



# AfDB

2015  
www.afdb.org

## Working Paper

### North Africa Policy Series

#### CONTENTS

I – Introduction **p.2**

II – Patterns of Women's Entrepreneurship and Employment in North Africa **p.6**

III – Challenges and Opportunities of Female-Owned SME Expansion in North Africa **p.9**

a. Legal Factors **p.9**

b. Social and Cultural Factors **p.10**

c. Economic Factors **p.11**

d. Business Environment of SMEs: Governance and Regulatory Factors **p.13**

e. Access to Finance **p.15**

f. Access to Business Networks **p.17**

g. Women's Time Constraints, Double Burden, and the Double Dividend Effect **p.18**

h. Informal Economy and Micro, Small, and Medium Enterprises (MSMEs) **p.19**

IV – Conclusion **p.20**

V – Policy Implications and Recommendations **p.22**

References **p.25**

Appendices **p.28**

**Jacob Kolster**  
Director ORNA  
j.kolster@afdb.org  
+216 7110 2065

## Promoting North African Women's Employment through SMEs

### Key Messages

- This analysis points to a host of significant challenges facing women to become SME owners in the region. These include women's multiple burden, legal and cultural barriers, lack of access to training and business related support, limited access to property and credit, absence of effective social networks, and problems associated to economic infrastructure. They can be summarized as follows:
  1. While in North Africa (NA) there are no direct laws preventing women to own businesses and the property rights under marriage are even-handed, many legal rules emanating from tradition or civil and religious codes restrict women's asset accumulation and economic and financial activity.
  2. Traditional social and cultural norms and perceptions reinforce the constraints on women's employment and entrepreneurship.
  3. Formal education plays a key role in enabling women to seek employment and engage in entrepreneurship. NA countries have had some achievements in this regard, but the educational attainment so far has provided more impetus for women to seek more part-time or full-time employment and engage less in self-employment or firm ownership.
  4. Governance deficiencies tend to affect entrepreneurship negatively, much more in the case of SMEs than large firms and more when the principal owner is a woman than a man.
  5. Government policies and regulations that facilitate flexibility in marketplace and work environment are important for women's participation.
  6. Lack of adequate access to finance and business networks is a major constraint on NA women's entrepreneurship, especially SME formation. Reliance on family and friends networks limits the size of firms generally and acts as a major barrier for establishment of SMEs by women.
  7. Women's role as primary family caregivers is major barrier to their market participation as workers and employers. This is the case in NA no less than other developing countries. Support for maternity and provision of childcare, especially through public channels, could help reduce this burden.
- There is a need for a supportive ecosystem for female-owned SMEs. Two pillars of such a system are:
  - a) Good governance and infrastructure, which are essential for economic growth, but also have particularly positive effects on women's entrepreneurship; and
  - b) Energizing and establishing communication and coordination among various governmental, non-governmental and international organizations in order to create a synergy between the three and to ensure coherence in their policies and programs.

This paper was prepared by Hadi Salehi Esfahani (University of Illinois at Urbana-Champaign) and Rokhsana Bahramitash (University of Montreal), under the supervision of Vincent Castel (Chief Country Economist, ORNA) with the support of Samia Mansour (Economist, ORNA) and Amine Mouaffak (Economist, ORNA). We extend our thanks to the following for their contribution: Thouraya Triki (Chief Country Economist, ORNA), Leila Jaafor (Socio Economist), Leila Mokadem (Res Rep, EGFO), Yacine Fal (Res Rep, MAFO), Gehane El Sokkary (Socio Economist, EGFO) and Assitan Diarra Thioune (Regional Economist, ORNA). Overall guidance was received from Jacob Kolster (Director, ORNA).

