

# TO PARTICIPATE OR NOT TO PARTICIPATE? : UNFOLDING WOMEN'S LABOR FORCE PARTICIPATION AND ECONOMIC EMPOWERMENT IN ALBANIA

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## ABSTRACT

The importance of increasing women's labor force participation has been taking center stage for some time now in many European countries. Albania is no exception, with its labor statistics showing significant disparity in labor market outcomes between men and women. This paper estimates determinants of female labor force participation in Albania distinguishing between urban and rural areas. It also estimates a model of enrollment for secondary education to determine the impact of household female labor force participation on secondary school enrollments. The primary source of data used for the analysis in this study is the 2008 Albanian Living Standard Measurement Survey (LSMS) conducted by the Albanian Institute of Statistics with technical support from the World Bank. The Albanian LSMS is nationally representative as well as representative for the urban and rural areas of the country. This paper uses a Probit model to empirically test the household and individual determinants of female labor force participation and its impact on secondary school enrollment for females in Albania. The study shows that education, uninterrupted work experiences, social support and infrastructure are crucial factors determining female labor force participation. Results reveal that rural women face a double challenge vis-à-vis men and their urban counterparts. Lastly, having a female member in the household who participates in the labor market is a very important determinant of school enrollment for girls.

**Keywords:** *labor market, participation, gender, equal opportunity, education and training, human capital*

**JEL Classification:** *J16, J21, J31*

## 1. Introduction

The importance of increasing women's participation in the labor market has been taking center stage for some time now in many European countries. Albania is no exception, with its labor statistics showing significant disparity in labor market outcomes between men and women. Low participation and lower life-time accumulation of work related benefits are linked to the feminization of poverty at old age. There is also growing concern over the declining labor supply

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in the face of population decline, reduced fertility rates and international out-migration. Between 1989 and 2001, Albania's population fell by 4 percent and rural population by 15 percent. Since 1990 approximately one fifth of the population has left the country and is living abroad (Carletto, Davis, et al, 2004).

Albania is a developing country that emerged twenty years ago from a harsh communist regime and remains in a protracted transitional phase. Compared to other countries in the region, Albania is unique in that it was the poorest and most isolated country of the communist bloc, and in that it adopted political and economic reforms later than the rest of the Central and Eastern European countries. Since the introduction of such reforms, it has achieved solid economic growth and significant poverty reduction. Nevertheless, it is evident from a review of labor statistics that women's labor force participation is far behind that of men, especially in rural areas, and has been in decline since the fall of communism and its policy of full employment.

The need to investigate determinants of women's labor force participation is therefore compelling. Determinants of participation, and moreover of employability, are of significant interest in economic literature, especially when such writing focuses on developing countries. Cross-national research has revealed a positive relationship between economic development and female labor force participation (Nam, 1991). However there is a notable absence of relevant empirical studies on female labor force participation in Albania.

Although there have been studies focusing on gender analysis, they have not focused on labor force participation. The focal point of the majority of these studies has been the impact of international migration in Albania. Studies from McCarthy et. al. (2009), Miluka et. al., 2010, Dabalén and Miluka, 2010, Stecklov et. al., 2008, mainly examine the impact of international migration on Albanian family farms, and on education, as well as considering shifts in the composition of migration and women's decision-making. Other studies by Azzari et. al., 2009 and Carletto et. al., 2009 touch upon labor market issues although the focus remains on return migrants. They consider labor mobility, return migrants and the impact of migration on female labor supply. Miluka, 2013 examines Albania's gender wage gap and its determinants. The rest of the literature is based on anecdotal evidence, reports, legislation, and outdated programs.

Given this paucity of pertinent research, the purpose of this paper is to analyze in-depth women's labor market participation in Albania and establish the determinants of that participation, distinguishing between urban and rural areas. The study also estimates a model of enrollment for secondary education to determine the impact of household female labor force participation on secondary school enrollments. In the remainder of this paper, section 2 provides a brief literature review. Section 3 follows with data and descriptive statistics. In Section 4 the econometric model is presented. Section 5 presents and analyses the regression results to conclude with section 6.

