Young Women's Transition from Education to Work in the Caucasus and Central Asia

By
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This article analyzes the individual- and family-level factors that pave the way to the labor market and to formal sector jobs for young women in the Caucasus and Central Asia. Retrospective life history data from a 2017 survey in Azerbaijan, Georgia, and Tajikistan show that higher education attainment has a strong positive impact on labor market activity and getting a formal sector job. Early family formation drives young women into inactivity, but it does not limit the chances of getting access to the formal sector. The chances of getting a formal sector job are positively influenced by the social resources of parents in Georgia and Tajikistan and by parents' economic resources in Azerbaijan and Georgia. Evidence about the role of economic need and of traditionalism for women's labor market participation is mixed.

Keywords: female labor force participation; school-to-work transition; informal work, education effects; family formation; parental resources; intergenerational transmission

Despite increasing educational levels, decreasing fertility rates, and global economic progress, women still face problems in labor market integration around the world (Elder and Kring 2016; Heyne 2017; Iannelli and Smyth 2008; Smyth 2005). This applies to the region of the Caucasus and Central Asia (CCA) and especially to Muslim societies (Heyne 2017; Spierings, Smits, and Verloo 2009, 2010). However, our knowledge of

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women's labor market chances in the CCA region is mostly descriptive (Elder et al. 2015). This article provides the first detailed multivariate analyses of women's labor market integration in the CCA, drawing on newly collected, nationally representative, retrospective life history data from Azerbaijan, Georgia, and Tajikistan.

Women's disadvantages emerge quite early in working life, especially after marriage and childbirth according to Western studies (Brewster and Rindfuss 2000; van der Lippe and van Dijk 2002). However, in developing countries, women's labor market disadvantage often arises during the school-to-work transition in terms of lower rates of labor force participation and the types of jobs women usually enter (Elder and Kring 2016; Gebel and Heyne 2014). Previous research has underlined the importance of this early transition event for the later life course (Buchmann and Kriesi 2011; Schoon and Silbereisen 2009). Accordingly, I focus on women at the beginning of their career. Moreover, another central issue for women who enter the labor market is what kind of jobs they get. For postsocialist countries, the employment sector type matters (Gërxhani 2004; Gërxhani and van de Werfhorst 2013; Kogan 2011), because a substantial share of women end up in informal job arrangements that are usually poor quality (Gërxhani 2004). This article also addresses this labor market divide.

Likewise, I address social inequalities within the group of women studied (Gebel and Heyne 2014). Based on the observation that some subgroups of women are quite successful compared to others, the central research question here is which individual- and family-level factors hamper or promote women's labor market access and chances to get a formal sector job.

The article is organized as follows: I describe the background of the three countries analyzed, and then discuss theoretical arguments about the effects of different individual and family factors on young women's labor market chances. I then describe the dataset, variables, and methods used in this study and present the results of the empirical analyses. Finally, I synthesize the findings of the empirical analyses and highlight which are the important individual- and family-level determinants of women's labor market chances in the CCA region. In this regard, I add depth to the established literature, which lacks an understanding of women's labor market integration in the CCA region.

The Structural, Institutional, and Cultural Background

Aside from getting in-depth insights into young women's labor market chances in three countries of the CCA region, Azerbaijan, Georgia, and Taijkistan represent an interesting cross-country comparative setting. I argue that the three countries share similarities (mainly in their institutional context) and differences (mainly in their economic development and the religious/cultural background). This allows me to formulate general expectations about all three countries given the cross-country similarities and country-specific expectations given the cross-country differences.

Georgia, located at the Black Sea, and Azerbaijan, located at the Caspian Sea, are countries in the Caucasus. Tajikistan is a landlocked country in Central Asia sharing a border with China. The three countries are of comparable size with small populations (2016: ~9.8 million in Azerbaijan, ~8.7 million in Tajikistan, ~3.7 million in Georgia; World Bank 2017). All three countries have ethnic minorities: Talysh, Lezgins, and Armenians in Azerbaijan; Armenians and Azeris in Georgia; and Uzbeks in Tajikistan. Outward migration is common. In Tajikistan, this takes place in the form of seasonal migration for work in Russia.

All three countries share the Soviet legacy. This is reflected in similarities in the education systems that were characterized by strong education-occupation linkages, strong vocational orientation, and exclusive tertiary education (Gerber 2003). In the postsocialist period, education-occupation linkages were lost, vocational education came under pressure, and vigorous tertiary education expansion and differentiation took place in post-Soviet countries (Kogan, Noelke, and Gebel 2011), including in Azerbaijan and Georgia but to a lesser extent in Tajikistan.

