ANALYSIS OF FACTORS IMPACTING RURAL WOMEN'S LABOR FORCE PARTICIPATION IN ARMENIA

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Abstract

Using the data from the Caucasus Barometer household survey for 2012 conducted by the Caucasus Research Resource Center's regional office in Armenia, a logit model was estimated to evaluate the influence of household socio-economic characteristics on the likelihood of rural women participating in labor force in Armenia. The estimation results of the study indicated that such characteristics as age, knowledge of English language, education level, and marital status were statistically significant factors impacting female labor force participation in rural areas of Armenia.

Key words: rural women's labor force participation, logistic regression, Caucasus Barometer household survey

Analysis of Factors Impacting Rural Women's Labor Force Participation in Armenia

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Introduction

Women play a significant role in the development and growth of agriculture worldwide. It needs to be noted that women account for almost 43% of agricultural labor force in the world (The Food and Agriculture Organization, 2011). When it comes to agriculture, women take on different roles including unpaid household workers, farmers, and entrepreneurs. At the same time, women face tougher conditions when it comes to getting a job due to labor market conditions or simply cultural attitudes. However, one would hardly disagree with the statement that in order to achieve a global development of agriculture a full and efficient utilization of available female labor resources needs to be achieved. This issue gains an utmost significance for developing countries such as Armenia, where labor resources not only are limited but also tend to decrease due to them leaving for other countries (Caucasus Research Resource Center-Armenia, 2011).

After the disintegration of the Soviet Union in 1992, Armenia proclaimed its independence and entered the phase of transition from centrally planned economy to market economy. During this transition period, Armenia underwent a series of social, political, and economic reforms which, for the most part, had devastating effects on its national economy. Among multiple challenges that Armenia had to face is the problem of unemployment. After almost 20 years of independence, the difficult situation concerning unemployment has not been fully resolved and many issues still remain in this area.

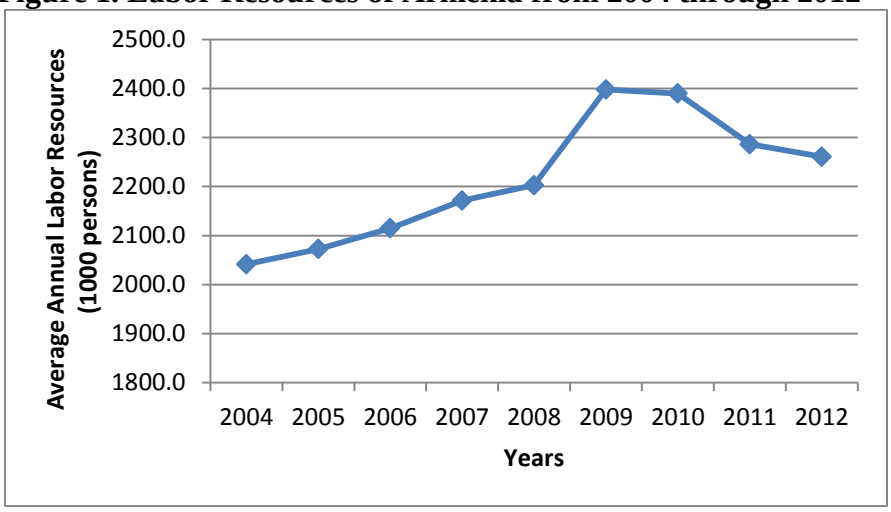
The problem of unemployment is prevalent in the female part of population. It needs to be pointed out that that in 2011, female labor force participation rate[1] in Armenia was 49% (The World Bank, 2013). In fact, this number has been virtually unchanged from 2008 through 2011 (The World Bank, 2013). For comparison, in 2011, female labor force participation rate was 56% and 62% in Georgia and Azerbaijan, respectively (The World Bank, 2013), suggestive of the lowest rate of female labor force participation present in Armenia among the Southern Caucasus region.

Aggregate data available on the website of the National Statistical Service of Armenia (NSSA) help to shed light on the interplay of a couple of demographic factors (age and educational attainment) and female labor force participation, as well as present the current trends in the dynamics of the available labor resources in Armenia. To that end, in the following series of figures graphical illustrations of the relationships between labor resources versus time as well as female employment versus demographic variables over time are presented. Figure 1 shows average annual labor resources[2] in Armenia over time. According to the data underlying Figure 1, average annual labor resources rose from 2004 reaching maximum (about 2.4 million persons) in 2009 and going down thereafter.