## **2. Brief literature review**

Empirical and rigorous studies of female labor force participation and its determinants are almost inexistent in Albania, although the issue is very relevant and pressing. These studies however are plentiful in economic literature. Various studies have looked at female labor force participation in general (Heckman, 1980; Mooney, 1967; Netz and Haveman, 1999; Rozenweig and Wolpin, 1980) and participation of married women in particular (Cain and Doley, 1976; Francesconi, 2002; Mahoney, 1961; Spencer, 1973). The focus of these studies as of many others in the

literature has been on the association between women's labor supply and non-market activities such as education, fertility, migration, marital status, family structure and economic status, and the like. Some of them have tested the modernization and world system perspective, by focusing on women's human capital through educational attainment (modernization hypothesis) and family economic status (world system perspective) captured by the occupational status and type of work of the male head of the household (Nam, 1991). Others have focused on the role of fertility, marital status, and family composition in determining female labor force participation (Cain and Dooley, 1976; Francesconi, 2002; Mahoney, 1961; Rosenzweig and Wolpin, 1980; Spencer 1973). Others yet have exclusively looked at the bias created when household characteristics are omitted as determinants of female labor force participation (Netz and Haveman 1999).

Theory shows that there is ambiguity in determining the effect of the size of the household and presence of children on female labor force participation. On one hand, having more children increases consumption needs for market goods, thus increasing the need for additional work outside the home. On the other hand, with an increase in the number of children, child care costs also increase, thus increasing the need for the mother to stay at home (Netz and Haveman, 1999). Additionally, as noted by Mahoney (1961), a bigger household can mean more adults present such as grandparents, or older siblings, who can take care of the younger children, thus reducing women's need to stay at home.

While there is ambiguity regarding the effects of the family size and number of children, studies show that having working males in the household decreases the likelihood of female labor force participation. Working males increase the marginal utility of home production, since they contribute less to it, as a result increasing the need for females to stay at home (Cain and Dooley, 1976; Netz and Haveman, 1999; Spencer, 1973).

There is also agreement in the literature that the expected effect of family income on female labor force participation is negative. An increase in family income apart from the earnings of females causes the marginal utility of consumption for market goods to decrease, and the marginal utility for home-production to increase, both of which will encourage females to work less, since the need for additional income is now less.

Lastly, education is seen as an investment positively related to potential earnings, therefore it increases the opportunity cost of economic inactivity. Education gives women, particularly younger ones, the needed qualifications that the changing economy demands. It also indicates income aspirations and expectation of women; therefore its influence on women's participation in the labor force is expected to be positive (Nam, 1991; Mahoney, 1961; Mooney, 1967; Spencer, 1973). In summary, empirical results show that female workers are more likely to leave the labor force if they have younger children to take care, if they don't have the needed education qualifications, and if they are not financially constrained.

### **3. Data and descriptive statistics: Women's employment in rural and urban areas**

The primary source of data used for the analysis in this study is the 2008 Albanian Living Standard Measurement Survey conducted by the Albanian Institute of Statistics with technical support from the World Bank. The Albanian LSMS is a household questionnaire that also collects data at the individual level. The survey is nationally representative as well as representative for the urban and rural areas and at the four strata level, namely coastal, central,

mountain and Tirana. The survey collects data on 3,600 households and provides household and individual information on general characteristics, education, labor, migration, social capital and other information secondary to the analysis. Our sample is comprised of those individuals that are in the labor module between the ages of 15 and 64 for a total of 9,143 individuals, where 4,390 are males and 4,753 are females.

Turning to women participants versus nonparticipants in the labor market, as expected, those who participate have more education (9.92 years of education for participants versus 9.21 years of education for nonparticipants), more work experience (21.16 years for participants versus 18.99 years for nonparticipants), and are somewhat older (Table 1). In terms of household composition, participants have less household female labor, 1.98 for participants compared to 2.13 for nonparticipants. In addition, women participants in the labor market have fewer children under the age of 6. In terms of total consumption, nonparticipants show higher expenditures, however when adjusted for per capita consumption, there is no significant difference between the two groups.

