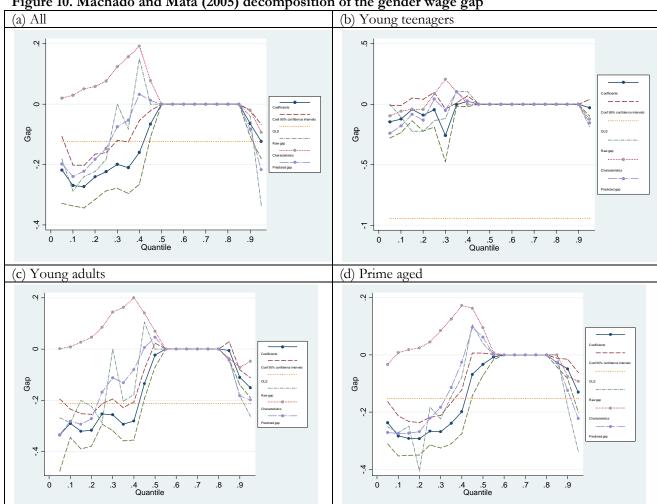
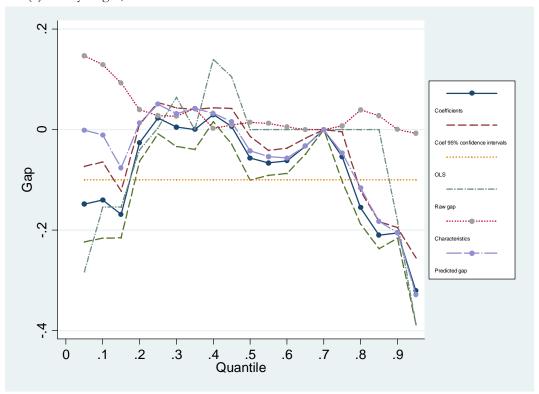


Figure 10. Machado and Mata (2005) decomposition of the gender wage gap

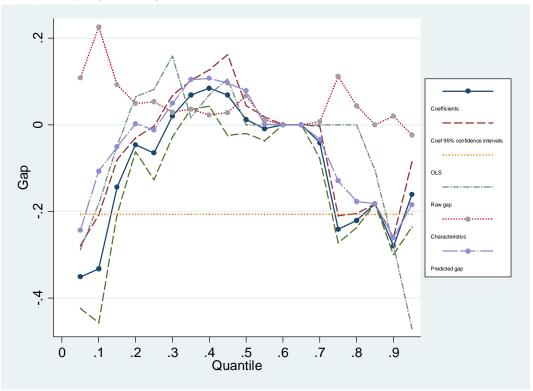
Note: These figures are based on the STATA command mmsel.

The conditional gap is based on earnings equations including controls for years of education, potential work experience, search method (friends and relatives), unlimited contract, having had an apprenticeship contract, working in a small-sized firm (5 or less employees), union membership, living in a rural area. With a larger number of variables, the command does not work, due to the lack of sufficient information.

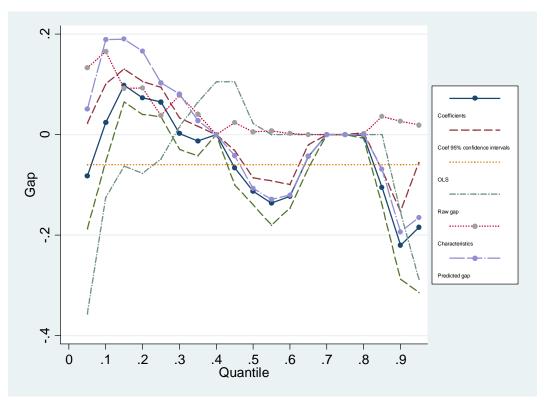
(d) hourly wages, All



(e) hourly wages, Young adults



(f) hourly wages, Prime aged



Note: These figures are based on the STATA command mmsel.

The conditional gap is based on earnings equations including controls for years of education, potential work experience, search method (friends and relatives), unlimited contract, having had an apprenticeship contract, working in a small-sized firm (5 or less employees), union membership, living in a rural area. With a larger number of variables, the command does not work, due to the lack of sufficient information.

Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

Annex of descriptive statistics

Table A1. Descriptive statistics: all, employed, and non-employed

•		•	All					Employe	d			Non	-employe	d	
Variable	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max
Log of total monthly labor income (in th. of old Manats)	1896	5.9355	0.5171	2.3026	8.8537	1896	5.9355	0.5171	2.3026	8.8537	0				
Women	4972	0.4670	0.4990	0	1	1896	0.3470	0.4762	0	1	3076	0.5410	0.4984	0	1
Log of weekly hours of work	1896	3.6412	0.3126	0.6931	4.4308	1896	3.6412	0.3126	0.6931	4.4308	0				
Primary education or below (including vocational education)	4972	0.0933	0.2909	0	1	1896	0.0601	0.2378	0	1	3076	0	0	0	1
General education	4972	0.1480	0.3552	0	1	1896	0.0723	0.2590	0	1	3076	0.1947	0.3961	0	1
Secondary general education	4972	0.5706	0.4950	0	1	1896	0.6113	0.4876	0	1	3076	0.5455	0.4980	0	1
Secondary specialized education	4972	0.0796	0.2708	0	1	1896	0.1060	0.3079	0	1	3076	0.0634	0.2437	0	1
University and Master program	4972	0.1084	0.3109	0	1	1896	0.1503	0.3575	0	1	3076	0.0826	0.2753	0	1
Actual work experience ¹	4972	4.5270	4.6817	-1	23	1896	6.2043	4.7842	-0.0192	22.2578	3076	3.4932	4.3039	-1	23
Teenagers (15-19 years)	4972	0.3435	0.4749	0	1	1896	0.1667	0.3728	0	1	3076	0.4525	0.4978	0	1
Young adults (20-24 years)	4972	0.3449	0.4754	0	1	1896	0.3708	0.4831	0	1	3076	0.3290	0.4699	0	1
Young old (25-29 years)	4972	0.3115	0.4632	0	1	1896	0.4626	0.4987	0	1	3076	0.2185	0.4133	0	1
Women engaged	4972	0.0346	0.1828	0	1	1896	0.0306	0.1723	0	1	3076	0.0371	0.1889	0	1
Men engaged	4972	0.0282	0.1654	0	1	1896	0.0538	0.2257	0	1	3076	0.0124	0.1105	0	1
Women married	4972	0.1036	0.3047	0	1	1896	0.1129	0.3165	0	1	3076	0.0979	0.2972	0	1
Men married	4972	0.0833	0.2763	0	1	1896	0.1614	0.3680	0	1	3076	0.0351	0.1841	0	1
Women divorced or widowed	4972	0.0074	0.0860	0	1	1896	0.0100	0.0996	0	1	3076	0.0059	0.0763	0	1
Men divorced or widowed	4972	0.0024	0.0491	0	1	1896	0.0042	0.0648	0	1	3076	0.0013	0.0360	0	1
Men with children	4972	0.0672	0.2504	0	1	1896	0.1297	0.3361	0	1	3076	0.0286	0.1667	0	1
Women with children	4972	0.0917	0.2887	0	1	1896	0.1065	0.3086	0	1	3076	0.0826	0.2753	0	1
Fatherless	4972	0.1372	0.3441	0	1	1896	0.1693	0.3751	0	1	3076	0.1174	0.3219	0	1
Motherless	4972	0.0354	0.1848	0	1	1896	0.0454	0.2081	0	1	3076	0.0293	0.1686	0	1
Household size: 1 member	4972	0.0193	0.1376	0	1	1896	0.0332	0.1793	0	1	3076	0.0107	0.1030	0	1
2 members	4972	23.0185	14.0182	1	81	1896	22.6978	14.7750	1	81	3076	23.2162	13.5293	1	81

3 members	4972	125.0048	116.0121	1	729	1896	124.5807	120.6218	1	729	3076	125.2663	113.0963	1	729
4 members	4972	0.3071	0.4613	0	1	1896	0.2706	0.4444	0	1	3076	0.3296	0.4702	0	1
5 members	4972	0.2765	0.4473	0	1	1896	0.2595	0.4385	0	1	3076	0.2871	0.4525	0	1
6 members	4972	0.1237	0.3293	0	1	1896	0.1255	0.3314	0	1	3076	0.1226	0.3280	0	1
7 members	4972	0.0525	0.2230	0	1	1896	0.0585	0.2348	0	1	3076	0.0488	0.2154	0	1
8-9 members	4972	0.0422	0.2011	0	1	1896	0.0443	0.2058	0	1	3076	0.0410	0.1982	0	1
Work and study	4972	0.0447	0.2066	0	1	1896	0.0670	0.2501	0	1	3076	0.0309	0.1730	0	1
Self-employed	4972	0.0453	0.2079	0	1	1896	0.1187	0.3235	0	1	3076	0.0000	0.0000	0	0
Immigrant of which	4972	0.1267	0.3327	0	1	1896	0.1287	0.3349	0	1	3076	0.1255	0.3313	0	1
With family	4972	0.0306	0.1722	0	1	1896	0.0274	0.1634	0	1	3076	0.0325	0.1774	0	1
For educational reasons	4972	0.0034	0.0584	0	1	1896	0.0011	0.0325	0	1	3076	0.0049	0.0697	0	1
Looking for a job	4972	0.0050	0.0707	0	1	1896	0.0074	0.0856	0	1	3076	0.0036	0.0597	0	1
For other reasons	4972	0.0877	0.2829	0	1	1896	0.0928	0.2903	0	1	3076	0.0845	0.2782	0	1
From rural areas	4972	0.0696	0.2545	0	1	1896	0.0807	0.2724	0	1	3076	0.0627	0.2425	0	1
From a small town	4972	0.0356	0.1853	0	1	1896	0.0327	0.1779	0	1	3076	0.0374	0.1897	0	1
From a big city	4972	0.0135	0.1153	0	1	1896	0.0090	0.0943	0	1	3076	0.0163	0.1265	0	1
From another country	4972	0.0080	0.0893	0	1	1896	0.0063	0.0793	0	1	3076	0.0091	0.0950	0	1
Found her / his job through	4972	0.0129	0.1127	0	1	1896	0.0338	0.1806	0	1	3076	0	0	0	0
educational institutions Through job fairs	4972	0.0078	0.0882	0	1	1896	0.0206	0.1420	0	1	3076	0	0	0	0
Through Public Employment Offices	4972	0.0078	0.1195	0	1	1896	0.0200	0.1912	0	1	3076	0	0	0	0
Through labor contractors	4972	0.0050	0.0707	0	1	1896	0.0330	0.1112	0	1	3076	0	0	0	0
Through direct call by the employer	4972	0.0658	0.2479	0	1	1896	0.1725	0.3779	0	1	3076	0	0	0	0
Through public job adverts	4972	0.0038	0.0915	0	1	1896	0.0222	0.1472	0	1	3076	0	0	0	0
Through personal network of friends	4972	0.2019	0.4015	0	1	1896	0.5295	0.4993	0	1	3076	0	0	0	0
and relatives					1					1					
Through other search channels	4972	0.0529	0.2238	0	1	1896	0.1387	0.3457	0	1	3076	0	0	0	0
Contract of unlimited duration	4972	0.1400	0.3470	0	1	1896	0.3671	0.4821	0	1	3076	0	0	0	0
Contract of limited duration	4972	0.0209	0.1431	0	1	1896	0.0549	0.2278	0	1	3076	0	0	0	0
Seasonal contract	4972	0.0344	0.1823	0	1	1896	0.0902	0.2865	0	1	3076	0	0	0	0
Oral contract	4972	0.0020	0.0448	0	1	1896	0.0053	0.0725	0	1	3076	0	0	0	0
Paid no tax on her / his job	4972	0.0736	0.2612	0	1	1896	0.1930	0.3948	0	1	3076	0	0	0	0

