Gender and Entrepreneurship in Iran

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Abstract:

The issue of female entrepreneurship has become a globally important topic in recent years, especially for countries in the Middle East and North Africa (MENA) region. Yet, in the case of Iran the topic remains under-researched despite the significance of female entrepreneurship as means of addressing the disproportionately high unemployment within the educated female work force. This article presents the findings from a survey that uses the World Bank Enterprise Survey questionnaire to document the characteristics of a sample of enterprises in Iran. The results suggest that entrepreneurship rate among Iranian women falls within the regional variation and remains low relative to other regions of world outside Asia. Low female entrepreneurship is mostly distinct among small and medium enterprises (SMEs). On the positive side, however, women entrepreneurs in Iran (similar to the rest of MENA) tend to be better represented in larger firms. The research highlights some of the notable characteristics of female entrepreneurship, indicating a high presence in the service sector, especially gender-segregated activities, as well as in some new and growing industries such as electronics and information technology. Our data shows that female-owned enterprises in Iran tend to face particular challenges in accessing some infrastructure services, particularly telecoms and the Internet. Yet, there were fewer complaints among female entrepreneurs regarding other aspects of business, such as obtaining permits and paying taxes, in comparison to the rest of the MENA region. Many female entrepreneurs indicated that international economic sanctions were a major obstacle for their business, predominantly because female-owned firms are new and tend to depend more on technology and foreign trade. Generally, a large part of gender differences in terms of enterprise ownership could be explained by firm size and industrial characteristics of female-owned firms, though one needs also to recognize challenges women face with regard to attitudes toward gender roles and stereotypes.

Key words: Gender and Entrepreneurship, Women in Iran, Women's Economic Status, Women's Entrepreneurship, Women's Employment.

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Although women's participation in market activity in Iran has risen since the 1990s, they continue to face major obstacles in finding employment, as evidenced by the very high female unemployment rates in recent years (44.3 percent for women aged 20-29 in fall of 2011, compared to 23.7 percent for men of the same age).[1] The limited job opportunities for women have been the subject of many studies. However, less is known about the types of constraints that Iranian women face as entrepreneurs. Female entrepreneurship is important because it is an employment path that some women may be able to pave for themselves, while opening up opportunities for others as employers or employees. This article offers a quantitative assessment of the extent and conditions of female entrepreneurship in Iran, using a novel dataset based on the World Bank Enterprise Surveys (WBES) methodology. Since WBES data is available for 138 countries during 2002-2011, the methodology allows useful comparisons between Iran and other countries in the Middle East and North Africa (MENA) region, as well as elsewhere.

Women's role as entrepreneurs has been on the rise around the world, at a rate twice as fast as that of men.[2] This trend also has been observed in the MENA region.[3] However, MENA's female entrepreneurship rates are the lowest among all regions.[4] The rising educational attainment of MENA women should have helped, but in many cases it seems to have contributed more to a

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[1] Statistical Center of Iran (1390/2011), Census Results, online at: www.amar.org.ir/Default.aspx?tabid=1160; date of access, 2012.

[2] See further Paul D. Reynolds (2004), William D. Bygrave, and Erkko Autio, *Global Entrepreneurship Monitor 2003 Executive Report* (Babson College, London Business School and Kauffman Foundation); Louise Dignard and Jose Havet (1995), *Women in Micro- and Small-Scale Enterprise Development* (London: Westview Press); and Roksana Bahramitash (2013), "Women, Islam and Entrepreneurship," in Asma Afsaruddin, Hibba Abugideiri, Heba Ezzat, Natana J. DeLong-Bas (eds.), *The Oxford Encyclopedia of Islam and Women* (Oxford: Oxford University Press) Vol. 2, pp. 492-496.

[3] For examples, see Valentine Moghadam (2003), *Modernizing Women: Gender and Social Change in the Middle East* (Boulder: Lynne Rienner Publishers); and Moushira Elgezir (2010), "Wading through Treacle: Female Commercial School Graduates (CGSs) in Egypt's Informal Economy, *Feminist Formations,* 22, 3, pp. 10-50.

[4] According to a 2013 World Bank report, women in MENA enter labor markets at half the global rate; see http://www.worldbank.org/en/news/press-release/2013/03/15/women-in-mena-enter-labor-markets-half-global-rate-says-world-bank-report-, accessed November 2013. See also Klaus Schwab (2012), *The Global Competitiveness Report 2011-2012* (Geneva: World Economic Forum).

surge in unemployment among educated women than to their employment and entrepreneurship.[5] In the case of Iran, Hadi Salehi Esfahani and Parastoo Shajari found that education has had a major impact in enabling women to become employers.[6] This puzzling outcome and the urgency of addressing the unemployment problem have led many international organizations to commission policy papers and organize international conferences on this subject.

The parallel between low female entrepreneurship and labor force participation rates has made it attractive to attribute both phenomena to a similar set of factors, namely, the negative incentives caused by resource rents, adverse cultural attitudes, lack of access to economic resources, inefficient and discriminatory administrative and judicial institutions, and sex segregation in the labor market and workplace. However, the effects of these factors in discouraging female employment remains a subject of controversy, and much less is known about their relevance and exact roles in constraining female entrepreneurship. For example, sex segregation may be closing some employment and entrepreneurship opportunities for women, especially where the clients or co-workers are predominantly men. But, by the same token, segregation tends to open up other opportunities for serving female clients who may need to turn to enterprises operated by women.[7] Similarly, while employer discrimination or work conditions prevent women from finding jobs, some entrepreneurs, especially female ones, may be able to gain

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[5] See Tara Vishwanath (2012), *Opening Doors: Gender Equality in the Middle East And North Africa* (Washington, DC: The World Bank), available online at: https://openknowledge.worldbank.org/handle/10986/10844, accessed October 2013.

[6] Hadi Salehi Esfahani & Parastoo Shajari (2012), "Gender, Education, Family Structure, and the Allocation of Labor in Iran," in *Middle East Development Journal*, 4, 2 (December), pp. 1250008-1-40.

[7] See further Roksana Bahramitash (2013), "Women's Entrepreneurship: Contemporary Practice," in Asma Afsaruddin, Hibba Abugideiri, Heba Ezzat, Natana J. DeLong-Bas (eds.), *The Oxford Encyclopedia of Islam and Women*, Vol. 2, (Oxford: The Oxford University Press), pp. 486-492; and Fatemeh Moghadam, "Iran's Missing Working Women," in R. Bahramitash & H. S. Esfahani (eds.), *Veiled Employment: Islamism and the Political Economy of Women's Employment in Iran*, (Syracuse: University of Syracuse Press), pp. 256-272.

by adjusting the work conditions and attracting female workers at lower costs than their male counterparts. The fact that this has not been happening on a sufficiently large scale to address the female unemployment problem suggests that there must be additional barriers facing such entrepreneurs, as women constitute only a fraction of total entrepreneurship. In this context, one question is: Are women entrepreneurs in a better position to overcome the obstacles, creating jobs for themselves and for other women? To answer this question, one first has to document the nature of women's entrepreneurial activities and then to assess the obstacles and opportunities that they face in those endeavors.

