THE PLACE AND DYNAMICS OF
THE MIDDLE-CLASS IN MENA COUNTRIES

Gender Gap in Self-Employment and Employership: Regional Differences in Turkey

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Entrepreneurship

- a major motivational force for regional economic development
- regional policies around the world focus on promoting entrepreneurship
- triggers innovation and competitive dynamics in the market
- transitional mechanism between the creation of knowledge and economic growth
- a pathway to upward mobility and financial success for those who have limited access to traditional career paths

Questions

- Is the probability of self-employment is higher/lower in some regions than in others?
  - What could be the reasons behind?
- Is entrepreneurship less common among women?
- Does these have anything to do with the development level of the regions?

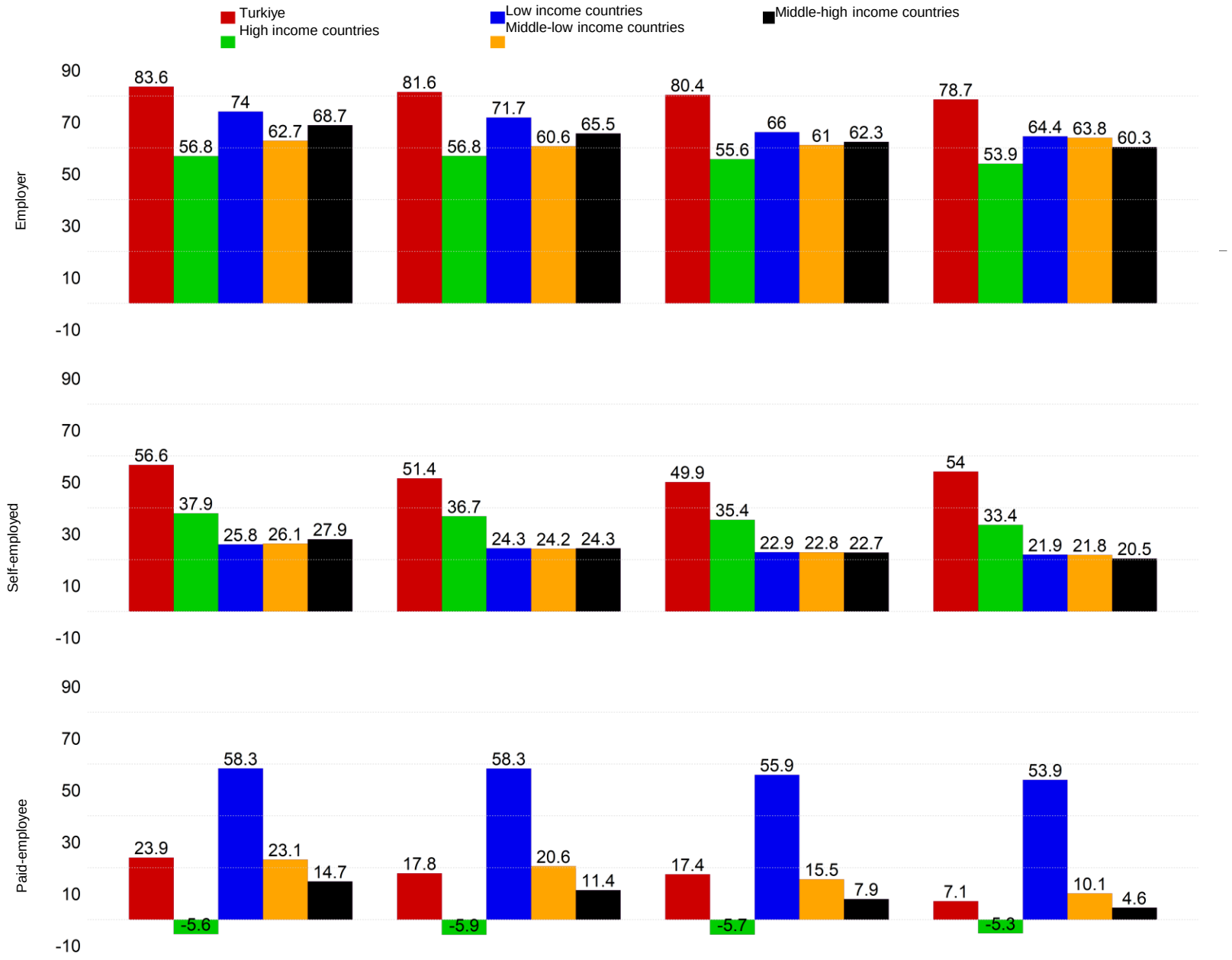