[1] The World Bank defines female labor force participation rate as "the proportion of the population ages 15 and older that is economically active: all people who supply labor for the production of goods and services during a specified period."

[2] The National Statistical Service of Armenia defines labor resources as "the sum of all economically active and non-active working age population (aged 15-75)."

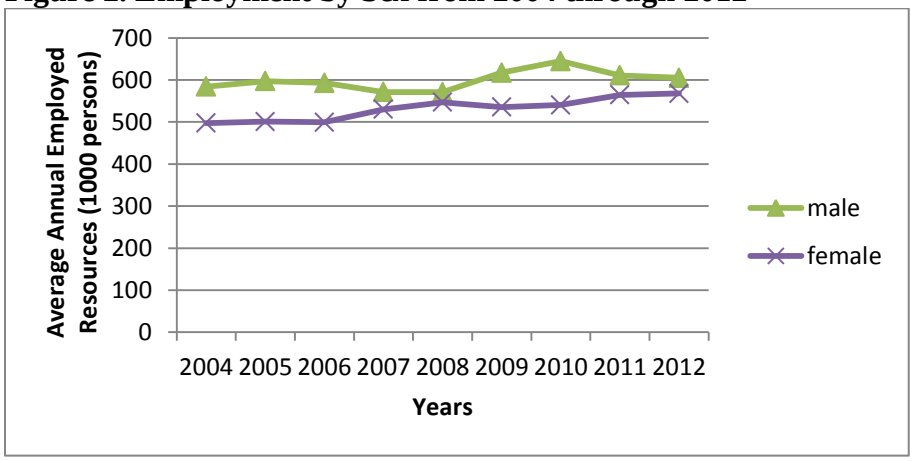
Figure 1. Labor Resources of Armenia from 2004 through 2012



*Source: NSSA, Employment, Yearbook, 2009; 2013.

Figure 2 illustrates average annual employed resources[3] by sex over time. During the observed period, the number of employed men exceeded that of women. A slightly increasing trend was observed for the number of employed women, while the number of employed men oscillated around its mean of 600 thousand persons throughout the observed time period.