Public debates over entrepreneurship in Iran started during the late 1990s. Earlier studies mainly were concerned about the role of the government and policymakers in encouraging entrepreneurship.[8] This focus soon shifted toward socio-cultural factors, especially after Firouzeh Saaber made the case for paying attention to female entrepreneurship.[9] Parvaneh Gelard, Zahra Arasti and Mohammed Reza Akbary-Jokar highlighted the role of personal factors and argued that women engaged in entrepreneurship for personal achievement and to gain social status.[10] Gelard further argued that personal characteristics, especially innovativeness and being able to establish

[8] See, for example, Mahmood Ahmadpour Daryani (1999), *Karafarini* [Entrepreneurship] (Tehran: Pardis).

[9] See Firozeh Saaber (2001), *Rahhayeh Toseeh Karafarini Zanan dar Iran* [The Paths to the Development of Women's Entrepreneurship in Iran], (Tehran: Roshangaran).

[10] See Parvaneh Gelard (2005), "Avamel Moasser dar Towse'ye Karafarini Zanan-e Irani" [Factors Affecting the Entrepreneurial Development of Iranian Women], in *Pajohesh Zanan*, 3, 1 (Spring), pp. 101-123; and Zahra Arasti and Mohamad Reza Akbary-Jokar (2007), "Esterategy Modiriyati va Rooykard-e Zanan-e Karafarin Irani be Movaffaghiat" [Management Strategy and Women's Approach to Successful Entrepreneurship], in *Faslnameh Modares Ulum Ensani*, 12, 1 (Spring) , pp. 55-77; and Zohreh Alipour (2000), "Tajrobeh-ye Karafarini Zanan dar Jomhori Islami Iran: Tavoni/Khososi" [Women's Entrepreneurship Experience in the Islamic Republic of Iran: Cooperatives/Private] in *Taavon* [Cooperation], pp. 14-19.

a balance between family and professional lives, are key determinants of the productivity of female entrepreneurs.[11]

Other scholars have stressed cultural barriers to women's entrepreneurship. For example, Fatemeh Javaheri and Sarveh Ghesavati argue that negative stereotypes about the role of women in the economy and the prevalent view that homemaking is their primary role together have adversely affected their participation in the economy as entrepreneurs.[12] Several studies also have emphasized the role of structural factors, ranging from economic to legal and bureaucratic obstacles.[13] However, most past empirical studies of entrepreneurship rely on *ad hoc* surveys. Nevertheless, the College of Entrepreneurship at the University of Tehran has conducted population-wide surveys based on Global Entrepreneurship Monitor (GEM) methodology, which have served as the basis for numerous papers.[14] Although GEM surveys are rich in terms of information about entrepreneurial potential and attitudes in the population, they do not contain much data about actual entrepreneurial activities. In contrast, the WBES methodology focuses on the characteristics of existing firms and the environments in which they operate. In this sense, r article complements earlier research by providing information on the performance and interactions

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[11] See Parvaneh Gelard (2008), "Bahrevari-ye Zanan Karafarin" [Productivity of Female Entrepreneurs], in *Faslnameh Pajohesh Bazargan*i, No. 46 (Spring), pp. 179-209.

[12] See Fatemeh Javaheri & Sarveh Ghesavati (2005), "Baresi Tasir Nabarabary Jensiaty bar Karafarini Zana dar Iran: Mavaneh Kar Afarini Zanan" [A Study of Gender Inequality on Women's Entrepreneurship in Iran; Barrier's to Women's Entrepreneurship], in *Fasnameh Eghtesadi, Ejtemai va Farhangi*, no. 1785, pp. 35-41.

[13] See other literature on the topic in Persian and English, Javaheri and Ghesavati (2005), Mohamad Reza Zali, Jahanghir Yadollahi, and Mostafa Razavi (2009), *GEM-Iran Summary 2008 Report*, (Tehran: Faculty of Entrepreneurship); Parvaneh Gelard (2005), "The Efficient Factors Affecting the Development of Women Entrepreneurship in Iran," *Women Research*, 13, pp. 101-123; Parvaneh Gelard (2007), "Characteristics, Motivations and Goals of Iranian Women Entrepreneurs," *Iran Journal of Trade Studies* (IJTS), 11, pp. 267-295; and Layla Sarafraz and Nezameddin Faghih (2011), "Women's Entrepreneurship in Iran: A GEM-Based Data Evidence," in *Journal of Global Entrepreneurship Research,* Vol.1, no. 1 (Winter & Spring), pp. 45-57.

[14] See Saaber, *Rahhayeh Toseeh*, Zali, Yadollahi, & Razavi, *GEM-Iran*, and Sarafraz & Faghih, "Women's Entrepreneurship."

of firms with their business environment in Iran. This methodology also has been used in a recent survey led by Ahmad Maydari, although the results of that survey had not been published when this article went to press.

In line with WBES methodology, we treat enterprise owners as entrepreneurs, following the part of the literature that views an entrepreneur as "an individual who organizes and operates a business or businesses, taking on financial risk to do so."[15] The GEM survey covers broader definitions of entrepreneurs and includes indicators for business ownership as well as intentions for innovation and business development. For comparative purposes, we only use the ownership indicator. Our dataset also includes an indicator for the top manager's gender, which we examine along the indicator for enterprise owner. While owners are the ultimate guides and risk takers in a firm, managers also may play entrepreneurial roles in the sense of identifying opportunities for improving the production process to create more value.

It should be noted that like most of the literature on female entrepreneurship in Iran, this article focuses on the formal urban economy. This is essentially due to the limitations of the WBES approach, which excludes small informal firms. Absence of rural and informal sector firms in the sample is important for the conclusions being drawn. For example, as Bahramitash argues, the informal sector seems to be an important space for female entrepreneurship.[16] Also, Mostafa Azkia has pointed out that many women in rural areas have entered entrepreneurship through cooperatives that have given them access to credit and government assistance. Based on his evidence, Azkia concludes that in the past, the policy of promoting the cooperatives have met with

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[15] See Merriam-Webster Dictionary entry for *entrepreneur*, online at: www.merriam-webster.com/dictionary/entrepreneur.

[16] See Roksana Bahramitash (2013), *Gender, Micro Entrepreneurship and the Informal Sector in Iran* (New York: Palgrave Macmillan).

some degree of success.[17] However, Karimi offers a very different reading of the situation, suggesting that the rural cooperative system has become a failed policy that has channeled women's efforts into rent seeking activities but her data is limited to only one province in Iran.[18]This is clearly an important issue and calls for further research on rural and informal economies in Iran.

