Çalışma İlişkileri Dergisi
Journal of Labour Relations

# The Predisposition of Turkey's NUTS II Regions to Women Employment: An Index Trial

## *Türkiye'nin NUTS II Bölgelerinin Kadın İstihdamına Yatkınlığını Ölçmek için Bir İndeks Denemesi*

**Dr. Varol DUR**
*Adnan Menderes Üniversitesi*
*Sosyal Bilimler Enstitüsü*
*Çalışma Ekonomisi Endüstri İlişkileri Bölümü*
*Adnan Menderes University*
*Graduate School of Social Sciences*
*Labour Economics and Industrial Relations*

Temmuz 2021, Cilt 12, Sayı 2, Sayfa: 201-213
*July 2021, Volume 12, Number 2, Page: 201-213*

P-ISSN: 2146-0000
E-ISSN: 2146-7854

Çalışma İlişkileri Dergisi
Journal of Labour Relations



***TARANDIĞIMIZ INDEKSLER / INDEXES***
ECONLI T - USA
CABELL'S DIRECTORIES - USA
ASOS INDEKS - TR
INDEX COPERNICUS INTERNATIONAL - PL
KWS NET LABOUR JOURNALS INDEX - USA

***YAYIN TÜRÜ / TYPE of PUBLICATION***
PERIODICAL - ULUSLARARASI SÜRELİ YAYIN
***YAYIN ARALIĞI / FREQUENCY of PUBLICATION***
6 AYLIK - TWICE A YEAR
***DİLİ / LANGUAGE***
TÜRKÇE ve İNGİLİZCE - *TURKISH and ENGLISH*

***PRINT ISSN***
2146 - 0000
***E - ISSN***
2146 - 7854

# The Predisposition of Turkey's NUTS II Regions to Women Employment: An Index Trial

# Türkiye'nin NUTS II Bölgelerinin Kadın İstihdamına Yatkınlığını Ölçmek için Bir İndeks Denemesi

**Varol Dur**[1]

**Öz**

Son dönemde yaşanan gelişmelere rağmen Türkiye'de kadınların iş gücü piyasası ile ilişkileri, diğer OECD üyeleriyle kıyaslandığında oldukça düşük düzeydedir. Diğer taraftan bu alanda ülke içinde bölgeler arasında da ciddi bir farklılık olduğu da yaygın olarak kabul edilen bir gerçektir. Bu çalışmanın temel amacı kadınların iş gücü piyasasına düşük katılımının altında yatan nedenlerini 2019 Hanehalkı İşgücü Anketinden alınan çok sayıda ilgili verinin Z-skor yöntemi kullanılarak standartlaştırılmasıyla oluşturulan bir indeks içerisinde değerlendirilmesidir. Yapılan çalışma, Türkiye'de NUTS II düzeyinde bölgelerin kadın istihdamına yatkınlığını değerlendirmiş ve ortaya veriye dayanan, analitik ve karşılaştırmaya dayalı bir metodoloji ortaya koymuştur. İndeks ile ulaşılan sonuç beklentiyle uyumludur. Bununla birlikte bölgeler arası farklılığın net biçimde gözlemlenebilir olması çarpıcı bir sonuç olmuştur.

Anahtar Kelimeler: Kadın İstihdamı, Bölgesel Farklılıklar, Z-skor, İndeks

**Abstract**

Despite recent developments, women's labor market interactions in Turkey remain poor as compared to other OECD members. On the other hand, it is generally acknowledged that in the same field, there is a significant disparity between regions within the country. The main aim of this study is to use an index developed by standardizing a large number of relevant data from the 2019 Household Labor Force Survey using the Z-score method to assess the underlying reasons for women's low labor market participation. The study examined the proclivity of Turkey's NUTS II regions for female employment and revealed an analytical methodology based on data and comparison. The scorecard results are in line with expectations. However, it was a remarkable result that the disparity between regions is plainly visible.

Keywords: Women Employment, Regional Disparities, Z-Score, Scorecard

[1] Dr., Adnan Menderes University, Graduate School of Social Sciences, Labour Economics and Industrial Relations, 0000-0002-6801-3567

**Başvuru Tarihi:07.05:2021**
**Yayına Kabul Tarihi:22.09.2021**

## INTRODUCTION

For the Turkish labor market, which has been in constant change and transformation over the last decades, low female employment and low female participation rate are on a continuum that can be considered as a structural problem. Again, these rates appear as main employment related indicators that distinguish Turkey from the other OECD countries of which it is one of the founding members.

Nonetheless, since the early 2000s, women's interactions with the labor market have improved. Even if there is no solid evidence that this upward trend indicates healthy development, it is possible to conclude that women's participation rates have been rising due to increased schooling for girls and public acceptance of two-breadwinner families. However, it is true that besides their own decision for entering the labor market, women must consider a variety of factors.