**Table 1.** Overall Descriptive Statistics by LFP Status

Variables	Participants	Non-participants	Total	P-Value
education	9.92	9.21	9.60	<b>0.000</b>
experience	21.16	18.99	20.19	<b>0.000</b>
age	37.08	34.20	35.79	<b>0.000</b>
household male labor	1.57	1.56	1.57	0.748
household female labor	1.98	2.13	2.05	<b>0.000</b>
total consumption	494455.10	514439.60	503436.80	<b>0.086</b>
per capita consumption	107124.00	108607.80	107790.90	0.595
number of children under 6	0.31	0.36	0.34	<b>0.064</b>
married	74.06%	55.11%	65.54%	<b>0.000</b>
migrant household	27.17%	28.32%	27.69%	0.480
distance index	0.04	0.07	0.05	0.446
social capital index	-0.05	0.03	-0.02	<b>0.032</b>
Total Observations	2410	2343	4752	

Note: P-values in bold indicate statistically significant differences.

In the rural areas, the gap in education between women participants and nonparticipants closes. Women in rural areas have overall lower level of education (Table 2). Experience<sup>3</sup> differences are larger between participants and nonparticipants in the rural areas. Women who are participating in the labor market in the rural area have over 3.5 years of experience more than women who are not participating in the labor market. Incidentally, nonparticipants have more children under the age of 6 years. The majority of the rural participants are married, which may point to marriage providing for some sort of social capital<sup>4</sup>; such expectation is in accordance to social and cultural norms in the country. Participants have less of both household male and female labor; therefore the substitution effect of male for female labor is less likely to occur in these households. Participants have 1.65 household male labor and 1.99 household female labor compared to 1.76 household male labor and 2.32 household female labor for the nonparticipants.

<sup>3</sup>Creation of variable is explained in the following section: Econometric Model.

<sup>4</sup>Creation of variable is explained in the following section: Econometric Model.

Although total consumption seems to be greater for non-participants households, per capita consumption shows no differences between the two groups. Participants belong to households that have on average larger number of plots; 2.60 plots for participants compared to 2.34 plots for the nonparticipants.

**Table 2.** Descriptive Statistics by LFP Status, Rural Areas

Variables	Participants	Non-participants	Total	P-Value
education	8.57	8.31	8.46	<b>0.071</b>
experience	22.02	18.71	20.64	<b>0.000</b>
age	36.58	33.02	35.10	<b>0.000</b>
household male labor	1.65	1.76	1.70	<b>0.059</b>
household female labor	1.99	2.32	2.12	<b>0.000</b>
total consumption	464521.80	505033.80	481334.40	<b>0.003</b>
per capita consumption	92185.70	91358.21	91842.29	0.729
number of children under 6	0.38	0.48	0.42	<b>0.023</b>
married	75.58%	54.60%	66.87%	<b>0.000</b>
migrant household	34.68%	31.96%	33.55%	0.290
distance index	0.31	0.36	0.33	0.360
social capital index	-0.07	0.03	-0.03	<b>0.084</b>
Land area in sqm	10225.28	9933.47	10104.18	0.859
hhplots	2.60	2.34	2.49	<b>0.014</b>
Total Observations	1198	1032	2230	

Note: P-values in bold indicate statistically significant differences.

Table 3, shows a different situation in urban areas. Education differences are larger between participants and nonparticipants in the labor market. Participant women in the labor market in the urban areas have over 1.5 years of education compared to nonparticipants, but there are no differences in terms of experience. The latter may be partly due to no significant differences in the number of children under the age of 6 years. Urban areas participants have on average more household male labor (1.48 for participants versus 1.38 for nonparticipants), which points to lack of substitution effect between male labor and female labor. On average about 18% of participants belong to households that have permanent migrants abroad compared to about 25% of nonparticipants. Lastly, participants live closer to bus stations, primary schools and public health facilities as captured by the distance index, therefore facilitating access and reducing distances.