Figure 2. Employment by Sex from 2004 through 2012

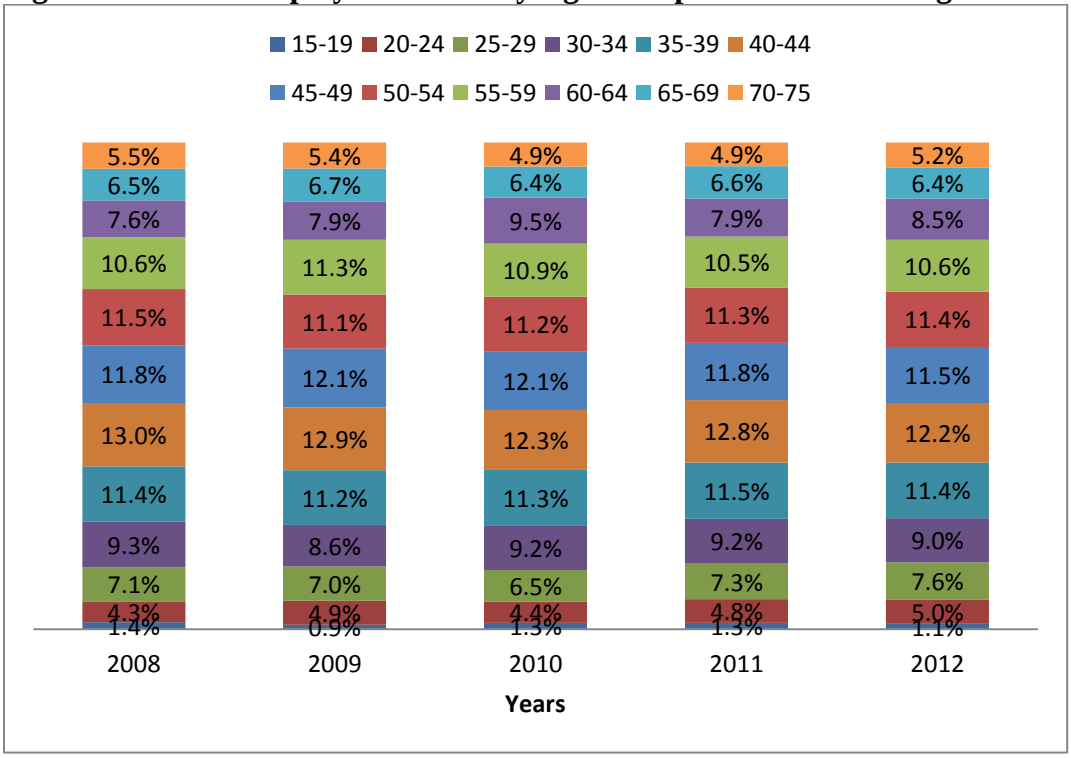


*Source: NSSA, Employment, Yearbook, 2009; 2013.

[3] The National Statistical Service of Armenia defines employed "as persons who during the reference week worked on paid basis or were self-employed, regardless of whether the job was permanent, temporary or seasonal, one-off, or casual, even if that job was for only one hour during the reference week; were temporarily absent from work for various reasons; and were engaged in household or farming activities, while the production was intended for full or partial sale or exclusively for own final use, provided that the production had a significant share in household consumption."

Figure 3 presents female employment rate[4] by age groups from 2008 through 2012. According to Figure 3, female employment rate was at its lowest at young ages, reached its peak of about 13% at the age group of 40-44, and declined thereafter.

Figure 3. Female Employment Rate by Age Groups from 2008 through 2012

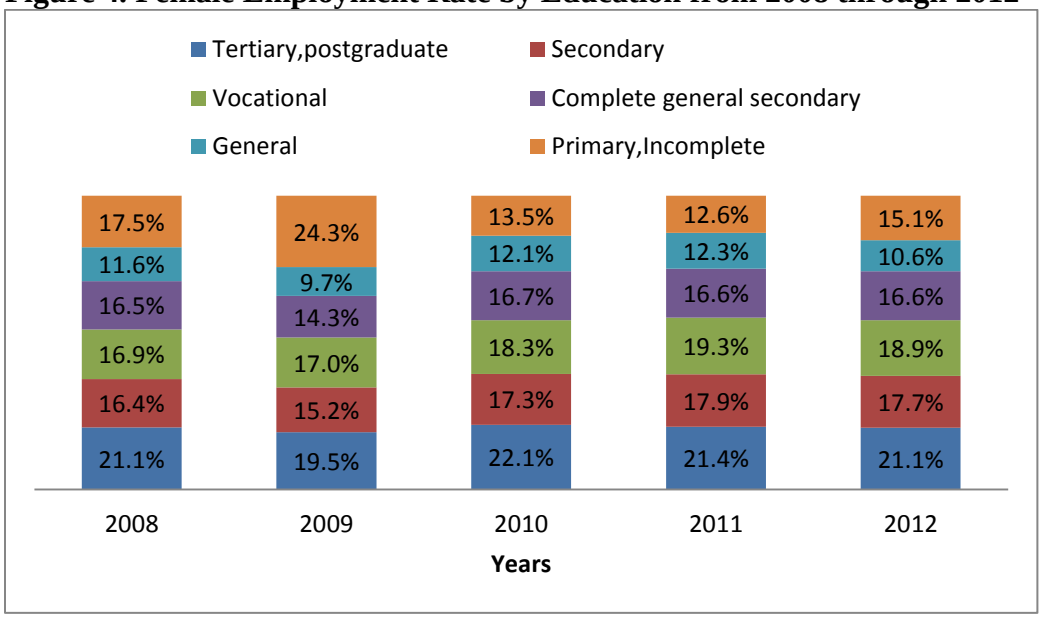


*Source: NSSA, Employment, Yearbook, 2009; 2013.

Finally, female employment rate by education from 2008 through 2012 is displayed in Figure 4. According to the data depicted in Figure 4, with the exception of 2009, female employment rate was the highest for women with tertiary or postgraduate education. Another conclusion that can be reached from Figure 4 is that, overall, the female employment rate increased along with an increase in educational attainment.

[4] The National Statistical Service of Armenia defines employment rate as "the share of employed population among working age population."

