

Determinants of Women's Labor Force Participation in Turkey: Is Social Conservatism an Important Constraint?

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Motivation

Women's labor force participation in Turkey is very low in comparison to the countries at a similar development stage. Moreover it has been steadily declining since the 1960s (from 65.4% in 1960 to 28.8% in 2011).

Turkey

- has the lowest female labor force participation rate among OECD countries in 2010
- Is an outlier in the upper-middle income country group
- Conforms to the trend in the MENA region

Table 1: Labor Force Participation Rates by Gender, 1960—2011

	MEN	WOMEN
Census of Population		
1960	93.6	65.4
1970	79.5	50.3
1980	79.8	45.8
1990	78.2	42.8
Household Labor Force Surveys		
1990	79.7	34.1
2000	73.7	26.6
2010	70.8	26.6
2011	70.7	28.8

Source: 1960-1990: Census of Population, TURKSTAT. Tansel (2002), p.29,
 1988-2008: Household Labor Force Survey, TURKSTAT,

Figure 1: Female Labor Force Participation Rate (%), OECD Countries, 2010

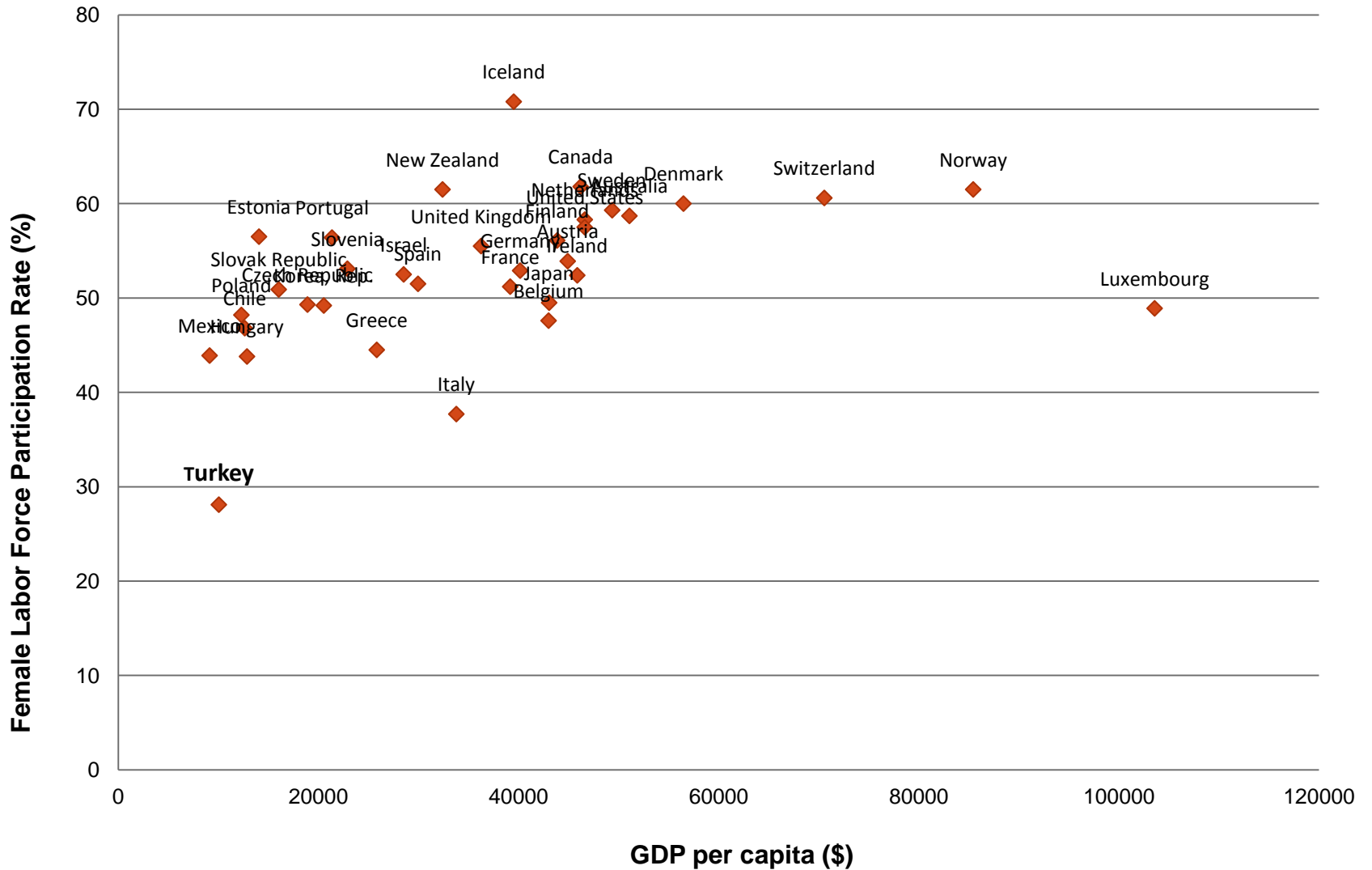


Figure 2: Female Labor Force Participation Rate (%), Upper-Middle Income Countries, 2010.

