# GENDER POVERTY GAP IN TURKEY

Gürdal Aslan |

To link to this article: https://www.forcejournal.org/index.php/force/article/view/17

Submit your article to this journal ⧉

# GENDER POVERTY GAP IN TURKEY

Gürdal Aslan*

**ABSTRACT**

Despite rising education levels and labor force participation rates in recent years, women are still at a disadvantaged position in the Turkish labor market relative to men, and Turkey is also one of the countries with a high level of gender inequality in economic participation and opportunity. Therefore, this study aims to analyze the gender poverty gap that might be one of the consequences of gender inequalities. In particular, we attempt to measure the size of the gender poverty gap using the data from 2018 Income and Living Conditions Survey (SILC). First, we explore the gender poverty gap across population subgroups disaggregated by individual, family structure and labor market characteristics. We find that the female poverty rates are higher than male poverty rates in all subgroups except formal employment workers. There is a significantly lower poverty rate for female formal workers than male formal workers. Second, we estimate linear probability models to measure the size of the gender poverty gap taking into account demographic and socioeconomic characteristics that may affect the gender poverty gap. Our findings reveal that a significant gender poverty gap exists in Turkey. This result is robust to controlling for individual, family and labor market characteristics.

**KEY WORDS:**     Gender, poverty, Turkey, SILC.

*Correspondence concerning this article should be addressed to Gürdal Aslan, Department of Economics, Izmir Katip Celebi University, Turkey.
E-mail: gurdal.aslan@ikcu.edu.tr
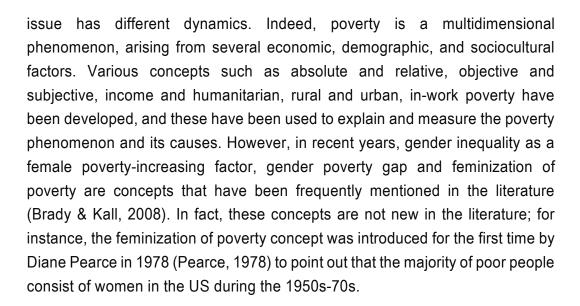
## 1. INTRODUCTION

The issue of poverty has been in the focus of economic development analyses over the last three decades, and the growing literature has revealed that this
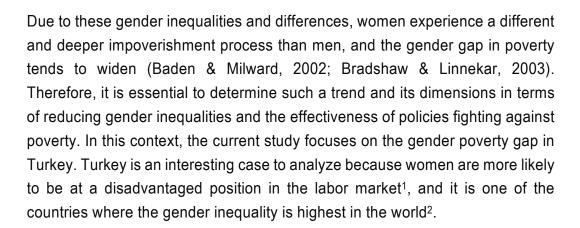
issue has different dynamics. Indeed, poverty is a multidimensional phenomenon, arising from several economic, demographic, and sociocultural factors. Various concepts such as absolute and relative, objective and subjective, income and humanitarian, rural and urban, in-work poverty have been developed, and these have been used to explain and measure the poverty phenomenon and its causes. However, in recent years, gender inequality as a female poverty-increasing factor, gender poverty gap and feminization of poverty are concepts that have been frequently mentioned in the literature (Brady & Kall, 2008). In fact, these concepts are not new in the literature; for instance, the feminization of poverty concept was introduced for the first time by Diane Pearce in 1978 (Pearce, 1978) to point out that the majority of poor people consist of women in the US during the 1950s-70s.

The gender poverty gap and the feminization of poverty imply that women, who have unequal access to rights and opportunities in all areas of social life such as education, health care, employment and participation in policy-making processes, are also vulnerable against poverty (the poverty rates for women are higher than the poverty rates for men). Gender inequalities cause women to be disadvantaged in many aspects of economic and social life. Gender inequalities are structural in that they rooted in gendered representations and manifest the pervasiveness of male domination. Structural gender inequalities, one of the oldest and most widespread forms of inequality in the world, continue to exist in developed and developing countries in today's world. The persistence of inequalities results in this sense from stereotypes, which structure our mentalities, which both originate from and fuel the construction of the gender system, understood as the "system of hierarchical division of humanity into two unequal halves" (Delphy, 2001, p. 45).

Because of the aforementioned prevailing stereotypes, domestic work and childcare is still accepted as woman's work rather than men. The fact that domestic responsibilities are mostly fulfilled by women limits women's job opportunities and earn income (Şener, 2012). In economic area, the primary reason behind that gender inequalities increase women's poverty is income deprivation or low income. In almost every country, women usually work at low-paying jobs and low-productivity jobs and therefore, women have an unequal position in the labor market and tend to earn less than men (Esteban Ortiz-Ospina, 2018).

