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Social norms and the gender gap in labor force participation: Evidence from Turkey

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ABSTRACT

We use a novel two-step empirical strategy to examine the relationship between social norms and the gender gap in labour force participation (LFP) across provinces of Turkey. In the first step, we identify the unexplained part of the gender gap in LFP that remains after accounting for differences in observed characteristics between women and men for each province by implementing a decomposition method. In the second step, we investigate the role of social norms in explaining cross-province variation in the unexplained part. The results reveal that more egalitarian gender role attitudes, smaller gender gap in tertiary education, lower fertility and consanguineous marriage rates, and lower level of religiosity significantly predict a smaller unexplained part of the gender gap in LFP favouring males.

KEYWORDS

Gender gap in labour force participation; social norms; decomposition analysis; Turkey

1. Introduction

Tackling the gender gap in labour force participation (henceforth, LFP) is crucial for women's economic empowerment that can help eradicate poverty and significantly contributes to inclusive and sustainable development especially in low and middle-income countries. This paper examines the link between gender gap in LFP and social norms in Turkey using microdata representative at the provincial level. To this end, we use a novel two-step empirical strategy in which the first step involves decomposing the gender gap in LFP for each province into a part that is explained by gender differences in observed characteristics and a part that remains unexplained. In the second step, we investigate whether social norms measured by gender role attitudes, gender disparity in education, family conservatism and religiosity can account for cross-province variation in the unexplained part of the gender gap in LFP.

The Turkish labour market is characterized by a striking gender disparity in LFP. According to the OECD statistics for 2019, Turkey has the largest gender gap in LFP at 39.5 percentage points in

favour of males compared to 15.6 percentage points on average across OECD countries. Moreover, the gender gap in LFP varies substantially across regions of Turkey with the difference between the highest and the lowest gender gap being more than 20 percentage points (TURKSTAT 2019).

Turkey offers an ideal setting to investigate the role of gender norms in explaining cross-province variation in the gender gap in LFP because there are remarkable regional differences in beliefs about the appropriate roles and responsibilities of men and women in society (Caner et al. 2016).

A recent and growing body of empirical studies document that gender gaps in the labour market are to a great extent attributable to cultural norms regarding gender roles in society (Giuliano 2020). Contributing to the new strand of literature, several researchers incorporate gender norms as determinants of female LFP in Turkey (Gunduz-Hosgor and Smits 2008; Goksel 2013; Dildar 2015; Atasoy 2017). They provide evidence that traditional gender role attitudes are the driving forces behind women's low LFP in Turkey.¹

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¹See Ilkharacan (2012) and Aldan (2021) for a review of studies that explore the drivers of female labour force participation in Turkey. To the best of our knowledge, there is no study that empirically examines the determinants of the gender gap in labour force participation in Turkey using a decomposition method.

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Unlike previous studies that attempt to identify the determinants of geographical variation in the gender gap in LFP with a focus on social norms, we capitalize on cross-province variation in the gender gap in LFP within a single country rather than relying on cross-country comparisons (e.g. Antecol 2000; Fortin 2005). Most importantly, we take advantage of our dataset that contains rich information on demographic and socioeconomic characteristics of individuals. We explore the relationship between social norms and cross-province variation in the unexplained part of the gender gap in LFP that remains after accounting for gender differences in observed characteristics. Our results reveal that family conservatism, religiosity, gender disparity in tertiary education and non-egalitarian gender role attitudes are positively associated with the unexplained part of the gender gap in LFP favouring males.

II. Data and empirical strategy

Our empirical strategy consists of two steps. In the first step, using data from the 2013 Turkish Life Satisfaction Survey (TLSS), we decompose the gender gap in LFP into an explained and an unexplained part for each of the 81 provinces of Turkey.² We implement the extension of the Oaxaca Blinder (OB) decomposition method for nonlinear models proposed by Powers, Hirotoishi, and Yun (2011) to estimate the two components of the gender gap as follows:

$$\Delta_p = \overline{LP}_m - \overline{LP}_w \quad (1)$$

$$= \overline{G(X_m \hat{\beta}_m)} - \overline{G(X_w \hat{\beta}_w)} \quad (2)$$

$$= \underbrace{\overline{G(X_m \hat{\beta}_m)} - \overline{G(X_w \hat{\beta}_m)}}_{\text{Explained part: } \Delta_p^e} + \underbrace{\overline{G(X_w \hat{\beta}_m)} - \overline{G(X_w \hat{\beta}_w)}}_{\text{Unexplained part: } \Delta_p^u} \quad (3)$$

where the subscripts m and w denote the men and women groups, respectively. Δ_p denotes the gender gap in labour force participation in province p . $\overline{LP}_m$ ($\overline{LP}_w$) represents the proportion of men (women) who are in the labour force in province p .³ $G(\cdot)$ denotes the cumulative distribution function of the logistic distribution. X_m (X_w) is a vector of individual and household characteristics for men (women), including age, age squared, marital status, educational attainment, self-reported health status, religiosity, the presence of children who attend school in the household, household income and household size.⁴ $\hat{\beta}_m$ ($\hat{\beta}_w$) is a vector of logit coefficient estimates based on men (women) sample in province p .⁵