Turkey, as a country with characteristics of the Southern European Welfare State and a welfare mix centered on family dependency, continues to rely on unpaid mothers and grandmothers' labour to care for children and the elderly. In Turkey, the state does not adequately advocate for or implement defamilistic measures aimed at alleviating family caregiver responsibilities. Furthermore, the market's contribution to the care sector is not equal or sufficient. According to scientific literature, a lack of state support contributes to mandatory familism, which becomes a major impediment and a major deciding factor for women's participation in the labor market. Cultural variables, on the other hand, define the limitation of the relationship between women work force and labor market, especially in some regions of the country, despite continuous developments and transformation in the labour market. Another barrier is that, as observed in employment statistics, informal employment is far more prevalent among women workforce, and women's employment is more sensitive to unemployment and other labor market risks than man. Finally, some sectors have traditionally been closed or semi-closed to women. All these factors and other similar ones have direct effect on not only woman's decision on entering labour market, but also women labour force demand.

The aforementioned factors do not impact all regions of Turkey in the same way or with the same intensity. On the basis of these considerations, it is important to note that the growth and change mechanism in the field of women's employment in Turkey is not geographically homogeneous. This regional diversity should be considered in all research, whether at the policy-making level or academic world. According to recent research, the western region of Turkey is improving faster in terms of women's employment indicators. Regional variations in major employment variables such as employment rate, employment participation rate, and unemployment rate are particularly noticeable. However, even if such macro analysis will reveal the big picture, it is insufficient to comprehend all of the factors that contribute to the big picture. Analyzing the relevant factors one by one, on the other hand, does not provide comprehensive results that enable all issues related to the demand and supply side of women employment to be evaluated. In that sense, all relevant and available variables should be assessed in way that allows an assessment of all factors which support and hinder women employment. Those factors need to be taken into consideration, from educational opportunities to the husband's view of his wife having a career, from the

disadvantage of women in the labor market compared to men, to the share of women in management.

The aim of this research is to propose a methodology that addresses the issues listed above. In this context, the paper's aim is to define regional differences in the field of women's employment by employing multiple variables that cover as much ground as possible. Several variables from the 2019 Household Labour Force Survey were standardized for this reason, and a scorecard was created to evaluate the labor markets in Nuts II in terms of women's employment friendliness. In this scope, while the background of women employment in Turkey was briefly explained in the first section, the second section was allocated for explaining regional disparities. The scorecard was created in the third section. For ensuring transparency and transferability, the methodology and its steps were explained as explicit as possible. Lastly, the scorecard and its outputs were explained in the third section.

## 1. Background

As compared to even Southern European countries, Turkey's women participation rate in the labour market has historically been low. The rate fell, particularly after the acceleration of domestic migration from rural to urban areas in the 1980s, because women who previously worked as unpaid family workers (or it can be said "contributing family workers") in rural jobs became homemakers due to a lack of jobs in cities and structures that can be more conservative about women participation to paid labour. These reasons hold women at home in slums formed around big cities, especially among the first generation of domestic migrants (Bozkaya, 2013; Seki, 2016). On the other hand, longstanding family-based social policies in Turkey have not ameliorated the low-level participation problem. Since the establishment of Turkish Republic, policymakers have accepted family as the keystone of the society and the order. Traditional gender roles, which recognize males as breadwinners and females as domestic caregivers, have shaped according to this point of view. This interpretation can be viewed as a reflection of society's patriarchal/authoritarian "father state" approach, which has evolved into a "patriarchal gender contract" in families (Dildar, 2015: 43). It has deep roots in both the state and the public, and its transformation is a long-term process.

Although it is not Turkey's first conservative government, the Justice and Development Party's (JDP) leadership has triggered a lot of debate regarding women and families' positions in the welfare state and social policies. The party's conservative ideals, as well as reflections on family and women's policies, have sparked these ongoing debates. The policies cover a wide range of social policy issues, from women's role in public life to the declining birth rate and resolving traditional family structures. It is a fact that under consecutive JDP governments, the prevailing political and bureaucratic discourse on social policy places the family at the centre of social policy. During this period, discussions about the future of women and families in the Turkish welfare state and social policies became increasingly intense, and opposition began to emerge, questioning women's identity based on their family roles. This family-centred approach can also be traced back to the establishment of the Ministry of Family and Social Policies (in 2011), which served as an umbrella administration for not only social policy/social service-related organizations but also for women and family-related public bodies that were previously under the Prime Minister's authority. The move to a lower level of state bureaucracy and placement under an umbrella that covers a wide range of topics but

does not specifically apply to women attracted criticism from feminist groups and academics. They claimed that institutional structures of the new ministry emphasized the traditional roles of women in the family and underrated women as individuals (Nişancı, 2016).