Due to these gender inequalities and differences, women experience a different and deeper impoverishment process than men, and the gender gap in poverty tends to widen (Baden & Milward, 2002; Bradshaw & Linnekar, 2003). Therefore, it is essential to determine such a trend and its dimensions in terms of reducing gender inequalities and the effectiveness of policies fighting against poverty. In this context, the current study focuses on the gender poverty gap in Turkey. Turkey is an interesting case to analyze because women are more likely to be at a disadvantaged position in the labor market[1], and it is one of the countries where the gender inequality is highest in the world[2].
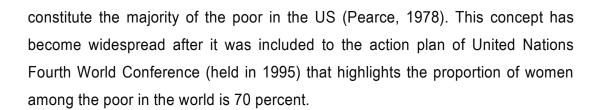
The main aim of this study is to analyze the gender poverty gap in Turkey. In particular, we attempt to measure the size of the gender gap in poverty and investigate determinants of poverty status. The existing evidence in the literature indicates that poverty status and gender poverty gap are associated with demographic, family, and labor market characteristics. Therefore, we incorporate these characteristics into our analysis to explore their role in determining gender gap in poverty. For this purpose, we conduct an econometric analysis in which, following the methodology of Glassman (2020), we run linear probability models. These models predict the size of the gender gap in poverty, taking individual, family structure and labor market related factors into account. We employ the data 2018 Turkish Statistical Institute (TÜİK) Income and Living Conditions Surveys (SILC) and use the relative poverty measure with a poverty line defined in terms of 60 percent of the median household equivalent income. Since the poverty status is determined at the household level and thus poverty rates for men and women living in the same household are identical, we exclude married and cohabiting individuals from our sample. This restriction allows us to identify differences in the poverty status of women and men. Therefore, our final sample consists of unmarried adults aged 18 or older.

The current paper proceeds as follows. The second section discusses the related studies in the literature. Third section explains the data source and provides descriptive statistics. Section 4 represents results of econometric analysis. Section 5 concludes the paper.
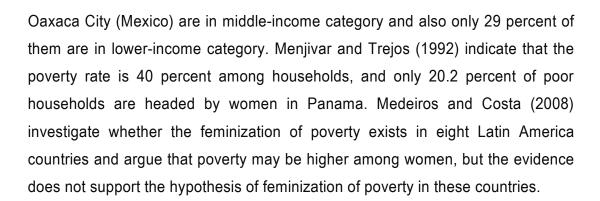
## 2. LITERATURE REVIEW

The concept of feminization of poverty, introduced by Diane Pearce in 1978, was used to point out that women, especially those who are the household head,

constitute the majority of the poor in the US (Pearce, 1978). This concept has become widespread after it was included to the action plan of United Nations Fourth World Conference (held in 1995) that highlights the proportion of women among the poor in the world is 70 percent.

According to Chant (2006), the feminization of poverty is generally associated with three trends: the disproportionate share of women among the poor, the deepening of this trend, and women's increasing share of poverty linked with a rising incidence of female household headship. From a broader perspective, Mclanahan and Kelly (1999) discuss that the feminization of poverty is associated with economic changes, changes in public benefits as well as demographic changes such as the delay in the first marriage age, the rise in the incidences of divorce, single-mother families, one-person households and the increase in the life expectancy. In addition, studies focusing on feminization of poverty in developed countries point out that female-headed households are more likely to be poor compared to male-headed households (Moghadam, 2005, p. 10) and suggest that the gender differences in poverty rates, higher incidence of single-mothers and female-headed households lead the feminization of poverty in developed countries (Chant, 2006).
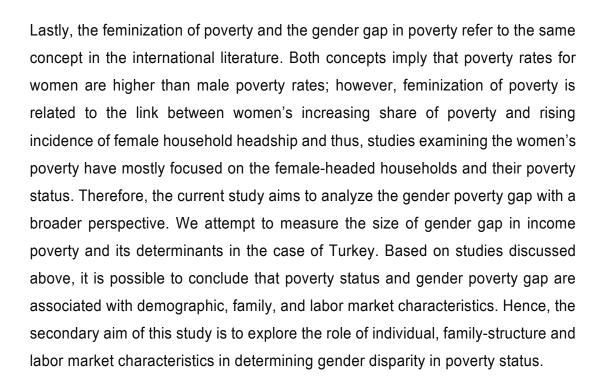
On the other hand, in fact, the veracity of the feminization of poverty concept in developing countries have been debated. Some researchers have reached different conclusions regarding the feminization of poverty in developing countries and suggest that female-headed households do not always constitute to a disproportionate share of the poor households in these countries. These findings might be explained by the fact that female-headed households are an extremely heterogenous category, and at the same time this category covers opposite cases. For example, wives of immigrants in this category might be less vulnerable against poverty because of the transfers sent by their husbands. In some countries (such as Mauritania) female-headed households might be in a better economic condition (Charmes & Remaoun, 2012). Using microeconomic data, some authors conclude that female household heads are not a specific poverty phenomenon and even their households belong to the middle- and upper-income population. For instance, Willis (1994) finds that 43 percent of female-headed households in

Oaxaca City (Mexico) are in middle-income category and also only 29 percent of them are in lower-income category. Menjivar and Trejos (1992) indicate that the poverty rate is 40 percent among households, and only 20.2 percent of poor households are headed by women in Panama. Medeiros and Costa (2008) investigate whether the feminization of poverty exists in eight Latin America countries and argue that poverty may be higher among women, but the evidence does not support the hypothesis of feminization of poverty in these countries.

Although there is a considerable amount of studies on poverty status of women in Turkey, the amount of empirical studies on gender poverty gap and feminization of poverty is limited. Existing studies focusing on women's poverty in Turkey have discussed, in general, the reasons behind women's poverty on the basis of gender inequality. These studies have indicated that the gender gap in wages, earnings, access to education and labor force participation deepen problems and poverty faced by women (Dikbayır, 2000; Selim & İlkkaracan, 2002; Adaman & Keyder, 2006; Dayıoğlu & Başlevent, 2012).