Does not know whether paid tax	4972	0.0324	0.1770	0	1	1896	0.0849	0.2788	0	1	3076	0	0	0	0
Moonlighting	4972	0.0177	0.1319	0	1	1896	0.0464	0.2104	0	1	3076	0	0	0	0
Dissatisfied with her / his job	4972	0.0815	0.2736	0	1	1896	0.2136	0.4100	0	1	3076	0	0	0	0
Training of which apprenticeship	4972	0.1748	0.3798	0	1	1896	0.4583	0.4984	0	1	3076	0	0	0	0
Mentoring	4972	0.0050	0.0707	0	1	1896	0.0132	0.1141	0	1	3076	0	0	0	0
Training in new technologies	4972	0.0099	0.0988	0	1	1896	0.0258	0.1587	0	1	3076	0	0	0	0
Other type of training	4972	0.8103	0.3921	0	1	1896	0.5026	0.5001	0	1	3076	1	0	1	1
Union membership	4972	0.0720	0.2585	0	1	1896	0.1888	0.3915	0	1	3076	0	0	0	0
Firm's size: 5 workers or less	4972	0.1076	0.3099	0	1	1896	0.2822	0.4502	0	1	3076	0	0	0	0
From 5 to 9	4972	0.0346	0.1828	0	1	1896	0.0907	0.2873	0	1	3076	0	0	0	0
From 10 to 19 size_10t19	4972	0.0579	0.2336	0	1	1896	0.1519	0.3590	0	1	3076	0	0	0	0
More than 20	4972	0.0432	0.2034	0	1	1896	0.1134	0.3172	0	1	3076	0	0	0	0
Does not know the size	4972	0.1380	0.3449	0	1	1896	0.3618	0.4807	0	1	3076	0	0	0	0
Goals in life: Success at work	4972	0.1138	0.3176	0	1	1896	0.1176	0.3222	0	1	3076	0.1115	0.3148	0	1
Giving a contribution to society	4972	0.1273	0.3334	0	1	1896	0.1245	0.3302	0	1	3076	0.1291	0.3353	0	1
Earning a lot of money	4972	0.1852	0.3885	0	1	1896	0.2210	0.4150	0	1	3076	0.1632	0.3696	0	1
Having a happy family life	4972	0.3508	0.4773	0	1	1896	0.3370	0.4728	0	1	3076	0.3592	0.4799	0	1
Gaining all type of work experiences	4972	0.0440	0.2052	0	1	1896	0.0438	0.2047	0	1	3076	0.0442	0.2056	0	1
Understanding the meaning of life	4972	0.0603	0.2381	0	1	1896	0.0533	0.2246	0	1	3076	0.0647	0.2460	0	1
Gain self-esteem	4972	0.1185	0.3232	0	1	1896	0.1028	0.3038	0	1	3076	0.1281	0.3342	0	1
Living in rural areas	4972	0.4055	0.4910	0	1	1896	0.5527	0.4973	0	1	3076	0.3147	0.4645	0	1
Living under the poverty line	4972	0.1961	0.3971	0	1	1896	0.1065	0.3086	0	1	3076	0.2513	0.4338	0	1
															$\overline{}$

Note: ¹ For the definition of actual work experience adopted see the data section.

Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

Table A2. Descriptive statistics by gender

1 , 0			All					Women					Men		
Variable	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max
Log of total monthly labor income (in th. of old Manats)	1896	5.9355	0.5171	2.3026	8.8537	658	5.8693	0.5647	2.3026	7.8240	1238	5.9706	0.4865	3.9120	8.8537
Women	4972	0.4670	0.4990	0	1	2322	1	0	1	1	2650	0	0	0	0
Log of weekly hours of work	1896	3.6412	0.3126	0.6931	4.4308	658	3.6070	0.3325	0.6931	4.4308	1238	3.6594	0.3001	0.6931	4.4308