**Table 3.** Descriptive Statistics by LFP Status, Urban Areas

Variables	Participants	Non-participants	Total	P-Value
education	11.57	10.04	10.83	<b>0.000</b>
experience	20.12	19.25	19.69	0.243
age	37.68	35.28	36.52	<b>0.001</b>
household male labor	1.48	1.38	1.43	<b>0.015</b>
household female labor	1.97	1.96	1.97	0.884
total consumption	530999.20	523043.50	527130.00	0.679
per capita consumption	125361.50	124386.50	124887.40	0.843

number of children under 6	0.23	0.25	0.24	0.440
married	72.21%	55.58%	64.12%	<b>0.000</b>
migrant household	17.99%	24.99%	21.40%	<b>0.000</b>
distance index	-0.29	-0.21	-0.25	<b>0.009</b>
social capital index	-0.03	0.02	0.00	0.243
Total Observations	1212	1311	2523	

Note: P-values in bold indicate statistically significant differences.

#### 4. Econometric model<sup>5</sup>

This paper uses a Probit model to empirically test the household and individual determinants of female labor force participation and its impact on secondary school enrollment for females in Albania. The choice of dependent variables female labor force participation, and school enrollment, are binary response variable (participating in the labor force versus non-participating, and being enrolled in school versus non-enrolling). The female's individual decision regarding the labor force, and the household's decision regarding enrolling their children in school, is therefore discrete and may be evaluated using a discrete regression model. Probit models has been extensively used in the literature to measure labor market participation, union membership, choice of transportation mode to work, or choice to participate in welfare programs among others (Gerfin, 1996).

The probit model may be presented as follows:

$$y_n^* = x_n \beta + \varepsilon_n \quad (1)$$

$$y_n = 1 \text{ if } y_n^* \geq 0 \quad (2)$$

$$y_n = 0 \text{ otherwise} \quad (3)$$

where  $y_n$  is the indicator of the  $n$ th individual's response determined by the underlying latent variable  $y_n^*$ ;  $x_n$  is a  $1 \times q$  vector of explanatory variables;  $\beta$  is a  $q \times 1$  vector of parameters;  $\varepsilon_n$  is a random error term, and  $n=1, \dots, N$

Let  $F(\varepsilon / x)$  denote the cumulative distribution function of  $\varepsilon$  conditional on the event

$$x_n = x. \text{ Then } P(y_n = 1 | x_n, \beta) = F(x_n \beta | x_n) \quad (4)$$

$F$  will be assumed to be the cumulative normal (probit model)

The dependent variable for the first model is *female labor force participation* defined as a binary 0 (for nonparticipation) and 1 (for participation), which includes all females who currently live in Albania, are between the ages of 15 and 64, who either have a job, or are able to start a job in two weeks, or have done part-time jobs outside of home in the last seven days. The choice of independent variable follow economic theory and a brief explanation of the independent variables follows:

*Education*, defined at the number of years of education completed. *Experience*, defined as age-years of education -6, where 6 signified the age at which formal education starts, and *experience squared*. *Male and female labor*, defined as the number of males/females in the household that are between the ages of 15 and 64 years old. *Number of children under the age of 6*, defined as the total number of children under the age of 6 that females currently have. *Marital status*, defined by a dummy variable taking a value of 1 if female is married, 0 otherwise. *Social capital*

<sup>5</sup>Source of data used in regression analysis: 2008 ALSMS, unless otherwise specified.

and *distance*, defined by social capital index and distance index respectively, are created through principal factor component analysis. *Household with permanent migrants* defined as a dummy taking a value of 1 is the household has any permanent international migrants, 0 otherwise. Although we are aware of the endogeneity issues of migration, as a control variable we are interested in seeing its trend. By no means will we attempt to explain causality or magnitude. *Land area* and *number of plots*, defined as land area in square meters in the possession of the households and number of household plots in which the land is divided. Lastly, *regional dummies*, include a set of dummy variables (1 if the individual pertained to a certain region, 0 otherwise) for the different regions is Albania, which include the Coastal, Central, Mountain regions and Tirana.