On the other hand, there are a few empirical studies, focusing on gender poverty gap and feminization on poverty, needed to be highlighted. The study of Gökovalı and Danışman (2010) reports the evidence of feminization of poverty between 2004 and 2006 in Turkey; however, they indicate that social, economic and demographic factors such as educational attainment and labor market characteristics are gender-neutral and universal determinants of poverty. Uysal and Köksal (2017) using the data from 2015 Turkish Income and Living Conditions Survey conclude that female-headed households are more likely to be poor. They find that approximately 40 percent of female-headed households are suffering from material deprivation compared to approximately 30 percent of male-headed households. A more recent study (Tekgüç & Akbulut, 2019) examines the gender gap in poverty using a multidimensional approach. Using the data from 2006 to 2015 SILC, they construct a four-dimensional poverty index (education, health, household living conditions and employment) and they find a significant gender poverty gap in the period 2006-2015.

Lastly, the feminization of poverty and the gender gap in poverty refer to the same concept in the international literature. Both concepts imply that poverty rates for women are higher than male poverty rates; however, feminization of poverty is related to the link between women's increasing share of poverty and rising incidence of female household headship and thus, studies examining the women's poverty have mostly focused on the female-headed households and their poverty status. Therefore, the current study aims to analyze the gender poverty gap with a broader perspective. We attempt to measure the size of gender gap in income poverty and its determinants in the case of Turkey. Based on studies discussed above, it is possible to conclude that poverty status and gender poverty gap are associated with demographic, family, and labor market characteristics. Hence, the secondary aim of this study is to explore the role of individual, family-structure and labor market characteristics in determining gender disparity in poverty status.

## 3. DATA AND DESCRIPTIVE ANALYSIS

To measure the size of the gender poverty gap in Turkey and to explore the role of individual, family structure and labor market characteristics in determining the gender disparity in poverty status, we use dataset complied by the Turkish Statistical Institute based on the 2018 Income and Living Conditions Survey (SILC). This survey is representative at the national level, and it provides information on each respondent's aged 15 and older individual and household characteristics, including the household income that allows us to determine poverty status of individuals.

In this study, we use the relative poverty measure to analyze the gender poverty gap and assume an individual as poor if his/her household equivalent income is less than 60 percent of median household equivalent income. The household equivalent income is calculated from the household total disposable income divided by the equivalized household size. To calculate the equivalized household size, we use Eurostat (2018) equivalence scale, which gives a weight to all members of the household. This weight is 1.0 for the first adult, 0.5 for other adults older than 14 and 0.3 for children younger than 14, and then these weights are added up to calculate the household equivalized size.
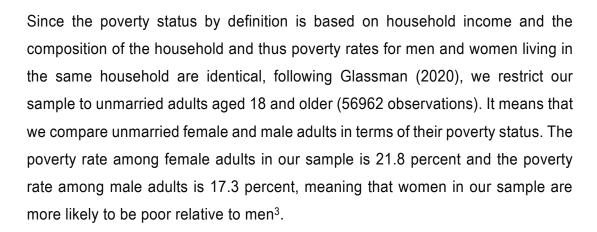
Since the poverty status by definition is based on household income and the composition of the household and thus poverty rates for men and women living in the same household are identical, following Glassman (2020), we restrict our sample to unmarried adults aged 18 and older (56962 observations). It means that we compare unmarried female and male adults in terms of their poverty status. The poverty rate among female adults in our sample is 21.8 percent and the poverty rate among male adults is 17.3 percent, meaning that women in our sample are more likely to be poor relative to men[3].
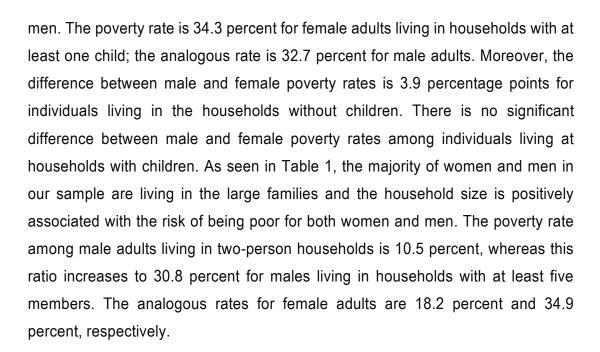
Table 1 provides descriptive statistics of variables used in the analysis and poverty rates for different population groups. According to Table 1, the majority of unmarried adults are aged between 18-24 (36.3 percent). Female adults in our sample on average are older than male adults[4]. The majority of male adults in our sample are aged between 18-24 (45.3 percent) and the majority of female adults are older than 55 (38.5 percent). Poverty rates are the highest among the youngest male and female adults, 23.8 percent and 27.9 percent respectively. In addition, the gender poverty gap is the highest among individuals aged between 35 and 44 with an 8.7 percentage points difference.

To delve deeper into gender disparity in poverty status by family structure characteristics, three variables have been used: marital status, the presence of child and household size. Marital status consists of two categories: never married and divorced or widowed. The largest share of male adults in our sample are never married (82.8 percent) whereas this share is 47.8 percent among women. For both women and men, never-married adults' the risk of being poor is higher than those who are divorced or widowed. The gender difference in poverty rates is 5 percentage points among divorced/widowed adults and 4.9 percentage points among never-married adults.