After adding and subtracting the estimated counterfactual labour market outcome for women, $\overline{G(X_w \hat{\beta}_m)}$, to the right side of equation (2), the gender gap in labour force participation can be split into two components: Δ_p^e and Δ_p^u . The first term on the right side of equation (3) is called the explained part that represents the part of the gap attributable to gender differences in observed characteristics, while the second term is called the unexplained part that captures differences in returns to those characteristics between men and women. The unexplained part can also be attributed to gender differences in unmeasurable or unobserved endowments that affect LFP.

In the second step, to explore the role of social norms in explaining cross-province variation in the unexplained part of the gender gap in LFP, we estimate the following model:

$$\Delta_p^u = \beta_0 + \beta_1 G_r + E_p \delta + F_p \gamma + \beta_2 R_p + X_p \alpha + \lambda_f + \varepsilon_p \quad (4)$$

where Δ_p^u is the unexplained part of the gender gap in LFP in province p . G_r denotes the average value of the gender role attitudes index in

²Although Turkish Statistical Institute has conducted the TLSS every year since 2003, the 2013 TLSS is the only survey representative at provincial level, allowing us to examine the gender gap in labour force participation across 81 provinces of Turkey.

³ $\overline{LP}_m$ ($\overline{LP}_w$) is a dummy variable that takes the value of 1 if the man (woman) participated in the labour force and 0 otherwise.

⁴Table A.1 of Appendix presents the definition of variables used in the individual-level analysis and descriptive statistics based on the whole sample that includes all the 81 provinces by gender.

⁵Since the logit model includes a constant term, the average value of the outcome of interest for men (women) must be equal to the average value of the predicted probabilities in the men (women) sample (i.e. $\overline{LP}_m = \overline{G(X_m \hat{\beta}_m)}$ and $\overline{LP}_w = \overline{G(X_w \hat{\beta}_w)}$).

region r .⁶ The vector E_p includes three gender gaps in education in province p , namely gender gaps in high school and tertiary education completion rate, and gender gap in secondary school enrolment rate. We control for cross-province variation in family conservatism by including the vector F_p that contains fertility rate and consanguineous marriage rate in province p . R_p , which is a measure of religiosity, denotes the number of individuals successfully completed Qur'an courses per 1,000 population in province p .⁷ X_p is a vector of province-specific economic and institutional factors, including per capita GDP, unemployment rate, and the number of child care centres per 1,000 children aged 0–6 years.⁸ We also include macro-region fixed effects (λ_f) to account for the demographic, social, cultural, and economic differences between five different parts of Turkey, namely West, East, North, South and Central. ε_p is the error term. We use province weights inversely proportional to the estimated standard error of the unexplained part of the gender gap in LFP when estimating Equation 4.

III. Results and discussion

The decomposition results of the gender gap in LFP for all provinces presented in Table A.3 can be summarized as follows. The gender gap in LFP, which is positive and statistically significant at the 1% level in all provinces, varies considerably across provinces from 23.8 percentage points in Bartın to 68.2 percentage points in Sirnak. In 35 provinces, the explained part of the gender gap in LFP is statistically insignificant, implying that there are no discernible gender differences in observable characteristics. A statistically significant positive

(negative) explained part suggests that gender differences in observable characteristics predict an advantage for males(females) over females(males). In the remaining 46 provinces, gender differences in observed characteristics range from 9.4 percentage points in favour of females in Kars to 5.1 percentage points in favour of males in Siirt.⁹ The unexplained part of the gender gap in LFP, always in favour of males and statistically significant at the 1% level, constitutes a sizable part of the gender gap in LFP in every province.

