

# FEMALE ENTREPRENEURSHIP IN TURKEY

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# Why are we interested?

## **Increasing women's economic participation remains a challenge for Turkey.**

- Between 2000 and 2011 gross female secondary enrollment rates grew from 61% to 85%
- More women enroll in university every year (55% in 2011 compared with 21% in 2001).
- Female labor force participation has increased to 32% in 2012 from 25% in 2004 but...
- ... it represents about half of female labor force participation in the ECA region or the OECD.

## **Labor market outcomes for women in Turkey are still some of the poorest in the ECA region.**

- Unpaid family workers are a quarter of female employment, and 72% of female self-employment
- There are relatively more employers in Turkey than in the ECA region (6% vs 3.1%),
- Employers constitute 5.2% of the total labor force, with one female employer for every 20 male employers
- In Turkey, male employers represent 7% of total male employment, female employers represent 1% of total female employment.

# Questions

- What is the situation of female entrepreneurship in Turkey?
- What are the constraints to start and grow a business that are specific to women?
- Do women and men have different preferences for starting a business?

# Summary paper draws on...

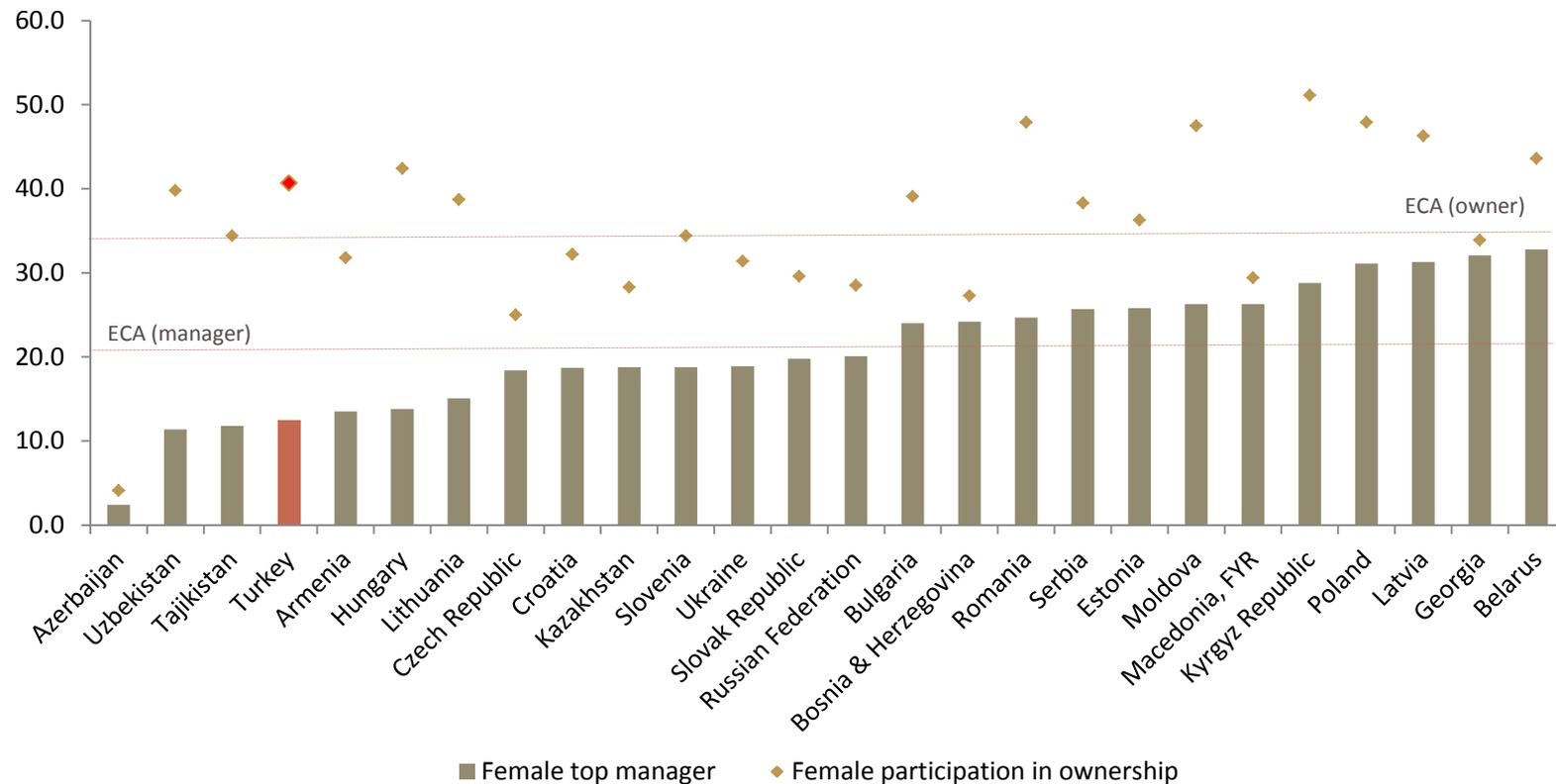
- **Background papers:**

- 1) Female Entrepreneurship in Turkey: Patterns, Characteristics and Trends (Cagla Okten);
- 2) Performance of Female Employers in Turkey (Tolga Cebeci);
- 3) Gender Earnings Gap in the Formal Labor Market in Turkey (Tolga Cebeci);
- 4) The Gender Gap in the Use of Financial Services in Turkey (Leora Klapper, Sandeep Singh, Ana Maria Munoz);
- 5) Analysis of Public Programs Relevant to Women's Entrepreneurship and Access to Labor Markets (Fatos Göksen, Özlem Altan Olcay, Ayse Alnıyaçık, and G. Ceren Deniz);
- 6) Qualitative Assessment of Economic Mobility and Labor Markets in Turkey: A Gender Perspective (A2F Consulting).

- **Data sources:**

- Labor Force and Earnings surveys,
- Life In Transition Survey (LITS),
- EU Income Social Inclusion and Living Conditions survey (EU-SILC),
- WB Global Financial Inclusion Index (FINDEX)
- Business Environment and Enterprise Performance Survey (BEEPS).
- Qualitative data is derived from focus groups (e.g., women entrepreneurs in the formal and informal sector) and life stories of successful female entrepreneurs.

# Defining an entrepreneur



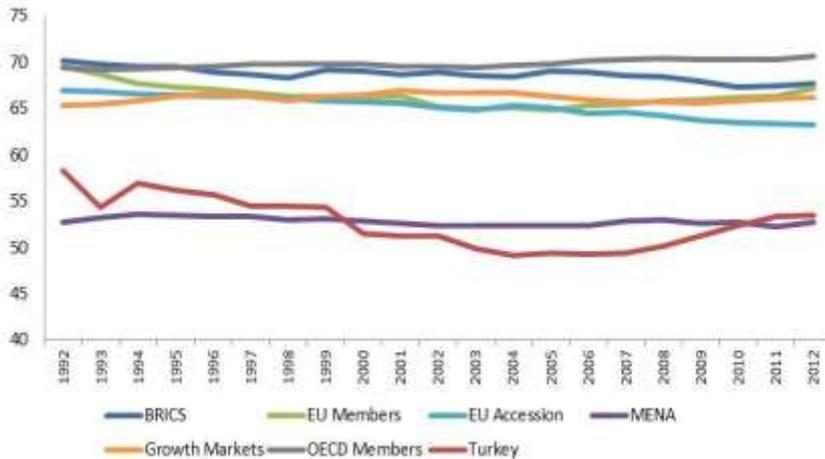
# Data sources and definitions

|                            | Household Labor Force Surveys (LFS)  | Business Environment and Enterprise Performance Survey (BEEPS)   | Life in Transition Survey Analysis (LITS)  | Performance of Female Employers in Turkey (EU-SILC)  |
|----------------------------|--|--|--|--|
| Year                       | 2004-2012.   | 2008   | 2010   | 2007-2010  |
| Definition of Entrepreneur | <p>(ICSE 1993)</p> <p><i>Employers:</i> workers who, working on their own account or with one or a few partners, hold the type of job defined as a "self-employment job", and, in this capacity, on a continuous basis have engaged one or more persons to work for them in their business as "employee(s)"</p> <p><i>Own-account workers:</i> workers working on their own account or with one or more partners, hold the type of job defined as "a self-employment job" and have not engaged on a continuous basis any "employees"</p> | <p><i>Business owners</i> (regardless of sole or shared ownership) and <i>top managers</i>.</p> <p>Manufacturing and services sectors ISIC codes 15-37, 45, 50-52, 55, 60-64, 72</p> <p>Formal (registered) companies with 5 or more employees</p> | <p>Follows ILO:</p> <p><i>Self-employment</i> including employers, own-account workers, members of producers' cooperatives and contributing family workers . Excludes agricultural workers</p> | <p><i>Self-employed with employees:</i> works in own business, professional practice or farm for the purpose of earning a profit, and who employ at least one other person and pays them.</p> <p><i>Self-employed without employees</i> Works in own business, professional practice or farm for the purpose of earning a profit, and do not employ any other person. May engage members of his/her own family or apprenticed without payment.</p> |

We use all the above sources for different parts of the analysis.