We also analyze the presence of children aged 14 and younger in the household. According to the Table 1, the majority of unmarried men and women in our sample are living in the households without children as expected. The presence of at least a child in the household also increases the risk of being poor both for women and

men. The poverty rate is 34.3 percent for female adults living in households with at least one child; the analogous rate is 32.7 percent for male adults. Moreover, the difference between male and female poverty rates is 3.9 percentage points for individuals living in the households without children. There is no significant difference between male and female poverty rates among individuals living at households with children. As seen in Table 1, the majority of women and men in our sample are living in the large families and the household size is positively associated with the risk of being poor for both women and men. The poverty rate among male adults living in two-person households is 10.5 percent, whereas this ratio increases to 30.8 percent for males living in households with at least five members. The analogous rates for female adults are 18.2 percent and 34.9 percent, respectively.

In all household size categories, the shares of poor are larger among women than those among men and the gender poverty gap is 4.1 percentage points for those living in households with at least five members and 5.5 percentage points in one-person households[5]. Note that women living alone are more likely to be poor when compared to men living alone: 12.7 percent and 18.2 percent, respectively.

In order to analyze the role of the labor-market characteristics, we include the educational attainment and the labor market status variables. We define education variable as the highest level of education attained by individuals and grouped into three categories: less than high school, high school, and more than high school education. As seen in Table 1, the education level of male adults in our sample is higher than that of women. The majority of women in our sample have less than high school education (60.9 percent) and men are more likely to be university graduates (21.2 percent against 18.1 percent). For both women and men, the higher educational attainment reduces the risk of being poor. The difference between female and male poverty gaps is significant among high school graduates (3.3 percentage points) and within the less than high school education category where the female poverty rate is 2 percentage points higher than male poverty rate. There is no significant gender difference in poverty rates among university graduates.

Table 1: Descriptive statistics and poverty rates

| Variables | | Male | | | Female | | | Poverty rate Difference (F-M) | All sample | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | # Obs. | Share (%) | Poverty Rate (%) | # Obs. | Share (%) | Poverty Rate (%) | | # Obs. | Share (%) | Poverty Rate (%) |
| Age | 18-24 | 3217 | 45.3 | 23.8 | 2589 | 29.1 | 27.9 | 4.1* | 5806 | 36.3 | 25.6 |
| | 25-34 | 2127 | 30.0 | 10.1 | 1257 | 14.1 | 15.4 | 5.2* | 3384 | 21.2 | 12.1 |
| | 35-44 | 699 | 9.9 | 9.9 | 797 | 9.0 | 18.6 | 8.7* | 1496 | 9.4 | 14.5 |
| | 45-54 | 318 | 4.5 | 13.8 | 827 | 9.3 | 16.7 | 2.9 | 1145 | 7.2 | 15.9 |
| | 55+ | 738 | 10.4 | 18.2 | 3426 | 38.5 | 19.9 | 1.8 | 4164 | 26.0 | 19.6 |
| Marital Status | Divorced or widowed | 1219 | 17.2 | 14.8 | 4642 | 52.2 | 19.8 | 5.0* | 5861 | 36.6 | 18.7 |
| | Never married | 5880 | 82.8 | 17.8 | 4254 | 47.8 | 22.7 | 4.9* | 10134 | 63.4 | 19.9 |
| Children | No child | 5234 | 73.7 | 11.8 | 6294 | 70.8 | 15.8 | 3.9* | 11528 | 72.1 | 14.0 |
| | At least one child | 1865 | 26.3 | 32.7 | 2602 | 29.3 | 34.3 | 1.7 | 4467 | 27.9 | 33.6 |
| Household size | One person | 806 | 11.4 | 12.7 | 1694 | 19.0 | 18.2 | 5.5* | 2500 | 15.6 | 16.4 |
| | Two persons | 742 | 10.5 | 9.2 | 1338 | 15.0 | 13.2 | 4.1* | 2080 | 13.0 | 11.8 |
| | Three persons | 1648 | 23.2 | 9.8 | 1689 | 19.0 | 14.3 | 4.5* | 3337 | 20.9 | 12.1 |
| | Four persons | 1659 | 23.4 | 12.4 | 1584 | 17.8 | 16.0 | 3.7* | 3243 | 20.3 | 14.2 |
| | Five and more persons | 2244 | 31.6 | 30.8 | 2591 | 29.1 | 34.9 | 4.1* | 4835 | 30.2 | 33.0 |
| Education | Less than high school | 3301 | 46.9 | 24.5 | 5387 | 60.9 | 26.5 | 2.0* | 8688 | 54.7 | 25.8 |
| | High school | 2248 | 31.9 | 13.5 | 1863 | 21.1 | 16.9 | 3.3* | 4111 | 25.9 | 15.0 |
| | More than high school | 1489 | 21.2 | 7.3 | 1601 | 18.1 | 8.3 | 1.1 | 3090 | 19.5 | 7.8 |
| Labor market status | Not in the LF/unemployed | 3115 | 44.1 | 24.1 | 6636 | 74.7 | 24.5 | 0.3 | 9751 | 61.1 | 24.4 |
| | Informal employment | 1098 | 15.5 | 24.5 | 710 | 8.0 | 26.6 | 2.1 | 1808 | 11.3 | 25.3 |
| | Formal employment | 2853 | 40.4 | 7.2 | 1540 | 17.3 | 4.6 | -2.6* | 4393 | 27.5 | 6.3 |
| Regions | TR1-Istanbul | 773 | 10.9 | 6.0 | 938 | 10.5 | 4.1 | -1.9 | 1711 | 10.7 | 4.9 |
| | TR2-Western Marmara | 402 | 5.7 | 14.4 | 474 | 5.3 | 17.3 | 2.9 | 876 | 5.5 | 16.0 |
| | TR3-Aegean | 903 | 12.7 | 9.5 | 1083 | 12.2 | 14.1 | 4.6* | 1986 | 12.4 | 12.0 |
| | TR4-East Marmara | 631 | 8.9 | 5.7 | 742 | 8.3 | 9.7 | 4.0 | 1373 | 8.6 | 7.9 |
| | TR5-West Anatolia | 585 | 8.2 | 7.9 | 707 | 8.0 | 10.6 | 2.8* | 1292 | 8.1 | 9.4 |
| | TR6-Mediterranean | 764 | 10.8 | 16.0 | 1020 | 11.5 | 24.3 | 8.3* | 1784 | 11.2 | 20.7 |
| | TR7-Central Anatolia | 419 | 5.9 | 15.5 | 592 | 6.7 | 21.6 | 6.1* | 1011 | 6.3 | 19.1 |
| | TR8-West Black-Sea | 640 | 9.0 | 13.4 | 918 | 10.3 | 15.0 | 1.6 | 1558 | 9.7 | 14.4 |
| | TR9-East Black-Sea | 193 | 2.7 | 10.4 | 286 | 3.2 | 15.0 | 4.7 | 479 | 3.0 | 13.2 |
| | TRA- North-East Anatolia | 496 | 7.0 | 30.7 | 560 | 6.3 | 31.8 | 1.1 | 1056 | 6.6 | 31.3 |
| | TRB-Central-East Anatolia | 486 | 6.9 | 35.8 | 626 | 7.0 | 40.7 | 4.9 | 1112 | 7.0 | 38.6 |
| | TRC-South-East Anatolia | 807 | 11.4 | 41.8 | 950 | 10.7 | 49.9 | 8.1* | 1757 | 11 | 46.2 |