Traditionally, socialist societies and institutions have supported female labor force integration (Gerber and Mayorova 2006; Kosyakova, Saar, and Dämmrich 2017). Previous comparative research has underlined the importance of welfare-state policies as well as cultural values concerning gender and family as macro-level determinants of female labor force participation (Pfau-Effinger 2005; Steiber and Haas 2012). This may also explain why the post-Soviet Muslim societies have reached higher levels of female labor force participation than Muslim Middle Eastern and Northern African (MENA) countries (Heyne 2017).

In contrast to postsocialist countries that were not part of the Soviet Union, Azerbaijan, Georgia, and Tajikistan experienced a very long and problematic transformation during the 1990s. The demise of the socialist state and the emergent capitalist order put an end to the lifetime employment guarantee and basic economic security for young people (Kogan, Noelke, and Gebel 2011). Economic and political shocks due to civil wars and revolutions added additional uncertainties in the lives of young people in these countries. The prevailing labor market problems put the socialist heritage of gender egalitarianism under pressure, as it had in Russia (Kosyakova, Kurakin, and Blossfeld 2015). In addition, the transition from socialism to capitalism removed external legal and institutional constraints on discrimination against women by employers (Gerber and Mayorova 2006).

There are clear differences among the three countries in terms of economic development (gross domestic product [GDP] per capita, purchasing power parity [PPP] [current international $] in 2016: Azerbaijan, $17,282, Georgia, $10,024, Tajikistan, $2,985) (World Bank 2017) and human development (Human Development Index 2016: Georgia, 0.769, Azerbaijan, 0.759, Tajikistan, 0.627) (UNDP 2017). The three countries also differ in their religious backgrounds. While Georgia is dominated by the Orthodox Christian tradition, Azerbaijan is mainly Shia Muslim, and Tajikistan is mainly Sunni Muslim. Differences in religion and economic development reflect cultural differences, which influence female labor market chances (Heyne 2017). In the following theoretical

reflections, the differences in the countries' economic development and their religious/cultural backgrounds are the main reasons for expected cross-country differences in women's labor market integration.

Theories and Hypotheses

Labor market inactivity

A person's choice to participate in the labor market is a constrained rational choice decision. We can assume that the decision is not made only by young women themselves but is influenced or even determined by their parents or their husbands if they are married. Of the three countries studied here, family is expected to play the most important role in Tajikistan, which is less modernized and predominantly Muslim; a lesser role in the more-developed Azerbaijan; and a lesser role still in Orthodox Christian Georgia.

The decision to participate in the labor market is bounded by social values. If *traditional values* prevail, young women will remain at home (Hakim 2000). I expect traditional values to prevail, especially in families with a low level of parental education, among women growing up in rural areas, and among very religious women. Traditionalism may also be expressed if the mother did not work and such traditional values of women staying at home are transmitted across generations (Farré and Vella 2013). I hypothesize that traditionalism, especially religious-based traditionalism, effects are stronger in the Muslim societies of Azerbaijan and Tajikistan as compared to the Orthodox Christian Georgia (Moghadam 2003; Spierings, Smits, and Verloo 2009).

Within these societies, one would expect women to opt for labor market inactivity if the utility of labor market inactivity exceeds the utility of labor market participation. Based on human capital theory, we should also expect that higher levels of educational attainment raise the *utility of labor market participation* (Becker 1964; van der Lippe and van Dijk 2002). The utility of labor market participation is also very high if young women live in poor households, as such households may be in need of any kind of income (Steiber and Haas 2012). A similar argument can be applied to women who have grown up with fewer than two parents, because in such cases their contribution to the family income might be especially needed as well. The economic need argument should most apply to less modernized Tajikistan.

The expected *utility of housework* is determined by the demand for household and care work from the family of origin and the family of destination. Specifically, in larger families and in the case of a relatively larger number of brothers, there is more demand for housework and care (Steiber and Haas 2012). Hence, I expect that women in large families and with a relatively large number of male siblings are less likely to enter the labor market. In the case of early family formation, the concurrent transition to early first marriage and early first parenthood paves the way for young women to enter the role of caregivers and house workers, while young men take the role of the sole breadwinner. This applies primarily

to patriarchal Muslim societies (Moghadam 2003; Spierings, Smits, and Verloo 2010).

Formal sector employment

In CCA countries a main aspect of job quality is whether a labor market entrant finds a formal (registered) job or an informal (unregistered) job. A formal (registered) job means that income taxes for the specific job are paid either by the employer or employee; this is not the case for informal (unregistered) jobs. Formal jobs are usually preferred by young women for several reasons. First, informal jobs generate low income in transformation societies (Gërxhani and van de Werfhorst 2013). Furthermore, formal jobs are usually associated with having a working contract and social security coverage. There is a historic pattern of strong sex-specific occupational segregation in post-Soviet countries, with female employment concentrated in the formal sector such as occupations in the education sector or public sector (Gerber and Mayorova 2006; Kosyakova, Kurakin, and Blossfeld 2015). As mentioned, informal sector jobs are a second choice because of their low quality. Taking a job in the family business can be seen as part of the informal sector because jobs in the family business are usually on an informal basis without any work contract. They often offer no chance of career advancement as the succession rules in the family business sector clearly privilege men.