Figure 1 displays a notable cross-provincial variation in the unexplained component. The darker the shade of blue in the map, the larger is the unexplained part of the gender gap in LFP. Figure 1 also indicates that there are stark differences in the magnitude of the unexplained component between Eastern and Western provinces of Turkey. In particular, Southeastern provinces, where patriarchal and conservative values are more pronounced, have a sizable unexplained part favouring males. Figure 1 is in line with Gunduz-Hosgor and Smits (2008) and Dildar (2015) that present evidence that women's labour force participation exhibits significant differences across regions of Turkey. Our decomposition results indicate that even after controlling for a large set of individual and household characteristics that affect labour force participation behaviour, the gender gap in LFP remains significantly unexplained in all provinces.

To examine whether social norms can account for cross-province variation in the unexplained part of the gender gap in LFP, we estimate different versions of Equation 4, in which measures of social norms are sequentially added to the model. The results are presented in Table 1. In all six

⁶We use data from the 2013 Turkish Demographic and Health Survey to create the gender role attitudes index. In this survey, women are asked whether they agree with several statements that capture their attitudes towards gender equality in various life domains. First, using answers to those seven survey questions, we assign a value of 1 to agreement (disagreement) with each gender-egalitarian (gender-nonegalitarian) statement and 0 otherwise. Second, the index is created by summing up the seven indicator variables. The higher the value of the index, the more egalitarian gender role attitudes the woman has. Third, to obtain region-specific gender role attitudes, we take the average value of the gender role attitudes index at the NUTS 2 level in which 81 provinces of Turkey aggregated into 26 regions. Unfortunately, the data are not available at the provincial level. See Table A.2 in the Appendix for the detailed information about the creation of the index.

⁷Qur'an courses, offered by the Presidency of Religious Affairs, aim to provide individuals with Islamic religious knowledge, teach how to read Qur'anic verses in Arabic, and help them memorize parts of the Qur'an that are recited in religious prayers. The US Department of State's International Religious Freedom Report (United States Department of State 2014) states that according to the Turkish government, 99% of the population is Muslim, the vast majority of which is Sunni Muslim. Representatives of other religious affiliations, on the other hand, claim that the actual percentage of Muslims is slightly lower than 99% and members of other religious affiliations, most of whom live in Istanbul and other large cities, constitute less than 1% of the population.

⁸Table A.2 in the Appendix presents a detailed description of all the regional-level explanatory variables used in Equation 4, their data sources and descriptive statistics.

⁹A statistically significant positive(negative) explained part indicates the expected decrease(increase) in the gender gap in LFP if men had the same endowments as women.

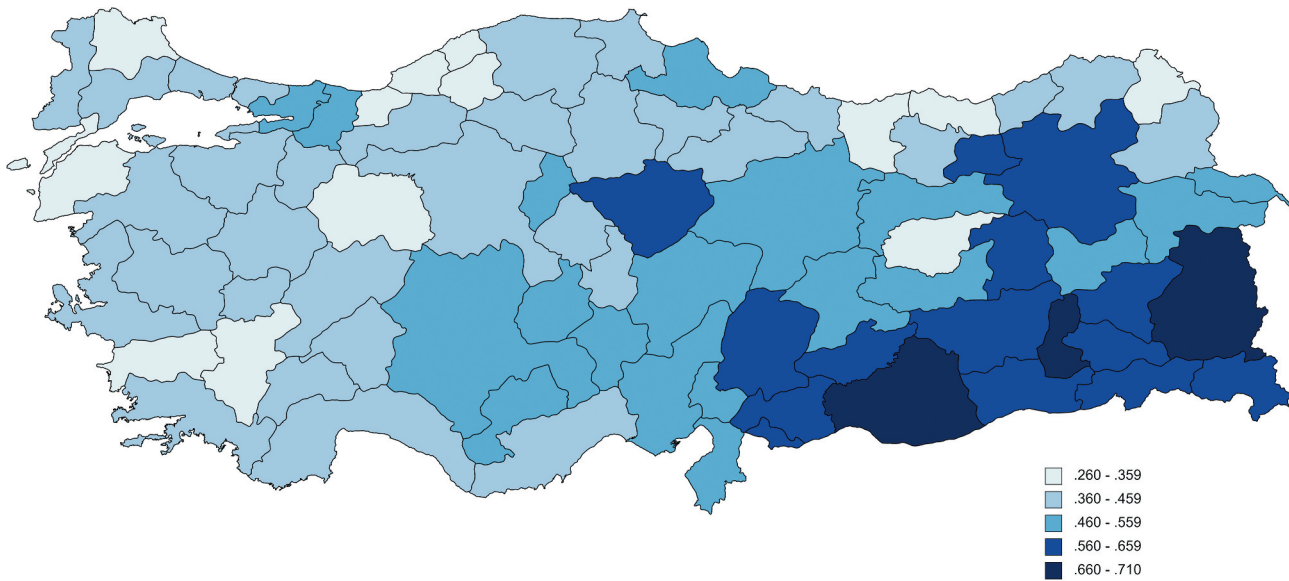


Figure 1. Provincial differences in the unexplained part of the gender gap in labour force participation