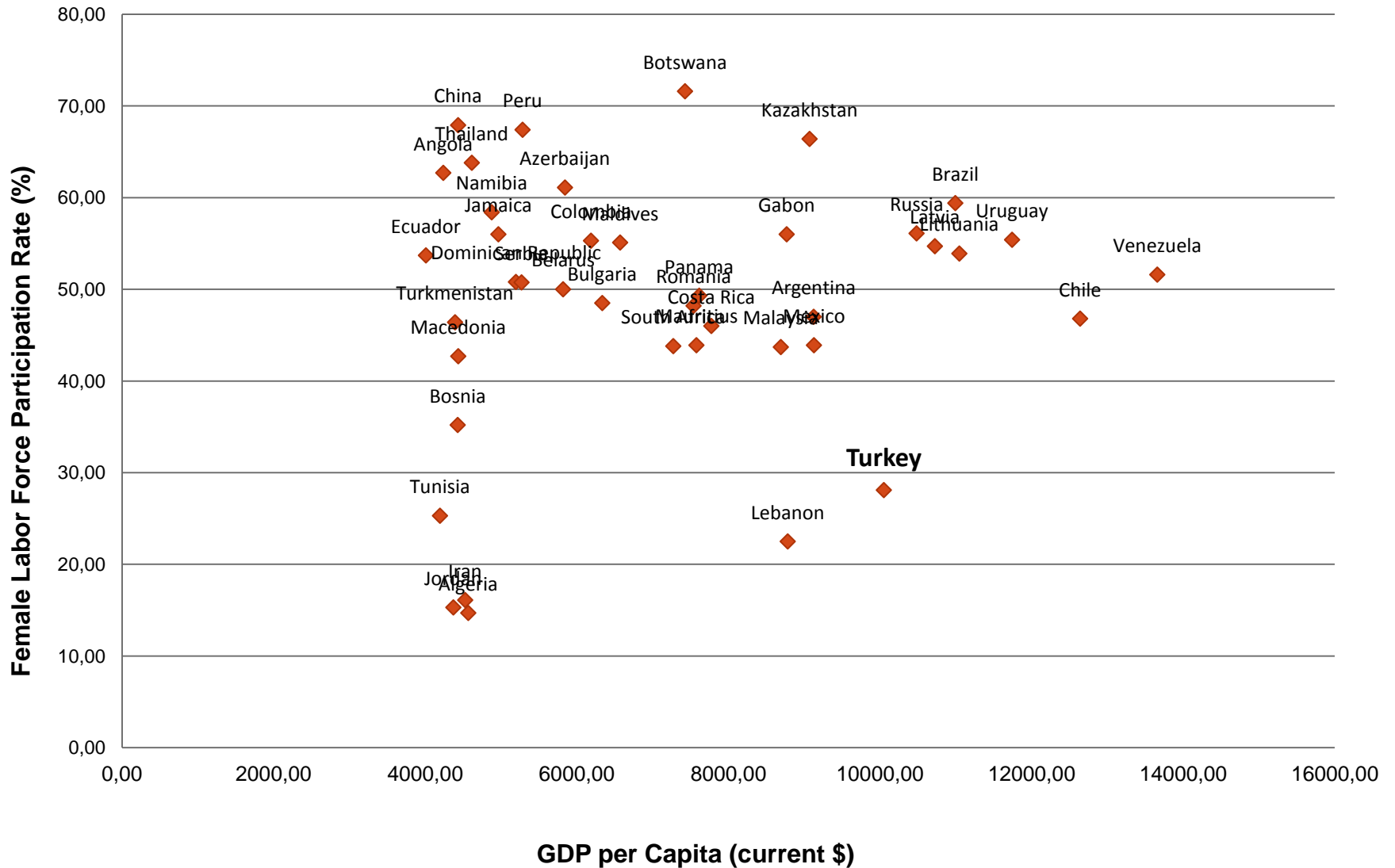
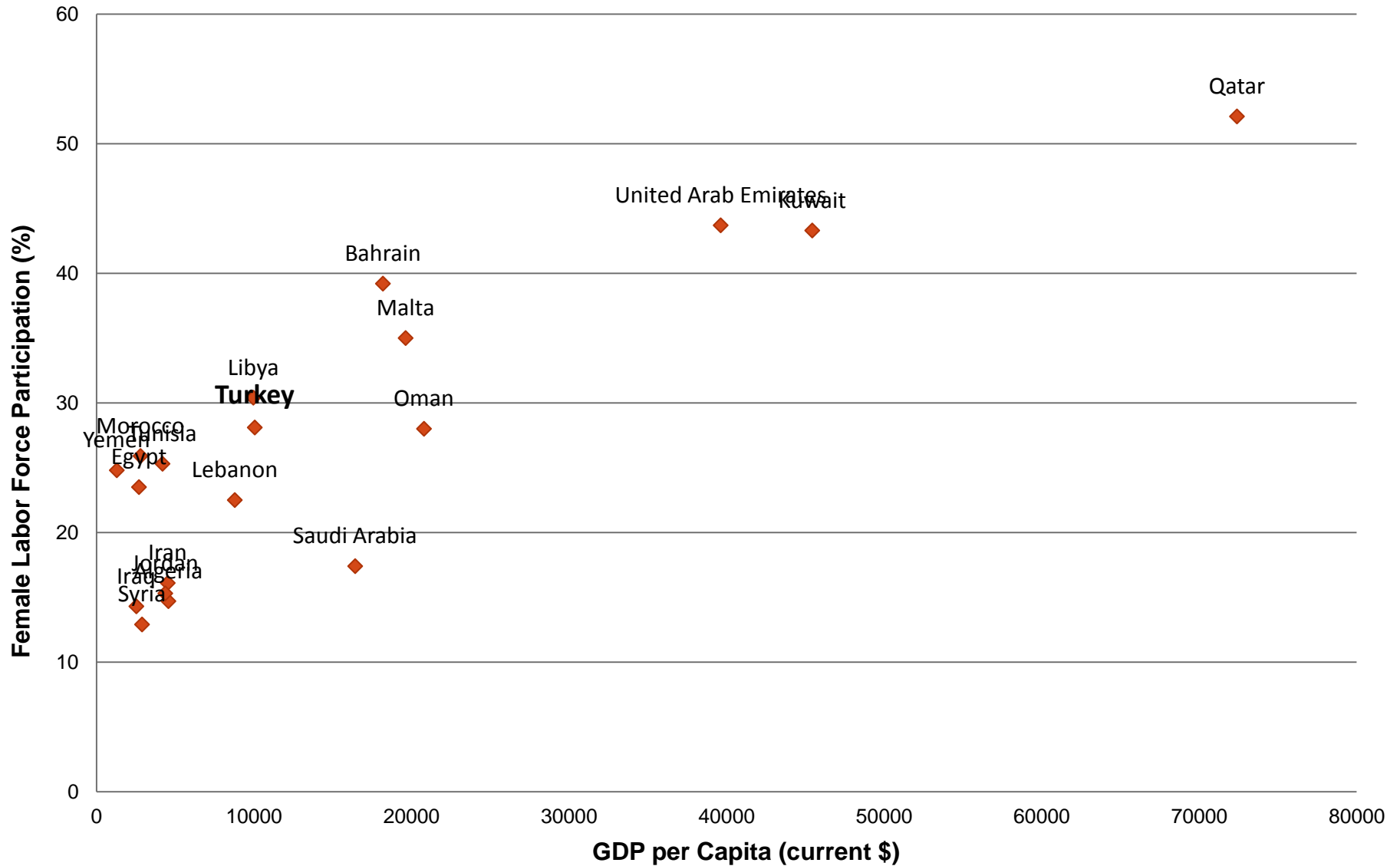


Figure 3: Female Labor Force Participation Rate (%), MENA Countries, 2010



Feminization U-hypothesis

In development economics, a U-shaped trend in female labor force participation rate is accepted as a stylized fact (Goldin 1994).