Education certificates are used to signal young applicants' productivity and trainability (Sørensen and Kalleberg 1981). Thus, higher education puts applicants in a better position when competing for formal sector jobs (Kogan 2011). Jobs in the public sector are often filled according to meritocratic selection procedures, whereas access to the private informal sector and the family business sector works mainly via social ties and family resources in transition countries (Gërxhani and van de Werfhorst 2013; Kogan 2011; Kogan, Matkovic, and Gebel 2013).

The family of origin is expected to affect labor market opportunities because it provides *social and economic resources* during the job search (Granovetter 1974). Having parents who work in a certain sector may pave the way to that sector because of social contacts. Young people from rich families may be able to endure a long waiting process for formal sector jobs (Gebel and Heyne 2014). I hypothesize that family background should play a stronger role in the less modern Tajik society compared to Azerbaijan and Georgia, where meritocratic principles are more relevant.

Moreover, *family formation* may play a role in the sector choice, particularly in Muslim countries. Marriage may signal upcoming childbirths and childbearing may reduce the likelihood of a job offer because employers, particularly those in the informal sector, hesitate in hiring females who would have the dual responsibility of work and family (Spierings, Smits, and Verloo 2009). This kind of discrimination should be less prevalent in the formal sector, specifically the public sector, because of stricter legal enforcement of antidiscrimination laws in the formal sector. Moreover, the better provision and legal enforcement of

family-friendly working hours, maternity leave, family/child allowances, and employment protection should make the formal sector the preferred choice for married women and mothers.

Data, Variables, and Methods

Data and sample

I use retrospective life history data from the TEW-CCA Youth Transition Surveys in Azerbaijan, Georgia, and Tajikistan that were collected from October 2016 to February 2017 (Gebel et al. 2018). Overall, 6,002 standardized face-to-face interviews were conducted. The surveys had national coverage, excluding only territories in Georgia and Azerbaijan that were occupied by Russia and Armenia as well as very remote mountainous areas. The source questionnaires were developed in English and translated into Azeri, Georgian, Tajik, and Russian.

A multistage stratified random sampling was carried out. Based on a complete list of districts by region, districts and clusters were randomly selected. Households within each cluster were selected via route-random selection. Finally, eligible respondents were screened and randomly selected in each household. Design weights were calculated for each country to account for different selection probabilities.

The target group is made up of individuals aged 18 to 35 who had left education in the 10 years preceding the survey. Leaving education is defined as finishing formal education (either successfully completing it or dropping out). Respondents are classified as being in formal education if the respondent combined formal education with other activities (e.g., work), if students were on vacation, paternity leave, or sick leave; or if students were on pending status and neither working nor looking for work at the moment of the survey and planning to continue study in the near future.

Dependent variables and methods

Separate analyses were performed for the labor force participation decision and the type of first employment. The labor force participation decision was analyzed using a binary indicator, taking the value of one for young women who opted for labor market inactivity after leaving education and zero for unemployed or employed women.

Based on a monthly economic activity calendar, any first job, including short-term, casual work, and unregistered work, was identified. Women starting their working life as self-employed or employers were excluded because different explanatory factors for a formal/registered business are expected and due to the small number of cases. A formal (registered) job means that income taxes for the specific job are paid either by the employer or employee; this is not the case for informal (unregistered) jobs. First jobs as family helpers are defined as part of

the informal sector because jobs in the family business are usually organized in an informal way. For both dependent variables, I employ binary logistic regression analysis and estimate average marginal effects (AMEs).

Independent variables

Table 1 provides an overview of descriptive statistics of the dependent and independent variables for the two analytical samples for each country. My working sample consists of 996 women in Azerbaijan, 1,196 women in Georgia, and 964 women in Tajikistan for the analysis of labor force participation (sample 1). The sample for access to formal sector jobs (sample 2) consists of 459 women in Azerbaijan, 695 women in Georgia, and 397 women in Tajikistan, who were in employment in their first job at the time of the survey. All descriptive statistics and multivariate analyses are weighted using national design weights.

A central independent variable in both analyses is education, which is defined on the basis of the highest school and vocational degree obtained when leaving education. I differentiate between students with qualifications of basic secondary or less, upper secondary, initial professional, secondary professional, undergraduate BA, and graduate MA/PhD degrees. The need for labor market participation is measured by a proxy variable of parental wealth. Respondents were asked to subjectively assess the wealth in their parental home at age 15. A dummy variable for growing up with fewer than two parents is included as another measure of economic need.