## I. Introduction

The AfDB gender strategy for the next decade relies on three pillars: legal status and property right, economic empowerment, knowledge management and capacity building (AfDB 2014). This strategy is meant to promote not just gender rights and capabilities, but also to enhance economic growth as part of inclusive development. Indeed, it is an integral part of AfDB's broader commitment to inclusive growth. The strategy recognizes that economic growth has not always translated into better jobs and increased income opportunities for the poor and disadvantaged groups, especially women and the youth (AfDB 2014: 8). Other multilateral organizations have also adopted similar perspectives and have developed research and operational programs to promote inclusive growth with an emphasis on gender equality<sup>1</sup>. The proposed policies include increasing women's access to financial services and resources, leveraging infrastructure for gender equality, and promoting women's employment and enterprise ownership (AfDB 2014: 3). It is widely recognized that an important mechanism for achieving these goals is energizing female-owned small and medium enterprises (SMEs), (UNIDO 2003, Neslon 2006, Esteves 2011, IFC&GPFI 2011, MENA-OECD 2012, IFC 2013, Triki and Faye 2013).

This report examines the economic conditions and opportunities of women in North Africa (NA) from a comparative perspective, with an emphasis on the role that female-owned SMEs may play in women's economic empowerment in the region. Improving women's economic conditions is a crucial issue in NA because they are highly over-represented among the poor and the unemployed in the region. In addition, the economic slowdown following the Arab uprisings has also made matters worse for everyone, particularly for women. As a result, addressing the adversities that women face in NA countries could contribute to planning economic recovery at the same time that it serves to contribute to gender equity.

Unemployment rates in NA countries have been alarmingly high in the last dozen years, particularly among women and youth, and as noted, the problem has exacerbated since the Arab uprisings of 2011. As can be seen in Figure 1, the average female unemployment rates in NA

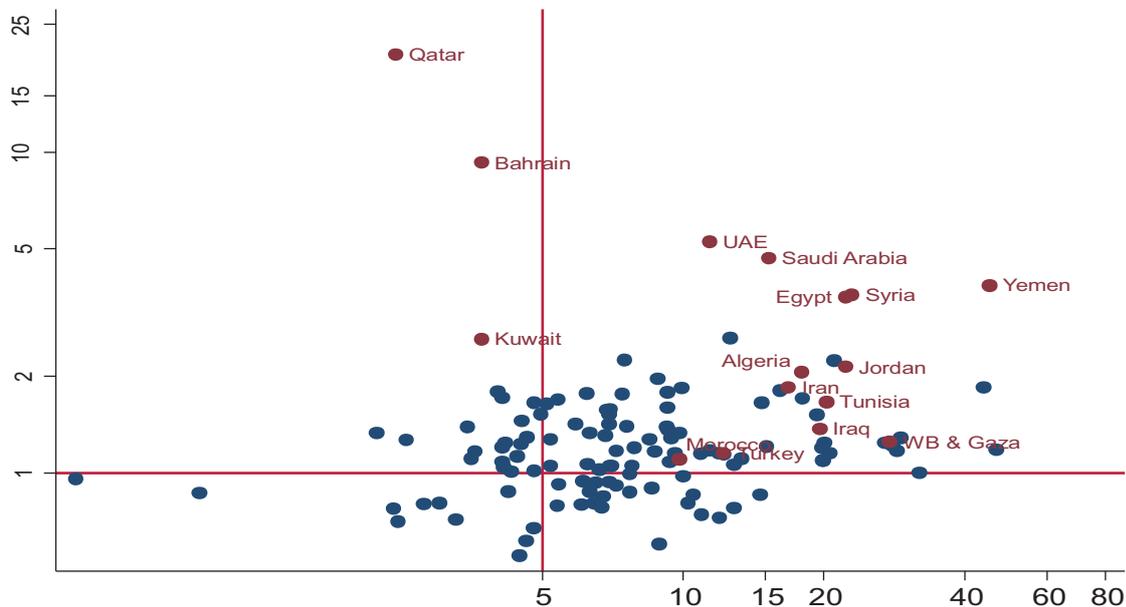
during 2008-2012 have been mostly around 20 percent, or the top decile of unemployment rates around the world. In this respect, NA countries have performed similarly to others the Middle East (ME), except the small resource-rich kingdoms of the Persian Gulf. Morocco has had a lower rate, of about 10 percent, but still in the top third of the cross-country distribution of female unemployment rate. The vertical axis of Figure 1 further shows that the burden of unemployment in the region has fallen disproportionately on women. As can be seen in the figure, the unemployment rates of women in most NA countries are more than 1.7 times those of men, putting these countries in the top 20 percent of the female-to-male unemployment ratios prevailing in other regions. Again, the pattern is similar to that in the ME region but Morocco is an exception, though still somewhat imbalanced for women. Of importance is the fact that the situation depicted in Figure 1 applies to the female adult population as a whole. The problem of high and gender-imbalanced unemployment is much more pronounced among the NA youths. Moreover, the problem has emerged in the past two decades while conspicuously low female labor force participation (LFP) rates have prevailed in the region (see Figure 2). Indeed, NA countries fall into the bottom decile of female LFP rates elsewhere in the world. Though the low LFP of women in the region is an older issue, it may have been adversely affected by the high female unemployment rates. This situation is similar to the one in ME countries when one controls for GDP per capita.

