

WOMEN-LED ENTERPRISES IN TURKEY

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EXECUTIVE SUMMARY

The Business Environment and Enterprise Performance Surveys 2013 (BEEPS or Enterprise Surveys) conducted by the World Bank provides new opportunities to better understand obstacles to female entrepreneurship in Turkey and thereby develop more focused policies to improve it. The last BEEPS for Turkey, conducted between January 2013 and May 2014, covers 1,344 enterprises that employ at least 5 people and operate in industry or services all around Turkey. Those who are identified as “the top manager”, “the main decision maker” and “owner/one of the owners (by any share in the capital) of the enterprise” in the survey are referred to as the “leader of the enterprise” for the purpose of this study. The main findings of the study based on this identification are as follows:

Enterprise Profiles

Compared to those led by men, enterprises led by women are:

- More owned by foreign capital,
- More part of a larger company,
- Similar in terms of formal type (i.e. legal structure),
- More concentrated in textile, clothing, chemical products manufacturing industries but less in machinery, electronics and vehicles manufacturing as well as construction and services other than trade,
- More located in the Mediterranean and Black Sea regions but less in the Aegean region and particularly few in Eastern Anatolia,
- Established more recently,
- Medium scale in terms of employment and sales.

Enterprise Leaders

Compared to their male counterparts, female leaders are slightly older and slightly fewer of them are married. Although exploring entrepreneurship opportunities is the main reason for leaders of both gender to establish their business, necessity driven entrepreneurship plays a bigger role for female entrepreneurs.

Enterprise Performance

Regarding the relative performance of enterprises led by men and women:

- *Employment gap:* Enterprises led by women employed, on average, 27% less people (9.7 staff) than those led by men in 2013,
- The employment gap between male and women-led enterprises is relatively low due to the fact that enterprises led by women are concentrated in sectors with a higher average enterprise size and are more owned by foreign capital, which have on average, more employees than domestically owned enterprises,
- However, the fact that enterprises led by women are younger, contributes to the employment gap,
- *Employment growth:* In terms of employment growth over the 2010-2013 period, there is no significant difference between those enterprises led by men versus those led by women,
- Women-led enterprises are concentrated in sectors that recorded a better employment performance over 2010-2013,
- In contrast, being more owned by foreign capital had a negative effect in the relative employment performance of women-led enterprises over this period,
- *Sales gap:* Enterprises led by women had an average of 54% more sales (TL 2.03 millions) than those led by men in 2013,
- Some part of the sales gap in favor of women-led enterprises originates from the fact that women-led enterprises are more concentrated in sectors with higher average enterprise sales,
- Comparative sales figures of women-led enterprises are negatively affected by being younger (established later).

Business Environment Constraints

Compared to those led by men, enterprises led by women:

- Do not perceive most business environment issues as bigger obstacles for their operation,
- Apply less for operating licenses and it takes significantly more time for them to obtain it though the reasons for that are not clear,
- Benefit more from state-owned banks and non-bank financial institutions for securing loans.

I. INTRODUCTION

It is well documented that participation of women in economic life in Turkey is too low both compared to that of men in the country and that of women in countries of similar per capita income². This gender gap in economic participation is observed not only in participation in the labor market, but also in entrepreneurship. Although women in most countries lag behind men in entrepreneurship, the gap is particularly large in Turkey³.

Achieving gender equity in economic life is one of the main areas covered by the Turkey Country Partnership Strategy of the World Bank Group. One of the projects that the Bank has been implementing together with the Ministry of Family and Social Policies to this end is the “Increasing Women’s Access to Economic Opportunities”. This study aims to contribute to the project by identifying and analyzing gender aspects of entrepreneurship in Turkey.

The Business Environment and Enterprise Performance Surveys (BEEPS or Enterprise Surveys) of the World Bank provide an opportunity to better understand obstacles to female entrepreneurship in Turkey and thereby develop more focused policies to improve it. The most recent BEEPS for Turkey, conducted between January 2013 and May 2014, covers 1,344 enterprises that employ at least 5 person and operate in industry or services all around Turkey. The survey analyses enterprises in Turkey by employee size (of 5+ enterprises), geographical region and sector.

In addition to the main survey that includes questions about the business environment, a separate module on gender was included in the 2013 Turkey survey. The purpose of the gender module was to get a better understanding of the profiles and performance of enterprises led by women as well as the profiles of what we define as women company leaders. Questions that are included either in the main or gender module and are considered useful for the purpose of this study are given below:

- What is the gender of the top manager of the enterprise?
- What percentage of the enterprise belongs to women?
- Is the top manager the owner or one of the owners of the enterprise?
- Is the top manager the main decision maker at the same time?

² e.g. Hausmann et al., 2012.

³ e.g. Estrin and Mickiewicz, 2009; Georgellis and Wall, 2005; Kim, 2007; Minniti and Naude, 2010; De Bruin and et al., 2006; Minniti et al., 2005; Ökten, 2013.

- What is the educational attainment of the top manager, age and marital status of her/him?
- How did the main decision maker join the enterprise/ What is the reason for joining the enterprise?

Dataset and Methodology

The method followed to define “female entrepreneur” is a very critical step in the study. The first criterion for this is the female ownership in the enterprise. A quick analysis of this variable shows that out of 1,315 enterprises to be used in the analysis, 26.5% of them (25.3% once sampling weights are applied) are at least partially owned by women. At first glance, this is a quite satisfactory ratio with positive implications for women entrepreneurship in Turkey. On the other hand, a deeper analysis reveals that analysis based on women ownership might be misleading. This is because, only in 16 of 1,315 enterprises women have an ownership share above 50% and in an additional 10 enterprises they have an ownership share of 50%. Moreover, only 6 enterprises in the sample completely belong to women. In the bulk of enterprises surveyed, women either do not have any ownership or have only a nominal ownership.

These findings pose the following problem for the study: Neither decisions taken nor the performance of enterprises with a nominal female ownership can be attributed to women. The number of enterprises with at least equal female participation in ownership (0.6%) is very low to conduct any sound analysis. Because of these two reasons, identifying female entrepreneurs based on ownership in the enterprise is not a plausible option.

Instead, the gender of the manager, gender of the decision maker and female ownership are used together to define and identify “female entrepreneurs” in this study. In the dataset, the top manager of 87 of 1,315 enterprises is a woman. In 79 of these 87 enterprises, the female top manager is also the main decision maker. Finally, in 70 of these 79 enterprises the top manager is also the owner or one of the owners of the enterprise. We define these 70 women as “women leaders”, these 70 enterprises as “women-led enterprises” and consider this to be the main category of analysis. This corresponds to 5.3% of all enterprises in our sample.

In contrast, we find that 890 of 1,315 enterprises are led by men, when this definition is applied. For comparison purposes, we define a third category of enterprises: “women enterprises” – namely enterprises with any share of female ownership. 349 enterprises

in the survey fall in this category. On the other hand, we do not consider defining enterprises with male ownership as a forth category of comparison to be useful. This is because such a category would include almost all enterprises in the dataset since only 6 enterprises in the dataset completely belong to women.

Although the figure we find for the share of women-led enterprises (5.3%) is quite low, it is consistent with the documented gender gap for entrepreneurship in the world and particularly in Turkey. Using Household Labor Force Surveys, Ökten (2013) reports that 7.4% of all business owners in Turkey are women. Although the exact ratio changes by country, in almost all countries analyzed in the literature, business owners are overwhelmingly male (Georgellis and Wall, 2005; Minniti et al., 2005; Kim, 2007; Sabarwal and Terrell, 2008; Minniti and Naude, 2010).

There are two caveats of our dataset: (1) The BEEPS sample excludes enterprises with less than 5 employees. As such findings may not reflect profiles of women-led and women-owned start-ups. (2) The selected women-led enterprises sample largely excludes the category of women-owned enterprises, which is a more common definition for similar research and has been more widely studied in Turkey.

Finally, before analyzing the 2013 Survey in detail, it is useful to compare 2008 and 2013 surveys in terms of basic indicators relating to female participation in the economy. A first analysis of the 2013 Survey reveals that female participation in the economy decreased over the period of 2008-2013 both for employment and entrepreneurship. In the 2008 survey, 12% of enterprises were women-led. In contrast, the survey of 2013 found that only 5% of enterprises were women-led. In addition, the share of enterprises with female ownership decreased from 41% to 25% over that period. Finally, according to both surveys, the share of women in all employed people decreased from 25% to 22% over the period (World Bank, 2014)⁴.