The Dataset

Our dataset consists of a survey of 126 firms, gathered in 2011 in seven Iranian cities: Isfahan, Kerman, Rasht, Shiraz, Tabriz, Tehran, and Zahedan. The questionnaire used for the survey is the Persian translation of the WBES survey used elsewhere in 2010.[19] The questionnaire is quite extensive and consists of 216 questions, some of which have multiple parts. The questions are organized into 13 sections, as follows: 1. control information (locality, firm size, status of the firm; 2. general information (history of the firm, owners' characteristics, registration;3. infrastructure and services (access to infrastructure and costs and quality of services);4. sales and supplies (product characteristics, markets, input supplies); 5. degree of competition (extent of competition, anti-competitive practices in the market); 6. land and permits (costs and procedures for obtaining land and various permits); 7. crime (impact of theft and other crimes on business; 8. finance (sources and access to finance, capital formation, accounting and audit); 9. business-government relations (courts, taxes, contracting, corruption, political instability); 10. labor issues

[17] See Mostafa Azkia (2011), "Contemporary Rural Development in Iran since 1950-2013," *International Journal of Social Sciences*, Vol.1 (Spring), pp.145-159.

[18] Zahra Karimi (2005), "The Role of Government Support in the Promotion of Women Entrepreneurship," presented at the Iran National Seminar on Women Entrepreneurship, Tehran, Iran.

[19] The questionnaire and dataset used in this paper are available from the authors. The WBES questionnaires and datasets for other countries are available from the Enterprise Surveys website, www.enterprisesurveys.org/.

(size and nature of workforce, education and skills, labor regulation); 11. business management (major obstacles to business, expansion plans); 12. costs and revenues (details of costs, revenues, profits, assets, liabilities); and 13. other (innovation, business associations, information about the respondent).

To apply the questionnaire to Iran, we modified some of the questions that concerned country-specific organizations and institutions to render them meaningful for the context. We also added a number of questions related to sanctions and supplemented our quantitative analysis with more extensive, open-ended interviews and in-depth case studies, which provided further insights.[20]

Due to limitations of data collection in Iran, the sample size is modest and the selection of firms has been based on referrals rather than sampling from the population of firms in the country. However, we did compare our sample with the results of the most recent publicly available census of firms in Iran to check its representativeness and to calculate sampling weights needed for deriving results.[21] We have tried, to the extent possible, to ensure that the sample represents a wide range of firm sizes, activities, and geographic locations. The use of personal contacts increased the likelihood that the information obtained is accurate. However, this process ruled out, for example, collecting data from firms owned by the government and other public entities. In spite of the

[20] The results of those interviews and case studies are included in a separate report available from the authors.

[21] A sampling weight for an observation is the inverse of the probability that a unit with the key characteristics of that observation may be selected. For example, if there are 80 small firms and 20 large firms in an economy and we take a random sample of 10 firms that includes 5 small firms and 5 large firms, the probability that a given firm would enter our sample is 0.0625 for small firms and 0.25 for large firms. So, when we want to derive the characteristics of the population from our sample, we can apply such weights. For example, if we need the average age of the firms in the economy, we need to multiply the age of each small firm in the sample by 1/0.0625 = 16 and the age of each large firm in the sample by 1/0.25 = 4 and then sum up the results and divide the total by the population of firms (i.e., 100). This method gives more weight to the small firms, which are under-represented in our sample. If the smaller firms are younger, the unweighted average age would under-estimate the average age because the sample has relatively few small firms compared to the entire population of firms.

caveats mentioned, the dataset is unique and is of significant value and can offer very novel and useful information.

Table 1 provides a glimpse of the dataset in terms of distribution of firms across industries and firm sizes. Comparing this sample with Iran's 2002 Census of Economic Establishments showed that our sample underrepresents firms in accommodation, education, financial service and insurance activities, manufacture of wearing apparel, and retail trade.[22] Significant over-representation was limited to information technology and personal services. In the case of information technology services, part of the difference with the census may be due to the rapid expansion of this sector during the 2000s.

[Insert Table 1 here]

Since two of the main organizations that helped us establish contacts with firms were women's business associations, we expected female-headed firms to be overrepresented in our dataset. To check for over-representation, we compared the female ownership rate in our sample with the 2008 and 2009 GEM datasets. Since in both surveys the number of observations on larger firms is limited, we use the average of results from the two samples. Also, we form three firm-size categories: small (5-9 workers), medium (10-49 workers), and large (50 or more workers). We dropped firms with less than five workers from the GEM sample to make the sample conform to our WBES data, which does not include such firms.

Table 2 presents the shares of firms owned by women in our sample and in the GEM datasets in two ways. The shares in the top two rows are unweighted, while those in the bottom two rows use sampling weights. The unweighted female ownership rates among the medium and

[22] The details of weight calculation may be obtained from the authors upon request. They are not presented here in order to save space.

large firms in our sample are much larger than the corresponding rate in the GEM data, while the opposite is true for the small firms. The overall unweighted female ownership rate in our sample is also about twice the rate in GEM data, which suggests oversampling of female-owned firms in our survey (assuming that the average results from the GEM samples can be viewed as reasonably good estimates for the true situation in Iran). However, once we apply sampling weights, our sample's results get remarkably close to those obtained from GEM surveys. Since the weights are entirely based on firm size and industry, this raises our confidence that oversampling can be compensated by applying the weights that we have calculated for our sample.

[Insert Table 2 here]

In our analysis of the pattern of female entrepreneurship in Iran, we take advantage of WBES data for 105 other countries that have gender data on the principal owner to offer benchmarks and put Iran in a comparative perspective. However, one difficulty in doing this is the lack of sampling weights for 64 of WBES country samples. To deal with this problem, we compared the unweighted and weighted female entrepreneurship rates by firm size for the 41 countries that have weight data to determine the sign and size of the bias. We found that the biases are generally small negative numbers with small standard deviations.[23] Based on this finding, we concluded that the cross-country averages of unweighted results are likely to be reasonably good estimates of the weighted results. To allow for regional variations, we calculate unweighted indicators for regional averages as benchmarks. We then compare both weighted and unweighted results from our sample with those indices.

[23] For small firms, the mean share of female-owned enterprises across countries and years is 0.5 percentage points lower when weights are used, compared to when no weights are applied. The standard deviation of the bias is 3.1 percentage points. For medium firms, these figures are 0.25 and 4.2 percentage points, and for large firms they are 0.6 and 4.8 percentage points.