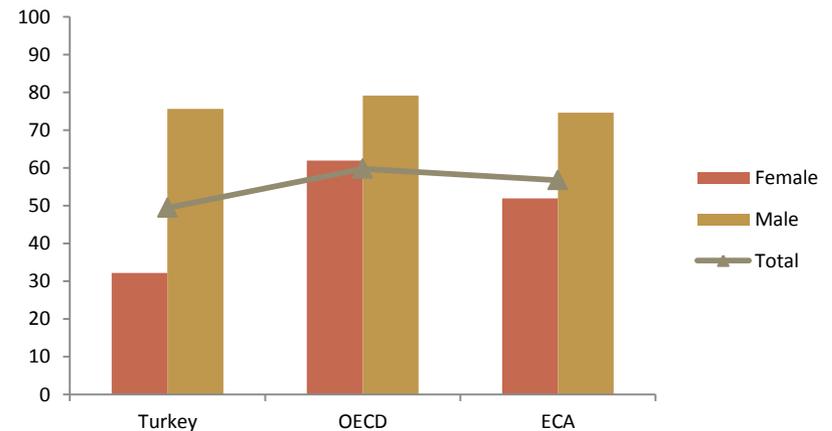
# Women's labor force participation in Turkey (quick facts)

**Labor Force Participation rate, total  
(% of population ages 15-64)**



Source: WDI

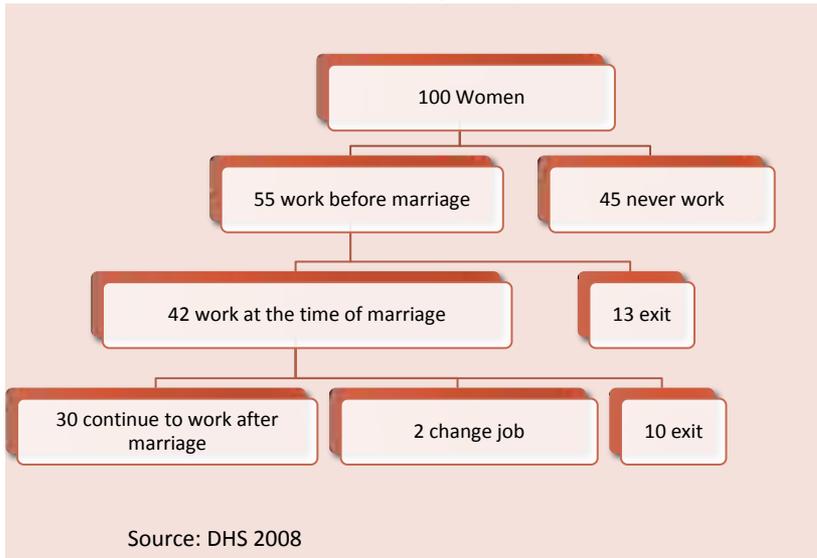
**Labor Force Participation by gender  
(% of total population ages 15-64)**



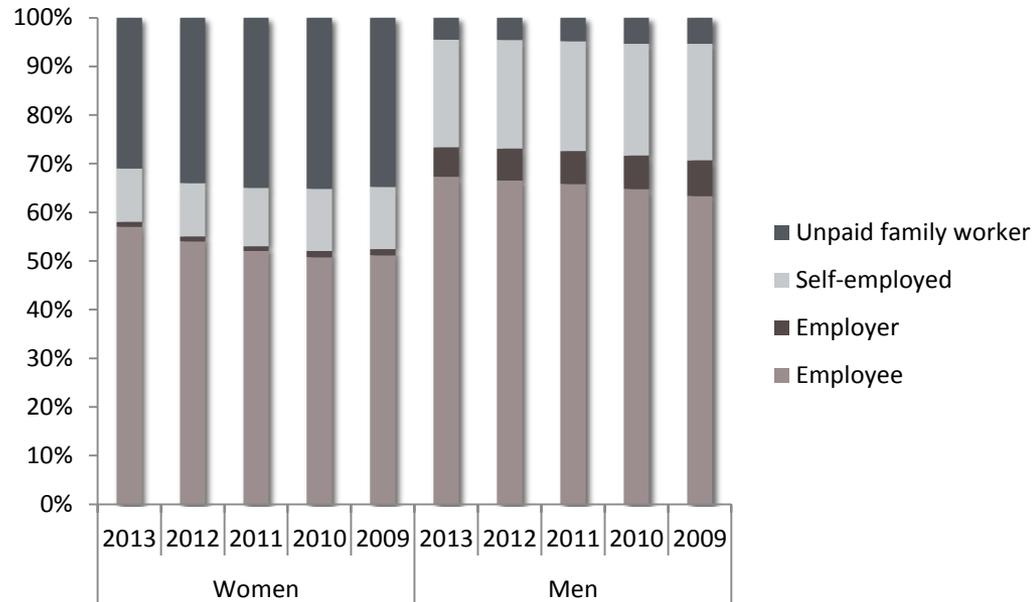
Source: WDI 2012, modeled ILO estimate

# Women's labor force participation in Turkey

Transitions in and out of LFP (stylized). Women 15-64



Employment composition by sex and year- (% of total population ages 15-64)



Source: TURKSTAT, LFS (2009-2013)

# Main determinants of entrepreneurship

1. We look at the effects of socio-demographic characteristics (education, marital status, number of children and urban/rural location) on the *gender gap* in entrepreneurship.
2. We use a multinomial logistic model where we analyze the odds of being an employer or own account worker over being inactive/unemployed.
3. Data: total working age population in HLFS 2012
4. We find that higher education reduces the gender gap while marriage and number of children increases the gender gap in entrepreneurship. Living in an urban area also increases the gender gap as it increases the odds of becoming an employer for males and decreases the odds for females.

# Summary of Results from Multinomial Logistic and Logistic Regression Analysis

| Impact on the odds of being an employer or OAW or nascent entrepreneur† |  |  |                          |
|---|--|--|--------------------------|
|   | Employer                                   | OAW  | Nascent Ent.             |
| female  | Negative                                   | Negative                                   | no effect*<br>negative** |
| age   | Positive                                   | Positive                                   | positive                 |
| primary school  | positive with<br>larger effect for males   | positive for males<br>negative for females | no effect                |
| junior high school  | Positive                                   | Negative                                   | positive                 |
| high school   | Positive                                   | Negative                                   | positive                 |
| vocational high school  | Positive                                   | Negative                                   | positive                 |
| university  | positive with<br>larger effect for females | negative with<br>larger effect for males   | positive                 |
| married   | positive for males                         | positive with                              | no effect                |
|   | no effect for females                      | larger effect on males                     |                          |
| divorced  | Positive                                   | positive with                              | no effect                |
|   |  | larger effect for females                  |                          |
| widow   | positive with<br>larger effect for males   | Positive                                   | no effect                |
| n of children, ages 0-4   | positive for males<br>negative for females | positive for males<br>negative for females | positive                 |
| n of children, ages 5-11  | positive for males<br>negative for females | positive with<br>larger effect for males   | no effect                |
| urban   | positive for males<br>negative for females | negative with<br>larger effect for males   | positive                 |
| experience  |  |  | no effect*<br>positive** |

\* with interaction terms; \*\* without interaction terms

†Odds of being an employer or OAW over being inactive/unemployed. Or odds of wanting to start up a business as opposed to looking for work as paid employee

# Education matters...

## Turkish female employers are, on average, more educated than male employers

- The odds of an urban woman with primary education to become an employer are 94% lower than the odds for a similar man (never married, no children). For a rural woman vs a rural man these odds are 89.3%.
  - *University education* brings the gap down to 35% for rural women, and to 60% for urban women.
- *University education* increases the odds of a male becoming an employer by 8 folds whereas it increases the odds of a female becoming an employer by 29 folds over being inactive/unemployed (compared with primary education).

# Age less so than experience...

**Female employers in Turkey are, on average, much younger than male employers and have much fewer years of experience in the labor market than men.**

- The average age of women in the labor force is lower than men's.
- Regardless of employment type, on average, women have only about half the years of experience than men do.