The outline of this study is as follows: The second section compares profiles of entrepreneurs led by men versus those led by women. So, the basic characteristics of enterprises are compared by gender of the leader. The third section compares the profiles of the company leaders themselves. The forth section analyzes performances of enterprises by gender of the leader and finally the fifth section analyses the perception of business environment constraints by gender of the business leader.

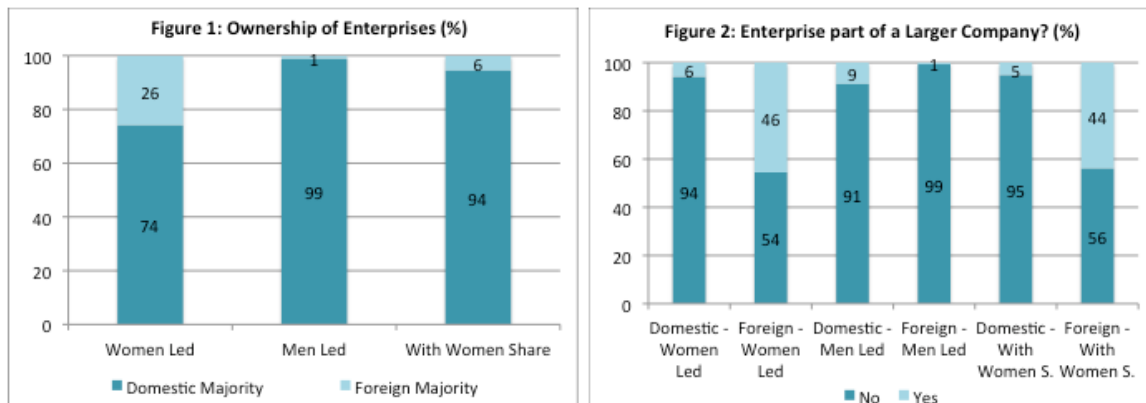
⁴ These figures indicate a surprising negative trend for female entrepreneurship and economic participation in Turkey. There is an ongoing effort that aims to reveal whether any issues during the implementation of the Survey by the contractor is the reason for such a surprising finding.

II. COMPANY PROFILES – CHARACTERISTICS OF ENTERPRISES BY GENDER OF THE LEADER

This section looks at how enterprises led by men and those led by women differ with regards to foreign ownership in their capital, legal type, sector and geographical region in which they operate, age, employment and sales volume.

Foreign Ownership

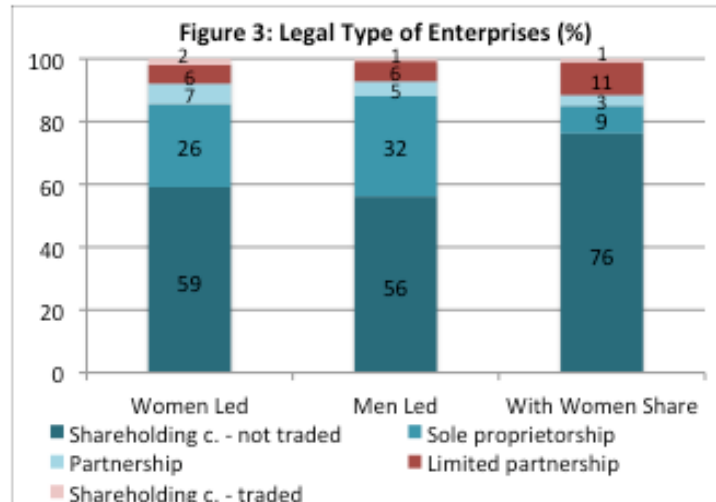
Patterns of foreign capital in the ownership of enterprises are given in Figure-1. In this Figure, those enterprises with a minimum 50% of foreign capital are categorized as “foreign-owned”, and others are categorized as “domestically-owned”. Figure-1 demonstrates that 26% of enterprises led by women in the sample are foreign-owned. In contrast, only 1% of those led by men are foreign-owned. *Comparing women-led enterprises and enterprises with women share:* The corresponding share of foreign capital in enterprises with women share is only 6%. As such, more women-led enterprises have foreign ownership compared to both men-led enterprises as well as enterprises with women share.



Findings in Figure-1 lead to the question of whether enterprises led by women are local offices or subsidiaries of multinational corporations. This is studied in Figure-2. In the Figure enterprises are classified both on the basis of the gender of the leader and the foreign/domestic ownership. It is noteworthy that almost half of the enterprises led by women and which are at the same time foreign-owned are part of a larger company. On the other hand, only 1% of enterprises led by men and which are at the same time foreign-owned, are part of a larger company. As for domestically-owned enterprises, incidence of being part of a larger company is slightly more frequent among those led by men (9%) relative to those led by women (6%).

Legal Type

Figure-3 provides legal types of enterprises by gender of the leader. In general, there is not a big difference between legal type of enterprises led by men and women. More than 50% of enterprises led by men or women are in the form of shareholding companies with no shares traded. Sole proprietorship follows with a share of around 30%. 2% of enterprises led by women and 1% of those led by men are in the form of shareholding companies with traded shares. *Comparing women-led enterprises and enterprises with women share:* As has been observed with previous characteristics



examined, enterprises with women share demonstrate very different characteristics in terms legal type as well. 76% of enterprises with women share are shareholding companies with no shares traded. In contrast, only 9% of enterprises with women share are in the form of sole proprietorship.

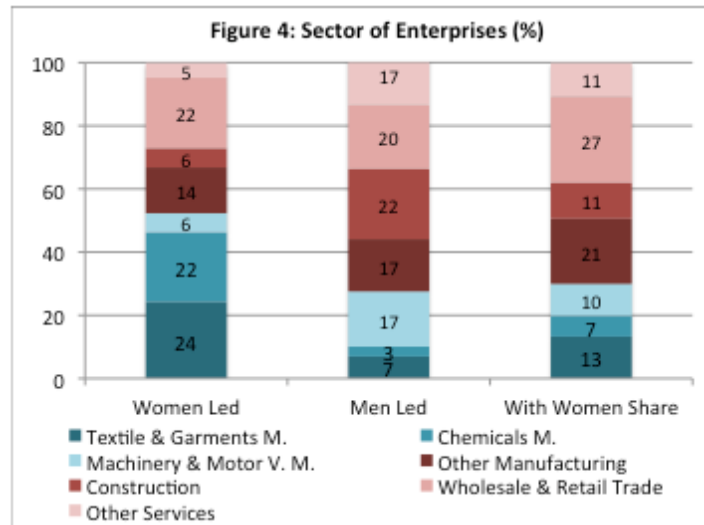
Sector Distribution

Next, we investigate sector distribution of enterprises. There is a high number of studies in the literature documenting that female and male business owners are concentrated in different sectors. Klapper and Parker (2010) reports that women-owned businesses are more in labor intensive sectors such as trade and services. Singh and et al. (2001) documents that women-owned business are concentrated in sectors with lower profits. Both Menzies et al. (2004) and Morris et al. (2006) find that only a slight portion of women-owned businesses operate in sectors with high-growth prospects and technology intensive. Analyzing household labor force surveys, Ökten (2013) documents that female owners are more concentrated in financial services, and social and education services in the Turkish Economy but less in construction, transportation and manufacturing industry.

Following the literature review on the subject, Figure-4 demonstrates sector distribution of enterprises in BEEPS. It is striking that almost half of women -led enterprises operate in two sectors. 24% of enterprises led by women operate in textile and clothing manufacturing and 22% of them operate in chemicals and chemical products manufacturing⁵.

Concentration of women-led enterprises in these two sectors are far above the concentration of men-led enterprises. In contrast, women-led enterprises are far less concentrated in machinery, electronics and

motor vehicles manufacturing, construction, and services other than wholesale and retail trade compared to those led by men. The level concentration of women and men-led enterprises are close to each other in other manufacturing and wholesale and retail trade services.



Findings presented in Figure-4 are somewhat different from the findings of Ökten (2013) for Turkey and studies mentioned above for other countries. The share of female enterprises operating in the services sector (27%) is much lower than those reported in other studies. The reason for this discrepancy is assumed to be a result of the fact that only enterprises with at least 5 employees are included in this study. Therefore, a high share of services enterprises are excluded from this study relative to manufacturing enterprises because average employee size of retail trade services enterprises are, on average, lower than others in the economy.