Figure 4. Female Employment Rate by Education from 2008 through 2012



*Source: NSSA, Employment, Yearbook, 2009; 2013.

The full use of available labor resources allows the country to record economic growth. In addition, the unemployed do not enjoy wage income (Dixon, 1996) which effectively puts them at disadvantage in comparison to the employed in terms of bargaining power (Basu, 2001) and potential poverty. This may result in deterioration in self-confidence and issues of equal rights and opportunities. In view of these problems, the improvement of female labor force participation rate gains a strategic importance and its resolution needs to be incorporated into the agenda of every country.

The major objective of this analysis is to determine the socio-economic characteristics of rural women impacting their participation in Armenia's labor force. To accomplish this objective logistic regression analysis was conducted using cross-sectional household data collected by the Caucasus Research Resource Center's (CRRC) regional office in Armenia within the framework of the Caucasus Barometer program for 2012. In addition, employing the same data set, cross-tabulation tool was used to profile a typical rural woman that participated in the labor force in Armenia.

The present study contributes to the extant literature in that it empirically focuses solely on rural women and it explicitly control for the effects of language and computer skills and presence of children in the household on female labor force participation. The findings of this study can assist policy-makers, non-governmental organizations (NGOs), as well as international organizations in designing strategies geared towards an increase in female labor force participation rate, provision of equal rights and opportunities, promotion of gender equality, rural development, and poverty reduction. In particular, interested parties will have information on what the drivers of female labor force participation are, so that they can concentrate on them in order to increase female labor force participation.

The rest of the proposal is structured as follows. Next, a brief review of the empirical literature on female labor force participation in Armenia is presented followed by the discussion of the methodology. The following section provides the empirical specification of the model. The data used in this study are discussed in the subsequent section. Then, the estimation results are presented and discussed. The final section provides details on the summary, policy recommendations, and recommendations for future research.

Literature Review

Many previous studies have investigated female labor force participation (Leuthold, 1978; Cogan, 1980; Greenhalgh, 1980; Layard, Barton, and Zabalza, 1980; Schultz, 1980; Smith, 1980; Killingsworth, 1983; Mroz, 1987; Fair and Macunovich, 1997; Bloom, Canning, Fink, Finlay, 2007; Thévenon, 2013). There is also a large body of prior research that has examined the relationship between female labor force participation and household socio-economic characteristics for different developed and developing countries, such as Burma (Mon, 2000), North Cyprus (Lisaniler and Bhatti, 2001), Syria (Nasser and Mehchy, 2011), Pakistan (Hafeez

and Ahmad, 2002; Faridi, Malik, and Basit, 2009), South Africa (Ntuli, 2007), Turkey (Dayıoğlu and Kırdar, 2010), Italy (Bratti and Staffolani, 2012), India (Sucharita, 2013), etc.

Female labor force participation was studied in Armenia through both descriptive approach (Harutyunyan, 2007; European Commission, 2011) and empirical estimation approach (Zohrabyan, 2013a; 2013b). In particular, Harutyunyan (2007) surveyed 94 respondents to examine rural women's participation in the federation of agricultural associations. The study revealed that among the most important factors impacting women's participation were family members' negative attitude towards women's participation and the lack of skills.

European Commission's work (2011) represents a synthesis report on a number of socio-economic issues present in the countries of the Southern Caucasus region (Armenia, Azerbaijan, and Georgia). The report discusses female labor force participation highlighting the lowest female employment rate (42%) and the highest gap (11%-13%) to male employment observed in Armenia. This situation was explained by a tradition that women are expected to stay at home and take care of the children. In addition, this situation was aggravated by the withdrawal of women from the labor market due to limited job opportunities, discouragement, and migration.

Zohrabyan (2013a) estimated a logit model to determine female respondents' socio-economic factors that influenced their labor force participation in the South Caucasus region. The employed data were collected within the framework of the CRRC's Caucasus Barometer program for 2010. The sample size for Armenia consisted of 842 female respondents above 18. The results showed that living in the capital city decreased the odds of being employed in Armenia, other things held constant. The odds of being employed in Armenia decreased for females who rather agreed with the statement that men should have more right to a job when jobs are scarce, other things held constant. In addition, age negatively affected the odds of being

employed in Armenia, other things held constant. Conversely, in Armenia, the odds of being employed increased for females who have at least higher education, secondary technical education, were divorced, or separated, or widowed, and had a monthly household income of $401 or more, other things held constant. The effects of the sex of the household decision-maker and household size were statistically insignificant.