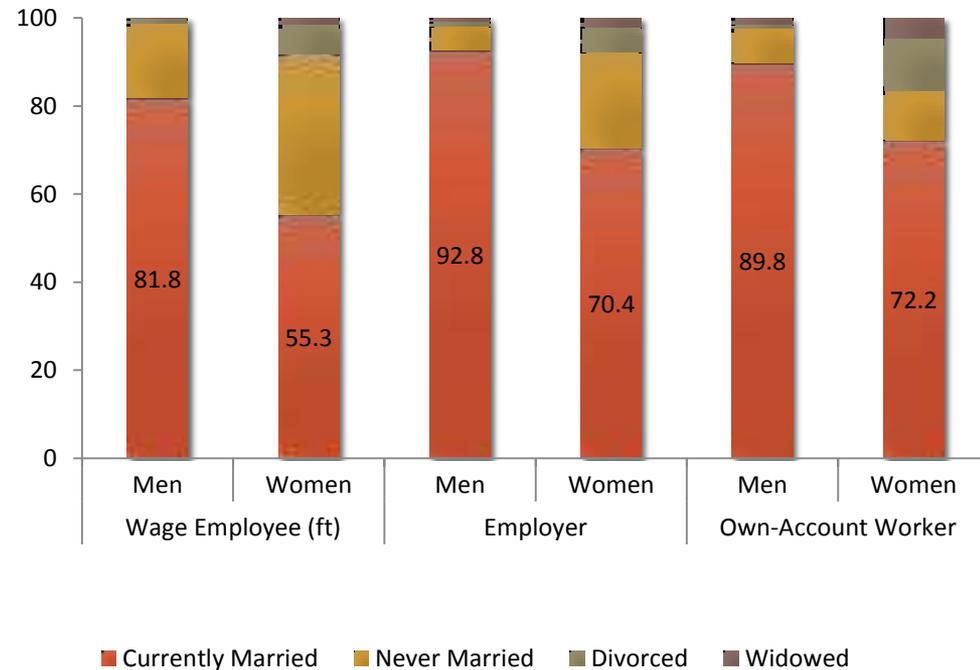
|        | Wage Employee (ft) |       | Employer |       | Own-Account Worker |       |
|--------|--------------------|-------|----------|-------|--------------------|-------|
|        | Men                | Women | Men      | Women | Men                | Women |
| Tenure | 16.0               | 9.2   | 21.7     | 12.3  | 22.4               | 11.7  |
| Age    | 36.4               | 32.2  | 41.8     | 36.9  | 42.2               | 39.1  |

Source: EU-SILC 2007-2010, Agriculture not included

# Marriage can explain the experience gap...

- **Being currently married increases the odds of being an employer (over being inactive/unemployed) for men...**
  - ...but has no effect for women
  - The likelihood of women being an entrepreneur is much higher if the husband is also an employer (rather than wage employed or OAW). 29% percent of all female employers are married to employers
  - The marriage differential between male and female wage employees and employers is consistent across age cohorts
- **The number of children aged 0-4 decreases the odds of being active in the labor market for women...**
  - ...but increases the odds for males.
  - The number of children aged 5-11 also decreases the odds of being an employer or wage employee for females, but has no effect on OAW.

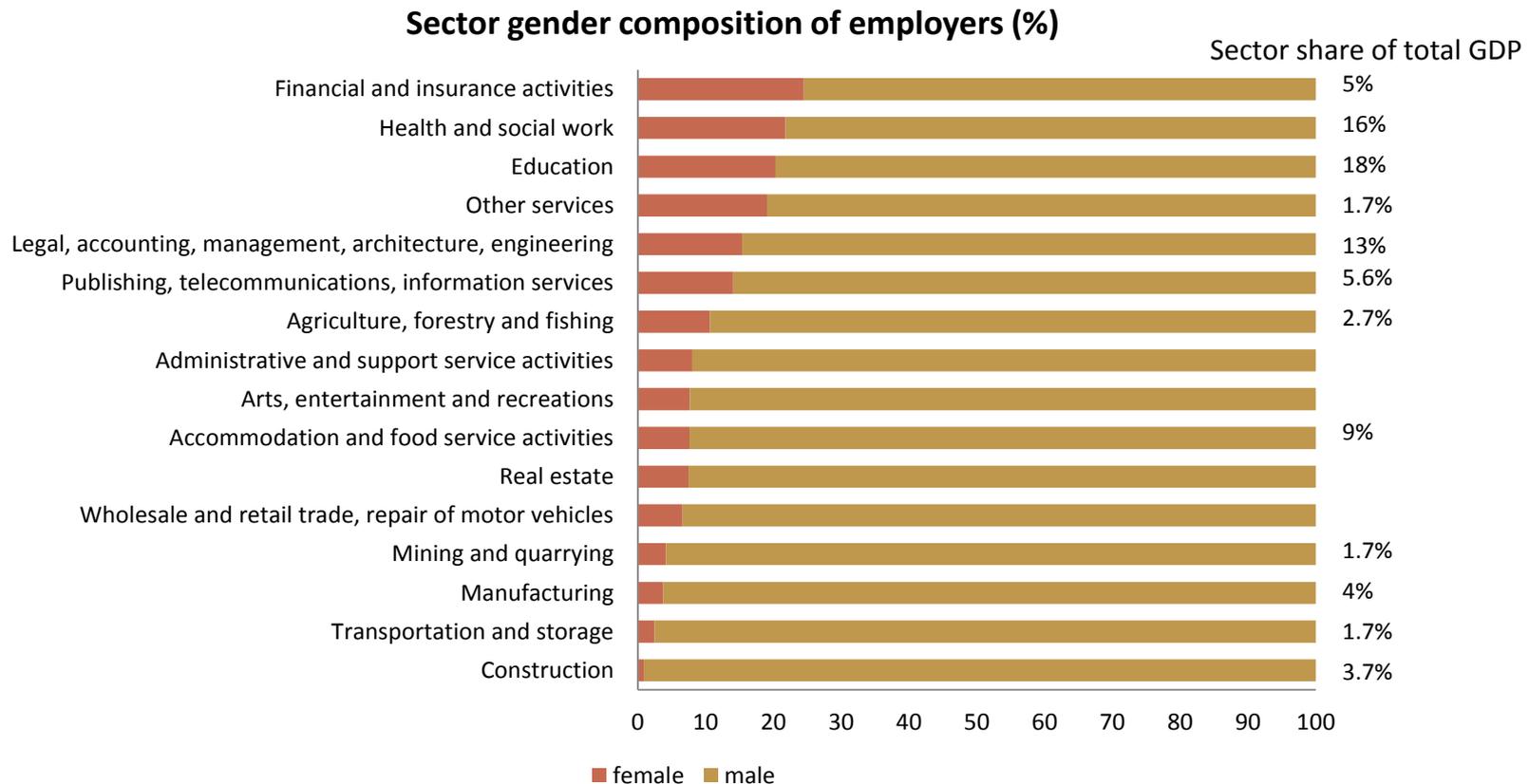
Marital Status by Work Type and Gender (%)



Source: EU-SILC

# Are female headed firms different?

They are concentrated in a few sectors...



## There is some evidence that women in Turkey prefer services to manufacturing

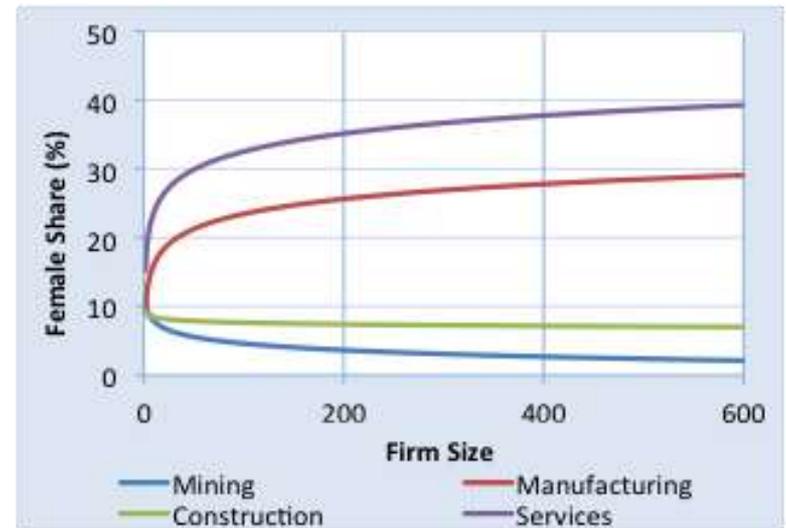
- Female OAW concentrate in administrative and support services (84%)
- Services concentration is entirely driven by retail firms, with little contribution from other service sectors
- 25% of all employees of a 200-employee manufacturing firm and 35% of a 200-employee services firm are expected to be female. Hairdressing and washing services, real estate activities, land transportation, hotels and restaurants, manufacture of apparel and retail trade are the sub-sectors with the highest increase in female representation in response to a increase in firm size.