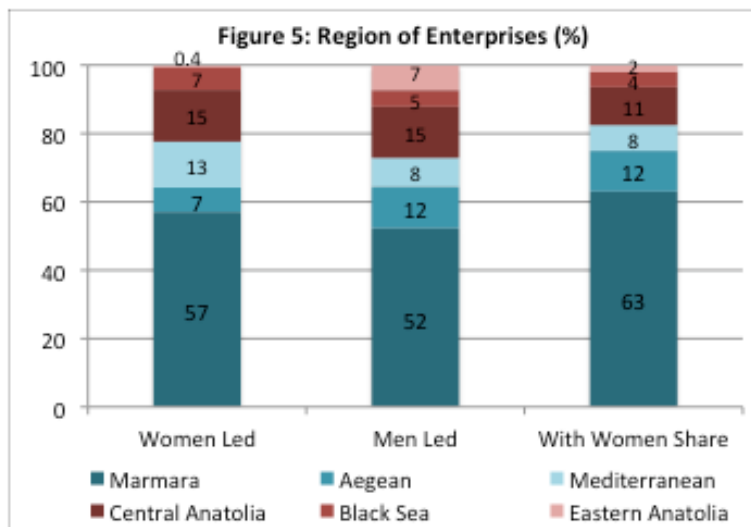
Geographic Distribution

Figure-5 presents the correlation between gender of the leader and the geographical region of enterprises. In this Figure, two official regions - Eastern Anatolia and Southeastern Anatolia - are covered under the Eastern Anatolia category. All other regions in the Figure correspond to official regions with the same name. For all three

⁵ Within the chemical products manufacturing sector are base chemicals, paints, agricultural chemicals, explosives, pharmaceuticals, cosmetics, cleaning items and items made of plastic and rubber.

enterprise types, particularly for those with women share, the Marmara region, which includes Istanbul, is the one with the highest share of enterprises led by women by a large margin.

Enterprises led by women are concentrated more in Mediterranean, Black Sea and

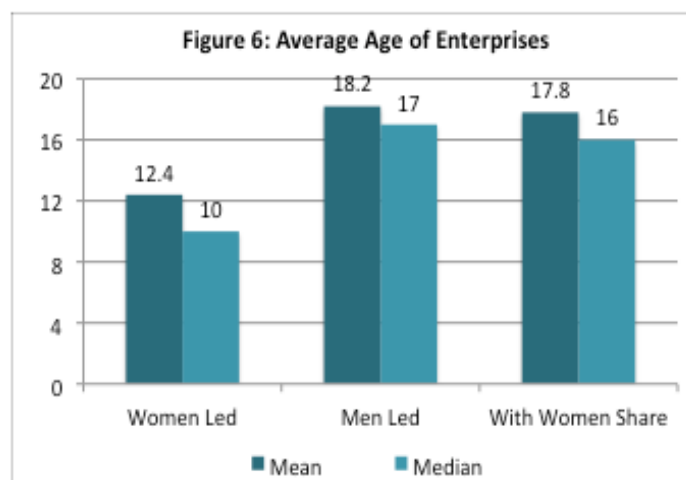


Marmara relative to those led by men. Enterprises led by women and those led by men are equally concentrated in Central Anatolia. Enterprises led by women are less concentrated than those led by men in the Aegean and Eastern Anatolia. The difference is particularly striking in the Eastern

Anatolia region. 7% of all enterprises led by men are located in this region. The share of the region in all enterprises led by women is only 0.4%. Finally, relative to those led by men, enterprises with women share are equal or less concentrated in regions other than Istanbul but significantly higher concentrated in Istanbul (52 vs. 63%).

Age of Enterprises

Figure-6 compares average age of enterprises led by men and women. The mean and median age of enterprises led by women are 6 years (32%) and 7 years (42%) lower than mean and median age of those led by men, respectively. Enterprises with women share have similar average age with those led by men. While interpreting these numbers, it should be remembered that they are computed using a

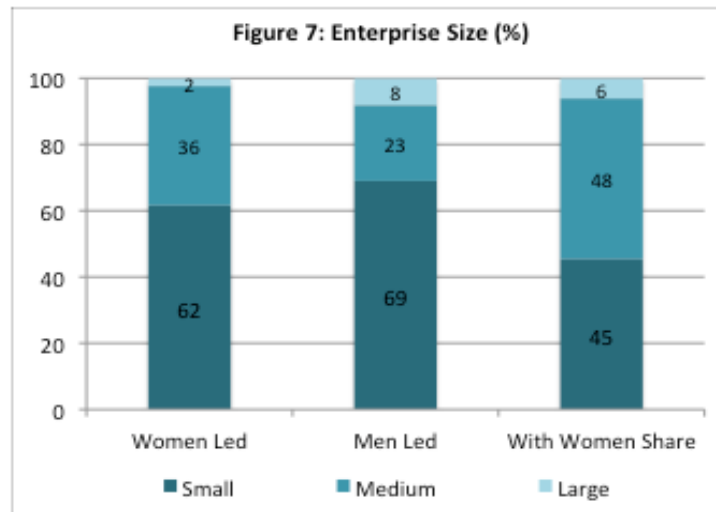


dataset composed of enterprises with at least 5 employees. If enterprises with less than

5 employees had been included in the dataset, average enterprise age could be expected to be lower for all three types of enterprises in the Figure.

Enterprise Size By Number of Employees

It is commonly reported in the literature that women-owned businesses are smaller in terms of employees than those owned by men (Dureitz and Henrekson, 2000; Klapper and Parker, 2010). Turkey is not an exception to this. Compared to those owned by men, women-owned businesses in Turkey are concentrated in employment levels less than 10 (Ökten, 2013). Figure-7 analyzes the case for Turkey using BEEPS data. Enterprises are categorized into 3 groups by employment level. Those employing between 5 and 19 are classified as “small”, those employing between 20 and 99 as “medium” and those more than 99 as “large” enterprises.

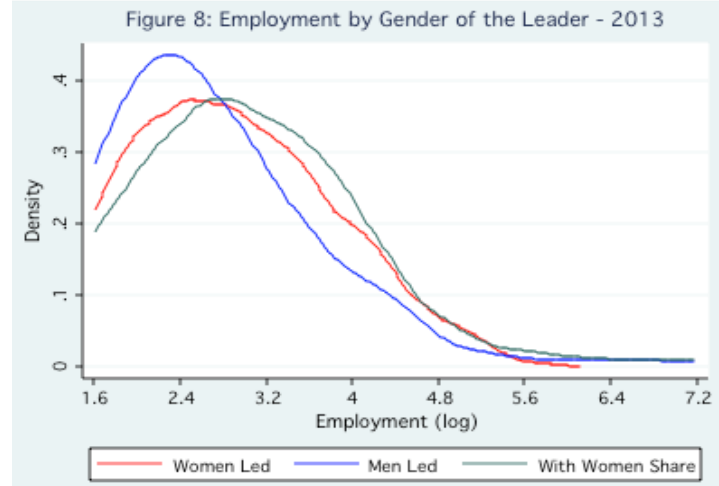


The Figure yields some interesting findings. Relative to enterprises led by men, women-led enterprises have a lower concentration not only in large but also in small-sized enterprises. 8% of all enterprises led by men but only 2% of women-led enterprises are large by employment. In contrast, medium-size enterprises have a high representation among women-led enterprises (36%). *Comparing women-led enterprises and enterprises with women share:* It is also noteworthy that the share of small-size enterprises is the lowest for enterprises with women share. In conclusion, women-led enterprises are mostly medium sized while those with women share are mostly small.

In order to provide a more complete analysis of enterprise size, employment distributions of enterprises by gender of the leader are given in Figure-8. The vertical axis shows the density and the horizontal axis shows the number of employees in logarithmic scale. The density is proportional to the number of enterprises that fall in that specific employment level⁶. The Figure demonstrates very clearly that the peak of

⁶ Since only enterprises with at least 5 employees are included in the analysis, the Figure horizontally starts from the value of 1.6, which is the logarithm of 5.