In the second model, the dependent variable is also defined as a binary variable taking the value of 1 for any individual between the ages of 14 through 17 being currently enrolled in school, 0 otherwise. The sample included only individuals of secondary school age between 14 and 17 years of age. The included independent variables are as follows:

*Household female labor force participation* defined as a dummy taking a value of 1 if the individual has a female of working age that participates in the labor market (except itself in the case of females), 0 otherwise. *Log household size*, defined as the total number of individuals in the household. In order to capture the household's demographic composition the log of the household size is included as an explanatory variable. *Log total consumption*, defined as log of total household expenditures. *Head's education*, defined as the total number of years of completed education by the head of the household. *Distance index*, defined as in the above model. *Regional dummies* defined as above to capture the different socio-economic effects of different regions.

## 5. Results

Results from the regression analysis in Table 4, reveal that education and work experience are very important determinants positively affecting female labor force participation. Education is especially important in the urban areas, where for every additional years of education, the probability of female labor force participation increases by about 4%. In the rural areas, the impact of education is very weak, which may be a result of the overall low levels of female education in the rural areas. Each additional year of education increases female labor force participation by about 0.1%. Work experience is a very strong determinant of female labor force participation, overall, and for each area. On average, each additional year of work experience increases female labor force participation by about 4.4%. This impact is stronger in urban areas about 6%, and about 4% in rural areas. As expected the impact of work experience increases at a decreasing rate as seen by the control variable experience squared.

**Table 4.** Determinants of Female Labor Force Participation.

Variables	All	Urban	Rural
Education	0.02172*** (0.003)	0.04256*** (0.004)	0.0093* (0.005)
Work experience	0.04430*** (0.002)	0.06210*** (0.004)	0.04126*** (0.003)
Experience squared	- 0.00093*** (0.000)	-0.00137*** (0.000)	-0.00083*** (0.000)

Male labor	0.00033 (0.009)	0.04632** (0.014)	-0.02247 (0.012)
Female Labor	0.02029* (0.009)	0.03786** (0.014)	0.00867 (0.013)
Children under age 6	-0.03454* (0.014)	-0.02632 (0.023)	-0.04701* (0.019)
Married (d)	-0.00841 (0.025)	-0.08454* (0.035)	0.00476 (0.039)
Migrant household (d)	0.03953* (0.018)	0.01718 (0.027)	0.04885 (0.026)
Distance index	0.01351 (0.007)	-0.04484* (0.018)	0.0073 (0.009)
Socialcapital index	-0.00339 (0.008)	0.01971 (0.012)	-0.02009 (0.012)
Coastal (d)	0.09073*** (0.025)	0.01427 (0.031)	
Central (d)	0.11073*** (0.025)	0.03884 (0.031)	-0.01395 (0.032)
Mountain (d)	-0.05332* (0.025)	-0.03221 (0.031)	-0.25962*** (0.029)
Land area (sqm)			0.00000 (0.000)
Number of household plots			0.03784*** (0.008)
Observations	4753	2523	2069

Note: Standard errors in parenthesis

\*\*\* significance at 1% level; \*\* significance at 5% level; \* significance at 10% level.

Availability of male and female labor in the household act as complements in the urban areas, whereas it has no impact in the rural areas. This points to differences of the role of household composition between the two areas. Male and female labor is regarded as complementing each other in the urban areas. This may be a result of household dynamics as well as labor market characteristics in the urban areas. Females in the urban areas are highly educated thus the labor market in the urban areas rewards these characteristics increasing female labor force participation. The same does not hold for rural household, where the role of education is not as strong and where the vast majority of females are in unpaid family farm work. Unpaid family work is an important source of labor for the family, but it does little for women's labor force participation.