**Sector by firm size and presence of women in management/ownership**



Source: BEEPS

**Female Share and Firm Size by Broad Sectors**

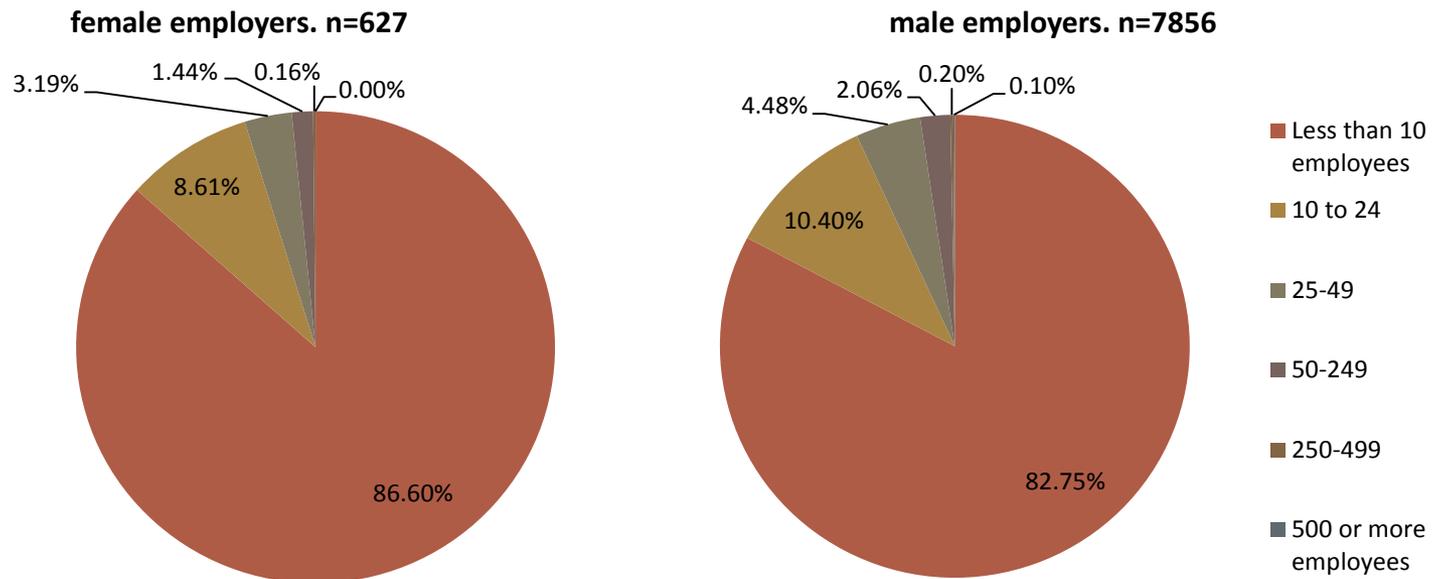


Source: SBS, Turkstat

# Are female headed firms different?

- As in most cases, female-led firms are smaller (but not significantly so)

Number of employees by sex of employer (%)

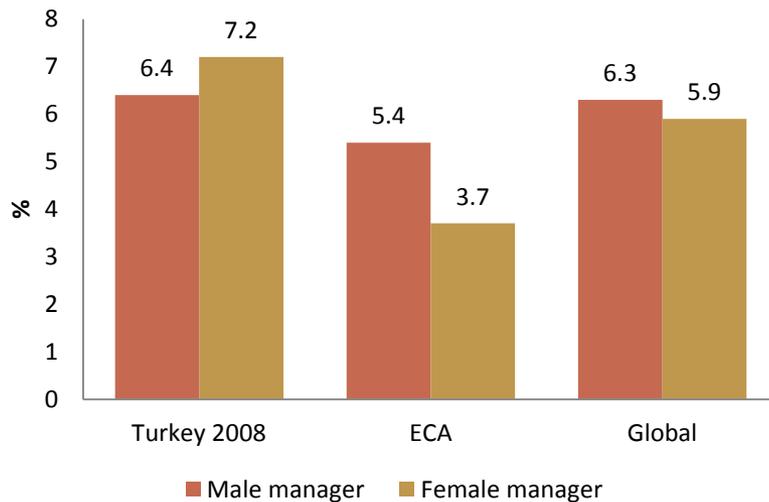


Source: LFS

# Does it pay to be an entrepreneur?

## Female-run firms grew faster than male-run firms and faster than female-run firms in ECA and globally in 2008

- Measured using employment growth -ratio of the annualized change in employment over the average employment of the initial and final year (Haltiwanger index).

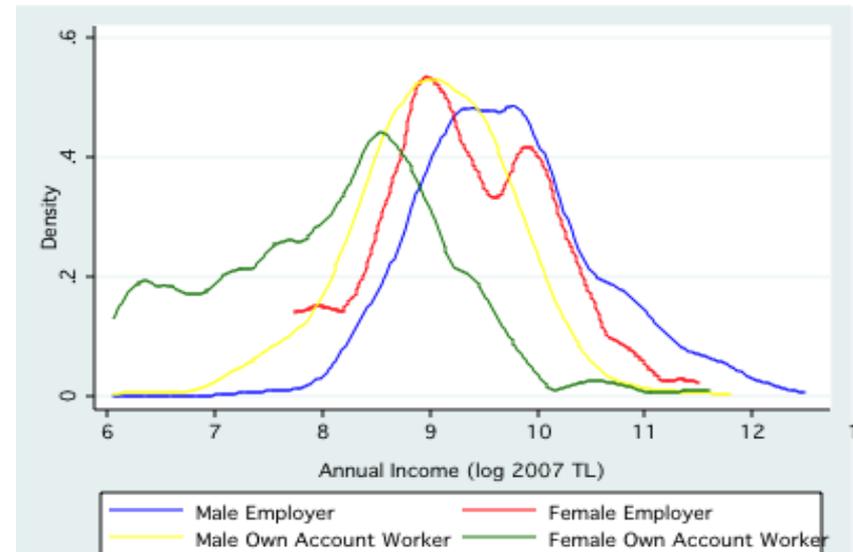


Source: BEEPS

## Among working women, employers make more money

- 60% more than full-time wage employees and more than twice as much as OAW,
- Male own-account workers earn almost as much as male full-time wage employees