General education	4972	0.1480	0.3552	0	1	2322	0.1606	0.3673	0	1	2650	0.1370	0.3439	0	1
Secondary general education	4972	0.5706	0.4950	0	1	2322	0.5564	0.4969	0	1	2650	0.5830	0.4932	0	1
Secondary specialized education	4972	0.0796	0.2708	0	1	2322	0.0861	0.2806	0	1	2650	0.0740	0.2618	0	1
University and Master program	4972	0.1084	0.3109	0	1	2322	0.1008	0.3011	0	1	2650	0.1151	0.3192	0	1
Actual work experience ¹	4972	4.5270	4.6817	0	23	2322	1.5814	3.5748	0	21.257 8	2650	7.1080	3.9579	0	23
Teenagers (15-19 years)	4972	0.3435	0.4749	0	1	2322	0.3575	0.4794	0	1	2650	0.3313	0.4708	0	1
Young adults (20-24 years)	4972	0.3449	0.4754	0	1	2322	0.3454	0.4756	0	1	2650	0.3445	0.4753	0	1
Young old (25-29 years)	4972	0.3115	0.4632	0	1	2322	0.2972	0.4571	0	1	2650	0.3242	0.4681	0	1
Women engaged	4972	0.0346	0.1828	0	1	2322	0.0741	0.2619	0	1	2650	0	0	0	0
Men engaged	4972	0.0282	0.1654	0	1	2322	0	0	0	0	2650	0.0528	0.2237	0	1
Women married	4972	0.1036	0.3047	0	1	2322	0.2218	0.4155	0	1	2650	0	0	0	0
Men married	4972	0.0833	0.2763	0	1	2322	0	0	0	0	2650	0.1562	0.3631	0	1
Women divorced or widowed	4972	0.0074	0.0860	0	1	2322	0.0159	0.1252	0	1	2650	0	0	0	0
Men divorced or widowed	4972	0.0024	0.0491	0	1	2322	0	0	0	0	2650	0.0045	0.0672	0	1
Men with children	4972	0.0672	0.2504	0	1	2322	0	0	0	0	2650	0.1260	0.3320	0	1
Women with children	4972	0.0917	0.2887	0	1	2322	0.1964	0.3973	0	1	2650	0	0	0	0
Fatherless	4972	0.1372	0.3441	0	1	2322	0.1331	0.3397	0	1	2650	0.1408	0.3478	0	1
Motherless	4972	0.0354	0.1848	0	1	2322	0.0336	0.1802	0	1	2650	0.0370	0.1888	0	1
Household members: 4	4972	0.3071	0.4613	0	1	2322	0.2963	0.4567	0	1	2650	0.3166	0.4652	0	1
5 members	4972	0.2765	0.4473	0	1	2322	0.2752	0.4467	0	1	2650	0.2777	0.4480	0	1
6 members	4972	0.1237	0.3293	0	1	2322	0.1460	0.3532	0	1	2650	0.1042	0.3055	0	1
7 members	4972	0.0525	0.2230	0	1	2322	0.0573	0.2324	0	1	2650	0.0483	0.2144	0	1
8-9 members	4972	0.0422	0.2011	0	1	2322	0.0491	0.2161	0	1	2650	0.0362	0.1869	0	1
Work and study	4972	0.0447	0.2066	0	1	2322	0.0379	0.1910	0	1	2650	0.0506	0.2192	0	1
Self-employed	4972	0.0139	0.1170	0	1	2322	0.0047	0.0687	0	1	2650	0.0219	0.1463	0	1
With family	4972	0.0306	0.1722	0	1	2322	0.0491	0.2161	0	1	2650	0.0143	0.1189	0	1
Migrating for educational reasons	4972	0.0034	0.0584	0	1	2322	0.0030	0.0548	0	1	2650	0.0038	0.0613	0	1
Looking for a job	4972	0.0050	0.0707	0	1	2322	0.0065	0.0801	0	1	2650	0.0038	0.0613	0	1
For other reasons	4972	0.0877	0.2829	0	1	2322	0.0801	0.2715	0	1	2650	0.0943	0.2924	0	1
From rural areas	4972	0.0696	0.2545	0	1	2322	0.0745	0.2626	0	1	2650	0.0653	0.2471	0	1
From a small town	4972	0.0356	0.1853	0	1	2322	0.0413	0.1991	0	1	2650	0.0306	0.1722	0	1