In the analysis of labor force participation, traditionalism is proxied by several measures. First, the highest level of parental education at the time when the respondent was 15 years old is measured. Second, using a yearly calendar on residential changes since the birth of the respondent, the share of time lived in rural areas from birth until the time of leaving education is used. Third, women are asked about the importance of religion in their personal lives at the time of the survey.[1] Fourth, as a measure of intergenerational transmission of traditional values, respondents were asked if their mothers worked when the respondent was 15 years old.

Moreover, when analyzing the participation decision, the utility of housework in the family of origin is captured by the number of brothers and sisters. I assume that in larger families and especially in families with a larger share of sons, there is an increased demand for housework and care. The additional utility of housework in the family of destination is captured by the event of early marriage and early childbirth. Both family formation events are defined as occurring early in the life course if they happened before the date of leaving education or at the date of leaving education.[2] This conservative measure should reduce the problem of reversed causality in terms of labor market decisions affecting family formation behavior.

In the analysis of first job type, family networks and resources are investigated by parental wealth (see above) and father's and mother's type of employment. According to the dependent variables, I distinguish between parental formal employment and informal employment (including family helpers). In addition, I

TABLE 1
Means of Dependent and Independent Variables, by Country and Sample

	Azerbaijan		Georgia		Tajikistan	
	S1	S2	S1	S2	S1	S2
Inactive	0.4		0.26		0.49	
Formal sector first job		0.8		0.8		0.7
Education						
Basic secondary	0.06	0.02	0.11	0.05	0.19	0.12
Upper secondary	0.39	0.21	0.22	0.16	0.5	0.29
Initial professional	0.02	0.03	0.14	0.14	0.01	0.02
Secondary professional	0.25	0.32	0.05	0.05	0.1	0.2
Undergraduate: BA	0.24	0.35	0.35	0.41	0.08	0.13
Graduate: MA/PhD	0.03	0.06	0.14	0.19	0.12	0.25
Parental wealth						
(Fairly) poor	0.11	0.13	0.3	0.32	0.24	0.24
Around the average	0.64	0.67	0.61	0.6	0.63	0.64
(Fairly) well off	0.25	0.2	0.09	0.08	0.13	0.12
Less than two parents	0.09		0.14		0.06	
Number of brothers	1.01	0.94	0.84	0.81	2.01	2.04
Number of sisters	0.93	0.95	0.8	0.77	1.91	2.05
Early marriage	0.13	0.16	0.15	0.12	0.14	0.25
Early childbirth	0.07	0.08	0.16	0.15	0.08	0.13
Time in rural areas	0.44	0.32	0.43	0.36	0.68	0.66
Low parental educ.	0.38		0.26		0.4	
Mother not working	0.45		0.4		0.55	
Religion (very) important	0.64		0.88		0.79	
Father's employment status						
Formal employee		0.46		0.4		0.56
Informal employee		0.22		0.23		0.2
Self-employed		0.18		0.17		0.1
Not working		0.14		0.2		0.14
Mother's employment status						
Formal employee		0.44		0.36		0.38
Informal employee		0.11		0.12		0.12
Self-employed		0.02		0.05		0.03
Not working		0.43		0.47		0.47
Ethnic minority	0.1	0.1	0.11	0.06	0.12	0.11
Disabled	0.02	0.03	0.06	0.06	0.03	0.03
Education leaver 2011–15	0.52	0.49	0.42	0.43	0.58	0.61
N	996	459	1,196	695	964	397

SOURCE: TEW-CCA Youth Transitions Surveys in Azerbaijan, Georgia and Tajikistan 2017; own calculations.
NOTE: Means are reported. Sample S1: Analytical sample for labor force participation. Sample S2: Analytical sample for job type analysis. Design weights applied.

define the categories of self-employed fathers/mothers and fathers/mothers not working or not present as rest categories. I include both father's and mother's employment type to capture gender-specific transmission mechanisms of social ties and resources.

As control variables I use the date of leaving education (education leaver cohorts 2011–2015 vs. 2006–2010), a dummy variable for belonging to an ethnic minority, and a dummy variable for disability in the analysis of labor force participation. When analyzing the chances of getting a formal sector job, the share of time lived in rural areas and the number of brothers and sisters are used as additional control variables. All models are estimated separately for each country to allow for full variation of the estimated effects across countries.

Empirical Results

Labor market inactivity

Starting with basic descriptive analyses of my working sample, I find that 26 percent of all Georgian women leaving education between 2006 and 2016 became inactive (see Table 1). The share is much higher in Azerbaijan (40 percent) and in Tajikistan (49 percent). Thus, the inactivity rate is higher in the two Muslim countries than in the Orthodox Christian country. The inactivity rate is highest in Tajikistan, which is characterized by both a Muslim tradition and lower levels of economic development. Overall, between a quarter and a half of women do not engage in labor market activities.