Income distribution of entrepreneurs and own account workers by sex



# Does it pay to be an entrepreneur?

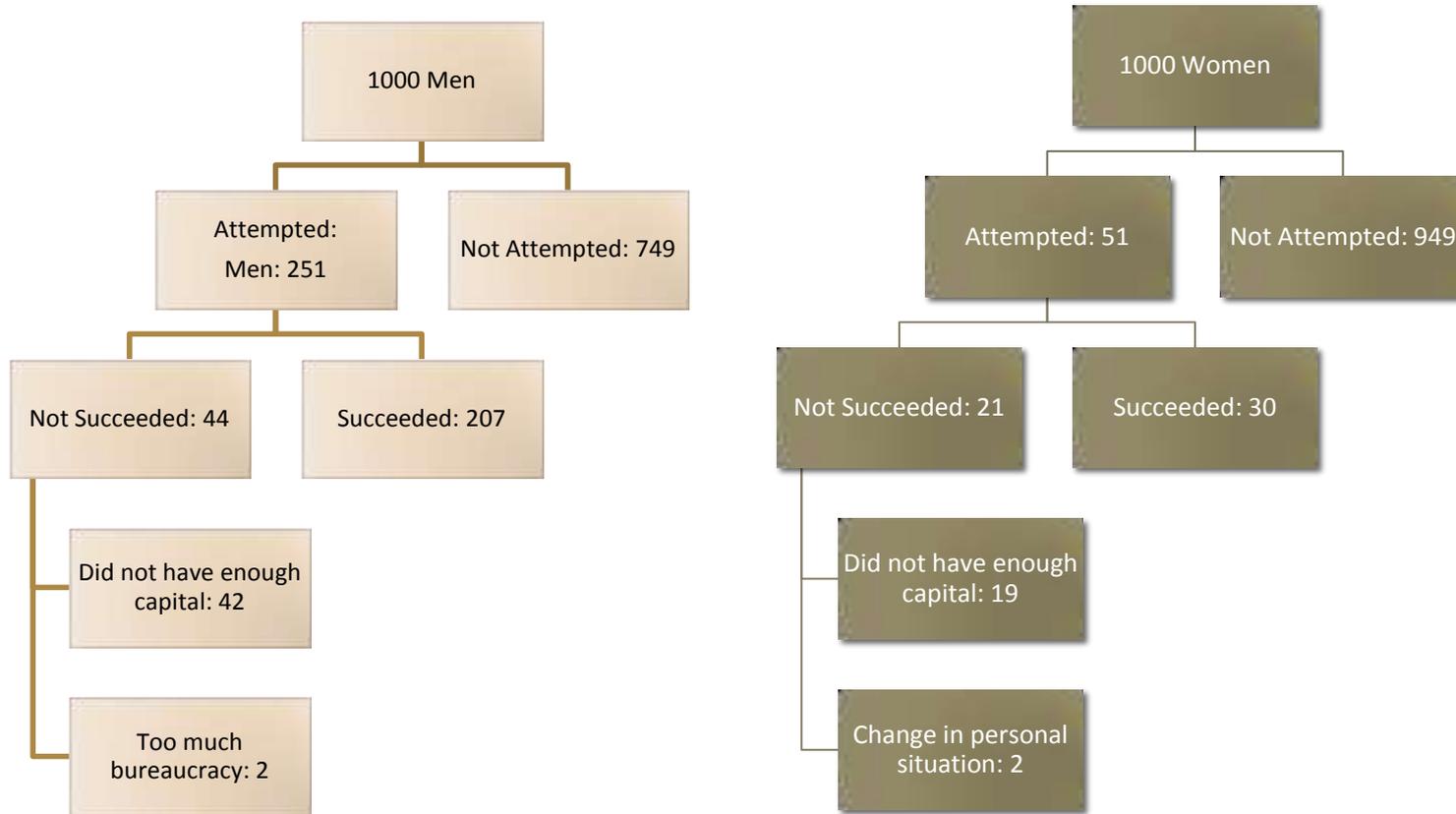
**The wage gap between female and male OAW is significant.** A female OAW earns on average about 45% of a male OAW earnings.

- One year of additional experience is associated with a 3% percent increase in average female OAW wages, double than for men.
- Female OAW with vocational or regular high school degrees make six times as much as female OAW with primary school degrees

**The income gap between male and female employers is also sizable.**

- At 0 years of tenure, female employers earn 74% of male employers. An additional year of tenure contributes 1.1 percent to the income of an average male employer but only 0.6 percent to the income of an average female employer.
- Once income of male and female employers operating in the same narrow sector are compared, relative income of female employers to male employers increases to the range of 72-74% (depending on tenure). Controlling by sector suppresses the role of tenure in explaining the income gap between male and female employers.

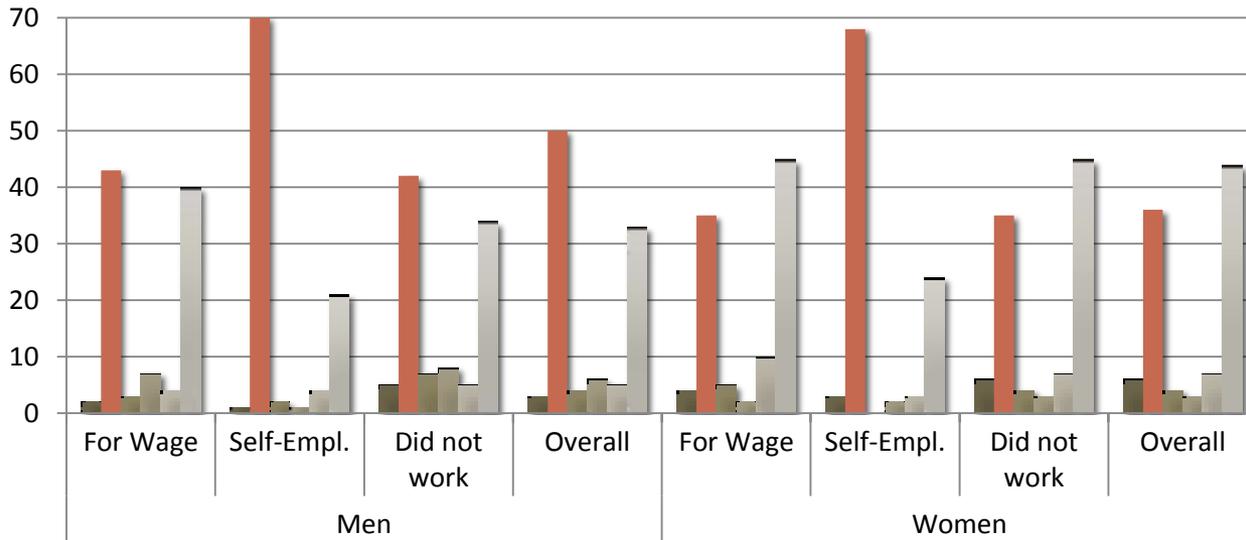
# Barriers: Low willingness to establish a business



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Being already active in the labor force increases attempt rate for men and women alike (30% for men and 11.5% for women), but being employed for a wage lowers them for men (16%) but is still higher for women (7%) when compared with the overall population (LFS regressions)

Desired work type by the work type employed during the last 12 months



Source: LITS 2010

- Don't know
- Self-Employed
- Employee in a Small Private Ent.
- Employee in a Large Private Ent.
- Employee in a State-Owned Ent.
- Government Employee

# Barriers: Low willingness to establish a business

**Out of 100 female employers in a year 't' 90 of them were also employers in the previous year. For male employers persistence rate is 83%.**

Entry rate for female employers is defined as the number of women that became an employer in the current year divided by the total number of female employers in that same year. Accordingly, exit rate is defined as the number of female employers that stop being employers in a given year divided by the total number of female employers the year before.

| Gender | Entry Rate | Exit Rate |
|--------|------------|-----------|
| Men    | 13.2       | 15.5      |
| Women  | 8.3        | 12.4      |

**Transition matrix for women in and out of entrepreneurship**

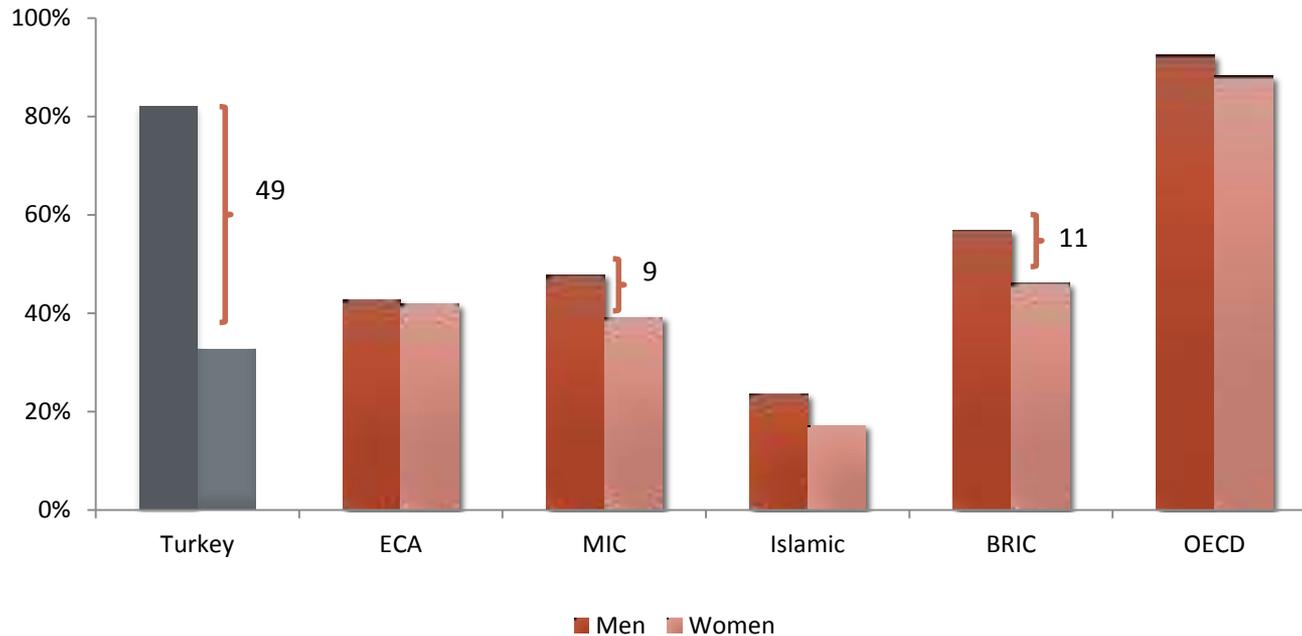
| Entry |               | t-1           |          |       |       |
|-------|---------------|---------------|----------|-------|-------|
|       |               | Wage Employee | Employer | OAW   | Other |
| t     | Wage Employee | 81.7          | 4.2      | 3.4   | 3.6   |
|       | Employer      | 0.1           | 86.0     | 0.6   | 0.0   |
|       | OAW           | 1.0           | 4.5      | 69.6  | 0.5   |
|       | Other         | 17.3          | 5.3      | 26.4  | 95.8  |
|       | Total         | 100.0         | 100.0    | 100.0 | 100.0 |

| Exit |               | t-1           |          |      |       |
|------|---------------|---------------|----------|------|-------|
|      |               | Wage Employee | Employer | OAW  | Other |
| T    | Wage Employee | 77.1          | 0.1      | 0.4  | 22.4  |
|      | Employer      | 1.9           | 90.0     | 2.4  | 5.7   |
|      | OAW           | 7.7           | 1.0      | 62.8 | 28.4  |
|      | Other         | 2.7           | 0.0      | 0.5  | 96.9  |