In another study by Zohrabyan (2013b), an ordered logit was estimated to investigate the impact of female respondents' socio-economic characteristics on their attitudes toward men having more right to a job in case of job scarcity. This study used the same data as the 2013a study by Zohrabyan. According to the findings, other things held constant, in Armenia the odds of having more negative attitudes toward men having more right to a job when jobs are scare were greater for divorced or separated or widowed women compared to married women, and for women who think that the main decision-maker in the family should be either a woman or a man and a woman jointly, relative to women who think that the main decision-maker in the family should be a man. The effects of settlement type, education level, monthly household income, employment status, age, and household size were statistically insignificant.

In contrast to the previous studies on female labor force participation in Armenia, the present study utilizes an empirical approach and concentrates solely on rural women. Another distinctive feature of the present study is that it augments the model estimated by Zohrabyan (2013a) by including a variable dealing with the number of children present in the household as well as variables accounting for English and Russian languages and computer skills.

Methodology

To assess the likelihood of labor force participation of rural women in Armenia in relation to a set of household socio-economic characteristics, binomial logit analysis was conducted. The logit model used in this study is specified as follows:

(1) $P(y = 1|x = \frac{\exp(\boldsymbol{\alpha\prime x})}{1-\exp(\boldsymbol{\alpha\prime x})}$,

where P stands for the probability of the event occurring, y=1, (a woman participating in the labor force), **x** is a vector of independent socio-economic variables, and α′ is a conformable vector of parameters. The probability of the event not occurring, y=0, (a woman not participating in the labor force), is calculated as:

(2) $P(y = 0|x) = 1 - P(y = 1|x)$.

After transforming the dependent variable into the log of the odds ratio, $\ln\frac{p}{1-p}$, and including the random disturbance term ν, the logit model looks as follows:

(3) $\ln\left(\frac{P}{1-P}\right) = \alpha'\boldsymbol{x} + \nu$.

The maximum likelihood approach was used to estimate the parameters in (3). The actual interpretation of the parameter estimates was done using the percent change in the odds ratios. First, the odd ratios were computed through the exponentiation of the values of the logit parameter estimates (i.e., $e^{\alpha i}$), then the percent change in the odds ratios were calculated as ($e^{\alpha i}$ - 1)*100.

Empirical Specification

The empirical specification of the logit model with the binary dependent variable modeled as a function of a set of household socio-economic characteristics hypothesized to impact female labor force participation in rural areas of Armenia is written as follows:

(4) $Pr(flfp = 1|) = F(\alpha_0 + \alpha_1 age + \alpha_2 numb\_child + \alpha_3 eng\_bgintadv + \alpha_4 rus\_bgintadv + \alpha_5 comp\_ bgintadv + \alpha_6 edu\_atleast\_higher + \alpha_7 edu\_sec\_tech + \alpha_8 married + \alpha_9 div\_sep\_wid + \alpha_{10} inc\_251\_more)$

where *Pr* is the probability of the female respondent participating in the labor force;

F is the logistic cumulative density function;

αs are the parameters to be estimated;

flfp is a dummy dependent variable taking on 1 if the female respondent is currently employed (part-time or full-time, official, informal, or self-employment, but it brings monetary income) and 0 otherwise;

age is the age of the respondent;

numb_child is the number of children below 18 in the respondent's household;

eng_bgintadv is a dummy variable taking on 1 if the respondent's knowledge of English is at the beginner or intermediate or advanced level and 0 otherwise;

rus_bgintadv is a dummy variable taking on 1 if the respondent's knowledge of Russian is at the beginner or intermediate or advanced level and 0 otherwise;

comp_bgintadv is a dummy variable taking on 1 if the respondent's computer skills to use Microsoft Office programs (Word, Excel, and PowerPoint) are at the beginner or intermediate or advanced level and 0 otherwise;

edu_atleast_higher is a dummy variable taking on 1 if the respondent has at least higher education and 0 otherwise;

edu_sec_tech is a dummy variable taking on 1 if the respondent has secondary technical education and 0 otherwise;

married is a dummy variable taking on 1 if the respondent is married and 0 otherwise; *div_sep_wid* is a dummy variable taking on 1 if the respondent is divorced or separated or widowed and 0 otherwise; and

inc_251_more is a dummy variable taking on 1 if the respondent's monthly household income is $251 or more and 0 otherwise.