Iranian Women's Entrepreneurship in Comparative Perspective

Table 3 compares the female entrepreneurship rates in Iran and various world regions. In analyzing the results, we assume that the sampling biases in the regional averages are small, as we argued above. For Iran, the table shows both unweighted and weighted results, but our focus will be on the weighted measures, which we believe are more representative. An immediate observation in the last column of this table is that the overall weighted share of female-owned firms in Iran is comparable with those in Asia and not too far below the corresponding shares in MENA, but much lower than those prevailing in other regions. However, the figures for different firm-size categories make it clear that this is due to the relative scarcity of female-owned small and medium enterprises (SMEs) in Iran. For the large firm category, the rate of female ownership in Iran seems similar to those in MENA and Africa and well above those in Asia and Europe. Only the rates in Latin America are significantly higher. Interestingly, the female ownership rate in Iran is higher among large firms than among SMEs, a pattern that is rare around the world, except in MENA.

[Insert Table 3 here]

The relative absence of women among the owners of SMEs may be rooted in Iran's socio-economic structure. In particular, women with mid-level education (middle or high school degrees, but no college) seem to find it not worthwhile to participate in the market, especially due to the fact that for many of them becoming homemakers could be a preferable option given the transfers from the government and the income levels that male breadwinners can bring home.[24] In addition, most women, who are not in upper classes, have limited access to finance and influential networks

[24] See Esfahani & Shajari (2012), "Gender, Education,…".

that are needed for establishing and operating SMEs or larger businesses.[25] The combination of these factors seems to explain the relative absence of women as owners of SMEs. It is noteworthy that the same factors also seem to account for the low labor force participation of middle class women. Women from well-to-do and educated families participate more as professionals and business leaders because they have stronger financial power and are likely to be able to hire caregivers at home. They also have better access to resources and enabling networks. They tend to form firms more often, and when they do, they establish larger firms. Below, we present further evidence that corroborates these conjectures. However, testing and substantiating of the underlying hypotheses is beyond the scope of this paper and needs further research.

Another possible explanation for our finding of low female participation as SME owners is the effect of international sanctions, which at the time of our survey had already hit many businesses hard. We will return to this topic later and discuss the topic more elaborately. But briefly, sanctions seem to have been especially influential in curbing women's entrepreneurial activities since many of the female entrepreneurs interviewed owned new industries that, in one way or another, have been affected by international sanctions.

A third possible reason for the less frequent presence of Iranian women in leadership positions of SMEs may be their recent entry into the market. If that is indeed the case, women's share in those ranks should grow and change the current pattern of ownership in the coming years. However, the age pattern of Iranian firms indicates a different situation. Table 4 summarizes the age structure of firms in our sample and compares it with the patterns typically observed in different regions. As the table shows, in most of the world, female owners tend to be younger than

[25] See Roksana Bahramitash (2013), *Gender, Micro Entrepreneurship and the Informal Sector in Iran* (New York: Palgrave Macmillan).

their male counterparts in the same size category, possibly because of the more recent entry of women into the business world. This also applies to the large firms in Iran. However, female-owned SMEs in Iran are typically older than their male-owned peers. This suggests that recent entry is not responsible for scarcity of SMEs owned by women. Another related observation in Table 4 is that everywhere in the world, older firms tend to be larger, typically due to natural growth over time. However, in our sample of Iranian firms, age does not have a direct relationship with size.

[Insert Table 4 here]

It is worth noting in Table 4 that Iranian firms are much younger that those in other countries, especially the larger firms. About 58 percent of the firms in our sample (77 percent when weighted) have been established since 2000. A key reason for this is the dynamics of firm ownership after the 1979 revolution, when all large firms were nationalized. The government started a process to encourage private sector development in the early 1990s, but the economy experienced a long slowdown in the mid-1990s and the institutional environment remained restrictive until the early 2000s. This observation is important because it shows that in the early 2000s some dynamism may have been added to women's participation in the economy as entrepreneurs, though that process slowed down after 2006. In any case, the period of private sector development in the 2000s coincided with entry of large numbers of women with higher education into the labor market.[26]

[26] See Roksana Bahramitash and Hadi Salehi Esfahani (2011), *Veiled Employment: Islamism and the Political Economy of Women's Employment in Iran*, (Syracuse: Syracuse University Press 2011) and Esfahani & Shajari (2012), "Gender, Education,…".

Another important indicator of women's leadership in business is their presence as managers. By this measure Iranian women seem to be doing relatively well in business, compared with their counterpart in the rest of the world. Table 5 presents the shares of female-managed firms in each size category, with and without sampling weights. While using weights lowers the overall share of female-managed firms in our sample of Iranian businesses, the result is still higher than the averages in all regions except Eastern and Central Europe. This is particularly the case among small and large firms. The relative absence of Iranian women in the management of medium-size enterprises and their relatively strong presence as managers of larger firms provides further support for our conjectures regarding the role of socio-economic factors in women's participation rates.

[Insert Table 5 here]

The rate of women's presence as firm managers may seem to be a byproduct of female ownership patterns. However, the correlation of management and ownership by women is far from perfect (a correlation coefficient of 0.62). Indeed, 38 percent of female managers run firms owned by men. In addition, men manage almost 22 percent of female-owned firms, while 11 percent of male-owned firm are managed by women.

The relatively high presence of Iranian women in management positions is consistent with other recent findings that the percentage of Iranian women who become employers had risen in Iran between the 1990s and 2000s.[27] This is particularly the case among women with high educational attainment. For example, the census of 2006 shows that 7.4 percent all women working in the

[27] See Haleh Afshar (1997), "Women and Work in Iran," *Political Studies*, 45 (4), pp. 755-765; Parvin Alizadeh and Barry Harper (2003), "The Feminization of the Labour Force in Iran" in Ali Mohammadi (ed.) *Iran Encountering Globalization: Problems and Prospects* (New York: Routledge); and Nadereh Chamlou (2008), *The Environment for Women's Entrepreneurship in the Middle East and North Africa*. Orientations in Development Series. (Washington, DC: World Bank).

private sector in Iran are employers, while the share is 15.7 percent among women with college education or higher.[28]

The industrial pattern of female-owned firms in Iran can be seen in Table 6. As in most other countries, women are well represented among the owners of textile and garment firms. They also own many personal service firms, such as hair-dressing and catering, and social service units, such as education. Indeed, this should be expected particularly because many personal and social services are sex-segregated. However, it is interesting to see that female owners also show strong presence in the new and growing electronics and IT services. These industries require technical skills and may provide good matches for the skills and expectations of women with technical higher education. Our sample did not capture female-owned firms in chemicals and pharmaceuticals. However, we know from casual observation that many women are working in this field as professionals and many have come to own or manage firms in that industry.[29]

[Insert Table 6 here]

Constraints on Entrepreneurship in Iran: The Role of Gender

Throughout the world women continue to be relatively absent from ownership and management. This is true even in the United States, as highlighted in Sheryl Sandberg's best best-selling book, which made a compelling case about the issue.[30] This is the case in Iran too, and the share of women among business leaders there is still relatively low compared with other countries,

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[28] Bahramitash and Esfahani (2011), *Veiled Employment*; and Esfahani & Shajari (2012), "Gender, Education,…".