# Barriers: Social norms and culture

- **Qualitative work in two regions in Turkey: Gender norms appear to be the main factor affecting women's economic participation.**
  - Women are not traditionally expected to be working outside of the home, traveling for work, or starting a business;
  - Husbands typically have control of finances;
  - Women lacked support from husbands and families to get an education or a job or starting a business.
  - Employed and unemployed women: more supportive families, and a change in social norms for women's roles, would make a big difference in improving their access to employment and entrepreneurship.
- **Marriage is decisive in the early exit of women from the labor market, and from entrepreneurial activity.**
  - Decrease in female participation and increase in male participation following marriage. (at age 22 no gender differences, declining between ages 22-30, same age group that is increasing its overall female labor force participation).
- **Childcare is a barrier.**
  - Safe, reliable childcare is not often available, and when it is, it is too expensive. Women overwhelmingly reported that the cost of childcare completely counteracted the benefit of employment.
  - Subsidized or incentivized childcare was the most often cited policy which could significantly improve women's access to economic opportunities.
- **Interviewed women did not see entrepreneurship or self-employment as the alternative to combine their home production needs with paid employment.**

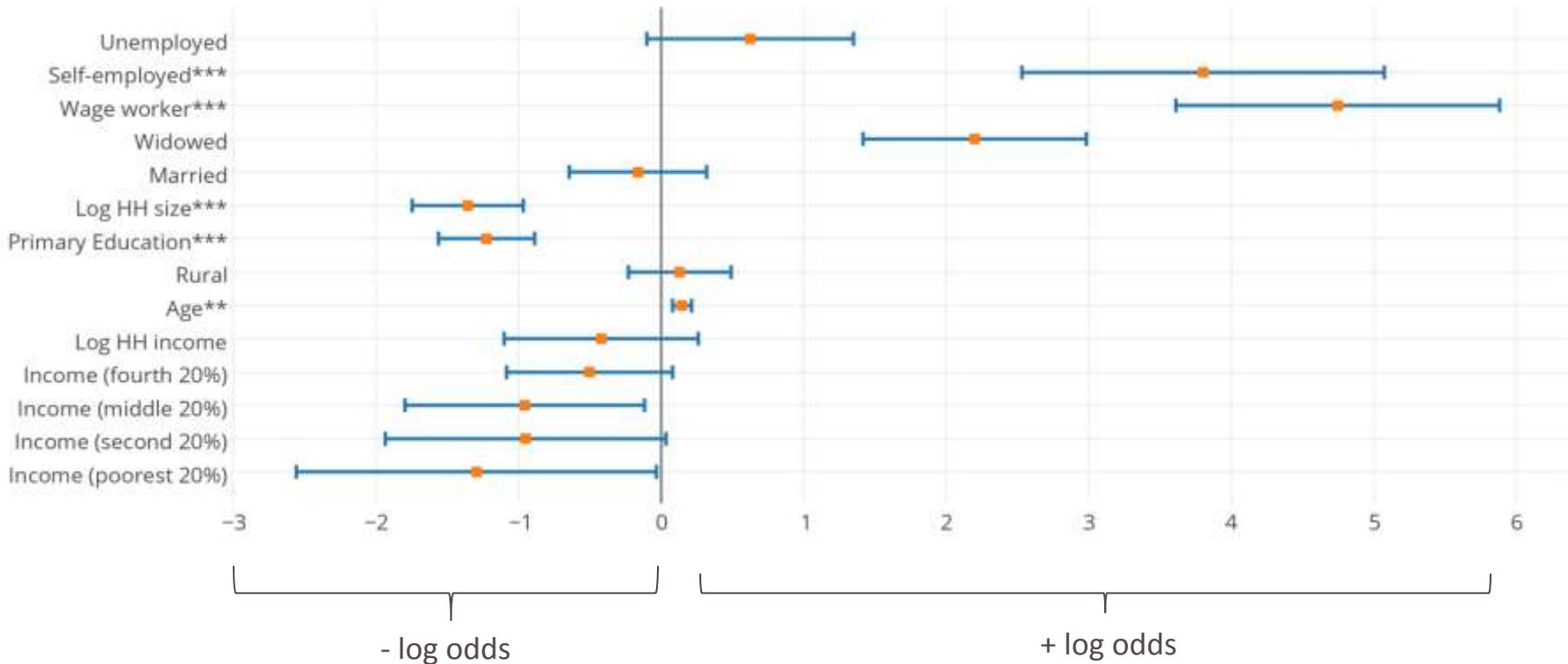
# Barriers: Access to finance



Turkey has the widest gap among middle-income countries. Estimates show that women in Turkey are 38 percentage points less likely than men to have an account, after controlling for other individual characteristics- income, employment, education, age.

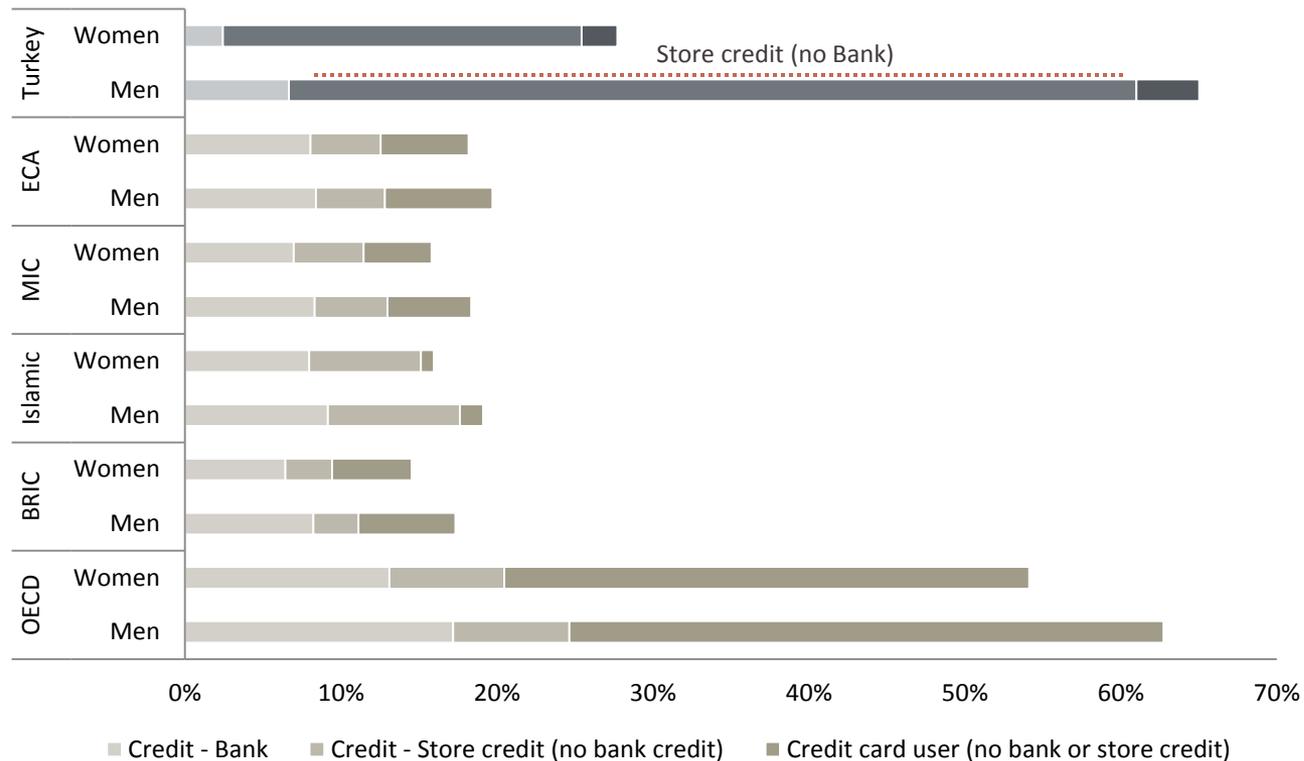
# Barriers: Access to finance

What explains account ownership for men and women in Turkey?