specifications, we control for GDP per capita, unemployment rate, child care service provision and macro-region fixed effects to control for economic and institutional determinants of the unexplained part of the gender gap. In column (1), we include only the gender role attitudes index as a measure of gender norms. The estimated coefficient of the index is negative and statistically significant at the 1% level, suggesting that more egalitarian gender

role attitudes are associated with a decrease in the unexplained part of the gender gap in LFP favouring males. Providing supporting evidence for this finding, Dildar (2015) establishes a negative causal relationship between traditional gender role attitudes and women labour force participation using data from the 2008 Turkey Demographic and Health Survey. Since gender norms play a significant role in achieving gender equity in education, Column (2)

Table 1. The relationship between social norms and cross-province variation in the unexplained part of the gender gap in labour force participation.

	(1)	(2)	(3)	(4)	(5)	(6)
Gender role attitudes index	-.089** (.025)	-.095*** (.023)	-.068*** (.021)	-.073*** (.023)	-.061*** (.021)	-.066*** (.022)
Gender gap in tertiary education completion rate	-	.019** (.007)	.022*** (.007)	.019** (.007)	.020** (.008)	.016** (.007)
Gender gap in high school completion rate	-	-.005 (.004)	-.004 (.004)	-.004 (.004)	-.004 (.004)	-.004 (.004)
Gender gap in secondary school enrolment rate	-	.002 (.002)	.001 (.002)	.002 (.002)	.001 (.002)	.001 (.002)
Fertility rate	-	-	.079*** (.023)	-	.087*** (.022)	-
Consanguineous marriage rate	-	-	-	.014*** (.005)	-	.016*** (.004)
Qur'an course attendance	-	-	-	-	.002* (.001)	.002* (.001)
Logarithm of GDP per capita	.047* (.026)	.045* (.027)	.063** (.027)	.062*** (.025)	.071*** (.024)	.072*** (.021)
Unemployment rate	.005** (.001)	.004** (.001)	.001 (.001)	-.001 (.001)	.001 (.001)	-.001 (.001)
Child care service provision	-.132*** (.028)	-.143*** (.027)	-.085*** (.032)	-.088*** (.033)	-.082** (.032)	-.083** (.032)
Region dummies	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	81	81	81	81	81	81
R-squared	0.70	0.74	0.78	0.77	0.79	0.78

Notes: OLS coefficient estimates with robust standard errors in parentheses are reported. The dependent variable is the unexplained part of the gender gap in LFP. The constant term and region dummies are not reported. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

adds three measures of gender gap in education. We find that a larger gender gap in tertiary education completion rate significantly predicts a larger unexplained part favouring males. However, gender gaps in secondary school enrolment rate and in high school completion rate are not statistically significant predictors of cross-province variation in the unexplained part. Previous studies at the individual level show that university education has a much bigger positive impact on the probability of women's labour force participation than lower levels of education (e.g. Ilkkaracan (2012) and Atasoy (2017)).

In columns (3) and (4), we add fertility rate and consanguineous marriage rate, respectively, as measures of family conservatism.¹⁰ The estimated coefficients for fertility rate (column 3) and consanguineous marriage rate (column 4) are positive and statistically significant at the 1% level, suggesting that the unexplained part favouring males tends to be larger in provinces with higher fertility and consanguineous marriage rates. In columns (5) and (6), we investigate whether religiosity is a statistically significant determinant of cross-province variation in the unexplained part. The results reveal that the higher the proportion of province population that graduated from Qur'an courses, the larger is the unexplained part of the gender gap in LFP favouring males in that province.

The results also show that increased GDP per capita (child care service provision) is associated with a bigger (smaller) unexplained part of the gender gap in LFP favouring males. Examining the determinants of female labour force participation across provinces of Turkey for the years 1980, 1985 and 1990, Tansel (2002) provides evidence for the U-shaped relationship between female labour force participation and economic development measured by per capita Gross Provincial Product. The estimated coefficient of unemployment rate is positive and statistically significant in the parsimonious specifications presented in columns 1 and 2, which is consistent with the discouraged worker hypothesis.¹¹ The estimated coefficient of unemployment rate turns out to be statistically

insignificant when we control for measures of family conservatism and religiosity in columns 3–6, suggesting that higher province-level unemployment rate is associated with higher levels of family and religious conservatism.