[29] Any visitor to industrial firms in Iran cannot help but note that their chemical labs and quality control facilities are almost entirely staffed by women.

[30] See Sheryl Sandberg (2013), *Lean In: Women, Work, and the Will to Lead*, New York: Knopf Doubleday Publishing Group.

especially among SMEs. A key question in this regard is whether the obstacles in the country's business environment constrain women entrepreneurs disproportionately and discourage them more compared with the situation in the rest of the world. WBES data offers an opportunity to shed some light on the question, as the survey contains about eighteen questions pertaining to the ranking of obstacles that women face in various spheres of their operations. We build a series of indicators that show the percent of firms that rank the obstacles in each area as "major" or "very severe" as opposed to "moderate," "minor," or "no" obstacle. For each area, we calculated these indicators for male- and female-owned firms separately, both with and without sampling weights. For comparison purposes, we aggregated the indicators for the countries in different world regions, using PPP GDP in constant 2005 US dollars. For these comparators, we did not use sampling weights for reasons given in section 2. Tables 7-11 report the results. We also ran probit regressions to examine the difference between the responses of male- and female-owned firms, while controlling for firm size and industry. Although we do not present the results of these regressions to save space, we will mention their results as we discuss the role of various constraints on women's business activities in Iran. Broadly speaking, those result show that a large part of gender differences are due to the size and industry characteristics of the female-owned firms. However, in the case of some obstacles, women's disadvantage clearly goes beyond firm size and industry effects. For some other business obstacles, women seem to enjoy some advantage over men in running enterprises.

Table 7 focuses on the role of infrastructure problems that may constrain entrepreneurship. The regional averages of the severity indicators in the lower part of the table show that inadequacies in infrastructure services tend to be higher in Africa, MENA, and Latin America. These figures also suggest that female-owned firms, on average, experience somewhat less severe

infrastructure inadequacies, especially with regard to telecoms. Using a probit methodology and controlling for firm size, industry, and country effects, the gender gap disappears for electricity supply disruptions, but women's relatively advantageous situation persists regarding deficiencies in telecoms and transport. It seems that female-owned enterprises around the world tend to be positioned in locations or sub-industries that face lower obstacles with regard to telecoms or transport.

[Insert Table 7 here]

In the case of Iran, the surveyed firms rate infrastructure services as major constraints, much higher than the typical rates in the other countries. In particular, inadequacies in electricity and telecoms (mainly limitations in access to the Internet) are viewed as severe constraints by overwhelming majorities of the respondents. Moreover, in contrast with the common pattern in other countries, female-owned firm in Iran tend to complain more about infrastructure problems: Based on the weighted sample results, access to telecom services, particularly the Internet, is a much greater problem for female-owned firms than for male-owned ones. The opposite is true about the unreliability of electricity supply. Controlling for industry and firm size effects strengthen this result. Regarding transport constraints, however, there is not much difference in the responses of the two types of firms. These observations suggest that Iranian women entrepreneurs may be positioned in sub-industry activities that can handle transport and electricity problems relatively well, but badly feel the need for a more reliable and open access to the Internet. This result may be connected with the educational achievement of Iranian women and the technical areas in which they enter. Access to business and technological information is vital for the new industries, which women entrepreneurs try to enter most in Iran.

The indicators of the constraint posed by access to finance are shown in the first two columns of Table 8. In all regions of the world, finance difficulties are a par for male and female entrepreneurs, but the figures for Iran suggest that women entrepreneurs face far fewer obstacles in this regard than men do. However, this gap in Iran becomes statistically insignificant when we use the probit method and control for industry and firm size effect. Overall, the survey results suggest that finance is an important concern for all Iranian businesses. This may seem surprising because globally women face difficulties in accessing credit to start up and maintain their enterprises. However, women's disadvantage in this regard may prompt them to choose industries and firm sizes that have less dependence on finance.

[Insert Table 8 here]

The second pair of columns in Table 8 shows that the obstacles faced by businesses in Iran due to labor regulations are similar to those in Asia and Africa and higher than those in Europe, but much less constraining than the typical labor regulations in MENA and Latin America. Furthermore, although in most of MENA and Asia women entrepreneurs find labor regulations more constraining than men do, this is not the case in Iran, similar to the typical situation in other regions. Indeed, labor markets in Iran seem to be quite favorable for employers because they also have little complaint about access to skilled workers, as indicated by the last two columns of Table 8. Notably, the extent of complaint about skilled workers in Iran is at the lower end of the spectrum around the world, and particularly lower than the rates common in MENA and Latin America. Also, like most of the world and in contrast with the MENA region, women entrepreneurs in Iran report fewer problems in finding skilled workers.

The difficulties facing businesses due to tax administration in Iran are surprisingly low, especially when compared to those in the MENA and Latin America regions. (See Table 9.)

Women entrepreneurs seem to report more difficulties than men in Iran, but that is entirely due to firm size and industry effects. Once these effects are controlled in probit regressions, the difference between male- and female-owned firms is not statistically significant. This is in contrast with MENA and Asian countries in general, where women entrepreneurs report tax administration as a severe obstacle more often than men do. The opposite is the case in Africa and Latin America.

[Insert Table 9 here]

With regard to trade regulations, Iranian businesses seem to experience more difficulties than many other countries, but similar to the average rates in MENA and Latin America. (See the middle two columns of Table 9.) Also, unlike the rest of MENA, female-owned firms seem to be positioned better or receive better treatment in this regard than male-owned firms. However, when it comes to anti-competitive behaviors in markets, the complaint rate in Iran tops most other countries in the world, as indicated by the last two columns of Table 9. The only two regions that come close are MENA and Latin America. The apparent disadvantage of women in experiencing anti-competitive behavior in Iran may look small, but it proves significant once we control for firm size and industry effects.

The business obstacles posed by access to land are viewed as major or severe by few firms in Iran, compared to MENA, Africa, and Latin America (see Table 10). Female-owned firms in MENA, unlike those in all other regions, report more difficulties in accessing land than male-owned firms do, whether one controls for firm size and industry or not. The same is true in Iran. However, the male-female difference in Iran seems to be entirely due to firm size and industry effects. Table 10 also shows that Iranian firms, similar to those in the rest of MENA, complain about the constraints in obtaining permits much more than the firms elsewhere. Female-owned firms seem to have less of a problem in this respect due to their firm size and industry positions.