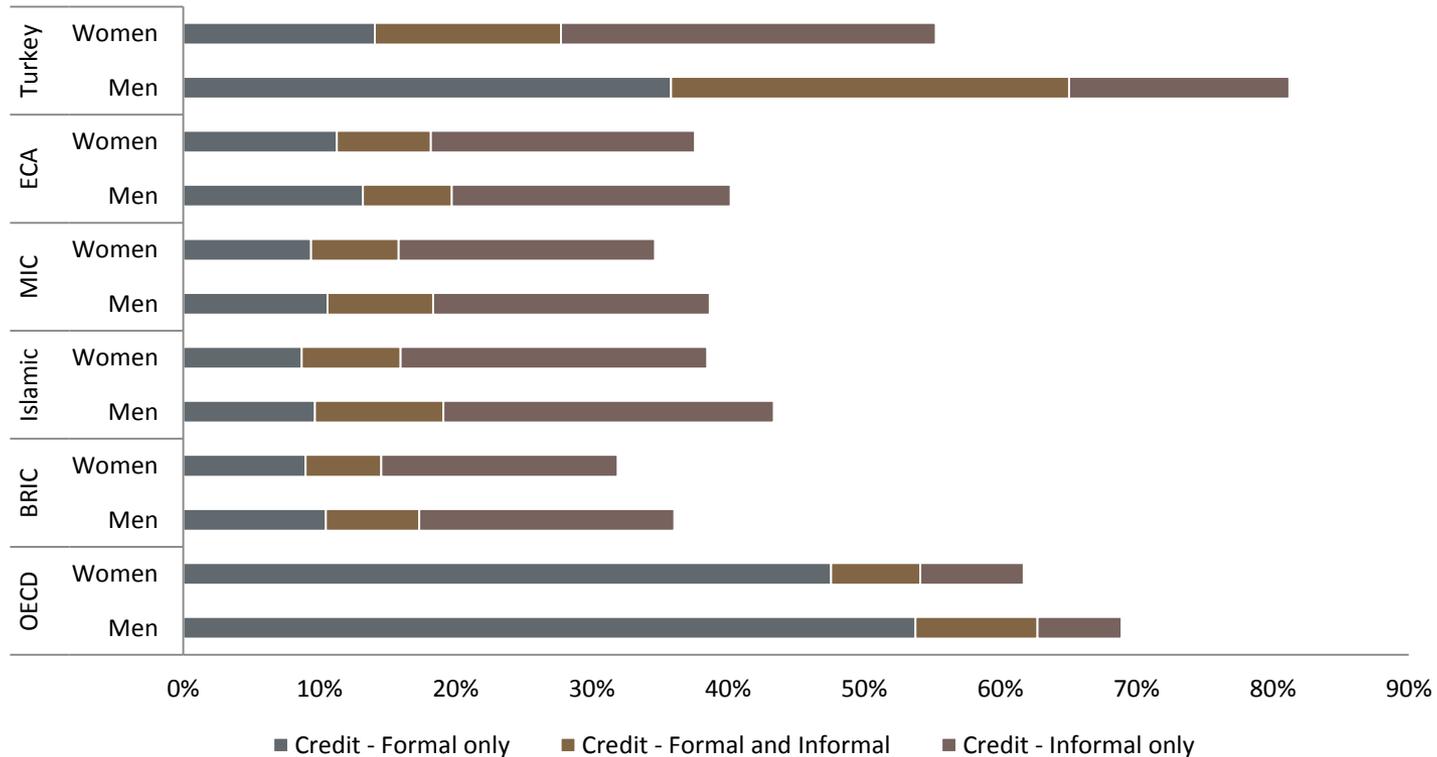
Women with more than a primary education are more likely to be banked, but this relationship between education and financial inclusion is not true for men.

# Only 5 percent of adults in Turkey report borrowing from a bank, credit union or MFI in the past year.



The use of store credit is much higher in Turkey. The low use of bank financing might be explained by the very high use of store credit reported by 43 percent of Turkish adults.

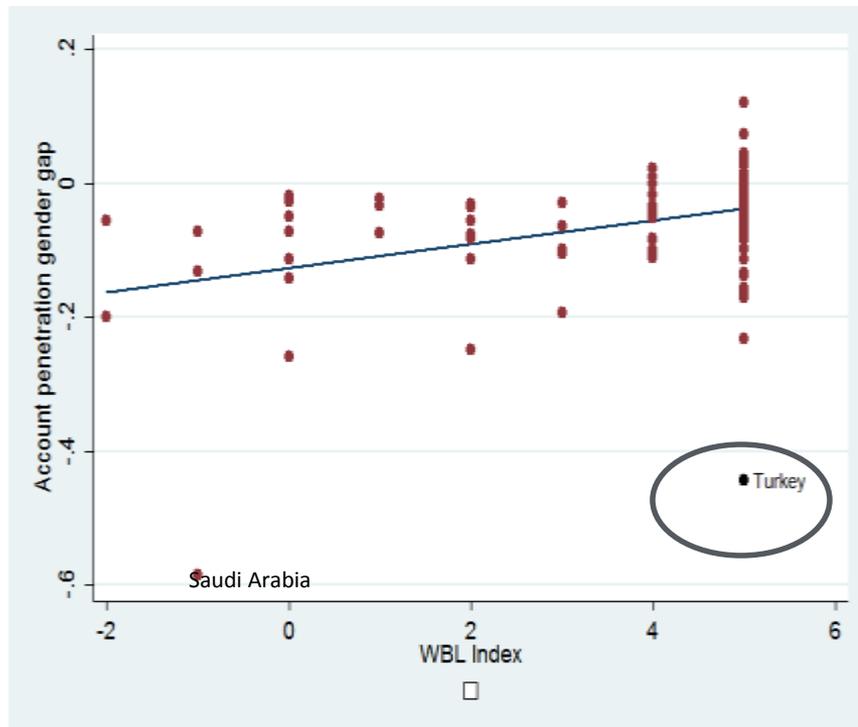
The main source of credit for men and women in Turkey are friends and family.



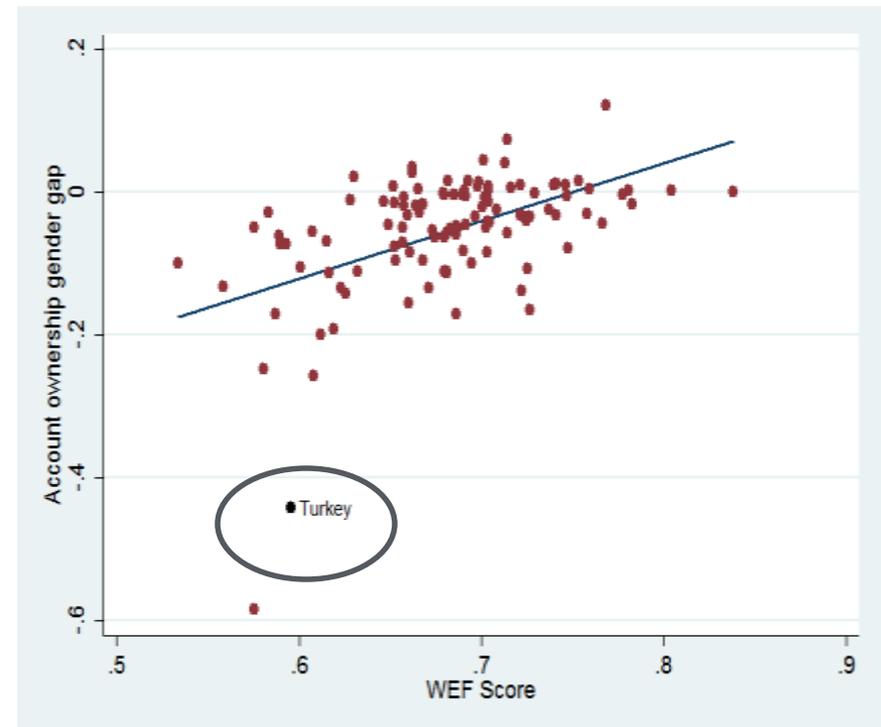
The most common reported reasons for taking out a loan in Turkey include emergencies or health purposes (44%), to pay school fees (31%), or to extend or repair one's home (18%).