This study

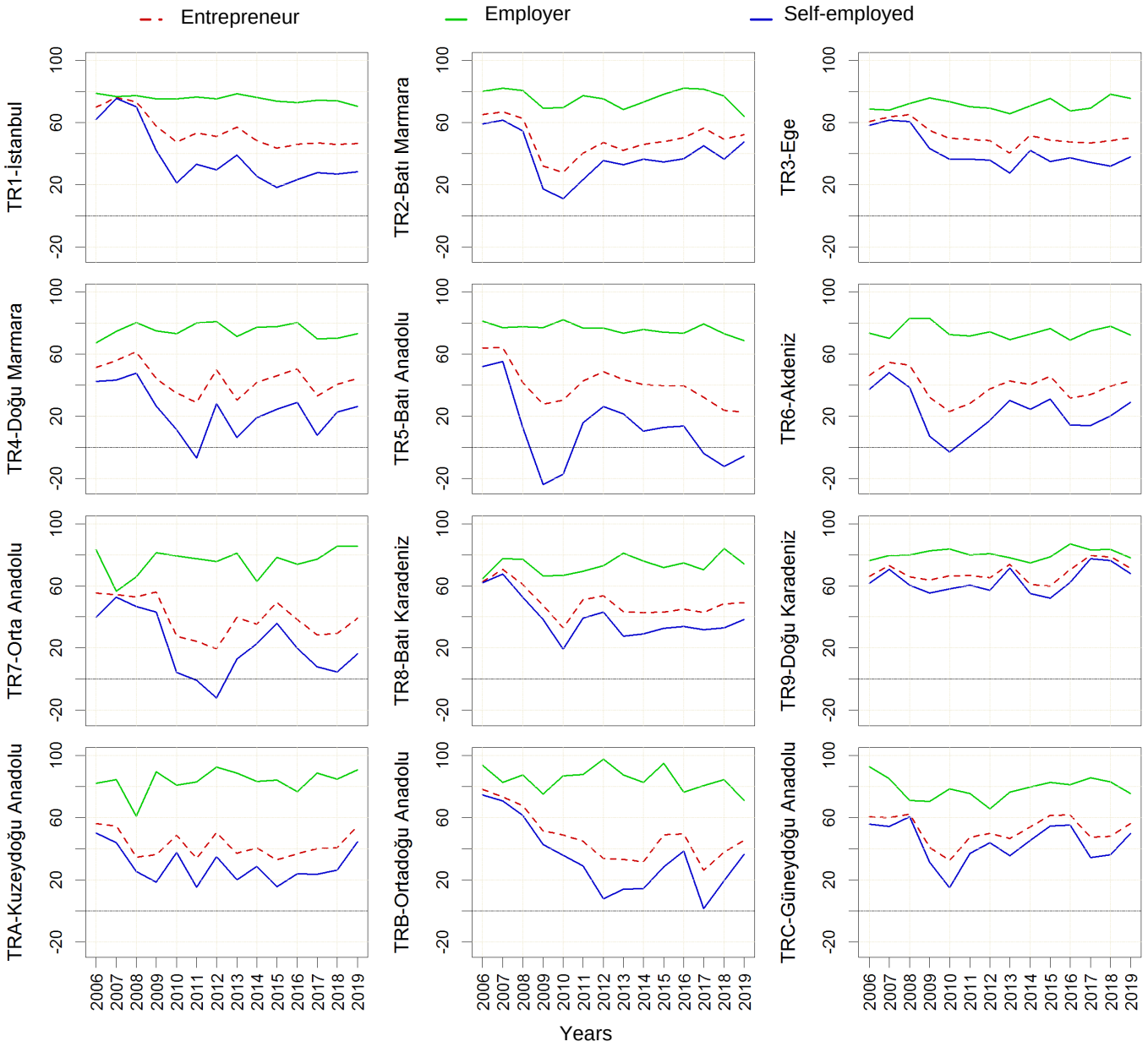
- examines macro factors that determine entrepreneurship in regions, such as the socioeconomic development levels of the regions and the attitudes towards women's employment at the regional level, as well as individual characteristics that influence individuals' entrepreneurial tendencies
- estimates gender inequality at the regional level through logit models
- analyses gender differences in the determinants of entrepreneurship by development level of regions

Background

- improvement in educational level
- regulations on the retirement age of women
- diminishing negative effect of marriage and having children
- increasing mean age at first marriage

- high opportunity cost of working for women
- insufficient work experience
- discrimination against women
- additional costs related to employing women