From a big city	4972	0.0135	0.1153	0	1	2322	0.0159	0.1252	0	1	2650	0.0113	0.1058	0	1
From another country	4972	0.0080	0.0893	0	1	2322	0.0069	0.0827	0	1	2650	0.0091	0.0948	0	1
Immigrant of which	4972	0.1267	0.3327	0	1	2322	0.1387	0.3457	0	1	2650	0.1162	0.3206	0	1
Found her / his job through educational institutions	4972	0.0129	0.1127	0	1	2322	0.0121	0.1092	0	1	2650	0.0136	0.1158	0	1
Through job fairs	4972	0.0078	0.0882	0	1	2322	0.0052	0.0717	0	1	2650	0.0102	0.1004	0	1
Through Public Employment Offices	4972	0.0145	0.1195	0	1	2322	0.0039	0.0621	0	1	2650	0.0238	0.1524	0	1
Through labor contractors	4972	0.0050	0.0707	0	1	2322	0.0026	0.0508	0	1	2650	0.0072	0.0844	0	1
Through direct call by the employer	4972	0.0658	0.2479	0	1	2322	0.1042	0.3056	0	1	2650	0.0321	0.1762	0	1
Through public job adverts	4972	0.0084	0.0915	0	1	2322	0.0103	0.1012	0	1	2650	0.0068	0.0822	0	1
Through personal network of friends and relatives	4972	0.2019	0.4015	0	1	2322	0.1206	0.3257	0	1	2650	0.2732	0.4457	0	1
Contract of unlimited duration	4972	0.1400	0.3470	0	1	2322	0.0986	0.2982	0	1	2650	0.1762	0.3811	0	1
Contract of limited duration	4972	0.0209	0.1431	0	1	2322	0.0129	0.1130	0	1	2650	0.0279	0.1648	0	1
Seasonal contract	4972	0.0344	0.1823	0	1	2322	0.0181	0.1333	0	1	2650	0.0487	0.2152	0	1
Oral contract	4972	0.0020	0.0448	0	1	2322	0	0	0	0	2650	0.0038	0.0613	0	1
Paid no tax on her / his job	4972	0.0736	0.2612	0	1	2322	0.0353	0.1846	0	1	2650	0.1072	0.3094	0	1
Does not know whether paid tax	4972	0.0324	0.1770	0	1	2322	0.0138	0.1166	0	1	2650	0.0487	0.2152	0	1
Moonlighting	4972	0.0177	0.1319	0	1	2322	0.0056	0.0746	0	1	2650	0.0283	0.1659	0	1
Dissatisfied with her / his job	4972	0.0815	0.2736	0	1	2322	0.0422	0.2011	0	1	2650	0.1158	0.3201	0	1
Training of which apprenticeship	4972	0.1748	0.3798	0	1	2322	0.1598	0.3665	0	1	2650	0.1879	0.3907	0	1
Mentoring	4972	0.0050	0.0707	0	1	2322	0.0039	0.0621	0	1	2650	0.0060	0.0775	0	1
Training in new technologies	4972	0.0099	0.0988	0	1	2322	0.0034	0.0586	0	1	2650	0.0155	0.1234	0	1
Other type of training	4972	0.8103	0.3921	0	1	2322	0.8329	0.3731	0	1	2650	0.7906	0.4070	0	1
Union membership	4972	0.0720	0.2585	0	1	2322	0.0556	0.2291	0	1	2650	0.0864	0.2810	0	1
Firm's size: 5 workers or less	4972	0.1076	0.3099	0	1	2322	0.0551	0.2283	0	1	2650	0.1536	0.3606	0	1
From 5 to 9	4972	0.0346	0.1828	0	1	2322	0.0194	0.1379	0	1	2650	0.0479	0.2136	0	1
From 10 to 19 size_10t19	4972	0.0579	0.2336	0	1	2322	0.0969	0.2959	0	1	2650	0.0238	0.1524	0	1
More than 20	4972	0.0432	0.2034	0	1	2322	0.0314	0.1745	0	1	2650	0.0536	0.2252	0	1
Giving a contribution to society	4972	0.1273	0.3334	0	1	2322	0.1197	0.3247	0	1	2650	0.1340	0.3407	0	1
Earning a lot of money	4972	0.1852	0.3885	0	1	2322	0.0633	0.2436	0	1	2650	0.2921	0.4548	0	1
Having a happy family life	4972	0.3508	0.4773	0	1	2322	0.5211	0.4997	0	1	2650	0.2015	0.4012	0	1

Gaining all type of work experiences	4972	0.0440	0.2052	0	1	2322	0.0349	0.1835	0	1	2650	0.0521	0.2222	0	1
Understanding the meaning of life	4972	0.0603	0.2381	0	1	2322	0.0633	0.2436	0	1	2650	0.0577	0.2333	0	1
Gain self-esteem	4972	0.1185	0.3232	0	1	2322	0.1016	0.3022	0	1	2650	0.1332	0.3399	0	1
Living in rural areas	4972	0.4055	0.4910	0	1	2322	0.3876	0.4873	0	1	2650	0.4211	0.4938	0	1
Living under the poverty line	4972	0.1961	0.3971	0	1	2322	0.2046	0.4035	0	1	2650	0.1887	0.3913	0	1

Note: ¹ For the definition of actual work experience adopted see the data section. Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

Table A3. Descriptive statistics by gender and age group

	Young tee	enagers			Young ad	ults			Prime ag	ged		
	Men		Women		Men		Women		Men		Women	
Variable	Obs	Mean	Obs	Mean	Obs	Mean	Obs	Mean	Obs	Mean	Obs	Mean
wage	187	5.924	129	5.868	463	5.963	240	5.850	588	5.992	289	5.886
women	878	0	830	1	913	0	802	1	859	0	690	1
lhours	187	3.620	129	3.667	463	3.675	240	3.608	588	3.659	289	3.580
gensec	878	0.300	830	0.304	913	0.060	802	0.087	859	0.052	690	0.074
secgen	878	0.517	830	0.499	913	0.670	802	0.638	859	0.558	690	0.530
specsec	878	0.017	830	0.024	913	0.083	802	0.122	859	0.122	690	0.119
univ	878	0.007	830	0.016	913	0.136	802	0.100	859	0.204	690	0.204
pwe2	878	3.860	830	0.020	913	6.543	802	0.792	859	11.029	690	4.378
youngteen	878	1	830	1	913	0	802	0	859	0	690	0
youngadult	878	0	830	0	913	1	802	1	859	0	690	0
youngold	878	0	830	0	913	0	802	0	859	1	690	1
wengaged	878	0	830	0.039	913	0	802	0.082	859	0	690	0.107
mengaged	878	0.013	830	0	913	0.058	802	0	859	0.088	690	0
wmarried	878	0	830	0.030	913	0	802	0.190	859	0	690	0.490
mmarried	878	0.011	830	0	913	0.081	802	0	859	0.384	690	0
wdivwid	878	0	830	0.001	913	0	802	0.009	859	0	690	0.042
mdivwid	878	0	830	0.000	913	0.002	802	0	859	0.012	690	0
mchild	878	0.014	830	0	913	0.057	802	0	859	0.314	690	0
wchild	878	0	830	0.020	913	0	802	0.146	859	0	690	0.467