Marriage and little children have a negative impact on female labor force participation. For each additional child under the age of six, the probability of female labor force participation decrease on average by about 3%. The impact is more intensified in the rural areas, by about 4.7%. This result points to the importance of child care and may be indicative of the lack of child care in the rural areas as well as the role of women in child care in these areas. Whereas number of children under the age of six does not have a significant impact for urban women, being married has a strong negative impact for urban women reducing the probability of participating in the labor market by about 8%. One way of interpreting this result may be that it is not child care per se that reduces women's labor force participation in the urban areas, rather it is the overall increase in family responsibilities and perhaps the way marriage is viewed through employer expectations on worker's productivity in the urban labor market that leads to such strong negative impact.

Other control variables show that having permanent international migrants in the household has a positive impact in female labor force participation overall, but it has no impact

individually in the urban and rural areas. Distance has a negative impact on female labor force participation in the rural areas. This result points to the importance of infrastructure and public services for access to the labor market. It is also related to the role of females as primary care givers of their children since the distance index includes distances to primary schools and ambulatory services. Being in the mountainous region in the rural areas compared to Tirana, decreases female labor force participation by almost 26%. This encompasses the problematic of this region, which has the highest poverty rates in the country and a large reduction of population due to migration. Lastly, availability of land increases female labor force participation in the rural areas. However, this participation is linked to unpaid female family farm labor.

### 5.1 Determinants of secondary school enrollment

Besides the usual suspects such as years of education of the household head, per capita consumption, household size, distance index, as determinants of enrollment for secondary education, household female labor force participation has a strong positive impact. The purpose of these regressions is not to capture the determinants of school enrollment per se, rather to capture parents' expectations of labor market participation and its impact on enrollment. The focus is on the importance of female labor force participation, as an important factor in the formation of parents' expectations. If parents expect returns to their children's education in the labor market, they are more likely to enroll their children in school. As a result, labor force participation increases as education increases. This is expected to be even more significant for females, because female labor force participation affects parent's expectations first hand regarding school enrollments of daughters. In this respect, tables 5 and 6 show that household female labor force participation has a strong positive impact on school enrollment for individuals between the ages of 14 and 17. The impact is larger for females. Having females participating in the labor market in the household increases the probability of secondary school enrollments for females by about 22% compared to about 13% for males. The impact is even larger for rural females whose probability of enrollment increases by almost 35% compared to about 7% for urban females. These results show the large significance of female labor force participation in terms of school enrolment for household members in general and females in particular. Female labor force participation deserves special attention particularly in rural areas.

**Table 5.** Determinants on Enrollment (ages 14-17)

Variables	Male	Female
Household female labor participation (d)	0.12687** (0.041)	0.22424*** (0.036)
Education of household head	0.01807** (0.006)	0.02717*** (0.005)
Ln total consumption	0.25201*** (0.047)	0.21643*** (0.045)
Ln household size	-0.20291** (0.072)	-0.14319* (0.063)
Distance index	-0.05041** (0.016)	-0.03506** (0.013)
Coastal (d)	-0.11662 (0.088)	-0.19149* (0.08)
Central (d)	-0.1131 (0.085)	-0.10811 (0.08)
Mountain (d)	0.0682	-0.07301

	(0.08)	(0.069)
Observations	610	644

Note: Standard errors in parenthesis

\*\*\* significance at 1% level; \*\* significance at 5% level; \* significance at 10% level.

**Table 6.** Determinants on Enrollment by Region (ages 14-17)

Variables	Urban Females	Rural Females
Household female labor participation (d)	0.06681* (0.031)	0.34903*** (0.054)
Education of household head	0.01097** (0.004)	0.02882** (0.01)
Ln total consumption	0.09513** (0.03)	0.23985** (0.081)
Ln household size	-0.11946* (0.051)	0.02308 (0.106)
Distance index	-0.01924 (0.014)	-0.01895 (0.019)
Coastal (d)	-0.00715 (0.034)	
Central (d)	0.00432 (0.031)	0.10041 (0.075)
Mountain (d)	0.03973 (0.024)	0.10850 (0.071)
Land area (sqm)		0.00000 (0.000)
Number of household plots		-0.03234 (0.017)
Observations	308	336

Note: Standard errors in parenthesis

\*\*\* significance at 1% level; \*\* significance at 5% level; \* significance at 10% level.