Except *age* and *numb_child* variables, all the variables were included in the model as dummy variables with corresponding base categories. In particular, the base categories for *eng_bgintadv*, rus*_bgintadv*, and *comp_bgintadv* were no basic knowledge of English, Russian, and computer skills, respectively. For *edu_atleast_higher* and *edu_sec_tech* the base category was less than higher education level. For *married* and *div_sep_wid* the base category was single. Finally, the base category for *inc_251_more* was monthly household income less than $251.

Age was hypothesized to positively impact the probability of female labor force participation due to experience and skills that women obtain as they age. However, the presence of social traditions and norms may render this relationship negative. The number of children in the household was anticipated to have a positive impact on female labor force participation if some sort of child care facility was available, otherwise it could negatively affect female labor force participation.

The knowledge of Russian, English, and computer skills were anticipated to positively affect female participation in the labor force, since relatively more literate women have a better chance of landing a job. It was anticipated that education would positively impact the probability of female participation in the labor force based on human capital theory. The sign of the parameter estimate associated with the *married* variable was expected to be ambiguous because of female labor force participation first decreases and then increases for married women (Goldin,

1994). The parameter estimate associated with the *div_sep_wid* variable was anticipated to be positive, since according to Neff, Sen, and Kling "widows or divorcees might, however, face fewer cultural or social barriers that prevent them from working outside the home and are sometimes more free to migrate seasonally since there is no husband or family to prevent them from doing so" (Neff, Sen, and Kling, 2012). Finally, higher income level was anticipated to negatively affect the probability of the labor force participation for rural women according to the neoclassical theory of labor.

Data

The data used in this analysis came from the Caucasus Barometer household survey for 2012 conducted by the CRRC's regional office in Armenia (CRRC, 2013). The sample included a total of 395 female respondents who were 18 years of age and older at the time of the interview and were from rural areas of Armenia. Socio-economic variables used in the study included employment, age, number of children under 18 years of age present in the household, knowledge of English, knowledge of Russian, possession of computer skills, education background, marital status, and monthly household income.

The dependent variable, employment status, was constructed based on the answers to the following question: "Are you currently employed? This employment may be part-time or full-time, official, informal, or self-employment, but it brings monetary income." Age and number of children under 18 years of age present in the household are self-explanatory. Knowledge of Russian and English are incorporated into the analysis to capture the impact of basic language skills that are required for jobs across many industries. The possession of computer skills pertained specifically to respondents' ability to use Microsoft Office programs. Nowadays, computer skills, like language skills, are required for landing a job across many specializations.

Education level and marital status contained information on the highest level of education completed and the current marital status of the female respondent, respectively. Finally, monthly household income was categorized based on some income level measured in the U.S. dollars. The CRRC data for 2012 permitted the quantification of these variables and the estimation of the parameter estimates of the model.

The percentages of the respondents associated with each variable are shown in Table 1. As Table 1 shows, almost three-quarters (74.91%) of the respondents were unemployed. The average age of the respondents was 48 years with the average number of children slightly above one per household. Approximately three-quarters of the respondents had no basic knowledge of English (72.69%) and computer skills (71.40%) associated with operating Microsoft Office programs, while nearly 87% of the respondents possessed knowledge of Russian at least at the beginner level. Roughly 60% of the respondents' education level was less than higher education and nearly two-thirds (65.3%) of the respondents were married. Approximately 80% of the respondents had monthly household income of up to 250 U.S. dollars. As such, a profile of a typical female from rural areas of Armenia would include a married and an unemployed woman in her late forties, with less than higher education, with no basic knowledge of English or computer skills but with at least basic knowledge of Russian, living in a household with one child and with monthly household income of up to 250 U.S. dollars.

Estimation Results

Before discussing the results from the estimated logit model, the cross-tabulation findings analyzing the relationship between rural women's labor force participation and the set of socio-economic variables used in this study are presented and discussed first.