As the economy moves from an agrarian society to an industrial and service-based formal economy, female labor force participation rates initially fall. In the later stages of development, as fertility declines and education level of women increases, their labor force participation rises.

- (Goldin 1994, Schultz 1990, Psarchapoulos and Tzannatos 1989, Durand 1975)

Feminization of employment with export-oriented industrialization

Rising export-orientation and flexible forms of employment have increased the relative demand for female labor in the developing countries starting from the late 1960s

- (Standing 1989, Seguino 2000, Joekees 1999, Wood 1991, Elson 1995, Elson and Pearson 1981, Cagatay and Ozler 1995, Cagatay and Berik 1990, Caraway 2006).

Two pieces of the puzzle

1. The U-shape pattern in women's labor force participation is not observed in Turkey. Why are the Turkish women still at the bottom of the 'U' despite significant demographic and structural changes in the economy?
2. Turkey did not go through the feminization of the labor force that was seen in many developing countries even though it has adopted an export-oriented growth strategy since 1980

Literature Review

- Many researchers have focused on the supply-side determinants of women's participation and emphasized the importance of **education** (Tansel 2002, Gündüz-Hoşgör and Smits 2006, Taymaz 2010).
- Others have argued that education cannot explain the puzzle on its own, since men with similar levels of education do not have low participation rates. They argue that such low levels of participation can be better explained by **bringing social and cultural values** into the analysis (Göksel 2012, Uraz et.al 2010).
- A third group of researchers, unsatisfied with supply-side explanations based on either educational or cultural variables, suggests that **lack of demand** might be playing a significant role in constraining job opportunities (Toksöz 2007, İlkaracan 2012).

Table 2: Labor Force Participation Rates by Year and Education

Level	1988		1995		2002		2012	
	M	F	M	F	M	F	M	F
Illiterate	70.5	32.3	62.5	28.4	48.1	24.4	34	16.7
Literate but no school completed	76.3	31.7	67.6	25	48.5	22.4	56.4	20.7
Primary school	88.9	34.3	86	31.8	78.8	26.7	74.3	28.3
Junior high school or vocational school	61.4	19.5	59	15.9	68.4	18.4	82.2	27.9
High school	75.5	45.7	73.4	34.9	64.6	28.5	69.1	30.6
Vocational school at high school level	82.8	52.5	80.9	46.4	77.7	39	80.5	38.1
University and other higher education	89.5	82.5	88	73.8	84.5	71.5	85.1	70.9

Source: TURKSTAT, Household Labor Force Statistics

What is the role of social conservatism in explaining this puzzle?

I add two additional variables in the supply-side analysis of LFP:

- Internalization of patriarchal norms
- Religiosity

I use three alternative measures for patriarchy:

1. Patriarchy_1: constructed by taking the average of the standardized versions of nine dummy variables based on opinion questions
2. Patriarchy_2: constructed using principal component analysis. The scale for *Patriarchy_2* is created out of *menwiser*, *familydec*, *wifeopinion*, *helphswork* and *womenwork*

Patriarchy variable

Patriarchy measures the internalization of patriarchal norms by women based on their responses to following statements

- *Helphswork*: Men should also do the housework like cooking, washing, ironing, and cleaning
- *Womenwork*: A married woman should work outside the home if she wants to
- *Goingout*: A woman may go anywhere she wants without her husband's permission
- *Womenpolitics*: Women should be more involved in politics
- *Familydec*: The important decisions in the family should be made only by men of the family
- *Wifeopinion*: A woman shouldn't argue with her husband even if she disagrees with him
- *Menwiser*: Men are wiser
- *Virginity*: Women should be virgins when they get married
- *Sonprf*: It is better to educate a son than a daughter

Religiosity

Women's answers to the religious practice questions are coded as follows:

- *Prayer (namaz)*: She performs namaz regularly (0)
She performs namaz irregularly (0.5)
She does not perform namaz/ not applicable (1)
- *Fast*: She fasts regularly (0)
She irregularly fasts (0.5)
She does not fast / not applicable (1)
- *Head-scarf*: She wears head-scarf regularly when going out (0)
She wears head-scarf irregularly when going out (0.5)

Data and Methodology

Data: the 2008 Turkey Demography and Health Survey (7405 married women surveyed)

Model: Logistic Regression Model

$$\Pr(\text{Ifp} = 1) = F(\beta_1 \text{ age} + \beta_2 \text{ age_square} + \beta_3 \text{ own education} + \beta_4 \text{ husband's education} + \beta_5 \text{ number of children} < 5 + \beta_6 \text{ household wealth} + \beta_7 \text{ place of residence} + \beta_8 \text{ region} + \beta_9 \text{ patriarchy} + \beta_{10} \text{ religion})$$

Dependent variable: a dummy variable for labor force participation

Independent variables: age, age square, education, husband's education, number of children under age five, household wealth quintiles, place of residence, geographical region, patriarchy and religion.