Source: 2018 TÜİK Income and Living Conditions Surveys (SILC) microdata; author's own calculations. (*Difference is significant at 95 percent confidence level.)

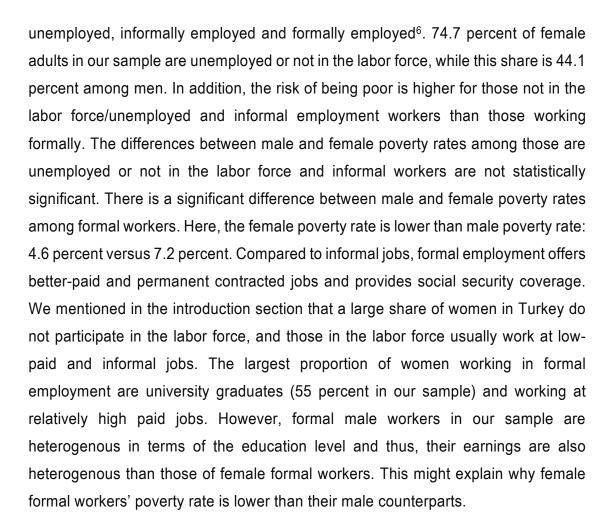The labor market status is divided into three categories: not in the labor force or

unemployed, informally employed and formally employed[6]. 74.7 percent of female adults in our sample are unemployed or not in the labor force, while this share is 44.1 percent among men. In addition, the risk of being poor is higher for those not in the labor force/unemployed and informal employment workers than those working formally. The differences between male and female poverty rates among those are unemployed or not in the labor force and informal workers are not statistically significant. There is a significant difference between male and female poverty rates among formal workers. Here, the female poverty rate is lower than male poverty rate: 4.6 percent versus 7.2 percent. Compared to informal jobs, formal employment offers better-paid and permanent contracted jobs and provides social security coverage. We mentioned in the introduction section that a large share of women in Turkey do not participate in the labor force, and those in the labor force usually work at low-paid and informal jobs. The largest proportion of women working in formal employment are university graduates (55 percent in our sample) and working at relatively high paid jobs. However, formal male workers in our sample are heterogenous in terms of the education level and thus, their earnings are also heterogenous than those of female formal workers. This might explain why female formal workers' poverty rate is lower than their male counterparts.

Table 1 also shows that there is a significant variation in gender poverty gaps among regions at NUTS 1 level. Women have higher poverty rates in all regions except Istanbul, in which there is no significant difference between male and female poverty rates. Mediterranean and South-East Anatolia regions have the highest gender poverty gap (8.3 and 8.1 percentage points) among regions. While the regions with the lowest poverty rates for both men and women are regions such as West Anatolia, which are the most developed regions of the country in socioeconomic terms, the regions with the highest poverty rates are Mediterranean and South-East Anatolia, the least developed regions of the country in socioeconomic terms.