nofather	878	0.103	830	0.105	913	0.137	802	0.136	859	0.184	690	0.164
nomother	878	0.024	830	0.025	913	0.035	802	0.030	859	0.052	690	0.048
hhsize4	878	0.375	830	0.323	913	0.312	802	0.287	859	0.262	690	0.275
hhsize5	878	0.330	830	0.294	913	0.294	802	0.289	859	0.207	690	0.236
hhsize6	878	0.101	830	0.166	913	0.110	802	0.141	859	0.101	690	0.128
hhsize7	878	0.027	830	0.057	913	0.045	802	0.052	859	0.073	690	0.064
hhsize8p	878	0.015	830	0.037	913	0.030	802	0.047	859	0.065	690	0.065
wstudy	878	0.028	830	0.036	913	0.060	802	0.022	859	0.063	690	0.058
selfemployed	878	0.003	830	0.005	913	0.024	802	0.000	859	0.038	690	0.010
immwithfam	878	0.016	830	0.014	913	0.011	802	0.042	859	0.016	690	0.099
immeduc	878	0.005	830	0.004	913	0.007	802	0.005	859	0.000	690	0.000
immlooking	878	0.002	830	0.002	913	0.003	802	0.005	859	0.006	690	0.013
immother	878	0.109	830	0.088	913	0.099	802	0.077	859	0.075	690	0.074
imm_rural	878	0.072	830	0.066	913	0.066	802	0.065	859	0.058	690	0.096
imm_town	878	0.034	830	0.024	913	0.038	802	0.046	859	0.019	690	0.057
imm_city	878	0.014	830	0.010	913	0.010	802	0.016	859	0.010	690	0.023
imm_ocountry	878	0.013	830	0.008	913	0.005	802	0.002	859	0.009	690	0.010
immigrant	878	0.132	830	0.108	913	0.119	802	0.130	859	0.097	690	0.186
search_ed	878	0.003	830	0.005	913	0.015	802	0.010	859	0.022	690	0.023
search_jfa~s	878	0.001	830	0.000	913	0.012	802	0.005	859	0.017	690	0.012
search_PES	878	0.010	830	0.001	913	0.034	802	0.002	859	0.027	690	0.009
search_inter	878	0.000	830	0.001	913	0.007	802	0.002	859	0.015	690	0.004
search_dir~t	878	0.006	830	0.060	913	0.036	802	0.113	859	0.055	690	0.146
search_ad	878	0.001	830	0.004	913	0.010	802	0.014	859	0.009	690	0.014
search_frrel	878	0.137	830	0.067	913	0.278	802	0.137	859	0.407	690	0.165
contr_unlim	878	0.038	830	0.031	913	0.194	802	0.103	859	0.299	690	0.174
contr_limit	878	0.006	830	0.006	913	0.041	802	0.020	859	0.037	690	0.013
contr_seas	878	0.023	830	0.014	913	0.047	802	0.019	859	0.077	690	0.022
contr_oral	878	0.001	830	0.000	913	0.003	802	0.000	859	0.007	690	0.000
taxno	878	0.058	830	0.033	913	0.125	802	0.035	859	0.139	690	0.039
taxdont	878	0.021	830	0.006	913	0.054	802	0.020	859	0.072	690	0.016

moonlight	878	0.011	830	0.000	913	0.036	802	0.009	859	0.037	690	0.009
jobdissati~d	878	0.065	830	0.028	913	0.122	802	0.041	859	0.162	690	0.061
apprentice~p	878	0.115	830	0.102	913	0.194	802	0.171	859	0.256	690	0.216
Mentoring	878	0.000	830	0.002	913	0.005	802	0.004	859	0.013	690	0.006
Trnewtech	878	0.002	830	0.000	913	0.019	802	0.004	859	0.026	690	0.007
Trother	878	0.883	830	0.895	913	0.782	802	0.822	859	0.705	690	0.771
Union	878	0.015	830	0.008	913	0.103	802	0.065	859	0.142	690	0.101
size_5less	878	0.076	830	0.043	913	0.164	802	0.050	859	0.221	690	0.075
size_5t9	878	0.013	830	0.006	913	0.064	802	0.025	859	0.068	690	0.029
size_10t19	878	0.003	830	0.054	913	0.033	802	0.103	859	0.035	690	0.141
size_20plus	878	0.006	830	0.002	913	0.050	802	0.041	859	0.106	690	0.055
Gsocontrib	878	0.158	830	0.134	913	0.117	802	0.130	859	0.127	690	0.091
Omone	878	0.261	830	0.058	913	0.313	802	0.064	859	0.302	690	0.070
Gfamily	878	0.179	830	0.445	913	0.183	802	0.536	859	0.244	690	0.596
Gworkexp	878	0.063	830	0.045	913	0.058	802	0.031	859	0.035	690	0.028
Gmeaning	878	0.067	830	0.076	913	0.060	802	0.055	859	0.045	690	0.058
Gselfest	878	0.156	830	0.129	913	0.127	802	0.096	859	0.116	690	0.075
Rural	878	0.369	830	0.384	913	0.426	802	0.353	859	0.469	690	0.432
poors_Az1	878	0.228	830	0.224	913	0.174	802	0.196	859	0.164	690	0.191

Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.