# Gender Gap in Account Penetration and Legal and Cultural Norms

*Panel A: Women, Business and the Law*



*Panel B: World Economic Forum*



Panel A shows a weak relationship between legal restrictions to female employment and a gender gap in financial inclusion. Panel B shows a *de facto* measure of gender inequality, Turkey fares low on both ends.

# Summarizing

- Lower levels of entrepreneurship among women are associated with the overall low labor force participation of women in Turkey, in particular among the least educated.
- Main findings shed light on the role of education, social norms and culture in entering entrepreneurship.
  - Education level has a more important effect on women than men when deciding to become employers.
  - A main cultural barrier to female entrepreneurship is the assignment of traditional family roles that do not view women as working outside the home and put husbands in control of finances.
  - Low financial inclusion at the individual level is likely to impact success of female entrepreneurship.
- There are significant differences in sector concentration, productivity and growth of female-managed firms
  - Sector concentration can be observed at all levels, from own account workers to employers, with women more concentrated in the services sector.
  - The much discussed “female-firm underperformance hypothesis” in the literature (Chaganti and Parasuraman, 1996; Minniti 2009) does not appear to hold for Turkey, at least in what respects to female owned firms according to BEEPS.

# A note on the policy side...

**Within the existing stock of programs, vocational training programs have a dominant role.**

These trainings address the obstacles of inexperience and low education levels. (ISKUR).

A World Bank impact analysis of ISKUR programs revealed that the trainings make a small but significant impact on the likelihood of working, number of hours worked, and monthly income of the participants.

KOSGEB targets entrepreneurs and benefits women, but no measured impacts to date

**There is neither close follow up of program implementation nor the data to evaluate the impact of programs.** Data gaps exist on program budgets, target group specifications, characteristics of beneficiaries, program outcomes, and more.

Entrepreneurial Trainings, Courses and Trainees (by KOSGEB)

|                    | 2011         | 2012         |
|--------------------|--------------|--------------|
| Number of Courses  | 906          | 921          |
| Number of Trainees | 24.145       | 25.475       |
| Men                | 13.605 (56%) | 13.127 (52%) |
| Women              | 10.540 (44%) | 12.348 (48%) |

Source: Goksen et al 2013

# Annexes

## Female share and firm size relationship:

$$FS_{fy} = \beta_0 + \beta_1 Employment_{fy} + \beta_2 Sector_{fy} + \beta_3 Employment_{fy} * Sector_{fy} + \varepsilon_{fy} \quad (A3.1)$$

$f$  represents firm and  $y$  year.  $FS$  is % share of female employees in the total employees of a firm,  $Employment$  is log number of employees of a firm and  $Sector$  is a dummy representing the broad Sector (i.e. mining, manufacturing, construction or services) a firm operates. Omitted category for the Sector is Mining Industry. A *Sub-sector* corresponds to a 2-digit code of NACE Rev. 1.1.

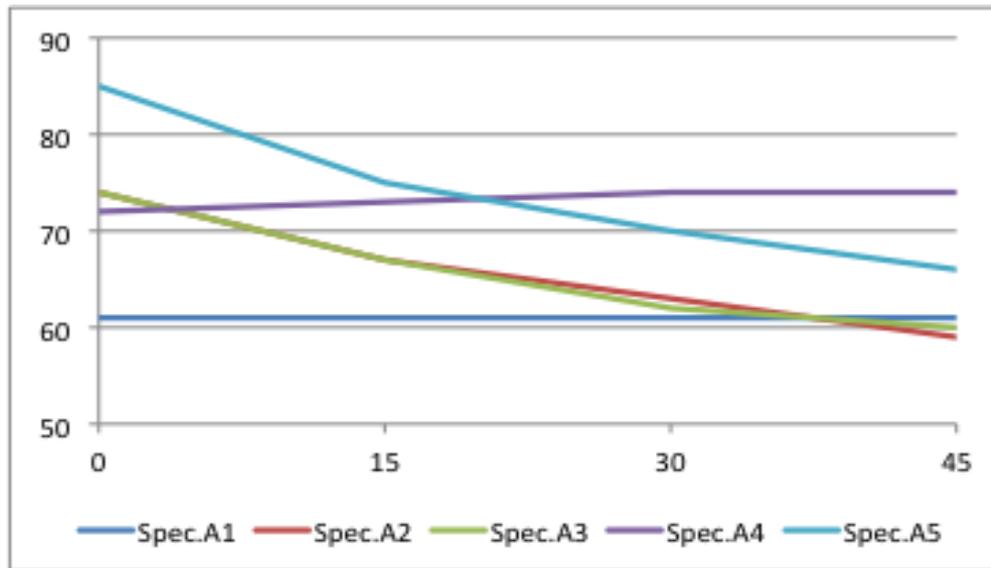
## Earnings gap

In order for a formal treatment of the income gap between male and female employers, employer income is run on female dummy in 5 specifications of the form below:

$$EmplIncome_{it} = \beta_0 + \beta_1 Female_{it} + \beta_2 Tenure_{it} + \beta_3 Female_{it} * Tenure_{it} + \sum_i \lambda_i Educ_{it} + \sum_i \gamma_i Sector_{it} + \varepsilon_{it} \quad (A)$$

where  $i$  denotes individuals and  $t$  year. Female takes 1 if the individual is a female and 0 if otherwise. Educ and Sector are Education and Sector dummies. Specification (A2) is run by adding tenure and interacting tenure with female dummy. Specification (A3) includes same variables as in Specification (A2), but it is run within educational attainment groups. Specification (A4) measures the income gap between male and female employers operating in the same sector and finally Specification (A5) compares the income gap between male and female employers that have the same education and operating in the same sector

## Female Employer Income (as % of that of Male) by Tenure



In order to reveal the role of tenure, education, sector operated and previous work type in explaining the income differential among female employers, a specification of below form run on the dataset including only female employers.

$$EmplIncome_{it} = \beta_0 + \beta_1 Tenure_{it} + \sum_j \lambda_j Educ_{it} + \sum_j \gamma_j Sector_{it} + \sum_j \Theta_j Prev_{it} + \varepsilon_{it} \quad (B)$$

| Regressor          | (B1)   | (B2)   | (B3)   | (B4)   |
|--------------------|--------|--------|--------|--------|
| Tenure (years)     | 223    | 90     | 130    | 183    |
| Middle School      | 2,754  |        | 13,293 |        |
| High School        | 13,172 |        | 18,985 |        |
| Vocational H. S.   | -1,323 |        | 3,274  |        |
| Higher Education   | 19,859 |        | 10,266 |        |
| Trade              |        | 18,966 | 11,231 |        |
| Accom. & Food S.   |        | 1,914  | 1,792  |        |
| Communication S.   |        | 16,913 | 337**  |        |
| Other Business S.  |        | 28,159 | 18,864 |        |
| Education Services |        | 15,503 | -534   |        |
| Health & Social S. |        | 40,128 | 30,610 |        |
| Other Services     |        | 5,353  | -8,965 |        |
| Own Account Worker |        |        |        | -5,135 |
| Not Working        |        |        |        | -7,826 |
| Constant           | 4,758  | 4,660  | 3,486  | 12,902 |
| R2                 | 0.32   | 0.38   | 0.46   | 0.04   |
| N. of Observations | 264K   | 264K   | 264K   | 136K   |

# Annexes

Relative education index:

$$\text{Index}_{ij} = \left( \sum_{f=1} \text{Educ}_f / N_f \right) / \left( \sum_{m=1} \text{Educ}_m / N_m \right)$$

where  $i$  represents sector,  $j$  occupation,  $f$  female employee,  $m$  male employee.  $N_f$  is the number of female in the sector-occupation,  $N_m$  is the number of male in the sector-occupation and  $\text{Educ}$  is the duration of educational attainment of an employee such that:

$$\text{Educ} = \begin{cases} 5, & \text{if educationalattainment} = \text{"primary"} \\ 8, & \text{if educationalattainment} = \text{"middle"} \\ 11, & \text{if educationalattainment} = \text{"high"} \text{ or } \text{"vocational"} \\ 14, & \text{if educationalattainment} = \text{"higher"} \end{cases}$$

Assignment of duration to each educational attainment is a critical step in computing the Index. 5 years is chosen for “primary” although this group includes employees that have less than 5 years of education or no education at all. Given that “primary” is a larger group for males, this choice is likely to result in a downward bias in the index rather than an upward bias. For robustness, computations repeated under various scenarios of education durations and obtained similar results at all attempts.