Table 1. Percentages of Women Respondents by Socio-Economic Variables in Rural Areas of Armenia, N=395

Variables	%
Employment status	
employed	25.09
unemployed	74.91
Age	
age (average in years)	48.30
Number of children under 18	
number of children (average # of children)	1.21
Knowledge of English	
no basic	72.69
beginner or intermediate or advanced	27.31
Knowledge of Russian	
no basic	13.51
beginner or intermediate or advanced	86.49
Knowledge of computer (Microsoft Office)	
no basic	71.40
beginner or intermediate or advanced	28.60
Education	
at least higher education	13.96
less than higher education	60.35
secondary technical education	25.69
Marital status	
married	65.53
single	7.18
divorced or separated or widowed	27.29
Monthly household income (U.S. dollars)	
0-250	79.81
251 or more	20.19

*Authors own calculations.

These cross-tabulation results are presented in Table 2 in terms of rural women participating in the labor force (participant) and rural women not participating in the labor force (non-participant). However, the actual discussion of the results is conducted in term of the participant women. As Table 2 reveals, the average age of the participant women was around 45 and the participant women, on average, had one child in the household.

About three-quarters of the participant women (71.21%) had no basic knowledge of English and 59% of the participant women had no basic computer skills related to using Microsoft Office programs. However, around 92% of the participant women knew at least basic Russian. Roughly 41% of the participant women had less then higher education. Nearly two-thirds of the participant women (66.58%) were married. Finally, around three-quarters of the participant women (71.05) had monthly household income of up to 250 U.S. dollars.

In summary, a profile of a typical participant female from rural areas of Armenia would include a married woman in her mid-forties, with less than higher education, with no basic knowledge of English or computer skills but with at least basic knowledge of Russian, living in a household with one child and with monthly household income of up to 250 U.S. dollars.

Table 3 depicts the logit parameter estimates with the associated p-values, odds ratios, and the percent change in odds ratios obtained using STATA software package. The discussion of the estimation results is conducted only in terms of statistically significant percent change in odds ratios using the 10% significance level. The estimation results reveal that a couple of parameter estimates are not consistent with hypothesized relationships.

Table 2. Rural Women's Labor Force Participation by Socio-Economics Variables in Armenia, N=96 for Participant Women and N=299 for Non-participant Women

	Participant, %	Non-participant, %
Age		
age (average in years)	44.95	49.42
Number of children under 18		
number of children (average # of children)	1.14	1.24
Knowledge of English		
no basic	71.21	73.18
beginner or intermediate or advanced	28.79	26.82
Knowledge of Russian		
no basic	8.15	15.30
beginner or intermediate or advanced	91.85	84.70
Knowledge of computer (Microsoft Office)		
no basic	58.68	75.66
beginner or intermediate or advanced	41.32	24.34
Education		
at least higher education	31.38	8.12
less than higher education	40.94	66.85
secondary technical education	27.68	25.03
Marital status		
married	66.58	65.18
single	8.62	6.70
divorced or separated or widowed	24.81	28.12
Monthly household income (U.S. dollars)		
0-250	71.05	82.75
251 or more	28.95	17.25

*Authors own calculations.

In particular, contrary to our anticipation, each additional year of age decreased the odds of being employed by 2.95%, everything else held constant. This could be explained by the fact that the kind of work that rural women have to do is rather rigorous and demanding in terms of physical abilities and over time women are simply unable to perform the work. Alternatively, this finding could be attributed to a combined effect of a decrease in the number of job opportunities in rural communities and a common belief among women in Armenia who think that men should have more right to a job in case of job scarcity (Zohrabyan, 2013a).

Relative to having no basic knowledge of English, having at least basic knowledge of English decreased the odds of being employed by 43.6%, everything else held constant. This finding is not in accordance with our expectations, and can be possibly explained by a rather limited use of English language skills in rural areas, where this skill is mostly used to teach English at schools.

As expected, having at least higher education, compared with having less than higher education, increased the odds of being employed by 629.81%, everything else held constant. In addition, as was expected, having secondary technical education, relative to having less than higher education, increased the odds of being employed by 94.83%, everything else held constant.

As expected, holding everything else constant, being divorced or separated or widowed increased the odds of being employed by 217.28%, compared to being single. The number of children in the household, possessing knowledge of Russian and computer skills, being married and monthly household income had a statistically insignificant impact on the odds of being employed for rural women in Armenia.