The ruling party considers falling fertility rates, rising average mean birth age, and deterioration in family structure to be the most pressing contemporary social issues confronting Turkish society. Although top policymakers have emphasized the need for "three children per family" as a solution to the demographic crisis, women's traditional positions as the backbone of families have been reminded, repeatedly. Furthermore, the dominant political discourse has sanctified families' roles in preserving society's well-being and order. (Bugra, 2013; Ayhan, 2015; Nişancı, 2016; Greulich, Aurélien & Inan, 2016).

However, women's labor market statistics have been improving since 2000. According to OECD data, women participation rate in Turkey has increased from 25% in 2005 to 38.7% in 2019. Its low starting point could be an explanation for the uptrend. However, this pattern has been aided in part by the government's financial incentives for women's jobs, as well as the significant contribution of rising girls' schooling levels in recent decades. For example, while the employment rate of mothers has been increased 43.5%, the number of part-time employed women has nearly tripled in the same period. Another positive development in the area of women employment is a 35% decrease in women NEET's figure (OECD, Labour Force Statistics Database). These developments can be seen as the start of a rapid rise (under normal economic and social conditions). This pattern demonstrates that, regardless of political debate, women's desire to participate in the labour market has become a permanent condition in Turkey.

Despite an upward trend in women's labor-force participation, the first common comment in all publications is the record low level of women's participation when compared to European countries, despite a decade-long increase. According to several studies, the conventional u-shaped curve in women's employment is the root reason of this problem. Rapid agriculture sector collapse and significant domestic migration resulted in a decline in unpaid family workers and a rise in housewives. However, according to some research, Turkey reached the end of the "U's" bottom in the 2000s, and women's activity-related data began to rise once more, for a variety of reasons (Tansel, 2002). Other scholars contend that conflict between family and work life, as well as poor welfare systems, drive women out of the labor market or make entry difficult, and that this is nonetheless a legitimate and substantial influence. Pressure from conventional care responsibilities, combined with a lack of support from the state or partners, is the primary reason for withdrawal from the labor market (Yazici, 2012; Göksel, 2013; Buğra 2013; Soyseçkin 2016).

According to Gündüz-Hoşgör and Smits (2008) and Göksel (2013), education is the most important factor of women's labor-force involvement. Women's engagement and inclination to participate increase as their education level grows. On the other hand, women's education level is a highly crucial element in deciding whether or not to have a kid or how many children a family should have. According to Greulich, Aurélien, and Inan (2016), better educated women have fewer children and give birth at a later age. Furthermore, the risk of having a large number of children at a young age is significantly lower for educated women who work in the formal labor market. These data highlight

the discrepancy between the upward trend in women's labor and education involvement and conservative political discourse. Dealing with the aging population problem or degeneration in family structure is only conceivable if this conflict in society is resolved (Karagöz, 2015).

## 2. The Need of Regional Comparison on Women Employment in Turkey

One can easily argue, based on the evidence presented in the preceding section, that it is too early to compare Turkish female employment statistics to those of Southern European countries. This phenomenon has been investigated by a number of Turkish academic studies. They attempted to discover the underlying reasons why Turkish women's employment statistics did not converge the countries with similar welfare state arrangements to Turkey. In this scope, some researchers have listed main reasons of this situation as follow: conflicts between work and family life and patriarchal norms in the society (Yazıcı, 2012; Buğra, 2013; Dildar, 2015; Soyseçkin, 2016), effects of governmental and bureaucratic approach (Akan, 2011; Nişancı, 2016), low educational attendance and low level of transition between education to work life (Göksel, 2013), unequal distribution in care responsibilities (Gündüz-Hoşgör and Smits, 2008; Özar, Yakut Çakar, 2013; Greulich and others, 2016), domestic migration (Tansel, 2002; for explanation of u shape curve: Goldin, 1994), unstable working arrangements (Ulutaş, 2015).

Women's employment data in Turkey, on the other hand, show a striking regional imbalance. Women's employment and the general labor market structure are undergoing changes in different parts of the country at different rates and intensities. This diversity has a different impact on women's willingness to participate to the labour market and the demand for women's labour force in each region (Kamacı, 2016; Apaydın, 2018).

As a summative assessment, the western parts of Turkey tend to be more developed than the eastern areas. This disparity in economic development affects social structure and economic activities, creating a more favorable environment for both formal and informal jobs. At the same time, regional disparities in growth create a vacuum that attracts workers to the west and leaves less developed areas with depleted human resources. (Gündüz - Hoşgör ve Smits, 2008; Çelebioğlu, 2017).