Table A4. Descriptive statistics by gender, the employed

		All				Wome					Men				
						n									
Variable	Obs	Mean	Std.	Min	Max	Obs	Mean	Std.	Min	Max	Obs	Mean	Std.	Min	Max
			Dev.					Dev.					Dev.		
Log of total monthly labor income (in th.	1896	5.9355	0.5171	2.3026	8.8537	658	5.8693	0.5647	2.30258	7.82404	1238	5.9706	0.4865	3.9120	8.8537
of old Manats)									5	6					
Women	1896	0.3470	0.4762	0	1	658	1	0	1	1	1238	0	0	0	0
Log of weekly hours of work	1896	3.6412	0.3126	0.6931	4.4308	658	3.6070	0.3325	0.69314 7	4.43081 7	1238	3.6594	0.3001	0.6931	4.4308
Primary education or below (including vocational education)	1896	0.0601	0.2378	0	1	658	0.0502	0.2184	0	1	1238	0.0654	0.2474	0	1

General education	1896	0.0723	0.2590	0	1	658	0.0957	0.2945	0	1	1238	0.0598	0.2372	0	1
Secondary general education	1896	0.6113	0.4876	0	1	658	0.5775	0.4943	0	1	1238	0.6292	0.4832	0	1
Secondary specialized education	1896	0.1060	0.3079	0	1	658	0.1185	0.3235	0	1	1238	0.0994	0.2993	0	1
University and Master program	1896	0.1503	0.3575	0	1	658	0.1581	0.3651	0	1	1238	0.1462	0.3535	0	1
Actual work experience ¹	1896	6.2043	4.7842	-0.0192	22.2578	658	2.5274	4.2460	-0.0192	21.2578	1238	8.1585	3.8045	0	22.257 8
Teenagers (15-19 years)	1896	0.1667	0.3728	0	1	658	0.1960	0.3973	0	1	1238	0.1511	0.3582	0	1
Young adults (20-24 years)	1896	0.3708	0.4831	0	1	658	0.3647	0.4817	0	1	1238	0.3740	0.4841	0	1
Young old (25-29 years)	1896	0.4626	0.4987	0	1	658	0.4392	0.4967	0	1	1238	0.4750	0.4996	0	1
Women engaged	1896	0.0306	0.1723	0	1	658	0.0881	0.2837	0	1	1238	0	0	0	0
Men engaged	1896	0.0538	0.2257	0	1	658	0	0	0	0	1238	0.0824	0.2751	0	1
Women married	1896	0.1129	0.3165	0	1	658	0.3252	0.4688	0	1	1238	0	0	0	0
Men married	1896	0.1614	0.3680	0	1	658	0	0	0	0	1238	0.2472	0.4315	0	1
Women divorced or widowed	1896	0.0100	0.0996	0	1	658	0.0289	0.1676	0	1	1238	0	0	0	0
Men divorced or widowed	1896	0.0042	0.0648	0	1	658	0	0	0	0	1238	0.0065	0.0802	0	1
Men with children	1896	0.1297	0.3361	0	1	658	0	0	0	0	1238	0.1987	0.3992	0	1
Women with children	1896	0.1065	0.3086	0	1	658	0.3070	0.4616	0	1	1238	0	0	0	0
Fatherless	1896	0.1693	0.3751	0	1	658	0.1596	0.3665	0	1	1238	0.1745	0.3797	0	1
Motherless	1896	0.0454	0.2081	0	1	658	0.0410	0.1985	0	1	1238	0.0477	0.2131	0	1
Household size: 1 member	1896	0.0332	0.1793	0	1	658	0.0122	0.1097	0	1	1238	0.0444	0.2061	0	1
2 members	1896	22.6978	14.7750	1	81	658	24.2310	14.9896	1	64	1238	21.8829	14.600 3	1	81
3 members	1896	124.580 7	120.621 8	1	729	658	135.662 6	125.042 2	1	512	1238	118.690 6	117.83 27	1	729
4 members	1896	0.2706	0.4444	0	1	658	0.2644	0.4414	0	1	1238	0.2738	0.4461	0	1
5 members	1896	0.2595	0.4385	0	1	658	0.2781	0.4484	0	1	1238	0.2496	0.4330	0	1
6 members	1896	0.1255	0.3314	0	1	658	0.1444	0.3517	0	1	1238	0.1155	0.3198	0	1
7 members	1896	0.0585	0.2348	0	1	658	0.0562	0.2305	0	1	1238	0.0598	0.2372	0	1
8-9 members	1896	0.0443	0.2058	0	1	658	0.0578	0.2334	0	1	1238	0.0372	0.1892	0	1
Work and study	1896	0.0670	0.2501	0	1	658	0.0729	0.2602	0	1	1238	0.0638	0.2445	0	1
Self-employed	1896	0.0364	0.1873	0	1	658	0.0167	0.1283	0	1	1238	0.0468	0.2114	0	1
With family	1896	0.0274	0.1634	0	1	658	0.0608	0.2391	0	1	1238	0.0097	0.0980	0	1
Immigrant for educational reasons	1896	0.0011	0.0325	0	1	658	0	0	0	0	1238	0.0016	0.0402	0	1