This is unlike other MENA countries, where the obstacles faced by women are more significant beyond firm size and industry effects.

[Insert Table 10 here]

As the last two columns of Table 10 show, policy uncertainty is one of most constraining factors for businesses in Iran and seems to affect female-owned firms much more, largely due to their size and industry characteristics. This is also the case in most other countries of MENA and Latin America, where policy uncertainty is also ranked very high as an obstacle.

The final set of business constraints to consider is crime, the legal system, and corruption (Table 11). The results of our survey, when used with sampling weights, suggest that crime is not a major obstacle to business activities in Iran. This is in contrast with Africa and Latin America, where crime is a big problem. Examining more closely the role of the firm owner's gender in this regard shows that the difference is not statistically significant, as is the case in most of the world. In MENA, on average, the difficulties caused by crime are greater compared to the situation in Iran.

[Insert Table 11 here]

Our survey results concerning the legal system in Iran show that for a sizable share of enterprises, especially female-owned ones, the system is a major or severe obstacle (Table 11). These indicators for Iran are much higher than those common in MENA and Latin America, which are already generally high by world standards. Moreover, the difficulties posed by the legal system in Iran seem to be more serious for women than men even after controlling for their firm sizes and industries. This bias can also be observed in MENA and Asia, but the opposite is true in other regions.

Similar to the perceptions about the legal system, corruption is viewed as a very significant obstacle by a large share of respondents to our survey. As the last two columns of Table 11 show, the problem is more severe than the average rates for MENA and not too far from those in Latin America, which are among the highest in the world. Interestingly, we do not find any gender bias in this dimension in Iran. In MENA, Latin America, and Asia, corruption seems to be a bigger problem for women entrepreneurs, while the opposite is true in Eastern Europe, Former Soviet Union, and Africa.

Sanctions

Besides the questions about business obstacles that are examined in all country surveys, we included questions about international sanctions in our survey because Iran has been facing increasingly binding sanctions. Our aim was to understand better the impact of those sanctions on firms of various types. In addition, we conducted more detailed interviews with firms that were particularly affected to gain further information and insight. We must point out that our survey was done in 2011, before international sanctions gained serious intensity for most businesses in Iran. The obstacles caused by sanctions increased significantly after mid-2012.

Sanctions force the majority of companies that are importing or exporting to operate through a third party. Goods from Europe must be shipped to Turkey, Dubai or Malaysia before they reach Iran. This indirect increases the cost of inputs for firms. Moreover, completing international financial transactions poses a serious dilemma for Iranian companies, since foreign firms demand full payment before they deliver the goods. More generally, sanctions put Iranian companies in a weak bargaining position, which often forces them to accept disadvantageous terms dictated by foreign firms.

In the formal survey, when asked about sanctions about 50 percent of firms reported these to be a major or very severe problem. However, using sampling weights shows that such enterprises represent 66.5 percent of the firms in Iran. This share seems to have grown sharply as sanctions have intensified. Although the percent of female-owned firms indicating severe problems with sanctions is lower than the male-owned ones, the difference is not statistically significant.

We also asked respondents to estimate the cost of international sanctions as a percent of their production costs. About 44 percent did not answer the second question. Among the remaining firms, the answer ranged from 0 percent for some (about 11 percent of the sample) that claimed that the sanctions do not affect them, to 150 percent, with a weighted average of 40 percent. The impact is viewed as strongest on firms in financial services, transportation, and some manufacturing activities. When separating out the firms with female owners, the average rose to 62 percent, compared with 37 percent for male-owned firms. However, this difference is largely because the size and activity of firms owned by women made them more vulnerable to sanctions.

Another major issue that firms discussed during the interviews was the problem of dual use materials. Often goods and materials that are for civilian use are prohibited by sanction regulations from being exported to Iran. Firms also were concerned that the sanctions were creating barriers to joint ventures and foreign investment, which makes technology transfer very difficult. One female entrepreneur, for example, discussed a contract she was trying to negotiate with a German firm, which was canceled two years ago when the German firm became nervous about the possibility of tightened sanctions against Iran. Another example was a business woman who had won several awards, including the International Iran TV's "Exemplary National Entrepreneur Award." She stated, "the sanctions have put our company at risk because our trading partner, which

is Turkey, refuses to open an account to facilitate fund transfers. We have to be paid after we have delivered our goods." She continued: "Importing the inputs we need is also difficult because we have to go through a third country, which makes it more expensive to buy goods, such as spectrometers that examine purities in minerals." However, according to her, the government had tried to counter the negative effects of sanctions on the business sector in a number of ways: "The government has several encouraging packages such as subsidized water, electricity and gas. We do not have to pay taxes on exported goods, we are supported by Bank Keshavarzi, and if we import in order to export, we are exempt from paying customs duties."

Conclusion

Female-owned SMEs are far less common in Iran than in most other countries. However, among larger firms, the rate of female ownership compares quite favorably with the patterns common around the world. Interestingly, these large firms tend to be much younger than their counterparts elsewhere. The results further show that women entrepreneurs are entering business and establishing new firms in the more dynamic sectors of the economy, particularly in the 2000s. It seems that this pattern of gender role in enterprise ownership is connected with the expanding educational attainment of women in Iran and the socio-economic characteristics of the Iranian society, especially its class divisions.[31]

Entrepreneurs in Iran face several major obstacles in developing their businesses. At the top of the list are international sanctions, policy uncertainty, and limited access to telecoms (especially the slow and constricted Internet), followed by unreliability of electricity supply, constraints on credit, anti-competitive behavior in markets, difficulties in obtaining permits,

[31] Bahramitash and Esfahani (2011) *Veiled Employment*; and Esfahani & Shajari (2012), "Gender, Education, …".

corruption, high costs and uncertainties of the legal system. Among these constraints, female entrepreneurs in our sample, in comparison with their male counterparts, reported experiencing more difficulties with issues related to sanctions, problems in telecoms, anti-competitive behavior, policy uncertainty, and the legal system. There are also areas in which women entrepreneurs seem to enjoy an advantage over their male peers, such as corruption, obtaining permits, access to finance, and electricity. A large part of these gender differences can be explained by firm size and industrial characteristics of female-owned firms. However, the rest seems to be due to attitudes and gender relations in Iran. These factors sometimes work against women, such as in the legal system. However, they sometimes also may work to women's advantage. For example, female entrepreneurs' easier time in dealing with permits and corruption could be due to the perception among bureaucrats that women have a harder time accepting to pay bribes. As a result, they may find it harder to press women for bribes, hence the lower incidence of obstacles for women in dealing with the bureaucracy.