In the following multivariate analysis, I investigate various individual- and family-level determinants of the labor force participation decision according to my theoretical model. My multivariate analyses confirm that education has a negative impact on the decision to stay at home in all three countries, even after accounting for family background (see Table 2). The education effects are rather linear: the higher the education, the higher the activity rate.[3] However, there are a few exceptions to this pattern. Upper secondary graduates have only a small relative advantage (in Tajikistan, no advantage), which is much smaller than the effects for professional and tertiary education. BA undergraduates have a higher probability of being inactive than vocational education and training (VET) students with either initial or secondary professional education in Tajikistan.

In line with the economic need argument, women from poor families have higher rates of labor market activity in Georgia and Tajikistan compared to women whose families had average or above average wealth. However, the effects are not statistically significant. The wealth effect is negative in Azerbaijan but also statistically insignificant. Growing up with fewer than two parents decreases the inactivity rate, which is in line with the economic need argument. This effect is pronounced and statistically significant in Azerbaijan and Georgia. Growing up in a family with fewer than two parents in these countries creates the economic need to participate in the labor market.

TABLE 2
Determinants of Labor Market Inactivity

	Azerbaijan		Georgia		Tajikistan	
	AME	(*SE*)	AME	(*SE*)	AME	(*SE*)
Labor market utility						
Education (Ref. basic secondary)						
Upper secondary	−.123*	(.064)	−.153***	(.058)	.012	(.050)
Initial professional	−.426***	(.115)	−.348***	(.062)	−.544***	(.092)
Secondary professional	−.573***	(.066)	−.394***	(.072)	−.493***	(.062)
Undergraduate: BA	−.576***	(.067)	−.350***	(.061)	−.401***	(.075)
Graduate: MA/PhD	−.697***	(.086)	−.499***	(.058)	−.526***	(.056)
Parental wealth (Ref: [fairly] poor)						
(Fairly) well off	−.070	(.052)	.052	(.046)	.074	(.055)
Around the average	−.033	(.033)	.008	(.041)	.003	(.049)
Less than two parents	−.111**	(.048)	−.063*	(.037)	−.110	(.070)
Utility of homework						
Number of brothers	.022	(.020)	.020	(.017)	−.001	(.012)
Number of sisters	−.015	(.014)	−.001	(.014)	−.022**	(.011)
Early marriage	.103**	(.051)	.140***	(.050)	−.157**	(.075)
Early childbirth	.055	(.067)	.038	(.049)	.189***	(.067)
Traditionalism						
Time in rural areas	.134***	(.030)	.062**	(.027)	−.030	(.035)
Low parental educ.	.017	(.031)	.041	(.032)	.025	(.032)
Mother not working	.009	(.029)	.036	(.026)	.137***	(.035)
Religion (very) important	−.014	(.029)	.057	(.036)	.023	(.038)
Control variables						
Ethnic minority	.016	(.051)	.155***	(.044)	.072	(.045)
Disabled	−.111	(.072)	−.062	(.044)	.108*	(.064)
Education leaver 2011–15	.013	(.029)	−.034	(.024)	−.024	(.033)
N	996		1,196		964	

SOURCE: TEW-CCA Youth Transitions Surveys in Azerbaijan, Georgia and Tajikistan 2017; own calculations.
NOTE: Results from logistic regression. Average marginal effects (AME) as displayed coefficients and standard errors in parentheses. Dependent variable (1 = inactivity, 0 = labor force participation). Design weights applied.
*$p < .10$. **$p < .05$. ***$p < .01$.

I find that young women who grew up in families with a relatively high share of brothers have greater chances of being engaged full time in housework in Azerbaijan and Georgia. According to my theoretical model, I interpret this effect primarily as the influence of an increased demand for housework and care activities from the family of origin. However, the effect does not reach statistical

significance. Interestingly, having more sisters decreases the inactivity rate in Tajikistan. In other words, women have stronger labor market attachments if there are a higher number of sisters in the household. Clear support for the hypothesis that an increased demand for housework and care activities drives young women into labor market activity is evident when looking at the effects of family formation. Specifically, I find that an early transition to first marriage significantly increases the probability of full-time housework in Azerbaijan and Georgia. In contrast, the first birth does not have any additional independent influence after controlling for the marriage effect in Azerbaijan and Georgia. Thus, the central event that hinders labor market activity of young women in Azerbaijan and Georgia seems to be early marriage and not childbirth. A different pattern can be found in Tajikistan, where childbirth is the decisive event increasing inactivity rates, while being married is still compatible with labor market engagement.

I find mixed evidence for the proxy measures of traditionalism after controlling for education attainment and family formation.[4] The results show that the share of time spent in rural areas increases inactivity in Azerbaijan and Georgia. In Tajikistan, the point estimate is negative, but the effect is very small and statistically insignificant. After controlling for the process of attainment in education as the central mediating mechanism of social mobility, low parental education only slightly increases the probability of being inactive in the labor market. However, the coefficients are not statistically significant. Having an inactive mother increases the probability of labor market inactivity. This effect is large and statistically significant only in Tajikistan. As I also control for parental wealth, the effect of having an inactive mother on the probability of labor market inactivity can be seen as a measure of intergenerational transmission of traditional values.[5] In a comparative perspective, this is also the only effect that is in line with my expectation that traditionalism has a stronger effect in the less developed Tajik society. Religiosity does not show any statistically significant effect in all three countries in the multivariate models. Thus, individual religiosity does not have any direct effect once education attainment, various family background characteristics, rural socialization, and events of own family formation are controlled for. There is not even an effect in the Muslim societies where stronger religion effects were expected.