If we sum up the differences in the characteristics of women and men in our sample, women are likely to be older than men because of the overrepresentation of divorced or widowed women among unmarried older. Women are more likely than men to be divorced or widowed, slightly more likely to live in the households with at least one

child, more likely to have less than high school education and more likely to be not in the labor force or unemployed. On the other hand, female poverty rates are higher than male poverty rates in all population groups except formal employment workers. Formal female workers are less likely to be poor than male formal workers. It turns out that the most disadvantaged women groups in terms of gender poverty gap are women who are living alone, have less than high school education, aged between 35-44 and are informal employment workers.

## 4. RESULTS OF ECONOMETRIC ANALYSIS

The main aim of this paper to measure the size of the gender gap in poverty, to investigate the gender poverty gap when individual, family structure and labor market related factors are taken into account and to measure the extent to which these factors play a role in determining the gender gap in poverty. In line with these aims, we conduct a regression analysis in which we predict linear probability models.

Table 2 provides the estimation results of the linear probability model where the dependent variable is the poverty status which takes the value of 1 if the individual is poor and 0 otherwise. Our main interest variable is the female dummy variable and we will interpret its coefficient as the difference between male and female poverty rates or the gender poverty gap. As a point of departure, we specify a baseline model (Column-I) in which the female dummy is the only explanatory variable. In Columns (II) - (V), we add different variables to the baseline model.

Column (I) in Table 2 estimates the baseline model or the unconditional effect of gender on poverty status. The estimated coefficient of the female dummy is positive and significant, implying that the female poverty rate is higher than the male poverty rate. Column (II) expands the baseline model to include the age as a control variable. The estimated coefficient of the female dummy is still positive and significant, implying that the poverty rate among female adults is 5.37 percentage points higher than that among male adults. The coefficient of age variable is statistically significant and positive.

The model in Column (III) controls also for characteristics related to family structure:

According to the estimated coefficients in Column (III), living in the household with children increases the probability to be poor by 8.42 percentage points compared to live without children. The correlation between the household size and poverty status is significant and positive. An additional member in the household increases the probability to be poor by 4.06 percentage points. However, when we control for family-structure characteristics, the coefficient of the female dummy decreases from 0.0507 to 0.0355; however, it is still statistically significant. In other words, the gender poverty gap reduces to 3.55 percentage points. Therefore, it is possible to conclude that 34-percent reduction is driven by family-structure variables.

We add variables related to labor market characteristics as additional controls to the model in Column (IV). The educational attainment seems an important determinant of poverty; the relationship the educational attainment and the probability to be poor living in poverty is statistically significant and negative. Our results show that the labor market status is also a significant determinant of poverty. Being a formal worker decreases the probability to be poor by 3.33 percentage points and being an informal worker decreases the risk of being poor by 15.9 percentage points compared to being unemployed or out of the labor force. We also control for whether the individual is a student or continues to his/her education because our sample covers individuals aged 18 and older, and especially young students are more likely to live with their families. This case may mask the some of the gender poverty gap[7]. The estimated coefficient of student variable is significant and negative, meaning that students are less likely to be poor. Once we control for the labor market characteristics, the estimated coefficient of the female dummy is still positive and significant, albeit to a smaller magnitude. In fact, the gender poverty gap reduces from 3.55 percentage points to 1.61 percentage points. On the other hand, we add region dummies to the model in Column (V) to control for socio-economic differences across regions. The reference category for the regions is Istanbul, and the estimated coefficients of all region dummies are significant and positive. Individuals living in regions rather than Istanbul are more likely to be poor.

The results in Columns (I) to (V) in Table 2 show that the effect of female variable on poverty status is persistently significant and positive across the models specified;

however, there is a sizeable reduction in its magnitude, from 0.0388 to 0.0161. When we control for all individual, family-structure and labor market characteristics, the gender poverty gap decreases from 3.88 percentage points to 1.61 percentage points. Despite this significant reduction in the gender poverty gap after including individual, family structure and labor market variables, controlling for these characteristics does not completely eliminate the gender gap in poverty. Therefore, we conclude that the gender poverty gap exists in Turkey. In addition, our results show that individual, family structure and labor market characteristics are significant determinants of poverty status. This result is consistent with the existing evidence on the association between poverty status and gender poverty gap and demographic, family and labor market characteristics in the literature.