## 6. Conclusions and policy recommendations

The empirical work presented in this paper, testing for determinants of female labor force participation in Albania provides important findings for policy making especially in rural areas. From the regression results it may be concluded that overall, women with higher education and work experience, with fewer children and close to public facilities are more likely to participate in the labor market. International migration is also seen as having an overall positive impact in female labor force participation. Education, uninterrupted work experiences, social support and infrastructure are therefore crucial factors determining female labor force participation.

The results unhide interesting differences between rural and urban areas. Work experience and number of children under the age of six exert a very important impact on females in rural areas. For urban women, being married, rather than presence of children, negatively impacts their probability of participating in the labor market, meaning for urban women, it is not child care per se that reduces their labor force participation, rather it is the overall increase in family responsibilities and perhaps the way marriage is viewed through employer's expectations. Furthermore, in urban areas, availability of male and female labor in the household act as complements, but this is not the case in the rural areas, pointing to different labor market characteristics between the two areas. Females in the urban areas are highly educated, and the labor market in the urban areas rewards these characteristics (Miluka, 2016), which in turn may increase female labor force participation, therefore acting as complements to male labor, and

vice-versa. The same cannot be said for rural areas, where education incentives are low and a large bulk of rural female employment is engaged in unpaid work.

There are a number of important policy implications. First, a general restructuring of the labor market in rural areas is needed as to provide activities other than farming. Rural non-farm activities would enable transitioning away from own family farm work into the formal labor market. In this way increased levels of paid employment for females may be achieved, and education incentives may be restored.

Given the low levels of education in rural areas, efforts to restructure the labour market needs to be accompanied by more education, and vocational training, however, training should move away from traditional female activities. In addition, information dissemination targeting rural audiences on labour market opportunities, such as job availability in rural and urban areas, market oriented skills is very much in need, and this points to a greater role that could be played by national employment services agencies.

Improving infrastructure and availability of public services such as transportation in rural areas would bring women closer to the labor market, and it would also alleviate women's time spend on household chores and child care responsibilities. Better infrastructure may also improve the general conditions for non-farm entrepreneurial activities. In this regard, fostering entrepreneurship in rural communities is an important strategy, especially if it is used to develop products and services, such as child care, that could assist women workers.

Education is an important determinant of female labor force participation, and having a female member in the household who participates in the labour market is a very important determinant of school enrollment, especially for girls of the household. This effect is significant in rural areas. As a result, more education and training is needed for rural females as to increase their labor force participation, which in turn will increase enrollment rates of next generations.

Finally, an important policy implication comes from the impact of children on women's labor force participation. Clearly, the costs of having additional children encourage women to stay out of the labor force, thus creating the need for the government to provide social assistance for women with many children, particularly by providing affordable day care, or day care at the work places. Similarly, work-family reconciliation policies need to be designed to adjust family responsibilities so that they do not impede women's labor force participation. This is especially important in urban areas. It is crucial to increase female labor force participation in a country wanting to achieve development and membership to the European Union. Such need is even more pressing for the rural areas, which have significant amount of catching up to do.

## References

1. Albania Gender Profile (2012). IFAD. Retrieved from <http://www.ifad.org/english/gender/cen/profiles/alb.htm>.
2. Albania Policy Note (2005). World Bank. Retrieved from [siteresources.worldbank.org/PGLP/Resources/AlbaniaPolicyNotes.doc](http://siteresources.worldbank.org/PGLP/Resources/AlbaniaPolicyNotes.doc)
3. Azzari, C., and Carletto, C. (2009). Modelling Migration Dynamics in Albania: A Hazard Function Approach. *Journal of Southeast European and Black Sea Studies* 9.4: 407-434.
4. Brainerd, E. (2000). Women in Transition: Changes in Gender Wage Differentials in Eastern Europe and the Former Soviet Union. *Industrial and Labor Relations Review* 52.1: 138-162.
5. Cain, G. G. and Dooley, M. D. (1976). Estimation of a Model of Labor Supply, Fertility, and Wages of Married Women. *Journal of Political Economy* 84.4: 179-199.