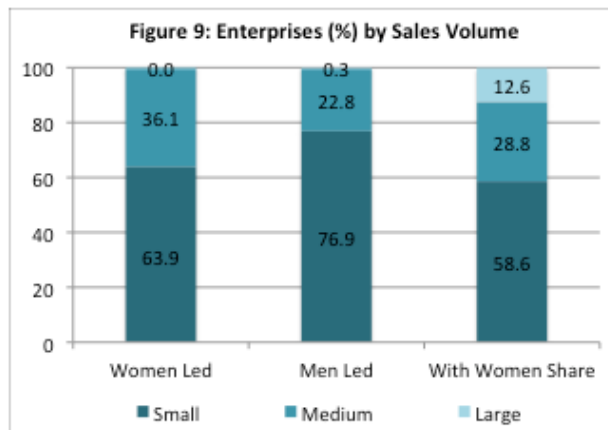
the line that represents women-led enterprises is at the right of the peak of the line that represents men-led enterprises. This roughly implies that male leaders are concentrated in small-size enterprises relative to female leaders. On the other hand, there is no women-led enterprise in the sample above the log employment level of 6, which corresponds to 400 in normal scale. This indicates that male leaders are also concentrated in large-scale enterprises relative to female leaders. Put differently, female leaders in the sample are more concentrated in medium-size enterprises. Findings in Figure-8 are similar to findings in Figure-7. Moreover, Figure-



8 demonstrates that enterprises with women share are the largest among types of enterprises compared. On the other hand, based on previous studies in the literature, it would be safe to claim that concentration of female leaders would move towards smaller enterprises, if enterprises with less than 5 employees had been included in the sample.

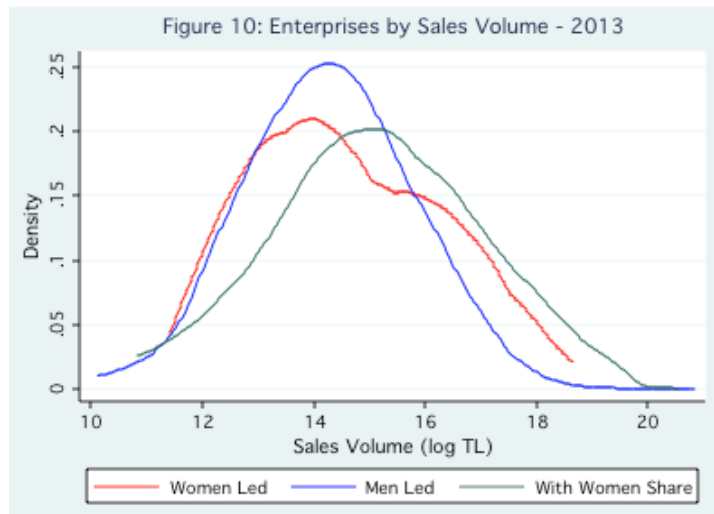
Enterprise Size by Sales Volume

In this last section, female and men-led enterprises are compared based on their sales volume in Figure-9. Previous studies in the literature report that enterprises owned by women have lower average sales volume (Chaganti and Parasuraman, 1996; Minniti, 2009). To begin with, Figure-9 provides sales categories of enterprises. 3 categories of enterprises are defined by their sales figures: i. small: those with lower than TL 5 million sales annually, ii. medium: more than 5 million and less than 50 million sales, iii. large: more than 50 million sales. Relative to enterprises led by men, enterprises led by women are less represented in the large and small sales categories. There is no women-



led enterprise with 50+ million sales in the sample. The concentration of women led enterprises in the medium sales category is similar to the concentration of these enterprises in the medium employee size category documented in Figure-7. Lastly, enterprises with women share have the largest concentration in the large sales category by a large margin.

A more detailed analysis of the sales volume of enterprises, sales distributions of enterprises by gender of the leader is provided in Figure-10. Sales volume on the



horizontal axis is shown in log Turkish Lira in year 2013 values. It is obvious in the Figure that the lowest sales volume among enterprises led by women are higher than the lowest sales volume among enterprises led by men. At the same time, the highest sales volume among women-led enterprises is much lower than the highest sales volume

among men-led enterprises. In other words, women-led enterprises are more concentrated in medium scale sales relative to those led by men.

On the other hand, enterprises with women share behave more like women-led enterprises on the lower end of the sales scale but like men-led enterprises on the higher end of the sales scale. Moreover, the peak point of the distribution line for this category is at the right of both, the one for women led and male led enterprises. In general, findings in Figure-10 are consistent with the findings documented in Figure-9.

Summary of Findings

- Women-led enterprises are more foreign-owned (compared to men-led enterprises).
- Those foreign-owned and women-led enterprises are to a large extent part of a larger legal entity (e.g. a group of companies or a holding structure).
- There is no significant difference between women and men-led enterprises in terms of formal enterprise type.

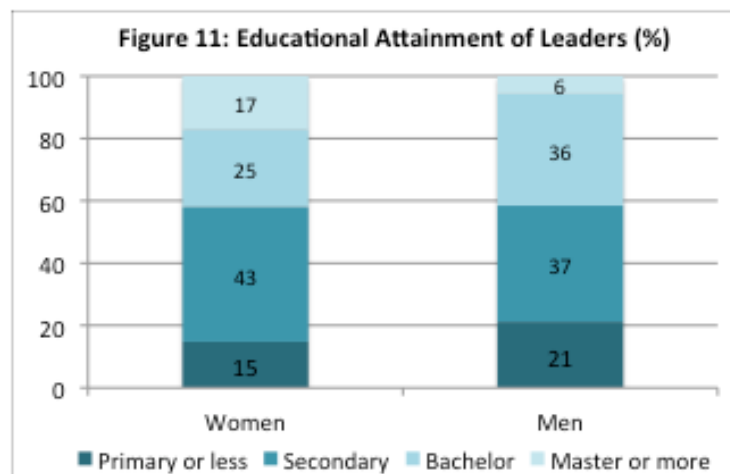
- Women-led enterprises are more concentrated in textile and clothes manufacturing, chemical products manufacturing but less in machinery, electronics and motor vehicles manufacturing, construction, and services other than trade.
- Women-led enterprises are more concentrated in the Mediterranean and Black Sea regions but less in the Aegean region and particularly sparsely represented in Eastern Anatolia.
- Average age of women-led enterprises is significantly lower.
- Women-led enterprises are more medium-size enterprises in terms of employment and sales volume.

III. LEADER PROFILES - PERSONAL CHARACTERISTICS OF LEADERS BY GENDER

This section aims to answer questions on whether there are significant differences in education, marital status, and number of children as well as motivation for entrepreneurship and previous jobs of female and male leaders.

Education

First, Figure-11 provides information about the educational attainment of leaders. The share of those having a secondary degree or less among all leaders of that specific gender is the same for both genders (58%). However, within the group of “secondary or less”, the share of the secondary school category is higher among female leaders (43%) than its share among male leaders (37%). A similar situation in favor of female leaders is also observed at the higher end of the education ladder. Although the share of female and male leaders with a bachelor’s degree or more in all leaders of each gender is the same (42%), the share of women with a master’s or higher degree (17%) is almost three times as much as the share of men with a master’s or higher degree (6%). Based on these findings, it can be concluded



that the average educational attainment of female leaders is higher than that of male leaders in Turkey. This result is consistent with Ökten (2013), who reports using household data that although the share of female owners is only 7% in all owners, women have a 15% share among owners with a university or higher degree.

Marital Status

Basic civil properties of male and female leaders are given in Figure-12. On average, female leaders are 1.6 years older than their male counterparts. A slightly lower share of female leaders are married and they have, on average, 0.1 less child than male leaders.