**Table 1: Selected Data on Women's Employment (2019)**

| | Unregistered Women Employment Rate (%) | Women Population Without a Diploma (%) | Women Employment Participation Rate (%) | Women Unemployment Rate (%) |
|---|---|---|---|---|
| TR-10 İstanbul | 22 | 16 | 37.60 | 18.90 |
| TR-21 Tekirdağ | 39 | 16 | 40.30 | 15.80 |
| TR-22 Balıkesir | 48 | 15 | 32.40 | 11.40 |
| TR-31 İzmir | 28 | 16 | 39.00 | 21.00 |
| TR-32 Aydın | 51 | 18 | 42.40 | 11.40 |
| TR-33 Manisa | 53 | 21 | 35.10 | 11.90 |
| TR-41 Bursa | 32 | 14 | 33.10 | 13.70 |

| | | | | |
|---|---|---|---|---|
| TR-42 Kocaeli | 35 | 15 | 34.30 | 16.70 |
| TR-51 Ankara | 22 | 11 | 34.50 | 19.80 |
| TR-52 Konya | 62 | 18 | 30.50 | 9.50 |
| TR-61 Antalya | 38 | 14 | 40.60 | 16.60 |
| TR-62 Adana | 52 | 24 | 32.20 | 14.80 |
| TR-63 Hatay | 58 | 29 | 28.40 | 22.20 |
| TR-71 Kırıkkale | 57 | 23 | 33.20 | 17.40 |
| TR-72 Kayseri | 52 | 22 | 26.30 | 19.30 |
| TR-81 Zonguldak | 60 | 21 | 36.60 | 13.10 |
| TR-82 Kastamonu | 65 | 25 | 40.10 | 10.10 |
| TR-83 Samsun | 67 | 27 | 37.90 | 8.70 |
| TR-90 Trabzon | 70 | 30 | 43.50 | 11.30 |
| TRA-1 Erzurum | 59 | 26 | 26.70 | 8.40 |
| TRA-2 Ağrı | 81 | 48 | 30.10 | 6.90 |
| TRB-1 Malatya | 65 | 31 | 34.50 | 11.40 |
| TRB-2 Van | 77 | 49 | 27.40 | 26.90 |
| TRC-1 Gaziantep | 51 | 33 | 24.50 | 15.70 |
| TRC-2 Şanlıurfa | 72 | 51 | 24.10 | 18.40 |
| TRC-3 Mardin | 54 | 46 | 21.40 | 42.10 |
| Mean | 53 | 25 | 33.33 | 15.90 |
| Standard Deviation | 16 | 12 | 6.00 | 7.19 |

**Source:** TurkStat, Household Labour Survey[2], 2019

Variables relevant to women's employment from TurkStat's household labor survey reveal regional variations. However, evaluating only individual variables does not produce satisfactory results in obtaining a better understanding of this multi-faceted problem. Furthermore, even after a simple comparison of key variables at the NUTS II level, some anomalies can be easily detected. As shown in Table 1, the TRA-2 area has the lowest women unemployment rate (6,9%). While this is a positive sign for women's jobs, the same region also has the highest rate of informal women's employment (81%). Other regions, on the other hand, with higher women labour participation rates, often have a higher women population without a diploma. In this context, even though an individual variable has a high value in one area, it does not necessarily indicate neither a favorable working environment, nor qualitatively higher jobs for women.

To tackle this problem, the paper proposes a scorecard that includes variables linked to common determinants and explanations for women's labor market participation. The scorecard aims to give users the ability to compare NUTS II regions in Turkey comprehensively and inclusively.

[2] The household survey data that used in this paper was cleared and processed by ILO Ankara Office's Research Officer Luis Pinedo-Caro.

## 3. Women's Employment in Turkey: The Scorecard of Regional Indicators

### 3.1. The Methodology

This study aims to provide cooperative research on women employment shaped by the political, cultural, and historical background in Turkey. With this object, "The Scorecard of Regional Indicators" was created by using data from Turkstat's household labour survey 2019. The data taken from the survey was reduced to 14 variables via 2-way and 3-way tabulations. In that sense, nearly 30 individual variables were used. Since the variables have different scales, they were standardized via the Z-score method. Average Z-score values for each region have given individual region scores (for similar methodology: Room, 2000; Bambra, 2006; UNICEF, 2007; Hudson and Kühner, 2010; Horsfall 2010; Willemse ve de Beer, 2012; Dur, 2019). Utilizing Z-score method, all selected variables were shown within a standard value, and thus, scores indicating the total effect of the variables for each region are obtained. By sorting these scores from the highest to the lowest, the scorecard was formed showing ranking from the supportive regions regarding women employment to the least supportive ones.