Low participation rates and high unemployment are significant barriers not just to gender equity, but also to economic recovery in NA. The above observations suggest that women's employment problems in the region are largely structural rather than temporary or cyclical. The situation has particularly deteriorated, as women in the region have tended to rely on public sector jobs, which have been in decline. For this reason, there is a dire need to find ways to expand women's employment opportunities in the private sector. The AfDB has identified SMEs as an important way of proceeding in this trajectory and addressing unemployment and poverty and has made it a top policy priority (Triki and Fay 2013). As we argue in this report, female-owned SMEs are indeed suitable vehicles for this end.

<sup>1</sup> For example, IDRC has adopted Supporting Inclusive Growth (SIG) and defines inclusive growth "in the SIG context to refer to growth that improves the access of the poor to expanding economic opportunities and reduces inequality" (IDRC 2010).

Figure 1

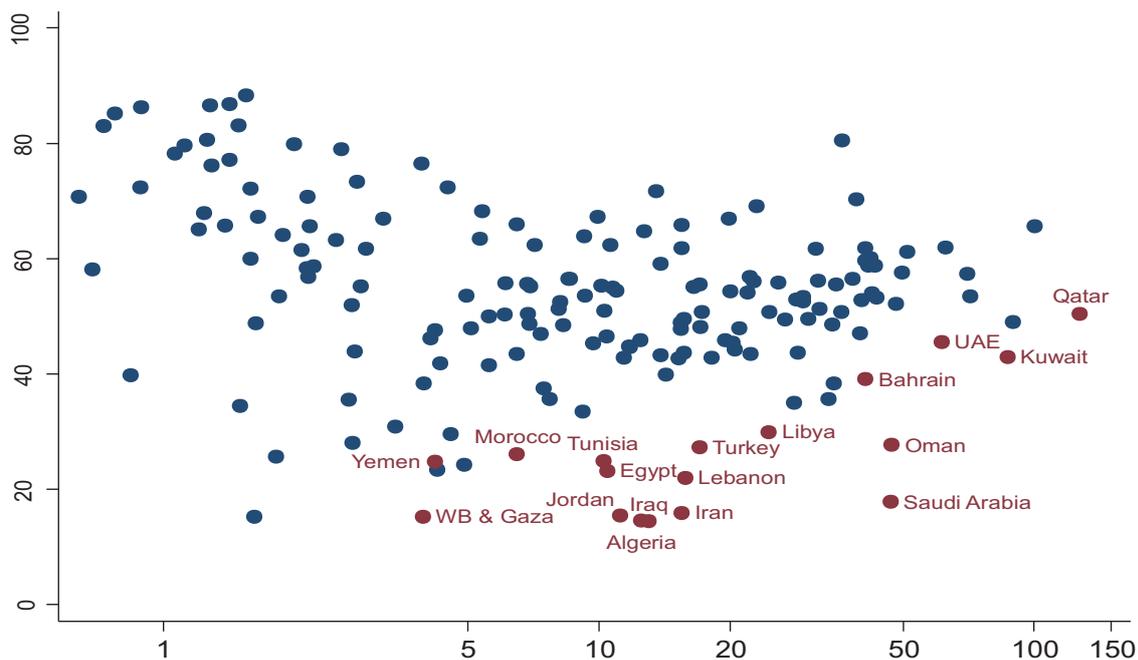
Average Female Unemployment Rate, 2008-2012