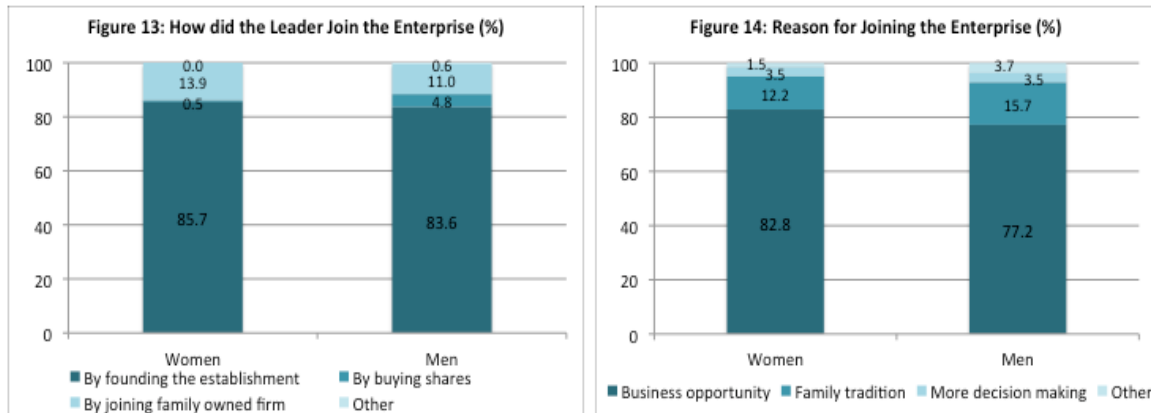
Figure-12: Basic Civil Properties of Leaders

Age	Mean	Median
Female Leader	44.8	44
Male Leader	43.2	44
Married?	Yes	No
Female Leader	87.2	12.8
Male Leader	93.7	6.3
Number of Children	Mean	Median
Female Leader	1.35	2
Male Leader	1.25	2

Findings that there is a higher share of older and unmarried women among female leaders are important from the policy perspective as this might indicate social norms and discrimination in the work life against married women particularly for rising to leadership positions. This might further indicate that marriage and children might be a deterrent factor for women leaders.

Motivation for Entrepreneurship

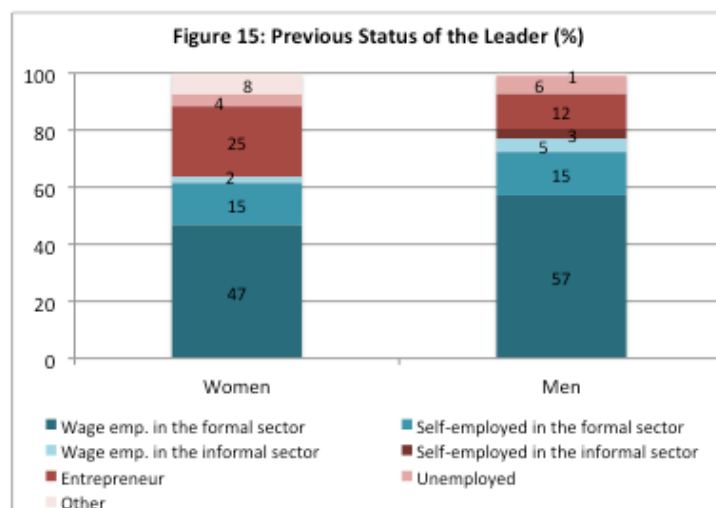
Figure-13 and Figure-14 provide insights into how leaders differ in terms of motivation for and means of joining/founding their enterprise. Figure-13 indicates that the majority of both male and female leaders joined their enterprises by establishing them. Joining the family company is the second most common path for leaders of both genders. On the other hand, 5% of male leaders joined their enterprise by buying company shares. In contrast, this avenue for joining the enterprise is nonexistent for female leaders in the dataset surveyed.



In parallel to the findings in Figure-13, Figure-14 reveals that majority of both male and female leaders joined/established their enterprise to explore entrepreneurship opportunities. This is followed by joining their company as part of a family tradition or family business as the second most common motivation. A number of studies in the literature document that exploring entrepreneurship opportunities is the main motivation for women and men to establish a company (Ljunggren and Kolvereid, 1996; Shabbir and Di Gregorio, 1996; Maysami and Goby, 1999; Werner and Kay, 2006).

Previous Employment

Lastly, Figure-15 shows the employment status of male and female leaders before joining/establishing the enterprise. 47% of female leaders and 57% of male leaders were formal wage employees before starting to work at their current enterprises. 15% of both male and female leaders were self-employed formally. The biggest difference between male and female leaders are observed in informal self-employment. In contrast to only 12% of male leaders, 25% of female leaders were self-employed informally before starting to work at their current enterprises. Moreover, in contrast to only 1% of male leaders, 8% of female leaders were unemployed.



Summary of Findings

- Female leaders are slightly older and the share of married leaders among them is lower relative to their male counterparts.
- Exploring entrepreneurship opportunities is the major motivation for leaders of both genders for establishing a business.
- Need-based entrepreneurship might be more common among female leaders than male leaders.

IV. PERFORMANCES OF ENTERPRISES BY GENDER OF THE LEADER

It is frequently reported in the literature that the performance of businesses owned by women is worse than the performance of those owned by men in terms of basic business indicators such as profitability, sales and growth (Hisrich and Brush, 1987; Loscocco and Robinson, 1991; Bosma et al., 2004; De Mel et al., 2009). It is shown in section 2 of this study that women-led enterprises in the sample in Turkey are concentrated in the medium category in terms of employment and sales levels. Using an econometric analysis, the relation between performance of enterprises and gender of the leader is examined in more detail in this section.

Employment Performance

The results of this regression is given in Figure A-1 in the Appendix. The coefficient of interest, gender dummy, in specification (I) takes a value of -9.7. This means that women-led enterprises, on average, have 27% less employees (9.7 staff) than men-led enterprises. Following this first specification, variables representing sector, geographical region, foreign ownership status, legal type and age of enterprises are added to the regression.

In specification (II), the estimate coefficient for the gender variable increases to 22, meaning that average employment of women-led enterprises is 22 people fewer than the average employment of men-led enterprises operating in the same sector. As the employment differences in favor of men-led enterprises increase significantly once comparison is conducted within sectors, we can conclude that women-led enterprises are more concentrated in sectors with higher average employment. We can also conclude that this situation helps women-led businesses keep the employment differential at a relatively low level (9.7).

Similarly, once the comparison is conducted within specific foreign ownership categories (i.e. those domestically owned are compared with each other and those foreign-owned with each other) the employment difference increases to 33.9 (specification IV). This result indicates that the general employment differential between women and men-led enterprises is limited (9.7) because women-led businesses are more foreign-owned, which, on average, have higher employment than domestically-owned enterprises. In other words, if the ownership status of women and men-led businesses were same, then the employment difference would be much above its current level in favor of men-led enterprises. This means that the low employment differential between women and men-led enterprises is driven by the difference in ownership status of women and men-led businesses. On the other hand, once region and legal type variables are added separately in Specification (III) and (V), the value that the gender dummy takes, does almost not change. This is quite an expected result because as seen in Figure 3 and Figure 5, men and women-led businesses do not differ significantly in regional distribution and legal type.

Lastly, the age of the enterprise is added to the analysis in Specification (VI). This time the value that the gender dummy takes decreases to 5.9 from 9.7. That is, once women and men-led enterprises of similar age are compared, women-led enterprises have an average of 5.9 fewer employees. This finding is not surprising because the age variable in the same column takes a value of 0.67 and Figure-6 demonstrated that women-led enterprises are significantly younger. In other words, one year of additional enterprise age is associated with an average of 0.67 more employees. Part of the measured 9.7 employment difference between men and women-led enterprises is related to the fact that women-led enterprises are younger. If women-led enterprises were similar to men-led enterprises in enterprise in terms of age, the employment differential would be smaller. In other words, the employment differential between women and men-led enterprises is further driven by the age of women-led versus men-led enterprises.

Sales Performance

As the second topic in this section, the same regression analysis is repeated for the sales volume of enterprises. The results are given in Figure A-2 in Appendix-2. Specification (I) indicate that in year 2013, sales volume of enterprises led by women were on average TL 2.03 millions (54%) higher than the average sales volume of enterprises led by men. Once women and men-led enterprises operating in the same region, of the same foreign ownership category and of the same legal type are compared, respectively, in Specifications (III), (IV) and (V), we do not observe a significant deviation from the

original coefficient (TL 2.03 millions) we got in specification (I). Consequently, these variables do not have a significant role in explaining the sales volume differences between men led and women led enterprises.

On the other hand, once sales of men and women-led enterprises are compared in specification (II), the sales differential in favor of women-led enterprises decreases to TL 0.92 million, implying that women-led enterprises are more concentrated in sectors with higher average sales volume per enterprise. In other words, if men and women-led enterprises had similarly been distributed across sectors, we would have expected the sales differential to be smaller in favor of women-led enterprises. It seems that the sales differential between women and men-led enterprises is driven by the difference in their respective sector concentration.

However, once enterprise age is taken into account in specification (VI), the average sales differential rises to TL 2.62 millions. Moreover, the estimated coefficient in the same column for one year of additional age is TL 0.17 million. This shows that if women-led enterprises had a similar average age as men-led enterprises, the sales differential would have been higher in favor of women-led enterprises. The sales differential seems to be in addition driven by the difference in the average age of women-led enterprises versus men-led enterprises.