To avoid a multi-collinearity problem, correlation levels between individual variables were tested before forming the scorecard. Even though multi-collinearity is primarily an issue with regression methods, this test is critical for scorecards in order to avoid highly correlated variables having a magnified impact on the scorecard and rating. In simple terms, the weight of associated variables in the scores rises dramatically. (Field, 2013). In general, the correlation +/- 0.80 is accepted as a risk for multi-collinearity (Aydın and others, 2013). The test shows that strong and significant correlations have been detected between "*Women employment participation rate*" and "*The ratio between women employer to men employer*" and "*Unpaid family worker rate*" and "*Unregistered women employment rate*". Due to these correlations, the weights of variables labelled as "The ratio between women employer to men employer" and "Unpaid family worker rate" were decreased by multiplying 0.75.

**Table 2: Correlations**

| | | infwomen | WMempratio | familyworker | LPRWomen |
|---|---|---|---|---|---|
| infwomen | Pearson Correlation | 1 | 0.083 | 0.891** | -0.279 |
| | Sig. (2-tailed) | | 0.688 | 0.000 | 0.168 |
| | N | 26 | 26 | 26 | 26 |
| WMempratio | Pearson Correlation | 0.083 | 1 | 0.360 | 0.851** |
| | Sig. (2-tailed) | 0.688 | | 0.071 | 0.000 |
| | N | 26 | 26 | 26 | 26 |
| familyworker | Pearson Correlation | 0.891** | 0.360 | 1 | 0.039 |
| | Sig. (2-tailed) | 0.000 | 0.071 | | 0.851 |
| | N | 26 | 26 | 26 | 26 |
| LPRWomen | Pearson Correlation | -0.279 | 0.851** | 0.039 | 1 |
| | Sig. (2-tailed) | 0.168 | 0.000 | 0.851 | |
| | N | 26 | 26 | 26 | 28 |

**. Correlation is significant at the 0.01 level (2-tailed).

### 3.2. Selected Variables

Table 3 lists the variables used in the scorecard as well as the reasons for including them in the study. Seven of the fourteen variables increased the scorecard's value, while the others reduced it.

**Table 3: The Scorecard Variables**

| Variables | Reason of Inclusion |
|---|---|
| **Negative variables** | |
| Unregistered (informal) women employment rate | The variable represents sensitivity of women in terms of unregistered employment |
| Job quits in women due to spouse request | The variable represents the effect of patriarchal norms in women employment |
| The women who do not have any diploma | The variable represents lack of education in women |
| Unpaid family worker ratio | The variable represents the transformation to waged labour in women from unpaid jobs |
| The rate of discourage women in labour market | The variable represents the hardship faced by women during enter or reenter to labour market |
| The possibility to face women long term employment compared with men | The variable represents the hardship faced by women during enter or reenter to labour market |
| Women unemployment rate | The variable is included to the analyses since it is one main indicator in the field |
| **Positive variables** | |
| Job quit in women due to education | The variable represents the relation between education and labour market |
| The ratio of women who has postsecondary or higher-level diploma | The variable represents the relation between education and labour market |
| The ratio of women employment to man employment | The variable is included to compare man and women in labour market. |
| The ratio between women employer to men employer | The variable is included to compare man and women in labour market. |
| The ratio of women in managerial roles to women employment | The variable is included to analyze women's role in labour market. |
| The possibility of women to have managerial roles compared with man in companies employed 50+ workers | The variable is included to compare man and women in labour market. |
| Women employment participation rate | The variable is included to the analyses since it is one main indicator in the field |

In that sense, it aspires to cover as much territory as possible in terms of women's employment. Education, social norms, women's disadvantages in the labor market, women's managerial positions in businesses, women/man comparisons, and some key indicators are all reflected in the scorecard.

### 3.3. The Outputs of the Scorecard

The analysis clearly validates that there is striking variation between NUTS II regions in Turkey. According to scorecard, while TR-10 İstanbul provides most women-friendly environment for employment with a Z-score of 0.741500445, TRC-3 Mardin has the lowest score that is -1.156541196.

According to the table 4, TR-51 Ankara, TR-61 Antalya, TR-31 İzmir and TR-32 Aydın follow TR-10 İstanbul. On the other hand, TRC-1 Gaziantep, TRA-2 Ağrı, TRC-2 Şanlıurfa and TRB-2 Van are also in the last five regions in the list with TRC-3 Mardin. Average of Z-score value is 0.000584812 and median of Z-score is 0.078144363 of the scorecards.