Looking for a job	1896	0.0074	0.0856	0	1	658	0.0106	0.1027	0	1	1238	0.0057	0.0750	0	1
For other reasons	1896	0.0928	0.2903	0	1	658	0.0912	0.2881	0	1	1238	0.0937	0.2915	0	1
From rural areas	1896	0.0807	0.2724	0	1	658	0.1033	0.3046	0	1	1238	0.0687	0.2530	0	1
From a small town	1896	0.0327	0.1779	0	1	658	0.0426	0.2020	0	1	1238	0.0275	0.1635	0	1
From a big city	1896	0.0090	0.0943	0	1	658	0.0106	0.1027	0	1	1238	0.0081	0.0895	0	1
From another country	1896	0.0063	0.0793	0	1	658	0.0061	0.0778	0	1	1238	0.0065	0.0802	0	1
Immigrant	1896	0.1287	0.3349	0	1	658	0.1626	0.3693	0	1	1238	0.1107	0.3138	0	1
Found her / his job through educational institutions	1896	0.0338	0.1806	0	1	658	0.0426	0.2020	0	1	1238	0.0291	0.1681	0	1
Through job fairs	1896	0.0206	0.1420	0	1	658	0.0182	0.1339	0	1	1238	0.0218	0.1461	0	1
Through Public Employment Offices	1896	0.0380	0.1912	0	1	658	0.0137	0.1162	0	1	1238	0.0509	0.2199	0	1
Through labor contractors	1896	0.0132	0.1141	0	1	658	0.0091	0.0951	0	1	1238	0.0153	0.1230	0	1
Through direct call by the employer	1896	0.1725	0.3779	0	1	658	0.3678	0.4826	0	1	1238	0.0687	0.2530	0	1
Through public job adverts	1896	0.0222	0.1472	0	1	658	0.0365	0.1876	0	1	1238	0.0145	0.1197	0	1
Through personal network of friends and relatives	1896	0.5295	0.4993	0	1	658	0.4255	0.4948	0	1	1238	0.5848	0.4930	0	1
Through other search channels	1896	0.1387	0.3457	0	1	658	0.0760	0.2652	0	1	1238	0.1721	0.3776	0	1
Contract of unlimited duration	1896	0.3671	0.4821	0	1	658	0.3480	0.4767	0	1	1238	0.3772	0.4849	0	1
Contract of limited duration	1896	0.0549	0.2278	0	1	658	0.0456	0.2088	0	1	1238	0.0598	0.2372	0	1
Seasonal contract	1896	0.0902	0.2865	0	1	658	0.0638	0.2446	0	1	1238	0.1042	0.3056	0	1
Oral contract	1896	0.0053	0.0725	0	1	658	0	0	0	0	1238	0.0081	0.0895	0	1
Paid no tax on her / his job	1896	0.1930	0.3948	0	1	658	0.1246	0.3305	0	1	1238	0.2294	0.4206	0	1
Does not know whether paid tax	1896	0.0849	0.2788	0	1	658	0.0486	0.2153	0	1	1238	0.1042	0.3056	0	1
Moonlighting	1896	0.0464	0.2104	0	1	658	0.0198	0.1393	0	1	1238	0.0606	0.2387	0	1
Dissatisfied with her / his job	1896	0.2136	0.4100	0	1	658	0.1489	0.3563	0	1	1238	0.2480	0.4320	0	1
Training of which apprenticeship	1896	0.4583	0.4984	0	1	658	0.5638	0.4963	0	1	1238	0.4023	0.4906	0	1
Mentoring	1896	0.0132	0.1141	0	1	658	0.0137	0.1162	0	1	1238	0.0129	0.1130	0	1
Training in new technologies	1896	0.0258	0.1587	0	1	658	0.0122	0.1097	0	1	1238	0.0331	0.1790	0	1
Other type of training	1896	0.5026	0.5001	0	1	658	0.4103	0.4923	0	1	1238	0.5517	0.4975	0	1
Union membership	1896	0.1888	0.3915	0	1	658	0.1960	0.3973	0	1	1238	0.1850	0.3884	0	1
Firm's size: 5 workers or less	1896	0.2822	0.4502	0	1	658	0.1945	0.3961	0	1	1238	0.3288	0.4700	0	1
From 5 to 9	1896	0.0907	0.2873	0	1	658	0.0684	0.2526	0	1	1238	0.1026	0.3035	0	1

From 10 to 19 size_10t19	1896	0.1519	0.3590	0	1	658	0.3419	0.4747	0	1	1238	0.0509	0.2199	0	1
More than 20	1896	0.1134	0.3172	0	1	658	0.1109	0.3143	0	1	1238	0.1147	0.3188	0	1
Does not know the size	1896	0.3618	0.4807	0	1	658	0.2842	0.4514	0	1	1238	0.4031	0.4907	0	1
Goals in life: Success at work	1896	0.1176	0.3222	0	1	658	0.0927	0.2902	0	1	1238	0.1309	0.3374	0	1
Giving a contribution to society	1896	0.1245	0.3302	0	1	658	0.1109	0.3143	0	1	1238	0.1317	0.3383	0	1
Earning a lot of money	1896	0.2210	0.4150	0	1	658	0.0760	0.2652	0	1	1238	0.2981	0.4576	0	1
Having a happy family life	1896	0.3370	0.4728	0	1	658	0.5502	0.4979	0	1	1238	0.2237	0.4169	0	1
Gaining all type of work experiences	1896	0.0438	0.2047	0	1	658	0.0289	0.1676	0	1	1238	0.0517	0.2215	0	1
Understanding the meaning of life	1896	0.0533	0.2246	0	1	658	0.0593	0.2363	0	1	1238	0.0501	0.2182	0	1
Gain self-esteem	1896	0.1028	0.3038	0	1	658	0.0821	0.2747	0	1	1238	0.1139	0.3178	0	1
Living in rural areas	1896	0.5527	0.4973	0	1	658	0.5653	0.4961	0	1	1238	0.5460	0.4981	0	1
Living under the poverty line	1896	0.1065	0.3086	0	1	658	0.0821	0.2747	0	1	1238	0.1195	0.3246	0	1

Note: ¹ For the definition of actual work experience adopted see the data section. Source: own elaboration on the ILO School-to-work transition survey of Azerbaijan.