Table 3. Logit Coefficients, Associated p-values, Odd Ratios, and Percentage Change in Odds Ratios, N=395

	Coefficients	Odds ratios	% change in odds ratios
Age			
age	-0.030	0.970	-2.95
	(0.007)		
Number of children under 18			
numb_child	-0.126	0.882	-11.81
	(0.226)		
Knowledge of English (base: no basic)			
eng_bgintadv	-0.573	0.564	-43.60
	(0.081)		
Knowledge of Russian (base: no basic)			
rus_bgintadv	-0.185	0.831	-16.87
	(0.662)		
Knowledge of computer (Microsoft Office) (base: no basic)			
comp_ bgintadv	0.072	1.074	7.44
	(0.851)		
Education (base: less than higher education)			
edu_atleast_higher	1.988	7.298	629.81
	(0.000)		
edu_sec_tech	0.667	1.948	94.83
	(0.022)		
Marital status (base: single)			
married	0.622	1.863	86.31
	(0.218)		
div_sep_wid	1.155	3.173	217.28
	(0.066)		
Monthly household income (U.S. dollars) (base: less than $251)			
inc_251_more	0.413	1.511	51.14
	(0.146)		
constant	-0.582		
	(0.434)		

*p-values are in the parentheses.
*Authors own calculations.

Summary, Policy Recommendations, and Recommendations for Future Research

A logit model was estimated to evaluate the influence of various socio-economic characteristics on rural women's labor force participation in Armenia using the 2012 survey data collected by the CRRC's regional office in Armenia. In particular, the findings of the analysis indicated that for each additional year of age, the odds of rural women participating in the labor force decreased, holding everything else constant. Other things held equal, rural women with at least basic knowledge of English were less likely to participate in the labor force than rural women with no basic knowledge of English.

Holding everything else constant, rural women with at least higher education and secondary technical education were more likely to participate in the labor force relative to rural women with less than higher education. Compared with single rural women, divorced or separated or widowed rural women were more likely to participate in the labor force, holding everything else constant. The effects of the number of children in the household, knowledge of Russian and computer skills, being married and monthly household income were statistically insignificant.

Additionally, cross-tabulation results revealed that a typical rural woman participating in the labor force in Armenia would be in her mid-forties, married, with less than higher education, with no basic knowledge of English or computer skills but with at least basic knowledge of Russian, living in a household with one child and with monthly household income of up to 250 U.S. dollars.

High female labor force participation rates contribute to human capital formation, increased labor productivity, poverty reduction, and overall socio-economic development. To address these issues, employment policies targeting women should be carefully formulated and

implemented. Hence, the following is a set of policy recommendations stemming from the findings of this study and geared towards the improvement of female labor force participation rate in rural areas of Armenia:

1. Create job opportunities for elderly women with good social protection programs, thereby taking advantage of the knowledge and work experience they accumulate over years.
2. Increase the variety of jobs to match the skills, thus presenting increased employment opportunities to women with certain skills (for example, English language skill).
3. Establish, provide an access to, and encourage enrollment in higher education and secondary technical education facilities.

While the findings obtained from this study provided useful information and insights into rural women labor force participation in Armenia, a few recommendations for future research are worth mentioning for the sake of building upon the present study. First, the present study included the actual number of children aged less than 18 present in the household to capture its impact on female labor force participation. However, a future study can break down this variable into distinct age groups such as preschool children (aged less than 6 years), pre-adolescent children (aged 6-12 years), and adolescent children (aged 13-17 years), since children of different ages do not require the same amount of time to be spent on childcare.

Second, the age variable was included as the number of years representing the actual age of the respondent. Instead, future research can disaggregate the age variable into distinct age groups (for instance, 15-19, 20-24…65 and above). This age disaggregation will permit to determine the labor force participation across different age groups.

Third, a future study should incorporate a variable indicating the presence of male only, female only, and male and female household heads, thus revealing who the decision-maker is.

This information is important since the presence of male household head may preclude the female from seeking and getting a job because of strong social mores and customs embedded in the Armenian society.

Finally, future research should include a variable representing educational attainment of husband. This is expected to negatively affect female labor force participation, since educated husband is likely to be the breadwinner in the household, thus having his wife stay at home and take care of household chores. At the same, educated husband can exhibit open-mindedness with respect to his wife having a job, thereby positively impacting female labor force participation.

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