Formal sector employment

In the second step of my analyses, I investigate the subsample of young women who are employed or self-employed. Specifically, I analyze the kind of first jobs young women enter.

Table 3 provides descriptive statistics on the kind of first job. Among the Azeri women who found a first job during my observation window, 77 percent succeeded in finding a job as a formal employee, 15 percent took a job as an informal employee, 4 percent became family employees/helpers in family businesses, and 3 percent became self-employed. The patterns are quite similar in Georgia with 77 percent in formal employment, 18 percent in informal employment, 2 percent

TABLE 3
Type of First Job (percentage)

	Azerbaijan	Georgia	Tajikistan
Formal/registered employee	77	77	64
Informal/unregistered employee	15	18	24
Employee/helper in family business	4	2	3
Self-employed/employer	3	3	9

SOURCE: Youth Transitions Surveys in Azerbaijan, Georgia and Tajikistan 2017; own calculations.
NOTE: $N = 459$ (Azerbaijan), $N = 695$ (Georgia), $N = 397$ (Tajikistan). Design weights applied.

family employees/helpers, and 3 percent self-employed. However, in Tajikistan, there is a different pattern, because the informal sector is larger and there are more self-employed women at entry into the labor market; this is in line with the lower economic development there. Specifically, 64 percent succeeded in finding a job as a formal employee, 24 percent took a job as an informal employee, 3 percent became family employees/helpers in family businesses, and 9 percent became self-employed. Overall, formal employment is the dominant employment form for all women entering the labor market in the three CCA countries. The share of young women who took over the family business or founded their own business when entering the labor market is quite low. For the following analyses, self-employed women are excluded.

Table 4 offers some supplementary descriptive analyses on the quality of female employment in different employment sectors. In line with my theoretical expectation, formal sector jobs are of the highest quality because they offer formal contractual work, rather high levels of social security contributions, and occupational positions with potential for advancement. In contrast, informal sector jobs are often without any work contract, without social security, and offer very little prospects for career advancement. A similar pattern emerges in the family business sector in Azerbaijan and Georgia. In Tajikistan, some jobs in the family business come with contracts, social security coverage, and offer access to higher occupational positions (managerial, professional or technical level). However, the family business sector in Tajikistan is still much closer in its characteristics to informal employment than to formal employment. Based on my results, it seems reasonable to consider family business as part of the informal job sector in all three countries.

Table 5 summarizes the results of multivariate analysis on the individual- and family-level determinants of getting a formal sector job. There is a positive association between higher education and the chances of finding a formal sector job in all three countries. The education effect is not linear in Azerbaijan and Tajikistan; there is a threshold effect instead. In Azerbaijan, women with secondary professional education or higher levels of education have a probability of

TABLE 4
Job Characteristics by Type of First Job (percentage)

	No Contract	Unlimited Contract	Temporary Contract	Social Security	ISCO 1-3
Azerbaijan					
Formal/registered employee	0	91	8	95	68
Informal/unregistered employee	90	4	6	3	24
Employee/helper in family business	100	0	0	0	0
Georgia					
Formal/registered employee	35	50	15	24	56
Informal/unregistered employee	92	8	1	4	14
Employee/helper in family business	100	0	0	0	0
Tajikistan					
Formal/registered employee	9	68	23	90	75
Informal/unregistered employee	92	3	5	5	3
Employee/helper in family business	64	16	20	39	36

SOURCE: TEW-CCA Youth Transitions Surveys in Azerbaijan, Georgia and Tajikistan 2017; own calculations.
NOTE: $N = 459$ (Azerbaijan), $N = 695$ (Georgia), $N = 397$ (Tajikistan). Social security is defined as social security in general such as paid sick leave, pensions, and so forth in Azerbaijan and Tajikistan. In the very liberal country of Georgia, it is just defined as free health insurance provided by the employer because other social security does not play any relevant role in Georgia. International Standard Classification of Occupations (ISCO) 1-digit codes 1 to 3 represent (1) legislators, senior officials and managers; (2) professionals; and (3) technicians and associate professionals. Design weights applied.

getting a formal sector job that is 45 to 50 percentage points higher than for women with lower levels of education. Similarly, the probability of getting a formal sector job is 60 to 67 percentage points higher for women with secondary professional education or higher levels of education compared to women with lower levels of education in Tajikistan. In contrast, the point estimates in Georgia show a linear trend and are smaller in magnitude. Compared to the reference group of women with basic secondary education or less, Georgian women with initial or secondary professional degrees have a 7 to 8 percentage point higher probability of getting a formal sector job. The effect is 16 percentage points for women with an undergraduate BA degree and 22 percentage points for graduates with an MA or PhD. However, only the effects for tertiary education are statistically significant in Georgia. The weaker education effects in Georgia might be related to the relatively stronger degree of educational expansion that may have devaluated higher education degrees.