Employment Growth

A detailed analysis of employment and sales performance of women and men-led enterprises are undertaken in previous subsections of this section. However, making inferences regarding success of male and female leaders based on these results can be misleading. This is because, size or sales of an enterprise at a point of time reflects the cumulative effort made throughout all life of an enterprise. Therefore, it is not possible to attribute the current performance of an enterprise only to the last decision maker of it. To a large extent, a specific piece of information in the survey allows us to deal with this issue. For most enterprises in the dataset, employment in year 2010 is also recorded⁷. Therefore, it is feasible to measure the employment performances of enterprises over the 2010-2013 period and relate this performance to the leader of the enterprise in 2013.

⁷ Although there is also a variable indicating sales volume of enterprises in year 2010, this information is missing for most enterprises in the dataset.

Based on this background, a new series of regression analysis are conducted in the form given in Appendix-3. The dependent variable in this regression is employment in 2013 and the explanatory variable of interest is the gender dummy as has been before. On the other hand, this time, employment of enterprises in 2010 year is included in all specifications. This specification allows us to compare 2013 employment levels of women and men-led enterprises with similar employment levels in 2010. Therefore, the gender dummy in this specification captures employment growth of women-led enterprises relative to that of men-led enterprises over the period.

According to results provided in Figure A3 in Appendix 3, the variable representing 2010 employment takes a value of 1.06 in all 6 specifications. This means that if a specific enterprise employed 1 more person than another enterprise in 2010, we can expect the former to employ 1.06 more in 2013. Put differently, the employment gap across enterprises increased slightly over the 2010-2013 period in favor of already large enterprises.

Results of specification (I) in Figure A-3 shows that women-led enterprises employed, on average, 0.07 fewer persons in 2013 than men-led enterprises with the same employment in 2010. This coefficient is both very small and not statistically significant. Although the magnitude of the estimated coefficient slightly increases and changes the sign once geographical regions and enterprise age are added in Specifications (III) and (VI), respectively, the estimated coefficient remains statistically insignificant.

However, adding a sector variable in Specification (II) results in a decrease in the estimated gender coefficient to -1.65. This implies that employment growth of women-led enterprises did not lag behind the employment growth of men-led enterprises over the 2010-2013 period because women-led enterprises are concentrated in sectors that recorded better employment growth over the period.

At the opposite end, once foreign ownership is taken into account in Specification (IV), the estimated gender coefficient becomes statistically significant: 1.63. This indicates that if the foreign capital category of men and women-led enterprises had been similar, women-led enterprises would have recorded significantly higher employment growth than men-led enterprises. This is because, women-led enterprises are more foreign-owned and this type of enterprises underperformed in employment growth over the 2010-2013 period.

Summary of Findings

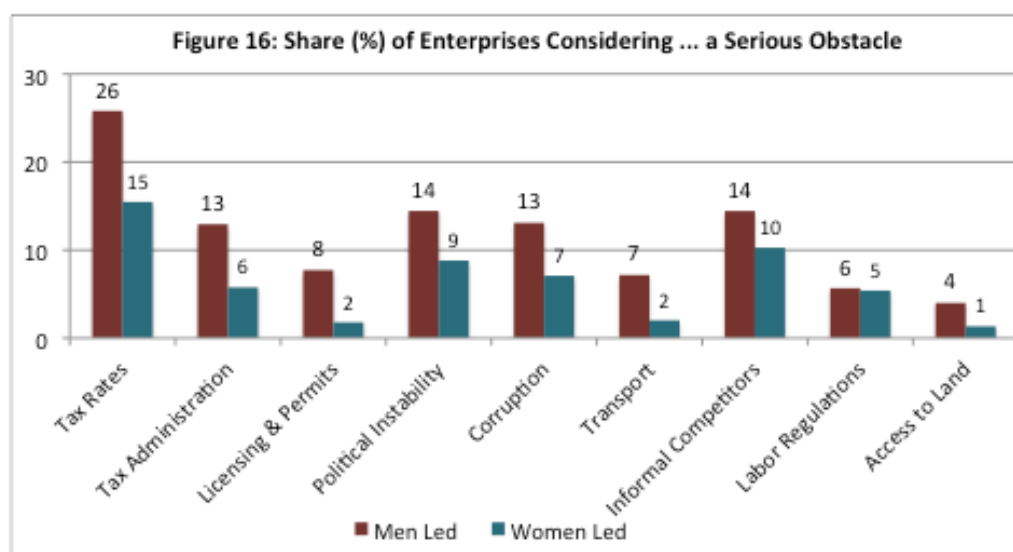
- In the year 2013, the average number of employees of women-led enterprises was lower by 27% than that of men-led enterprises (9.7 staff).
- The employment gap stayed relatively low because women-led enterprises are concentrated in sectors with larger enterprise size and they were more foreign-owned enterprises. These have on average a larger average size than domestically-owned enterprises.
- In contrast, the employment gap widened because women-led enterprises are on average younger than men-led enterprises.
- Women-led enterprises had, on average 54% more sales volume than men-led enterprises (TL 2.03 millions).
- A main contributor to this sales differential was that women-led enterprises are concentrated in sectors with large sales volume per enterprise.
- As in the case of employment, being younger had a negative effect on the sales performance of women-led enterprises relative to those led by men.
- There is not a significant difference between men and women-led enterprises in terms of employment growth over the period of 2010-2013.
- Once again, being concentrated in sectors that recorded higher growth rates contributed to employment growth performance of women-led enterprises relative to men-led enterprises.
- However, being more foreign-owned had a negative effect on the relative employment growth performance of women-led enterprises as average employment growth of foreign-owned enterprises was lower than that of domestically-owned enterprises over the period.

V. BUSINESS ENVIRONMENT CONSTRAINTS BY GENDER OF THE LEADER

This section aims to clarify whether enterprises led by women face more constraints than those led by men.

Overall Outlook

Figure-16 demonstrates the percentage of enterprises that declare each of 9 constraint types as a serious obstacle by the gender of the enterprise leader⁸. Surprisingly, all of the 9 constraints in the Figure seem to be less important obstacles for women-led enterprises relative to men-led enterprises. Tax rates are the most cited obstacle by enterprises of both genders. Tax rates as a major business environment constraint are followed by (mal-) practices of informal competitors, political instability, corruption and (cumbersome) tax administration.

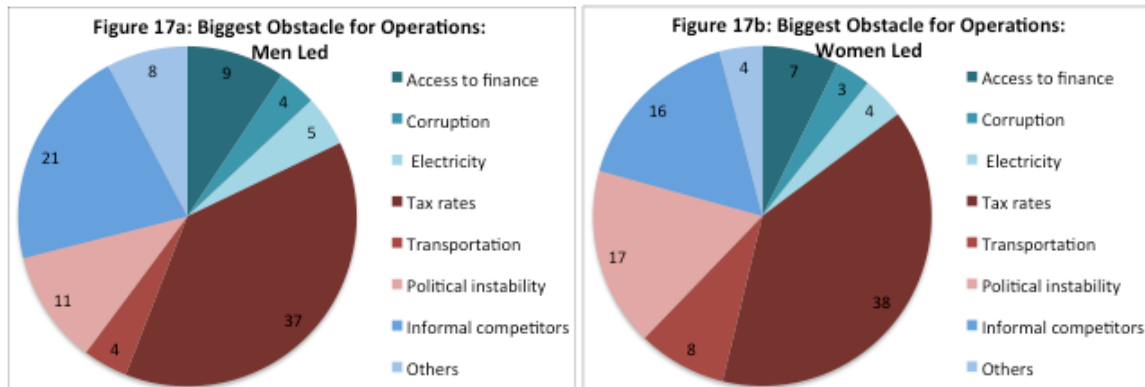


Biggest Obstacle: Tax Rates

This subsection ranks business obstacles by following a more direct approach. Figure 17a and Figure 17b are generated using the results for the survey question “which is the biggest obstacle for your current business operations?”. According to these Figures, current tax rates are considered to be by far the biggest obstacle by both men and women-led enterprises with a ratio of 37% and 38%, respectively. This finding is

⁸ Survey respondents were asked to pick among 5 choices: No obstacle, minor obstacle, moderate obstacle, major obstacle, and severe obstacle. Figure 16 makes use of the sum of those responded major or severe obstacle.

consistent with that found in Figure 16. Where men-led and women-led enterprises differ in their perception of the biggest business constraints they face is in the area of informal competitors, political instability and transportation as well as access to finance, corruption and electricity. Political instability is considered a more important obstacle by women-led enterprises (17%) than men-led enterprises (11%). Transportation is another constraint that is perceived to be a bigger problem for women-led enterprises (8% vs. 4%).