Turkiye
High income countries
Low income countries
Middle-low income countries
Middle-high income countries
Employer
Self-employed
Paid-employee
90
70
50
30
10
-10
83.6
56.8
74
62.7
68.7
81.6
56.8
71.7
60.6
65.5
80.4
55.6
66
61
62.3
78.7
53.9
64.4
63.8
60.3
56.6
37.9
25.8
26.1
27.9
51.4
36.7
24.3
24.2
24.3
49.9
35.4
22.9
22.8
22.7
54
33.4
21.9
21.8
20.5
23.9
-5.6
58.3
23.1
14.7
17.8
-5.9
58.3
20.6
11.4
17.4
-5.7
55.9
15.5
7.9
7.1
-5.3
53.9
10.1
4.6


Entrepreneur
Employer
Self-employed
TR1-İstanbul
TR2-Batı Marmara
TR3-Ege
TR4-Doğu Marmara
TR5-Batı Anadolu
TR6-Akdeniz
TR7-Orta Anadolu
TR8-Batı Karadeniz
TR9-Doğu Karadeniz
TRA-Kuzeydoğu Anadolu
TRB-Ortadoğu Anadolu
TRC-Güneydoğu Anadolu
100
60
20
-20
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
Years

Micro and macro factors that cause differences between regions

Macro

- development level of regions
- institutional structure
- regional approach against women's rights
- Higher GDP per capita → a higher demand for income-elastic services provided by small enterprises and easier and less costly raising of capital for potential entrepreneurs
- Dominant manufacturing sector for developing regions& services sector for developed regions
- In Turkiye 16,4% of people do not approve paid employment of women whereas 15,3% do not approve of women working at all (2016 Family Structure Survey), regions have mixed thoughts on this topic

Micro and macro factors that cause differences between regions

Micro

- education
- fear of failure
- the ability to grasp entrepreneurship opportunities
- having necessary traits to start a business

Related literature

- Gender gaps in entrepreneurship have been attributed to high opportunity costs for women as a result of their roles within the family (Koellinger et.al, 2013, Cowling and Taylor, 2001)
- choosing self-employment, men and women have different motives and employment strategies such that as men choose self-employment to improve their long term career opportunities, women choose self-employment as an alternative to unemployment or part time employment (Rosti and Chelli, 2005, Georgellis and Wall, 2005)
- comparatively more educated women will choose paid employment over self-employment (Naudé, 2013)
- determinants in choosing self-employment does not vary between women and men but the size of their effects vary by the development level of the region (Minniti and Naudé, 2010)
- gender gap is higher for high income countries when employership is in question (Cuberes et.al., 2018)
- In countries within the low income group, where fewer job opportunities exist, the frequency of women is found to be higher among the out of necessity entrepreneurs (Cuberes et.al., 2018)

Related literature

- Significant gender gaps exist in entrepreneurship even if determinants such as marital status, age, educational attainment, number of children, income level, having entrepreneur parents or spouse and social capital have been controlled for (Cuberes et.al., 2018, Koellinger et.al., 2013)
- Magnitude of gender gap almost halves when personal traits such as fear of failure, consciousness of one's own abilities, realizing opportunities and having a network of other entrepreneurs have been added to the model (Koellinger et.al., 2013)
- almost ¾ of the gender gap in entrepreneurship in Germany is due to women's relatively lower risk taking personalities (Caliendo et.al.,2015)
- Personal traits of women may affect the tendency to become an entrepreneur in different directions such as fear of failure negatively and perception of abilities positively (Daoud et.al., 2015)
- Gender gap in self-employment is an outcome of micro variables such as education and risk perception while conjunctural developments and unemployment effects emphasize these gaps (Faria et.al,2020)

Data

- To study the micro determinants of self-employment such as age, educational attainment, household specifications and access to financial sources by Turkey's regions
  - Income and Living Conditions Survey (SILC)
    - involves information on household income, incomes other than wages and entrepreneurial income, ownership of houses, properties that might be used as collateral, aids received from family and kinsmen.
    - pooled the cross sectional micro data sets of SILC for 2006-2018
    - agricultural sector has been excluded

Logit models

Probability of entrepreneurship, employership and self-employment →

1. microeconomic determinants & a dummy for NUTS1 regions (TR1 Istanbul as the reference region)
2. microeconomic determinants & gender dummy, 13 models for Turkey and 12 NUTS1 regions
3. a) microeconomic determinants & a dummy for development level of regions, 2 models for women and men

   b) microeconomic determinants, 4 models for developed&less developed regions and women&men

Dependent Variables

- Entrepreneur → 1 if individual is an employer or self-employed
- Self-employed → 1 if individual is self-employed
- Employer → 1 if individual is an employer

- Comparison groups
  - Paid employee → 0
  - Unpaid family worker →0
  - For employers
  - self-employed →0