I find that in Georgia, women from richer families have a 15 percent higher probability of getting access to the formal job sector compared to those from poor families. Women from families of average wealth have a 13 percentage point

TABLE 5
Determinants of Getting a Formal Sector Job

	Azerbaijan		Georgia		Tajikistan	
	AME	(*SE*)	AME	(*SE*)	AME	(*SE*)
Education (Ref. basic secondary)						
Upper secondary	.150	(.134)	–.030	(.090)	.165*	(.088)
Initial professional	.115	(.194)	.074	(.088)	.270	(.239)
Secondary professional	.446***	(.131)	.080	(.094)	.671***	(.083)
Undergraduate: BA	.484***	(.130)	.161**	(.082)	.626***	(.093)
Graduate: MA/PhD	.500***	(.142)	.216**	(.086)	.597***	(.092)
Parental resources						
Parental wealth (Ref. [fairly] poor)						
(Fairly) well off	.019	(.069)	.151**	(.071)	–.036	(.056)
Around the average	.108**	(.048)	.132*	(.069)	–.032	(.047)
Father's status (Ref. informal employee)						
Formal employee	.044	(.045)	.079*	(.047)	.091*	(.050)
Self–employed	–.039	(.062)	–.028	(.054)	–.066	(.068)
Not working	.048	(.056)	.063	(.050)	.125**	(.063)
Mother's status (Ref. informal employee)						
Formal employee	.093	(.060)	.131**	(.057)	.126**	(.059)
Self–employed	.075	(.088)	.077	(.083)	–.127	(.106)
Not working	.076	(.059)	.145***	(.052)	.051	(.056)
Family formation						
Early marriage	.011	(.080)	.042	(.044)	.072	(.058)
Early childbirth	.040	(.092)	.059	(.044)	.042	(.077)
Control variables						
Time in rural areas	.081*	(.046)	–.042	(.037)	–.067	(.044)
Number of brothers	.002	(.027)	–.031	(.022)	.012	(.013)
Number of sisters	–.003	(.019)	–.005	(.017)	.025**	(.012)
Ethnic minority	.013	(.072)	–.147**	(.060)	.170***	(.051)
Disabled	–.045	(.139)	–.028	(.061)	.057	(.124)
Education leaver 2011–15	–.025	(.038)	.054*	(.031)	.057	(.042)
	459		695		397	

SOURCE: TEW-CCA Youth Transitions Surveys in Azerbaijan, Georgia and Tajikistan 2017; own calculations.
NOTE: Results from logistic regression. Average marginal effects as displayed; coefficients and standard errors in parentheses. Dependent variable (1 = inactivity, 0 = labor force participation). Design weights applied.
*$p < .10$. **$p < .05$. ***$p < .01$.

advantage. In contrast to my country-specific expectations, there is no evidence for such an effect of parental wealth in Tajikistan. In Azerbaijan, there is a

hump-shaped relationship; that is, women from average wealthy families have the highest chances of entering formal sector jobs. In all three countries, there is some evidence for the effects of parental social resources. Women with fathers or mothers working in formal sector jobs have higher chances of getting access to the formal job sector compared to women with fathers or mothers working in informal sector jobs. Thus, there is an intergenerational transmission of sector employment patterns. These effects are strong and statistically significant as expected in Tajikistan but also in Georgia. As I control for parental wealth in the same model, the effects could be interpreted as the sector-specific social networks and insider information that pave the way for the daughters. Interestingly, both effects of mothers and fathers are significant even when simultaneously entered in my model. The effects are slightly stronger for mother's employment status, which hints to a stronger intergenerational transmission along gender lines. I also find some strong positive effects of nonworking fathers in Tajikistan and nonworking mothers in Georgia.

I get positive point estimates for the effects of early marriage and early childbirth on the probability of getting access to formal sector jobs in all three countries. Experiencing early family formation seems to be more compatible with a formal sector job among those women who actually find a job. However, the effects never reach statistical significance.

I find that growing up in a rural area increases the chances of getting access to a formal sector job in Azerbaijan, while the opposite pattern emerges in Georgia and Tajikistan. However, the effect only reaches statistical significance in Azerbaijan. There is only a limited influence of the number of brothers and sisters after controlling for parental wealth and employment status. These variables were used to account for sibling rivalry over parental economic and social resources. Being from an ethnic minority significantly reduces the chances of getting access to the formal job sector in Georgia and Tajikistan even after controlling for social origin, education effects, and rural/urban differences. There is no evidence of disability being a hurdle to the formal job sector among those people who found a first job. Over time, there is growing female employment in the formal sector in Georgia and Tajikistan, whereas there is no time trend in Azerbaijan.