On the other hand, the share of women-led enterprises that cite access to finance, informal competitors, corruption and electricity as the biggest obstacle is slightly lower than that of men-led enterprises that cite these constraints as the biggest obstacle.

Operating Licenses

The share of women-led enterprises that applied for operating license over the last two years is less than half as much as the share of men-led enterprises (Figure 18a).

Figure 18a: Enterprises Applied to Obtain an Operating License in the last 2 years (%)

Men Led	Women Led
13.8	5.2

Moreover, it takes significantly more time to obtain an operating license by women-led enterprises (Figure 18b). So not only do less women-led enterprises apply for operating license, it also takes them on average much longer to obtain them.

Figure 18b: Days Take to Obtain Operating License

Men Led		Women Led	
Mean	Median	Mean	Median
38.8	15	52.2	45

Access to Finance

There is vast literature that compares external financing opportunities provided to male and female business owners. A number of studies report that financing opportunities from commercial banks are limited for female entrepreneurs relative to male entrepreneurs and this imposes a significant obstacle to the growth of female businesses (Aronson, 1991; Carter et al., 1997; Watson, 2002; Muravyev et al., 2007; Sabarwal and Terrell, 2008; Demirgüç-Kunt et al., 2008). On the other hand, some other studies in the field claim that there is not a considerable difference between male and female entrepreneurs in the access to external finance. (Buvinic and Berger, 1990; Aguilera-Alfred et al., 1994; Baydas et al., 1994; Neumark and McLennan, 1995; Coleman, 2000; Carter and Shaw, 2006). In this section we aim to clarify the case for Turkey. It should be noted that as our sample includes enterprises with at least 5 employees, our findings may not reflect the access to finance situation at the start-up phase.

In Figure-20, sources of working capital of enterprises are given by gender of the leader. Internal funds are the major source of working capital for enterprises led by both women and men. Internal funds are followed by bank borrowing with a working capital share of 17% in women-led enterprises and 16% in men-led enterprises. Although financing from suppliers is the third source of financing for both genders, it is a much more important source for women-led enterprises (10%) than for men-led enterprises (5%). It should be noted that borrowing from suppliers might be a sector driven mechanism rather than being driven by the gender of the leader. Finally, sources other than these three account for 2% to 3% of all working capital. Borrowing from relatives and credit from micro finance institutions are included in this group. In summary, sources of working capital do not differ significantly by gender of the leader.

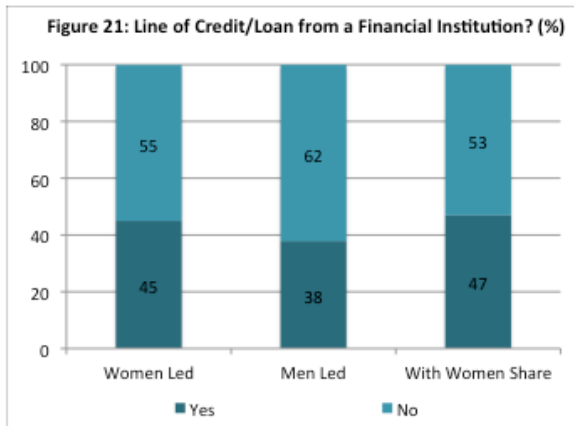
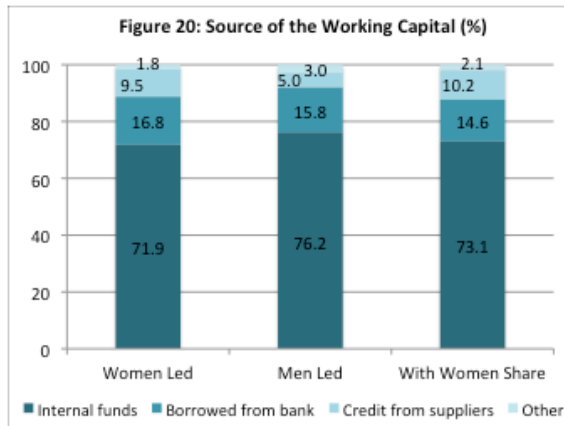
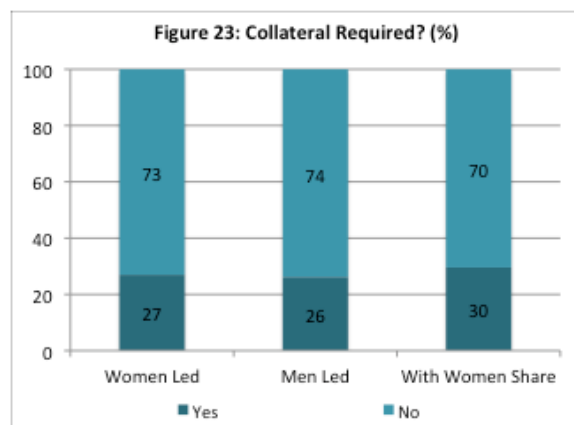
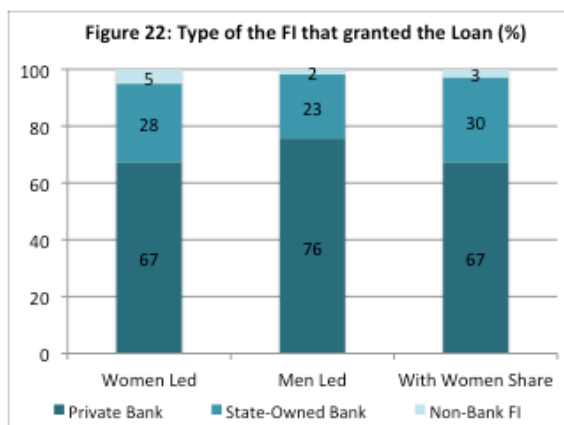


Figure-21 demonstrates that 38% of enterprises led by men and 45% of enterprises led by women have an active line of credit or loan from a financial institution. As for the type of institution granting the loan, the share of private banks is 76% and 67% for male and female led enterprises, respectively. In contrast, the share of state-owned banks is slightly higher for loans received by women-led enterprises (28%) than those received by men-led enterprises (23%). Moreover, while 2% of all loans received by men-led enterprises, are from non-bank financial institutions, 5% of loans received by women-led enterprises are from non-bank financial institutions. As the last point in this section, Figure-23 shows that 26% of men-led enterprises and 27% of women-led enterprises with an active loan were required to show a collateral for receiving the loan. So women-led enterprises are subject to the same collateral requirement, although at start-up stage they may have more difficulties than men providing to banks an acceptable collateral registered in their names.



Summary of Findings

- Most business environment constraints do not pose a bigger obstacle for the operations of women-led enterprises relative to those led by men. Differences are much nuanced.
- Women-led enterprises apply less for operating licenses and it takes significantly more time for them to obtain it.
- There is no significant difference between men and women-led enterprises in accessing external finance except that state-owned banks and non-bank financial institutions are more important sources of loans for women-led enterprises relative to those led by men.

VI. CONCLUSIONS

The topic of women entrepreneurship in Turkey has been relatively well-studied, albeit largely within the context of micro-entrepreneurship and access to microfinance. Where studies have looked at larger businesses, the focus has been almost exclusively on *women-owned* enterprises. Anecdotally, we know that in Turkey, female ownership of enterprises is often only nominal and associated with family businesses. Thus, “nominally” women-owned enterprises do not necessarily reflect the characteristics and challenges faced by women in Turkey who are de-facto co-owners and leaders of businesses (what we refer to as “women-led enterprises” and “women leaders”). This paper aims to bring a novel aspect to the existing body of research by zooming on what we hope to be a more meaningful definition of women-entrepreneurs, i.e. women who are not only de-facto (co-)owners but also top-managers and decision makers in their business. By applying this lens, we get a more accurate picture of the “true” representation and position of women entrepreneurs in the Turkish economy, their characteristics, business performance and the challenges they face. With this more nuanced understanding, we hope to inform more meaningful policy debates around women entrepreneurship Turkey.