6. Case, A., and Deaton, A. (2002). Consumption, Gender, Health, and Poverty. Research Program in Development Studies Princeton University.
7. Carletto, C. Davis, B. et al (2004). "Internal Mobility and International Migration in Albania" ESA Working Paper No. 04-13.
8. Carletto, C. and Kilic, T. (2009). Moving up the Ladder? The Impact of Migration Experience on Occupational Mobility in Albania. World Bank Policy Research Working Paper, No. 4908.
9. Cuka, E., Papapanagos, H., Polo, N., and Sanfey, P. (2003). Labor Market Development in Albania. *Review of Development Economics* 7.2: 217-227.
10. Dabalén, A., Miluka, J. (2010). Who is Bearing the Burden? Exploring the Role of Albanian International Migration on Education. *Eastern European Economics* 48.6: 36- 56.
11. Francesconi, M. (2002). A Joint Dynamic Model of Fertility and Work of Married Women. *Journal of Economics* 20.2: 336-380.
12. Gerfin, M. (1996). Parametric and Semi-Parametric Estimation of the Binary Response Model of Labor Market Participation. *Journal of Applied Econometrics* 11.3: 321-339.
13. Heckman, J. J. (1979). Sample Selection Bias as a Specification Error. *Econometrica* 47.1: 153-162.
14. Heckman, J. J. (1993). What Has Been Learned About Labor Supply in the Past Twenty Years? *American Economic Association Papers and Proceedings* 83: 116-121.
15. Knight, J. (2006). Why Do Girls in Rural China Have Lower School Enrollment? *World Development* 34. 9: 1639–1653.
16. Kunze, A. (2000). The Determination of Wages and the Gender Wage Gap: A Survey. IZA Discussion Paper No. 193.
17. McCarthy, N., Carletto, C., Kilic, T., and Davis, B. (2009). Assessing the Impact of Massive Out-Migration on Albanian Agriculture. *The European Journal of Development Research* 21.3: 448-470.
18. Mahoney, T. A. (1961). Factors Determining the Labor Force Participation of Married Women. *Industrial and Labor Relations Review* 14.4 (1961): 563-577.
19. Miluka, J. (2016). "Returns to Education in the Albanian Labor Market" *Journal of European Social Research* 1.2: 138-156. ISBN:2312-251X
20. Miluka, J., Carletto, G., Davis, B., and Zezza, A. (2010). The Vanishing Farm? The Impact of International Migration on Albanian Family Farming. *Journal of Development Studies* 46.1: 140-161.
21. Miluka, J. (2013). Not Just Education: Gender Wage Gap in the Albanian Labor Markets through Occupational Segregation, Work Experience, and Child Care. In J. Silber (Ed.), *Poverty and Exclusion in the Western Balkans: New directions in measurement and policy* (pp. 155-176). New York: Springer.
22. Netz, J., and Haveman, J. D. (1999). All in the Family: Family, Income, and Labor Force Attachment. *Feminist Economics* 5.3: 85-106.
23. Rosenzweig, M. R. and Wolpin, K. I. (1980). Life-Cycle Labor Supply and Fertility: Casual Inferences from Household Models. *Journal of Political Economy* 88.21: 328-348.
24. Spencer, B. G. (1973). Determinants of the Labour Force Participation of Married Women: A Micro-Study of Toronto Household. *The Canadian Journal of Economics* 6.2: 222-238.
25. Stecklov, G., Carletto, C., Azzarri, C., and Davis, B. (2008). Agency, Education and
26. Networks: Gender and International Migration from Albania. The World Bank. Policy Research Working Paper, No. 4507.