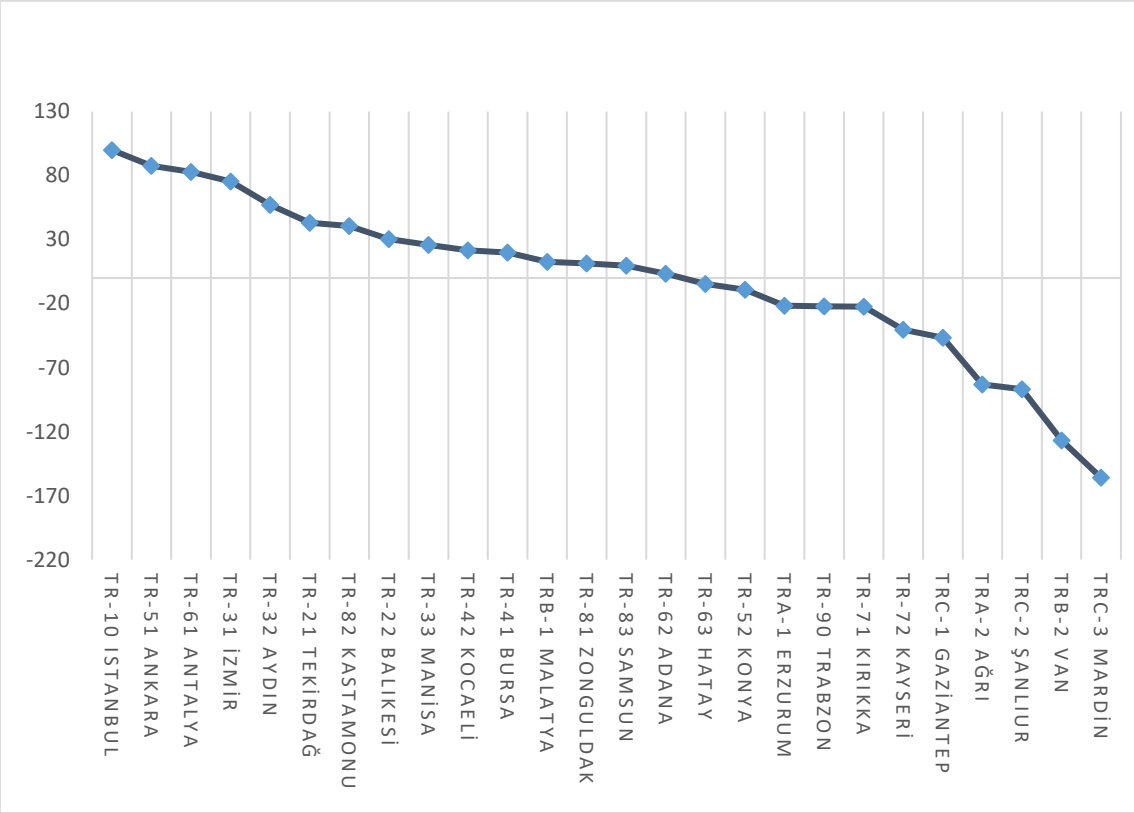
Aside from z-score values, index values are also developed to make table 4 easier to read. TR-10 Istanbul's Z-score value is set to 100, and the distances to other regions can be calculated as a result. Median of index values is calculated as 10.53868056.

**Table 4: Regional Women's Employment Climate Scorecard**

| | NUTS II Regions | Z-score Value | Index Value | | NUTS II Regions | Z-score Value | Index Value |
|---|---|---|---|---|---|---|---|
| **1** | TR-10 Istanbul | 0.741500 | 100.00 | **14** | TR-83 Samsun | 0.07114 | 9.593376 |
| **2** | TR-51 Ankara | 0.649945 | 87.65271 | **15** | TR-62 Adana | 0.02429 | 3.275555 |
| **3** | TR-61 Antalya | 0.615296 | 82.97999 | **16** | TR-63 Hatay | -0.03464 | -4.67168 |
| **4** | TR-31 İzmir | 0.559214 | 75.41663 | **17** | TR-52 Konya | -0.06828 | -9.20903 |
| **5** | TR-32 Aydın | 0.424419 | 57.23793 | **18** | TRA-1 Erzurum | -0.15991 | -21.5654 |
| **6** | TR-21 Tekirdağ | 0.319280 | 43.05865 | **19** | TR-90 Trabzon | -0.16452 | -22.1878 |
| **7** | TR-82 Kastamonu | 0.301812 | 40.7029 | **20** | TR-71 Kırıkkale | -0.16557 | -22.3294 |
| **8** | TR-22 Balıkesir | 0.224943 | 30.33624 | **21** | TR-72 Kayseri | -0.29861 | -40.271 |
| **9** | TR-33 Manisa | 0.192221 | 25.92337 | **22** | TRC-1 Gaziantep | -0.34636 | -46.7103 |
| **10** | TR-42 Kocaeli | 0.161105 | 21.72699 | **23** | TRA-2 Ağrı | -0.61563 | -83.0250 |
| **11** | TR-41 Bursa | 0.147962 | 19.95447 | **24** | TRC-2 Şanlıurfa | -0.64414 | -86.8697 |
| **12** | TRB-1 Malatya | 0.092805 | 12.51591 | **25** | TRB-2 Van | -0.94167 | -126.996 |
| **13** | TR-81 Zonguldak | 0.085153 | 11.48398 | **26** | TRC-3 Mardin | -1.15654 | -155.973 |