Our first interesting finding is that women’s active participation in entrepreneurship in Turkey is much lower than commonly believed. The share of women-led enterprises (5.3%) is much lower than the more commonly referenced data point of enterprises with women share, which represent a good 25% of enterprises in Turkey. The implication of that finding is that with such a low level of active participation in

entrepreneurship, *the issue of supporting women entrepreneurship in Turkey becomes even more pressing.*

Our second interesting finding is that unlike commonly believed, much more women-led enterprises are medium-sized, foreign-owned and part of a larger company group than men-led enterprises. The implication of that finding is that there seems to be a certain type of business structure - and possibly a business culture - (i.e. foreign ownership, company conglomerates) that is favorable to women-led enterprises. Our study does not provide insights into the causal links between this type of business structure and the prevalence of women-led businesses. Does this type of business structure and associated culture foster women-led enterprises? Here, more research is needed. We have also learnt that significantly less women-led than men-led enterprises are small or domestically-owned, unlike commonly believed. Indeed, in addition to the micro-enterprise space, the domestic small-scale business segment in Turkey has been commonly believed to be a space with high concentration of women enterprises. This may mean that hitherto focus on supporting small-scale women entrepreneurs might not have translated into bringing very large numbers of women into this segment. As such, the impact of such programs needs to be revisited. With the bulk of women-led enterprises concentrated in the medium-sized enterprise segment, it would also be important to understand what is constraining further growth of these medium-sized women-led enterprises and keeping them from graduating into large enterprises. The focus of the research in this area has been on understanding barriers such as access to finance and capacity constraints. Further research on growth barriers for women-led enterprise is needed.

Our study has confirmed some of the commonly assumed characteristics of women's enterprises. Women-led enterprises are indeed younger and concentrated in the coastal regions of Turkey. They are also more concentrated in light manufacturing such as the production of textile, clothes- and chemical products (assumed to mean cosmetic manufacturing) and less so in heavy industries like machinery, electronics, vehicles manufacturing or construction. Sector and geographic concentration of women entrepreneurs is problematic when these sectors are associated with low economic value. The implication of this finding is that sector concentration - depending on the sectors - can limit economic contributions and benefits to women-led enterprises. This invites further research into the *economic benefits of actively supporting and incentivizing women enterprises and women-led enterprises to move into other, higher-value sectors and strategically important high-potential regions such as the currently*

heavily supported region of Eastern Anatolia. Also, further research is needed to clarify whether lack of skills and knowledge about non-traditional (heavy industry) sectors among women play a role in this situation.

Our study has also confirmed some of the commonly assumed characteristics of women business leaders. Female company leaders are indeed slightly older than male counterparts with a higher level of education and with fewer of them married. Also, necessity to create a livelihood (as opposed to entrepreneurial opportunity) seems to be a stronger driver for women to establish their business than it is for men. These findings are consistent with widely held beliefs about women entrepreneurs in Turkey. These prevailing characteristics (age, education and family status) are likely to be the result of underlying social and cultural norms that might be deterrent factors for aspiring and existing women business leaders. Policy options to address some of these social barriers could include better public childcare support facilities and regulation that encourages affordable private-sector provided child care services.

We have also gained some insights into patterns of company performance with some good understanding of the underlying factors driving performance differences between women and men-led enterprises. Unlike often believed, women-led enterprises do not necessarily create more jobs than men-led enterprises. In fact, they have 27% less employees. Yet, as often referred to, they do indeed have significantly higher sales than men-led enterprises (54%). These performance differences are driven by the concentration of women-led enterprises in specific sectors (with higher average sales) and their predominantly younger company age (employing less staff).

Our study did not look into whether some of the performance differences are driven by a differential impact of business constraints on women-led versus men-led enterprises. The overall take away however is that differences in how women and men-led enterprises perceive business constraints are small. Unlike commonly believed, women-led enterprises are not experiencing greater business environment constraints across the board and business environment issues are therefore unlikely to be a driver of performance gaps. Most notably, women-led enterprises seem to actually experience less corruption than men-led enterprises. That said however, there is one particular issue that stood out as problematic for women-led enterprises: far less women-led enterprises apply for operating licenses and it takes them much longer to obtain them. Further research is needed to better understand if there is gender-based differentiation

or even discrimination that affects the issuing of operations licenses to women-led enterprises and what the business impact of that is.

Finally, the findings point to state-owned banks and non-bank financial institutions as the prevalent sources of loans for women-led enterprises, as opposed to private sector banks. Commercial banking of women entrepreneurs is a space that is being increasingly studied but is still attracting few Turkish banks. In the perception of private sector banks, women entrepreneurs remain a high-risk, unappealing and un-bankable borrower group. There is a range of policy options that can be further debated to address this issue, including regulations that reduce collateral requirements, simpler legislation and procedures for SME loans and sanctions against the use of women's loans by male family members.

In sum, our findings do not explain the reasons underlying prevailing patterns of enterprise size, sector and geographic concentration among women-led enterprises or patterns of age, education and family status among women business leaders. But the findings help take a more nuanced look at women entrepreneurship in Turkey, revisit some prevailing misconceptions and associated women support strategies and consider further research needed to better understand the underlying reasons that are driving these patterns.

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APPENDIX

A-1

In this section, 6 regressions of below specification run:

$$Employment_{2013,i} = \alpha + \beta GenderofLeader_i + \theta ControlVariable_i + \varepsilon_i$$

In the specification i represents the enterprise. Dependent variable is the number of employees of enterprises in 2013. Gender dummy variable takes 1 for enterprises led by women and 0 otherwise. One control variable is added to each regression starting from (II). Control variable in each regression is, respectively: sector category, geographical region category, foreign ownership dummy, legal type dummy, age of enterprises in years. ε is the error term.

Figure A-1: Regression Results (Dependent Variable: 2013 Employment)

	(I)	(II)	(III)	(IV)	(V)	(VI)
Gender Dummy	-9.7***	-22.0***	-10.2***	-33.9***	-10.8***	-5.9***
Sector Category Var.		X				
Region Category Var.			X			
Foreign Ownership Dummy				X		
Legal Type Category Var.					X	
Age of Enterprise						0.67***
N. of Observations	948	948	948	931	945	924
R ²	0.001	0.042	0.003	0.012	0.020	0.003

***, **, *: Significant at 1%, 5%, 10% level, respectively.

A-2

In this section, 6 regressions of below specification run:

$$TotalSales_{2013,i} = \alpha + \beta GenderofLeader_i + \theta ControlVariable_i + \varepsilon_i$$

Dependent variable in the specification is total sales of enterprises in 2013 in million Turkish Lira. Explanatory variables are same as those in A-1.

Figure A-2: Regression Results (Dependent Variable: Total Sales in 2013 in Million TL)

	(I)	(II)	(III)	(IV)	(V)	(VI)
Gender Dummy	2.03***	0.92***	1.95***	2.26***	2.17***	2.62***
Sector Category Var.		X				
Region Category Var.			X			
Foreign Ownership Dummy				X		
Legal Type Category V.					X	
Age of Enterprise						0.17***
N. of Observations	807	807	807	788	804	798
R ²	0.001	0.032	0.001	0.001	0.012	0.010

***, **, *: Significant at 1%, 5%, 10% level, respectively.

A-3

In this section, 6 regressions of below specification run:

$$Employment_{2013} = \alpha + \beta Gender_{ofLeader} + \gamma Employment_{2010} + \theta ControlVariable + \varepsilon_i$$

In the specification, *Employment2010* stands for the number of employees of enterprises in 2010 and used in all regressions. All other variables are same as those in A-1.

Figure A-3: Regression Results (Dependent Variable: 2013 Employment)

	(I)	(II)	(III)	(IV)	(V)	(VI)
Gender Dummy	-0.07	-1.65***	-0.21	1.63***	-0.65**	0.14
Employment 2010	1.06***	1.06***	1.06***	1.06***	1.06***	1.06***
Sector Category Var.		X				
Region Category Var.			X			
Foreign Ownership Dummy				X		
Legal Type Category V.					X	
Age of Enterprise						0.05***
N. of Observations	848	848	848	834	845	827
R ²	0.971	0.972	0.972	0.971	0.972	0.972

***, **, *: Significant at 1%, 5%, 10% level, respectively.