Source: The World Bank, World Development Indicators, 2014

Figure 2

PPP GDP per Capita, 2008-2012 Average in 1000s of 2011 US\$



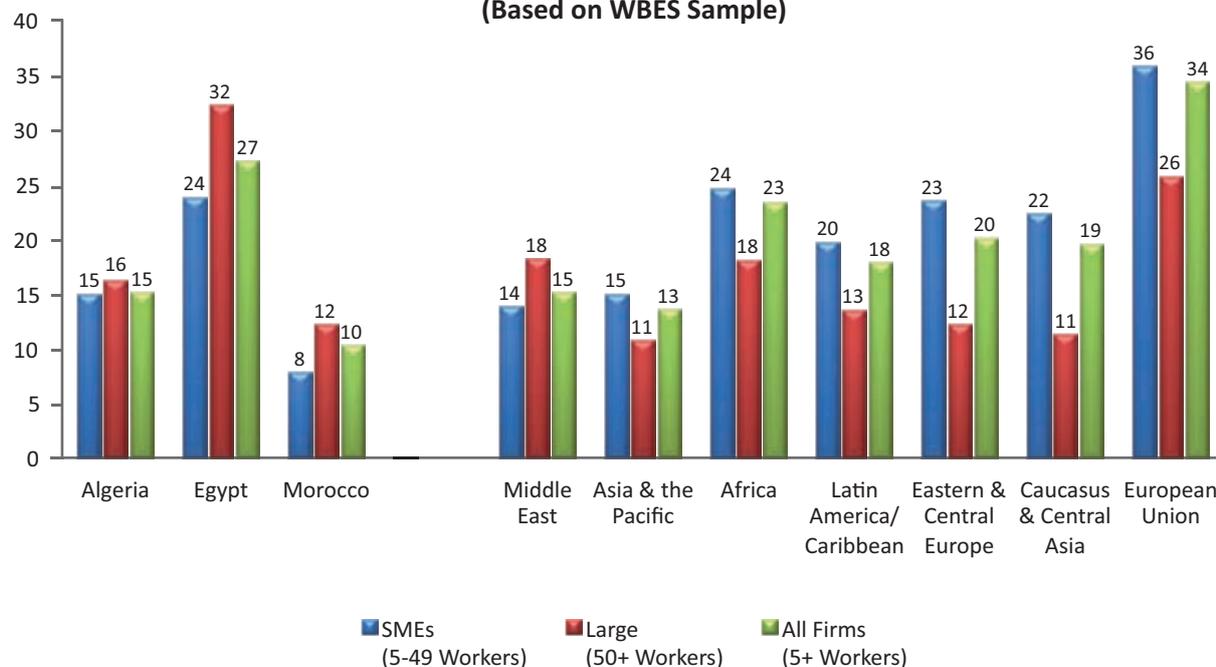
Source: The World Bank, World Development Indicators, 2014