As it seen in the Graphic 1, distribution of the regional scores has more or less steady downward trend. Skewness and Kurtosis tests also verified the normality of both Z-score index value distribution of the scorecard (respectively -0,721 and 0.480). However, stem and leaf plot graph showed that Van and Mardin have both extreme values, which can be observed as sharp decline in graphic one.

**Graphic 1. Regional Women's Employment Climate Scorecard Index Values**




The scorecard's average point is in between TR-62 Adana and TR-63 Hatay. The regions are more normally distributed above the average line, as seen in Graph 1. In line with this observation, although the standard deviation of the first 15 NUTS II regions is 0.235457, the standard deviation of the remaining regions is 0.373243.

## CONCLUSION

The literature's most prevalent and general proposal in the field of women employment is to develop policies that can enhance gender equality in the labor sector. Increasing parental leave arrangements to share the care burden of a new baby, rearranging maternity leave to support returning to the labor market, expanding public care facilities, and increasing employers' responsibility for establishing day care centers are some of the recommendations in this regard. In general, researchers suggest that expanding the welfare state to raise public accountability and reduce the burden on families would be the most effective approach. On the other hand, when implementing practical reforms, the underlying causes and cultural context of gender inequality must be considered.

Only in this way can reconciliation measures be widely accepted by various segments of the society. Another typical idea for enhancing women's participation is to increase their academic level. Using public sector work as a means for women to gain a foothold in the formal labor market can also be considered a realistic advice.

The scorecard demonstrates the significant imbalance between the Nuts II regions in the area of women employment. Even if the regions with higher scores than average are in the range of the normal distribution, there is a dramatic drop in the score value in the values above the average axis. It shows that a certain degree of convergence exists among regions with a relatively favorable environment for women's employment. On the contrary, not only is there a greater disparity within the bottom ranks, but these regions have become outliers as compared to the higher ranks of the scorecard.

As accepted and foreseen in the literature, eight out of the top 10 Nuts II regions of the scorecard are located in the western part of Turkey. Ankara and Kastamonu are the exceptions to this generalization. TR-61 Ankara, as the country's second-largest city and capital, has a vibrant economy as well as a large number of public jobs that women prefer. So, based on existing literature, Ankara's scorecard position can be predicted. TR-82, on the other hand, has a higher scorecard value than comparable regions. The TR-82 is propelled up the scorecard by high scores from women in managerial roles in industries, the women/man employment ratio and women labour participation rate, and low score from women unemployment rate.

Although TR-72 and TRC-1 have economically developed cities, respectively Kayseri and Gaziantep, their scorecard values are below the average line. Women participation rate is low and women unemployment rate is high in both cities. On the other hand, job quits in women due to spouse request is exceptionally high in TR-72. In that sense, these results indicate the trace of cultural structure on labour market.

The scorecard offers strong and empirical proof of the need for region-specific solutions in the field of supporting women employment. The scorecard and the composition of the individual scores should be closely analyzed in order to consider the regions' high and weak points. National wide strategies/incentives/policies have often run the risk of harming some disadvantaged areas while benefiting already strong ones. A relatively higher degree of standard deviation in the bottom lines of the scorecard can be accepted as evidence of this policy inefficiency.

The primary goal of this article is to present an empirical framework for assessing women's labor-force participation. By analyzing the results, it is possible to conclude that this target has been met. Even though the article includes geographical comparisons, the study's key shortcoming is its lack of time dimension. Due to data availability, the analysis had to be carried out with a year's worth of data. Future researches that contribute to the dynamic side of the methodology will be appreciated in this regard.

## References

Akan, T. (2011). *Responsible pragmatism in Turkish social policy making in the face of Islamic egalitarianism and neoliberal austerity*. **International Journal of Social Welfare** 20.4: 367 - 380.

APAYDIN, F. (2018). *Türkiye'de İşsizliğin Karakteristiklerinin Karşılaştırmalı Analizi.* **Journal of Suleyman Demirel University Institute of Social Sciences**, 30(1).

Aydın, M. Ak M. & Altuntaş N. (2013). *'Çevre' Ülkelerinde Finansal Gelişme ile Büyüme Arasındaki İlişki: Panel Veri Analizi.* **Hacettepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi,** 31.2. 2-14.