Conclusion

My descriptive analysis confirms expectations of this cross-country comparison of the individual- and family-level factors that pave the way to the labor market and to formal sector jobs for women in Azerbaijan, Georgia, and Tajikistan. A substantial share of women do not engage in labor market activities in all three countries. Inactivity rates are higher in the two Muslim countries than in the Orthodox Christian country and highest in Tajikistan, which is predominantly Muslim and the least developed of the three countries. There is still a substantial proportion of women who work in the informal sector at the beginning of their

working careers, which is highest in the least developed country of Tajikistan. Nevertheless, formal employment is the dominant form of employment for all women entering the labor market in these three CCA countries.

The multivariate results reveal that education has a strong negative impact on the decision to stay at home in all three countries. With a very few exceptions, the education effects are rather linear; that is, the higher the education level, the higher the labor market participation. Similarly, the multivariate analyses confirm that higher education paves the way to jobs in the formal sector. In cross-country comparisons, the education effects, particularly related to getting a formal sector job, are smaller in Georgia, which might have been caused by the broad higher education expansion in Georgia reducing the labor market returns on education. Nevertheless, the general finding of rather strong education effects in all the analyses reveals the value of higher education certificates to labor market success in the three developing countries, Azerbaijan, Georgia, and Tajikistan. Despite the concerns about the low quality of education given the rapid expansion of education and concerns about weak links between the education system and employers, there are still high labor market returns on education across the countries.

Another general finding across countries is that early family formation plays an important role in the decision to become inactive in the labor market, but there is no evidence that early family formation affects the rate at which women get formal sector jobs. Thus, early family formation is a hurdle for women's labor market integration in Azerbaijan, Georgia, and Tajikistan. However, once settled in the labor market with a job, early family formation does not limit the chances of getting access to the formal job sector.

There is mixed evidence for the influence of the proxy measures of traditionalism, after controlling for education attainment and family formation. Particularly, religiosity does not show any statistically significant direct effect on the inactivity decision once education attainment, various family background characteristics, rural socialization, and own family formation are controlled for. As expected, if at all, traditionalism plays a stronger role in less developed Tajikistan. The limited direct influence of individual measures of traditionalism on women's school-to-work transition does not imply that traditionalism is not important at all. For example, traditionalism might be a hurdle to girls' education attainment, which was shown to be a very important factor for women's labor market integration.

Across countries, there is also evidence for direct effects of parental economic and social resources on women's school-to-work transition. Parental economic resources are shown to play a role in Georgia and Azerbaijan for finding a job in the formal sector, while this is not the case in Tajikistan. Parental economic resources, as a measure of economic needs, did not directly affect women's labor market inactivity decision. Parental social resources are important for finding a formal sector job in Georgia and Tajikistan. Thus, there is an intergenerational transmission of sector employment patterns. The effects are slightly stronger for mother's employment status, which is evidence of a stronger intergenerational transmission along gender lines.

In sum, this work shows that there are various individual- and family-level factors that influence women's school-to-work transition. By providing insights into

the reasons for within-group inequalities among young women at labor market entry, the analyses specifically outline which factors foster women's school-to-work transition and what the hurdles are that policy-makers may address if they aim for better labor market integration of women. The comparative view reveals that there are common patterns in the determinants of labor market participation, but there are also cross-country differences that were related to the similarities and differences of the three countries considered here. This study provides new insights into a region of the world for which there is limited empirical evidence, but there is still a need for further comparative research. Further efforts will require collection of retrospective or prospective longitudinal data on other countries in the CCA region as well.

Notes

1. While the first two measures date back to the time before leaving education, the third measure of traditionalism is potentially endogenous to the labor market decision. Results of sensitivity analysis on the inclusion versus exclusion of this variable are reported in the section on empirical results.

2. This variable is coded as 1 if a person is married before leaving education (e.g., marriage age 18 and age of leaving education is 19) or at the date of leaving education (e.g., marriage age 18 and age of leaving education is 18). It is coded as 0 if a person married after leaving education (e.g., marriage age 18 and age of leaving education is 17).

3. Sensitivity analyses show that the education effects become slightly larger if potentially endogenous variables such as family formation or religiosity are not controlled for. The order of the education effects and the conclusions are not changed.

4. Sensitivity analyses show that the results do not substantially differ if the various proxies of traditionalism are entered separately into the model.

5. Alternatively, the effect of having an inactive mother on the probability of labor market inactivity can be interpreted as an effect of social capital on the probability of labor market inactivity. A young woman can profit from her mother's work experience and social contacts in the labor market.

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