An interesting finding was the set of business areas in which Iranian firms face fewer obstacles than the enterprises elsewhere. In particular, the tax administration, access to skilled labor, and crime are not as significant concerns as they are for typical firms in other countries. In these areas, female owners complain somewhat more than men about crime and tax administration, but not in the case of access to skilled labor.

Based on the results of this study, specific policies would encourage and facilitate entrepreneurship, especially among women. These would include such policies as reducing the sanctions or their burden on businesses; reducing uncertainty; investment in high speed Internet and easing access to web resources; investment in infrastructure, especially to make electricity supply more reliable; promoting ways in which women can gain access to credit and reducing

government controls over credit allocation; reducing corruption; streamlining the process of obtaining permits; and reforming the legal system to reduce its costs and uncertainties.

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Table 1
Distribution of Sample Firms by Industry and Size

Industry	Number of Firms in the Sample			
	Small	Medium	Large	Total
Textiles		2	3	5
Garments			1	1
Agroindustry		4	6	10
Metals and Machinery	1	7	8	16
Electronics	1	1	1	3
Chemicals and Pharmaceutics			1	1
Non-Metallic & Plastic Materials		4	4	8
Other Manufacturing	1	4	8	13
Construction & Transport	1	9	6	16
IT Services	1	1	5	7
Accounting and Finance		1	1	2
Retail and Wholesale Trade	2	2	3	7
Hotels and Restaurants		1		1
Real Estate and Rental Services	1			1
Social Services	3	6	9	18
Personal Services	3	3	10	16
Other Services			1	1
All Industries	14	45	67	126

Source: Calculated based on WBES data for Iran.

Table 2
Share of Female-Owned Enterprises by Firm Size in Iran:
WBES and GEM Samples With and Without Sampling Weights

Dataset	Weighting	Percent of Firms with Female Principal Owner			
		Small Firms (5-9 Workers)	Medium Firms (10-49 Workers)	Large Firms (50 or More Workers)	All Firms (5 or More Workers)
WBES 2011	Unweighted	7.1	20.0	23.9	20.6
GEM 2008/9	Unweighted	11.1	6.7	16.7	9.4
WBES 2011	Weighted	10.0	8.3	13.9	9.6
GEM 2008/9	Weighted	12.0	6.3	14.4	9.2

Sources: Calculated based on WBES and GEM datasets for Iran.

Table 3
Shares of Firms with a Female Principal Owner by Size Category in Iran and World Regions*

Country	Percent of Firms with Female Principal Owner			
	Small Firms (5-9 Workers)	Medium Firms (10-49 Workers)	Large Firms (50 or More Workers)	All Firms (5 or More Workers)
Iran (Unweighted)	7.1	20.0	23.9	20.6
Iran (Weighted)	10.0	8.2	13.9	9.6
Region	**Cross-Country Regional Averages, GDP Weighted at Country Level Using PPP GDP in Constant 2005 USD**			
MENA	**8.7**	**14.6**	**15.2**	**14.3**
Asia & the Pacific	9.6	8.6	6.6	8.0
Africa	20.2	16.9	12.6	16.6
Latin America/Caribbean	26.6	24.8	20.5	23.4
Eastern & Central Europe	32.8	19.2	9.3	21.6
Caucasus & Central Asia	32.0	16.9	8.4	20.0
European Union	27.7	17.3	8.5	21.0

* The shares for each country are based on pooled surveys that include the gender of the principal owner.
Source: Calculated based on WBES dataset.

Table 4
Mean Age of Firms in Years by Gender of Owner and Size Category in Iran and World Regions *

Country	Small Firms		Medium Firms		Large Firms	
	Female-Owned	Male-Owned	Female-Owned	Male-Owned	Female-Owned	Male-Owned
Iran (Unweighted)	10.0	6.1	11.0	12.1	10.3	12.4
Iran (Weighted)	10.0	3.5	13.5	10.5	7.1	7.8
Region	**Cross-Country Regional Averages, GDP Weighted at Country Level Using PPP GDP in Constant 2005 USD**					
MENA	**14.4**	**14.6**	**17.6**	**16.0**	**19.4**	**18.5**
Asia & the Pacific	12.7	11.7	13.3	13.6	20.4	19.6
Africa	10.8	11.5	12.5	14.1	19.9	23.2
Latin America/Caribbean	14.4	16.4	18.0	19.5	29.3	27.8
Eastern & Central Europe	9.1	9.8	11.1	13.2	19.3	23.9
Caucasus & Central Asia	8.2	8.7	12.6	11.4	18.3	18.1
European Union	14.1	16.1	20.4	20.4	29.5	30.3

* The shares for each country are based on pooled surveys that include the gender of the principal owner.
Source: Calculated based on WBES dataset.

Table 5
Share of Firms with a Female Top Manager by Size Category in Iran and World Regions *

Country	Percent of Firms with Female Top Manager			
	Small Firms (5-9 Workers)	Medium Firms (10-49 Workers)	Large Firms (50 or More Workers)	All Firms (5 or More Workers)
Iran (Unweighted)	28.6	15.9	27.7	23.6
Iran (Weighted)	34.3	5.6	17.0	20.8
Region	**Cross-Country Regional Averages, GDP Weighted at Country Level Using PPP GDP in Constant 2005 USD**			
MENA	**16.0**	**10.8**	**14.1**	**13.1**
Asia & the Pacific	7.9	5.2	3.6	5.0
Africa	6.8	3.9	1.4	3.7
Latin America/Caribbean	18.2	12.7	7.3	11.9
Eastern & Central Europe	34.7	25.0	13.1	21.3
Caucasus & Central Asia	27.0	19.3	9.0	17.8

* The shares for each country are based on pooled surveys that include the gender of the principal owner.
Source: Calculated based on WBES dataset.

Table 6
Share of Firms with Women Leaders by Industry and Size

Industry	Percent of Firms with Female Principal Owner			Percent of Firms with Female Manager		
	Large	Medium	Large	Large	Medium	Large
Textiles		50.0	33.3		50.0	66.7
Garments			100.0			100.0
Agroindustry		0.0	16.7		0.0	33.3
Metals and Machinery	0.0	14.3	25.0	0.0	0.0	12.5
Electronics	0.0	0.0	100.0	0.0	0.0	100.0
Chemicals and Pharmaceutics			0.0			0.0
Non-Metallic & Plastic Materials		25.0	0.0		25.0	25.0
Other Manufacturing	0.0	25.0	12.5	0.0	25.0	25.0
Construction & Transport	0.0	22.2	16.7	0.0	11.1	16.7
IT Services	0.0	100.0	40.0	0.0	100.0	20.0
Accounting and Finance		0.0	0.0		0.0	0.0
Retail and Wholesale Trade	50.0	0.0	0.0	0.0	0.0	33.3
Hotels and Restaurants		0.0			0.0	
Real Estate and Rental Services	0.0			0.0		
Social Services	0.0	0.0	44.4	100.0	0.0	33.3
Personal Services	0.0	66.7	20.0	33.3	66.7	20.0
Other Services			0.0			0.0
All Industries	7.1	20.0	23.9	28.6	15.6	26.9

Source: Calculated based on WBES data for Iran.