Ayhan, K. (2015). *Islamisation of Turkey under the AKP Rule: Empowering Family, Faith and Charity.* **South European Society and Politics**, 20:1, 47-69.

Aysıt T. (2002). *Economic Development and Female Labor Force Participation in Turkey: Time-Series Evidence and Cross-Province Estimates*. Economic Research Forum for the Arab Countries, Iran and Turkey.

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.462.9820&rep=rep1&type=pdf, accessed by 23.05.2017.

Bambra, C. (2006). *Decommodication and The Worlds of Welfare Revisited*, **Journal of European Social Policy**. 16 (1). 73-80.

Bozkaya, G. (2013*). Kadınların İşgücüne Katılımını Belirleyen Faktörler: Türkiye Üzerine Bir Analiz.* **Sosyal Bilimler Dergisi,** 3.5: 69-89.

Bugra, A. (2013). Revisiting the Wollstonecraft dilemma in the context of conservative liberalism: The case of female employment in Turkey. Social Politics: International Studies in Gender, State & Society: 148-166

Buğra, A. (2014). *Revisiting the Wollstonecraft Dilemma in the Context of Conservative Liberalism: The Case of Female Employment in Turkey*. **Social Politics: International Studies in Gender, State & Society,** Volume 21/1. 148-166.

Celebioglu, F. (2017). *Women Employment in terms of Gender Inequality across the Provinces of Turkey*. **Eurasian Journal of Business and Economics,** *10*(19). 61-80.

Dildar, Y. (2015). *Patriarchal Norms, Religion, and Female Labor Supply: Evidence from Turkey*. **World Development**, *76*, 40-61.

Dur, V. (2019). *Refah Devleti Tipolojileri Çerçevesinde Türkiye'de Kadın ve Aileye Dönük Sosyal Politikalar ve Etkileri.* Ankara Üniversitesi. Unpublished PhD Thesis. https://dspace.ankara.edu.tr/xmlui/handle/20.500.12575/71979.

Field, A. (2013). *Discovering Statistics Using IBM SPSS Statistics*, Sage.

Göksel, İ. (2013). *Female Labor Force Participation in Turkey: The Role of Conservatism*. **Women's Studies International Forum,** Vol. 41. Pergamon.

Goldin, C. (1994). *The U-shaped Female Labor Force Function in Economic Development and Economic History*. No. w4707, National Bureau of Economic Research.

Greulich, A., Dasre, A., & Inan, C. (2016). *Two or Three Children? Turkish Fertility at a Crossroads*. **Population and Development Review**, 537-559.

Gündüz-Hoşgör, A. & Smits, J. (2008). *Variation in Labor Market Participation of Married Women in Turkey*. **Women's Studies International Forum,** Vol. 31, No. 2. 104-117.

Horsfall, D. (2010). *From competition state to competition states?* **Policy Studies**, 31(1), 57-76.

Hudson J. & Kühner S. (2010). *Beyond the Dependent Variable Problem: The Methodological Challenges of Capturing Productive and Protective Dimensions of Social Policy*, **Social Policy and Society**, Vol. 9.2, 167 - 179.

Kamacı, A. (2016). *Doğu Karadeniz'de İşgücü ve İstihdam*. **Journal of Management Economics Literature Islamic and Political Sciences**, 1(1), 14-32.

Nişancı, A. (2016*), Continuity or Shift: A Multiple Streams Framework Analysis of the Family Policy in Turkey*. **Journal of Soc. & Soc. Welfare**, 43, 19-36.

Özar, Ş. & Yakut-Çakar, B. (2013). *Unfolding the İnvisibility of Women Without Men in the case of Turkey*. **Women's Studies International Forum,** 24-34.

Seki, İ. (2016). *The Relationship between the Phenomenon of Political Conservatism and the Rate of Female Participation in the Labor Force: An Empirical Analysis of Turkey*. **Insan ve Toplum**, 6(2).

Soyseçkin, İ. S. (2016). *Balance between work and family life: Middle class working mothers in Turkey*. **Fe Dergi,** 8(1), 130-143.

Ulutaş, Ç. (2015), *İş & Aile Yaşamını Uzlaştırma Politikaları: Türkiye'de Yeni Politika Arayışları*. **Ankara Üniversitesi SBF Dergisi**, Cilt 70, No. 3: 723 – 750

Willemse, N., & De Beer, P. (2012). *Three Worlds of Educational Welfare States? A Comparative Study of Higher Education Systems Across Welfare States.* **Journal of European Social Policy**, 22(2), 105-117.

Yazıcı B. (2012), *The Return to the Family: Welfare, State, and Politics of the Family in Turkey*, **Anthropological Quarterly**, Vol. 85, No. 1, 103-140.