IV. Conclusion

This paper investigates the importance of social norms in explaining gender disparity in LFP across the provinces of Turkey. We first obtain the unexplained part of the gender gap in LFP that remains after accounting for gender differences in observed characteristics in each province by implementing a decomposition method. Next, we relate cross-province differences in the unexplained part to measures of social norms. We find that more egalitarian gender role attitudes, smaller gender gap in tertiary education, lower fertility and consanguineous marriage rates, and lower level of religiosity significantly predict a smaller unexplained part of the gender gap in LFP favouring males. Our findings provide evidence that policies aimed at eroding restrictive gender-related social norms can also help narrow the gender gap in LFP in Turkey.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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References

- Aldan, A. 2021. "Rising Female Labor Force Participation and Gender Wage Gap: Evidence from Turkey." *Social Indicators Research* 155: 865–884. doi:10.1007/s11205-021-02631-9.
- Antecol, H. 2000. "An Examination of cross-country Differences in the Gender Gap in Labor Force Participation Rates." *Labour Economics* 7 (4): 409–426. doi:10.1016/S0927-5371(00)00007-5.

¹⁰Since the correlation coefficient between fertility rate and consanguineous marriage rate is 0.92, we include these two dimensions of family structure separately.

¹¹The discouraged worker hypothesis predicts a negative relationship between unemployment rate and female labour force participation. Tansel (2002) presents evidence in favour of the discouraged worker hypothesis using data for 67 provinces of Turkey for the years 1980, 1985 and 1990.

- Atasoy, B. S. 2017. "Female Labour Force Participation in Turkey: The Role of Traditionalism." *Eur J Dev Res* 29: 675–706. doi:[10.1057/s41287-016-0013-z](https://doi.org/10.1057/s41287-016-0013-z).
- Caner, A., C. Guven, C. Okten, and S. O. Sakalli. 2016. "Gender Roles and the Education Gender Gap in Turkey." *Social Indicators Research* 129: 1231–1254. doi:[10.1007/s11205-015-1163-7](https://doi.org/10.1007/s11205-015-1163-7).
- Dildar, Y. 2015. "Patriarchal Norms, Religion, and Female Labor Supply: Evidence from Turkey." *World Development* 76 (C): 40–61. doi:[10.1016/j.worlddev.2015.06.010](https://doi.org/10.1016/j.worlddev.2015.06.010).
- Fortin, N. M. 2005. "Gender Role Attitudes and the labour-market Outcomes of Women across OECD Countries." *Oxford Review of Economic Policy* 21 (3): 416–438. doi:[10.1093/oxrep/gri024](https://doi.org/10.1093/oxrep/gri024).
- Giuliano, P. 2020. "Gender and Culture." *Oxford Review of Economic Policy* 36 (4): 944–961. doi:[10.1093/oxrep/gra044](https://doi.org/10.1093/oxrep/gra044).
- Goksel, I. 2013. "Female Labor Force Participation in Turkey: The Role of Conservatism." *Women's Studies International Forum* 41: 45–54. doi:[10.1016/j.wsif.2013.04.006](https://doi.org/10.1016/j.wsif.2013.04.006).
- Gunduz-Hosgor, A., and J. Smits. 2008. "Variation in Labor Market Participation of Married Women in Turkey." *Women's Studies International Forum* 31 (2): 104–117. doi:[10.1016/j.wsif.2008.03.003](https://doi.org/10.1016/j.wsif.2008.03.003).
- Ilkcaracan, I. 2012. "Why so Few Women in the Labor Market in Turkey?" *Feminist Economics* 18 (1): 1–37. doi:[10.1080/13545701.2011.649358](https://doi.org/10.1080/13545701.2011.649358).
- Powers, D. A., Y. Hirotoshi, and M. Yun. 2011. "Mvdcmp: Multivariate Decomposition for Nonlinear Response Models." *The Stata Journal* 11 (4): 556–576. doi:[10.1177/1536867X1201100404](https://doi.org/10.1177/1536867X1201100404).
- Tansel, A. 2002. "Economic Development and Female Labor Force Participation in Turkey: Time Series Evidence and cross-province Estimates." METU ERC working papers in economics 01/05.
- TURKSTAT. 2019. "Regional Results of Labor Force Statistics." <https://biruni.tuik.gov.tr/medas/?kn=102locale=en> (Accessed 18 July 2020).
- United States Department of State. 2014. "Report on International Religious Freedom." Turkey, 28 July 2014, available at: <https://www.refworld.org/docid/53d906fb5.html> (Accessed 28 July 2022)