Women in Turkey

	URBAN		RURAL	
	LFP (%)	# of women	LFP(%)	# of women
Own education				
No education	18.90	1032	39.53	716
Primary school	28.18	2633	52.57	1012
Secondary school	25.10	506	29.13	127
High school and higher	49.44	1258	47.11	121
Husband's education				
No education	20.96	291	34.34	198
Primary school	28.50	2319	50	1228
Secondary school	26.68	791	42.11	228
High school and higher	37.01	2002	40.73	302
Number of children < 5				
None	36.22	3015	54.74	939
One	27.73	1760	43.09	564
Two	17.09	550	28.01	307
Three or more	11.54	104	39.76	166

	URBAN		RURAL	
	LFP(%)	# of women	LFP(%)	# of women
Household Wealth				
Quintile 1	22.65	490	44.06	1039
Quintile 2	25.55	1045	48.29	497
Quintile 3	28.21	1315	46.49	271
Quintile 4	31.86	1362	45.53	123
Quintile 5	41.33	1217	50	46
Geographical Region				
Istanbul	33.60	506	42.31	26
West Marmara	37.90	314	55.96	109
Aegean	43.47	392	69.43	157
East Marmara	42.36	484	67.27	110
West Anatolia	26.13	444	33.63	113
Mediterranean	28.49	709	47.37	304
Central Anatolia	22.25	382	45.39	152
West Black Sea	42.86	455	56.98	179
East Black Sea	57.76	303	84.15	82
Northeast Anatolia	19.37	413	37.57	189
Central East Anatolia	15.02	426	20.10	204
South East Anatolia	17.47	601	34.19	351

	URBAN		RURAL	
	LFP(%)	# of women	LFP(%)	# of women
Patriarchy				
<i>Helpswork:</i> Men should also do the housework like cooking, washing, ironing and cleaning				
Agree	35.86	3684	48.75	1088
Disagree	20.65	1724	42.65	877
<i>Familydec:</i> The important decisions in the family should be made only by men of the family				
Agree	21.94	875	45.65	609
Disagree	32.91	4522	46.36	1333
<i>Virginity:</i> Women should be virgins when they get married				
Agree	29.30	4406	46.27	1701
Disagree	40.73	874	45.41	218
<i>Sonprf:</i> It is better to educate a son than a daughter				
Agree	22.26	611	47.60	334
Disagree	32.22	4802	45.88	1625
<i>Menwiser:</i> Men are wiser				
Agree	23.45	772	46.79	498

Table 4: Logistic regression coefficients of independent variables on the odds of being in the labor force

Independent Variables		Labor Force Participation	
		Urban	Rural
Age		0.252*** (1.287)	0.206*** (1.228)
Age squared		-0.004*** (0.996)	-0.003*** (0.997)
Woman's education level	No education (reference)		
	Primary	0.285** (1.329)	0.117 (1.124)
	Secondary	0.160 (1.197)	-0.418 (0.658)
	Higher	1.045*** (2.844)	0.438 (1.549)
Husband's education level	No education (reference)		
	Primary	0.015 (1.014)	0.339 (1.404)
	Secondary	-0.155 (0.856)	0.051 (1.052)
	Higher	-0.051 (0.950)	-0.04 (0.996)
Number of children under age 5	None (reference)		
	One	-0.427*** (0.652)	-0.190 (0.826)
	Two	-0.863*** (0.422)	-0.737*** (0.478)
	Three or more	-1.040** (0.353)	-0.020 (0.980)
Household wealth	Quintile 1 (reference)		
	Quintile 2	-0.199 (0.819)	-0.340** (0.711)
	Quintile 3	-0.490*** (0.612)	-0.684*** (0.504)
	Quintile 4	-0.646*** (0.524)	-0.743** (0.475)
	Quintile 5 (richest)	-0.745*** (0.474)	-0.869* (0.419)
Patriarchy_1		0.418*** (1.518) [0.202]	0.113 (1.119)
Religion		1.062*** (2.892) [0.236]	-0.047 (0.989)
N		5403	1956
Pseudo R ²		0.1210	0.1273