Table 7
Percent of Surveyed Firms Facing Major or Very Severe Obstacles in Access to Infrastructure in Iran and Different World Regions*

Country	Electricity		Telecoms		Transport	
	Female-Owned	Male-Owned	Female-Owned	Male-Owned	Female-Owned	Male-Owned
Iran, Unweighted	46.2	53.1	52.0	52.1	20.8	31.7
Iran, Weighted	20.1	65.3	83.8	55.4	17.1	27.8
Region	**Regional Averages, GDP Weighted at Country Level Using PPP GDP in Constant 2005 USD**					
MENA	29.2	28.8	20.7	19.2	18.6	17.9
Asia & the Pacific	24.8	25.1	5.8	7.3	13.5	10.9
Africa	41.8	39.3	10.6	11.3	18.5	21.3
Latin America/Caribbean	33.3	35.3	13.4	24.2	17.2	20.1
Eastern & Central Europe	6.8	17.0	4.0	12.3	7.3	10.8
Caucasus & Central Asia	5.6	16.9	2.9	11.0	2.6	10.5
European Union	3.1	4.0	2.9	3.8	3.2	5.5

* The shares for each country are based on pooled surveys that include the gender of the principal owner.
Source: Calculated based on WBES dataset.

Table 8
Percent of Surveyed Firms Facing Major or Very Severe Obstacles in Credit and Labor Markets in Iran and Different World Regions*

Country	Access to Finance		Labor Regulation		Skilled Workers	
	Female-Owned	Male-Owned	Female-Owned	Male-Owned	Female-Owned	Male-Owned
Iran, Unweighted	31.8	39.8	19.2	17.4	12.5	8.5
Iran, Weighted	19.9	61.7	12.4	14.4	6.8	16.1
Region	**Regional Averages, GDP Weighted at Country Level Using PPP GDP in Constant 2005 USD**					
MENA	38.2	35.4	31.6	25.7	33.5	26.6
Asia & the Pacific	15.9	15.9	12.3	11.6	13.9	14.4
Africa	37.3	36.7	11.1	14.2	16.6	20.3
Latin America/Caribbean	37.9	35.3	29.6	34.2	28.2	39.8
Eastern & Central Europe	22.1	24.9	8.3	10.1	13.6	21.6
Caucasus & Central Asia	16.2	18.5	3.6	3.5	7.8	16.4
European Union	15.1	14.3	8.5	11.0	9.0	9.8

* The shares for each country are based on pooled surveys that include the gender of the principal owner.
Source: Calculated based on WBES dataset.

Table 9
Percent of Surveyed Firms Facing Major or Very Severe Obstacles Due to Tax Administration, Trade Regulation, or Anti-Competitive Behavior in Iran and Different World Regions*

Country	Tax Administration		Trade Regulation		Anti-Competitive Behavior	
	Female-Owned	Male-Owned	Female-Owned	Male-Owned	Female-Owned	Male-Owned
Iran, Unweighted	13.0	10.8	16.7	15.5	42.1	24.4
Iran, Weighted	7.3	3.4	12.3	21.4	53.7	48.1
Region	**Regional Averages, GDP Weighted at Country Level Using PPP GDP in Constant 2005 USD**					
MENA	28.0	25.4	21.3	18.8	40.3	35.0
Asia & the Pacific	23.5	19.7	12.7	13.9	18.0	15.3
Africa	21.6	22.7	13.5	15.7	24.2	24.1
Latin America/Caribbean	42.1	43.4	21.6	21.2	50.5	42.2
Eastern & Central Europe	27.4	27.8	10.7	15.4	17.0	21.7
Caucasus & Central Asia	22.8	19.2	11.6	13.1	18.3	15.5
European Union	19.2	19.9	5.8	5.7	12.3	12.7

* The shares for each country are based on pooled surveys that include the gender of the principal owner.
Source: Calculated based on WBES dataset.

Table 10
Percent of Surveyed Firms Facing Major or Very Severe Obstacles Due to Limitations in Access to Land, Obtaining Permits, or Policy Uncertainty in Iran and Different World Regions*

Country	Access to Land		Obtaining Permits		Policy Uncertainty	
	Female-Owned	Male-Owned	Female-Owned	Male-Owned	Female-Owned	Male-Owned
Iran, Unweighted	18.2	16.9	25.0	26.9	60.0	43.5
Iran, Weighted	12.6	11.3	27.2	51.2	70.0	40.4
Region	**Regional Averages, GDP Weighted at Country Level Using PPP GDP in Constant 2005 USD**					
MENA	29.7	24.7	29.5	26.6	46.1	41.0
Asia & the Pacific	9.7	10.6	9.6	10.0	27.9	25.5
Africa	19.2	19.3	12.4	12.4	18.8	21.1
Latin America/Caribbean	14.6	16.4	21.4	26.6	55.8	48.8
Eastern & Central Europe	10.7	17.2	11.3	15.8	31.5	36.5
Caucasus & Central Asia	8.1	12.8	12.0	12.2	15.5	20.6
European Union	6.3	8.2	7.8	7.4	6.3	8.6

* The shares for each country are based on pooled surveys that include the gender of the principal owner.
Source: Calculated based on WBES dataset.

Table 11
Percent of Surveyed Firms Facing Major or Very Severe Obstacles Due to Problems with Crime, Legal System, or Corruption in Iran and Different World Regions*

Country	Crime		Legal System		Corruption	
	Female-Owned	Male-Owned	Female-Owned	Male-Owned	Female-Owned	Male-Owned
Iran, Unweighted	13.0	16.7	30.0	21.3	25.0	27.4
Iran, Weighted	11.8	8.7	47.1	20.1	30.7	51.5
Region	**Regional Averages, GDP Weighted at Country Level Using PPP GDP in Constant 2005 USD**					
MENA	17.2	15.3	28.8	21.4	35.5	33.1
Asia & the Pacific	10.9	12.3	8.2	6.4	25.8	24.0
Africa	32.1	30.3	11.1	12.6	26.9	29.8
Latin America/Caribbean	37.2	34.9	19.1	28.5	57.5	55.0
Eastern & Central Europe	12.3	17.9	14.9	18.2	17.1	25.5
Caucasus & Central Asia	9.5	15.9	10.7	10.3	15.9	21.7
European Union	5.1	5.0	4.7	4.7	6.7	5.7

* The shares for each country are based on pooled surveys that include the gender of the principal owner.
Source: Calculated based on WBES dataset.