Table 2. Estimation results- SILC 2018

| Variables | (I) | (II) | (III) | (IV) | (V) |
|---|---|---|---|---|---|
| Female | 0.0388*** | 0.0507*** | 0.0355*** | 0.0161** | 0.0161** |
|  | (6.22) | (7.62) | (5.49) | (2.48) | (2.54) |
| Age |  | -0.000831*** | 0.00112*** | -0.00127*** | -0.00105*** |
|  |  | (-5.02) | (4.42) | (-4.63) | (-3.94) |
| Never married |  |  | 0.00296 | 0.0356*** | 0.0208** |
|  |  |  | (0.28) | (3.32) | (1.99) |
| At least one child in the household |  |  | 0.0842*** | 0.0737*** | 0.0679*** |
|  |  |  | (8.91) | (8.02) | (7.59) |
| Household size |  |  | 0.0406*** | 0.0311*** | 0.0196*** |
|  |  |  | (18.66) | (14.34) | (9.15) |
| Student |  |  |  | -0.0608*** | -0.0428*** |
|  |  |  |  | (-7.61) | (-5.45) |
| High school graduate |  |  |  | -0.120*** | -0.0987*** |
|  |  |  |  | (-15.15) | (-12.80) |
| University graduate |  |  |  | -0.127*** | -0.113*** |
|  |  |  |  | (-16.39) | (-14.68) |
| Informal employment |  |  |  | -0.0331*** | -0.0249** |
|  |  |  |  | (-3.04) | (-2.33) |
| Formal employment |  |  |  | -0.159*** | -0.132*** |
|  |  |  |  | (-24.18) | (-20.44) |
| TR2-Western Marmara |  |  |  |  | 0.106*** |
|  |  |  |  |  | (7.88) |
| TR3-Aegean |  |  |  |  | 0.0715*** |
|  |  |  |  |  | (7.88) |
| TR4-East Marmara |  |  |  |  | 0.0293*** |
|  |  |  |  |  | (3.23) |
| TR5-West Anatolia |  |  |  |  | 0.0446*** |
|  |  |  |  |  | (4.60) |
| TR6-Mediterranean |  |  |  |  | 0.136*** |
|  |  |  |  |  | (12.64) |
| TR7-Central Anatolia |  |  |  |  | 0.108*** |
|  |  |  |  |  | (8.27) |
| TR8-West Black-Sea |  |  |  |  | 0.0683*** |
|  |  |  |  |  | (6.57) |
|  |  |  |  |  | 0.0583*** |

| | | | | | |
|---|---|---|---|---|---|
| TR9-East Black-Sea | | | | | |
| | | | | | (3.62) |
| TRA- North-East Anatolia | | | | | 0.194*** |
| | | | | | (13.27) |
| TRB-Central-East Anatolia | | | | | 0.248*** |
| | | | | | (16.78) |
| TRC-South-East Anatolia | | | | | 0.304*** |
| | | | | | (23.49) |
| Observations | 15995 | 15995 | 15995 | 0.1315 | 0.1788 |
| R-squared | 0.0024 | 0.0042 | 0.0798 | 0.1356 | 0.1827 |

T-statistics in parentheses (*p<.05 **p<.01 ***p<.001). Note: Reference educational level is less than high school. Reference category for marital status is widowed or divorced. The reference category for the labor market status is unemployed or not in the labor force. The reference region is TR1-Istanbul region. Robust standard errors.

## 5. CONCLUSION

The fact that women, who have unequal access to rights and opportunities in all areas of social life, are also vulnerable against poverty, and the increase in gender poverty gap have become a global problem. The predictions that this problem will worsen and that the gender poverty gap will widen in the near future requires urgent policy measure to be taken.

United Nations Women and United Nations Development Programme (UNDP) predict that the COVID-19 pandemic and its social and economic effects could widen the existing gender poverty gap and increase the number of women living in extreme poverty by 47 million to 435 million and that this number may not fall back to its pre-pandemic level until 2030 (UN Women, 2020). Therefore, to determine the size of the gender poverty gap is essential to establish efficient policies fighting against the increasing female poverty and gender poverty gap. In this study, we examine the size of the gender gap in poverty and factors affecting the gender poverty gap in Turkey, which is one of the countries with a high level of gender inequality in economic participation and opportunity.

We use the data from 2018 Income and Living Conditions Survey (SILC). First, we analyze the gender poverty gap for different demographic groups via a descriptive analysis. The results of the analysis show that the male and female poverty rates, and therefore the difference between male and female poverty rates varies according to almost all variables related to demographic, family-structure and labor market

characteristics. Moreover, it is revealed that female poverty rates are higher than male poverty rates in all population groups except formal workers. It is also observed that increases in the number of children and the household size increase the poverty rate of women more than that of men, while a larger educational attainment and formal employment reduce poverty rate of women more than that of men. It turns out that the most disadvantaged women groups in term of gender poverty gap are women who are living alone, have less than high school education, aged between 35-44 and are informal workers.

Second, linear probability models are estimated order to measure the size of the gender poverty gap and explore the role of individual, family structure and labor market characteristics in determining the gender poverty gap. Our findings show that individual, family structure and labor market variables are significant determinants of poverty status, and the gender poverty gap reduces from 3.88 percentage points to 1.61 percentage points when we control for all these variables; however, its significance is robust to the inclusion of these variables. Therefore, our results reveal that is a gender poverty gap exists in Turkey.

### ENDNOTE(S)

[1] According to Turkish Statistical Institute (TÜİK) statistics, male employment rate is 64%, male labor force participation rate is 73%, the informality rate among male workers is 32% while the analogous rates are 29%, 35% and 44% for women, respectively.

[2] According to World Economic Forum's Global Gender Inequality Index, Turkey ranks 130th among 153 countries (World Economic Forum, 2019). In addition, according to sub-dimensions of this index, Turkey ranks 136th in the category of economic participation and opportunity, 135th in the category of labor force participation, 106th in the category of equal pay, 13th in the category of access to education opportunities, 64th in the category of health and survival and 109th in the category of political empowerment (World Economic Forum, 2019).

[3] The female and male poverty rates among married adults are 20.1 percent and 19.7 percent, respectively. For married adults, the difference between male and female

poverty rates is not significant at the 90 percent confidence interval.

[4] The mean age of male adults is 31.3 while the mean age of female adults is 45.7.

[5] The mean household size is 4.0 for men and 3.6 for women in our sample.

[6] Informal employment refers to workers who are not registered at the Social Security Institution (SGK).