Table 5: Logistic Regression Coefficients: Parents' education as a proxy for patriarchy variable

Independent Variables		Labor Force Participation			
		Urban		Rural	
Mother's education	No education (reference)				
	Primary	0.324***	(1.383)	0.149	(1.161)
	Secondary	0.534*	(1.705)	1.123	(3.074)
	Higher	1.127***	(3.086)	1.342	(3.826)
Father's education	No education (reference)				
	Primary	-0.142	(0.867)	0.149	(1.160)
	Secondary	0.021	(1.021)	0.024	(1.024)
	Higher	-0.142	(0.868)	0.125	(1.133)
Religion		1.074***	(2.928)	-0.069	(0.933)
N		5403		1956	
Pseudo R ²		0.1232		0.1297	

*p<0.05; **p<0.01; ***p<0.001

Other explanatory variables (not reported in the table): Age, age squared, woman's education level, husband's education level, number of children under age 5, household wealth, geographical region.

Main findings

- *Education* is an important correlate of labor force participation
- ***Husband's education is not significant***
- *Children under age five* has the expected significant negative effect, stronger for urban women
- *Household wealth*: Increasing wealth quintiles are associated with less labor force participation among women.
- *Region*: There is significant regional variation
- ***Patriarchy*: being progressive has a positive significant effect in urban sample**
- ***Religion*: being not religious has a positive significant effect in urban sample**
- ***Mother's Education*: As a proxy for patriarchy variable (more educated mothers raising daughters with more progressive values) significant in urban sample**

Conclusion/Limitations

- Cultural factors still play an important role
- Religion is an important factor as well: this is the first study that establishes a negative relationship between religion and women's labor force participation in Turkey

Limitation: The potential endogeneity due to the cross-sectional nature of data. The direction of causality may run in both directions: from having progressive values to participation in the labor market, and from working outside the home to being less mindful of patriarchal norms

Using mother's education as an instrument for internalization of patriarchal values might help to solve the endogeneity issue.

Table 6: Instrumental Variable Estimation

IV-Probit Regression Coefficients (Robust standard errors in parenthesis)

Independent Variables	Labor Force Participation	
	Urban	Rural
Patriarchy_1	2.405*** (0.139)	1.576*** (0.426)
Religion	-0.232 (0.135)	-0.289 (0.154)
Control variables (age, age squared, women's education, number of children under age 5)	Yes	Yes
N	5429	1976
	Marginal Effects	
Patriarchy_1	0.933*** (0.069)	0.627 *** (0.170)
Religion	-0.089 (0.053)	-0.115 (0.061)

*p<0.1; **p<0.01; ***p<0.001

Instrument for Patriarchy_1 = mother's education

References

- Goldin, Claudia (1994). The U-shaped Female Labor Force Function in Economic Development and Economic History. NBER Working Paper Series No 4707
- Göksel, İdil (2012). The Reasons of Decreasing Trend of Female Labor Force Participation in Turkey: The Role of Conservatism. Working Paper No 1205. Izmir, Izmir University of Economics.
- Gündüz-Hosgör, Ayse. and Jeroen Smits (2008). “Variation in Labor Market Participation of Married Women in Turkey.” Women’s Studies International Forum (31) 104-117.
- İlkkaracan , İpek (2012). “Why so Few Women in the Labor Market in Turkey?” Feminist Economics, 18 (1), 1-37.
- Tansel, Aysıt (2002). Economic Development and Female Labor Force Participation in Turkey: Time Series Evidence and Cross-Province Estimates. ERC Working Papers in Economics 01/05. Ankara, Economic Research Center, METU.
- Taymaz, Erol (2010). Growth, Employment, Skills and Female Labor Force. State Planning Organization of the Republic of Turkey and World Bank Welfare and Social Policy Analytical Work Program, Working Paper No 6.
- Tokgoz, Gulay (2011). Women’s Employment in Turkey in the Light of Different Trajectories in Development-Different Patterns in Women’s Employment. Fe Dergi, 3 (2), 19—32.
- Uraz, et. al (2010). Recent Trends in Female Labor Force Participation in Turkey. State Planning Organization of the Republic of Turkey and World Bank

**Thank you for your
attention!**