Independent Variables

Female	1 for women, 0 for men
Age	Completed age of individual
Age2	Square of completed age of individual
Married	1 for married, 0 otherwise
Health	General health condition from one's own perspective (1-Very well, 2-well, 3-neither good nor bad, 4-poor, 5-very poor)
Head of household	1 if the individual is also the head of the household; 0 otherwise
Kids	1 if there are kids under 14 in the household; 0 otherwise
Size of household	Number of household members
Primary education or below	1 if illiterate or literate with no diploma or highest completion level is primary school or middle school; 0 otherwise
High school	1 if highest completion level is high school; 0 otherwise
Vocational high school	1 if highest completion level is vocational high school; 0 otherwise
High	1 if highest completion level is university or masters or doctorate; 0 otherwise
Agriculture	1 if employed in agriculture; 0 otherwise
Manufacturing	1 if employed in manufacturing; 0 otherwise
Construction	1 if employed in construction; 0 otherwise
Services	1 if employed in services; 0 otherwise
Registered	1 if individual is registered in social security system due to main job; 0 otherwise
Hours	Total hours worked in a week
House	1 if the individual owns a house; 0 otherwise
Security income	1 if the individual receives security income; 0 otherwise
Transfers	1 if the household receives transfer income in cash or kind; 0 otherwise
Income quintile	The quintile in which household's disposable income falls (1-5)

Discussion&Conclusion

- 1st group of analyses →
  - significant regional differences and gender gaps in the probability of being an entrepreneur, employer or self-employed exist
  - the probability of being self-employed instead of a paid employee in reference to TR1 Istanbul is higher in every region except TR4 East Marmara
- 2nd group of analyses →
  - in Turkey and each of the NUTS1 regions the likelihood of women being entrepreneurs and self-employed instead of paid employees is significantly less than that of men's
  - When the likelihood of employership is in question, there is a significant gender gap in all regions but TR2 West Marmara and TR9 East Black Sea
  - When the comparison group of the dependant variable is unpaid family workers the coefficients of the gender variable tend to be smaller

Discussion&Conclusion

- 3rd group of analyses →
  - significant positive relationship of the development level with women's propensity to be an entrepreneur in comparison with being a paid-employee
  - Men's likelihood of entrepreneurship instead of being a paid employee has nothing to do with the development level of the region they live in.
  - reverse u-shaped relationship between age and the probability to be an entrepreneur is found to be valid for both men and women
  - Being married is found to have a significant positive relationship with women and men's propensity to be an entrepreneur instead of a paid employee but not in less developed regions for women
  - In less developed regions manufacturing industry has been found to offer more opportunities than services for female entrepreneurs whereas for men the opposite holds.
  - For women, the propensity to be an entrepreneur is estimated to be significantly related with less working hours while male counterparts were found to be related to more hours than paid employees

Discussion&Conclusion

- The probability of women to be an entrepreneur instead of a paid employee in the post crisis 2009-2012 period, is significantly higher than in 2006 for developed regions.
- Developed regions offer more employership opportunities than the less developed regions for both women and men
- Estimated coefficients for household income levels show that women's likelihood to be an employer is higher only in high levels of income whereas for men significant positive relationship is estimated also for lower income levels.
- When compared with self-employment, even completion of high school is related with higher likelihood of employership for women in less developed regions; whereas in developed regions it takes university or higher degrees for a significant positive relationship between education and employership
- In developed regions the likelihood of women to become self-employed instead of paid employee is maximized at age 56 and in less developed regions at age 53; while men get to the maximum tendency 17 and 22 years younger

Discussion&Conclusion

- Age at which the propensity of being an employer is at its maximum being higher in developed regions
- Having a young kid in the household is related with higher propensity to be self-employed whatever the development level of the region is for women however it has not a significant effect on that of men's in less developed regions.
- When compared with the probability to be an unpaid family worker, the likelihood of being self-employed is negatively related with being married for women
- In developed regions higher income level for women is found to be related with smaller likelihood to be self-employed.

To sum up...

- individuals' entrepreneurship probabilities differ by gender and region
- While the magnitude of gender inequality was found to vary among regions and subgroups in entrepreneurship, it was present in almost all regions.
- The probability of self-employment in most regions is found to be associated with longer working hours, informality, and low education levels in non-service sectors, while employers are found to be relatively more on the formal side of employment with higher levels of education.

Policy implications

- Policies aimed at eliminating women's access to capital constraints, such as mentoring programs and venture capital initiatives
- Policies aimed at enabling women to trust themselves and their abilities in entrepreneurship through education and sharing successful examples
- Policies aimed at ensuring gender equality in access to education, economic opportunities, and earnings, and preventing inequality from being passed on to future generations

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Thank you for listening