[7] In our sample, the proportion of students is 11 percent, and the majority of them are in the age category of 15-24 (80.8 percent).

## DISCLOSURE OF CONFLICT
The author declares that he has no conflicts of interest.

## AUTHOR(S) DETAILS
Gürdal Aslan, PhD.

The Department of Economics

Izmir Katip Celebi University, Turkey

E-mail: gurdal.aslan@ikcu.edu.tr

ORCID ID: https://orcid.org/0000-0003-2745-4363

## REFERENCES
Adaman, F., & Keyder, Ç. (2006). *Türkiye'de büyük kentlerin gecekondu ve çöküntü mahallelerinde yaşanan yoksulluk ve sosyal dışlanma*. Retrieved on October 21, 2020 from http://ec.europa.eu/employment_social/social_inclusion/docs/2006/study_turkey_tr.pdf

Baden, S., & Milward K. (2002). Genre et pauvreté. C. Verschuur, & F. Reysoo (Eds.), in Genre, mondialisation et pauvreté, *Cahiers Genre et Développement*, (pp. 115-124), n°3, Genève, Paris: EFI/AFED, L'Harmattan.

Bradshaw S., & Linneker B. (2003). *Challenging women's poverty.* Retrieved from http://www.progressio.org.uk/sites/default/files/Challenging womens poverty.pdf

Brady, D., & D. Kall (2008). Nearly universal, but somewhat distinct: The feminisation of poverty in affluent Western democracies, 1969-2000. *Social Science Research, 37*, 976-1007.

Chant, S. (2006). Re-thinking the "feminization of poverty" in relation to aggregate gender indices. *Journal of Human Development, 7*(2), 201–220.

Charmes, J., & Remaoun, M. (2012). Travail, "care" et temps social : le triple emploi du temps des femmes africaines, Nouvelles approches de la «féminisation de la pauvreté»

Dayıoğlu, M., & Başlevent, C. (2012). Türkiye'de gelir dağılımının ve yoksulluğun toplumsal boyutları. S. Dedeoğlu, & A. Y. Elveren (Eds), *Türkiye'de refah devleti ve kadın* (pp. 127-157). İstanbul: İletişim Yayınları.

Delphy, C. (2001). *L'ennemi principal II*. Penser le genre, Paris: Syllepse.

Dikbayir, G. (2000). *Gender and poverty: Further data requirement to measure the gender dimension of extent and incidence of poverty.* Retrieved from http://www.portal-stat.admin.ch/iaos2000/dikbayir_final_JJ paper.doc.

Ortiz-Ospina, E. (2018). *Economic inequality by gender.* Published online at OurWorldInData.org. Retrieved from 'https://ourworldindata.org/economic-inequality-by-gender'

Eurostat (2018). *Statistics Explained*. Retrieved from http://ec.europa.eu/eurostat/statisticsexplained/

Glassman, B. (2020). *An analysis of the gender poverty gap using the American community survey*. SEHSD Working Paper Number 2020-12.

Gökovalı, U., & Danışman, A. (2010). Feminization of poverty: Does it really exist in Turkey? *New Perspectives on Turkey, 42*, 179-201.

McLanahan, S. S., & Erin, L. K. (1999). The feminization of poverty: Past and future. InJ. Chafetz (Ed.), *Handbook of Cender Sociology*. New York: Plenum.

Menjívar, R., & Trejos, S. (1992). *La pobreza en América central*. Flacso.

Moghadam, V., M. (2005). *The feminization of poverty and women's human rights.* Papers in Women's Studies/Cender Research: UNESCO, Social and Human Sciences Sector (SHS).

Medeiros, M., & Costa, J. (2008). Is there a feminization of poverty in Latin America? *World Development, 36*(1), 115-127.

Nations Unies. (1996). *Plate-forme d'Action et Déclaration de Beijing*, 4ème Conférence Mondiale sur les Femmes, Beijing Chine, 4-15 septembre 1995, Département de l'Information des Nations Unies, New York.

Pearce, D. (1978). The feminization of poverty: Women, work and welfare. *Urban & Social Change Review, 11*(1), 28-36.

Selim, R., & İlkkaracan, İ. (2002). *Gender inequalities in the labor market in Turkey: Differentials in wages, industrial, and occupational distribution of men and women*. Retrieved from http://content.csbs.utah.edu/~ehrbar/erc2002/pdf/P405.pdf

Şener, Ü. (2012). Kadın yoksulluğu. *Mülkiye Dergisi, 36*(4).

Tekgüç, H., & Akbulut, B. (2019). A multidimensional approach to gender gap in poverty: an application for Turkey. *Political Economy Research Institute Working paper Series, 485*.

UN Women. (2020). *From insights to action: Gender equality in the wake of Covid19*. Retrieved from https://www.unwomen.org/media/headquarters/attachments/sections/library/publications/2

020/gender-equality-in-the-wake-of-covid-19-en.pdf?la=en&vs=5142

Uysal, G., & Köksal, S. (2017), Material deprivation increases among the female-headed households. *BETAM, Research Brief* 17/206.

Willis, K. (1993). Women's work and social network use in Oaxaca City, Mexico. *Bulletin of Latin American Research,12*(1), 65-82.

World Economic Forum. (2019). *Global gender gap report 2020*. Geneva, 371.