The acknowledgement of the potential of women-led SMEs in the NA and ME regions has prompted increased interest in research and policy debates on the issue. These date back to a forum in Addis Ababa in 2003, when the AfDB took a firm position about its vision on the role of women entrepreneurs in private sector development and especially in the direction of poverty reduction and sustainable growth (AfDB/ILO 2007). Later, MENA-OECD Investment Program, Arab International Women's Forum, and the World Bank have organized two major conferences in 2005 and 2012 aimed at improving the business environment and job creation for women in the region. The conference

presentations put the growth and employment possibilities of female-owned SMEs in the spot light. The general view is that the picture of female-owned SMEs in the region has not been particularly bright in the past. For example, the results of the World Bank Enterprise Surveys (WBES), which is a key source of data for the analysis in this report, indicate that women serve as principal owners in about 8 percent of formal-sector SMEs in Morocco (see Figure 3)<sup>2</sup>. The corresponding rate in Algeria is 15 percent, which is lower than the averages of all regions outside NA and Asia. Only in Egypt does the rate of female SME ownership compare well with those elsewhere.

**Figure 3**

**Percent of WBES Sample Firms Owned by Women Simple**  
**Cross-Country Averages for Each Region**  
**(Based on WBES Sample)**



Female-owned SMEs in the NA region are not only relatively scarce and constrained, but they also provide limited employment opportunities for women, when compared to the SMEs in other world regions. Also, the jobs they offer are typically concentrated in a few traditional sectors such as textiles. However, despite these shortcomings, female-owned SMEs create more jobs for women than their larger and male-owned

counterparts. Also, in the last dozen years, women have started to make inroads into new and expanding sectors in the region, such as electronics and telecoms, with some success in attracting sizable numbers of female employees. In addition, there appears to be significant potential for expanding female-owned SMEs and encouraging them to employ more women, as we argue below.

<sup>2</sup> IFC & GPFI (2011) uses a different definition of female-owned firms and depicts a very different picture. It defines a firm as female-owned if any of the owners is a woman and as male-owned only if all owners are men. This definition clearly underestimates the role of men among enterprise owners in significant ways. The definition used in this report is based on the question whether the principal owner is a woman or if a woman is the sole owner of the enterprise. A firm is designated as male-owned if a man serves as the principal owner or if all owners are men. The firms that cannot be identified in these ways are not included in the measures and analyses. By the IFC&GPFI (2011) measure, which is also used in WDI (2011), about 15% of SMEs in MENA are female owned, compared to the global average of about 33% and much higher rates in East Asia, Latin America, and Eurasia regions. However, it should be kept in mind that this measure is hard to interpret as an indicator women's leadership in SMEs.

Also, definitions of what a female owned SME is also vary. For instance, IFC & GPFI (2011) uses a different definition of female-owned firms and depicts a very different picture. It defines a firm as female-owned if any of the owners is a woman and as male-owned only if all owners are men. This definition clearly underestimates the role of men among enterprise owners in significant ways. The definition used in this report is based on the question whether the principal owner is a woman or if a woman is the sole owner of the enterprise. A firm is designated as male-owned if a man serves as the principal owner or if all owners are men. The firms that cannot be identified in these ways are not included in the measures and analyses. By the IFC & GPFI (2011) measure, which is also used in WDI (2011), about 15% of SMEs in MENA are female owned, compared to the global average of about 33% and much higher rates in East Asia, Latin America, and Eurasia regions. However, it is worth bearing in mind that this measure is hard to interpret as an indicator women's leadership in SMEs.

In this report, we first examine the general picture of firm ownership and employment of women in NA and compare and contrast this with other countries in the ME and other regions. Situating NA countries within these contexts is helpful as there are some similarities between NA and ME countries, which have notable differences with most other regions. In particular, women's employment and entrepreneurship in both NA and ME regions have been more limited compared to their counterparts in the rest of the world. Next, we relate the patterns of female economic activity and ownership and employment of firms to country conditions by applying econometric techniques to a combination of datasets. The details of the statistical analyses are reported in an appendix<sup>3</sup>. The discussion in the main text will focus on the interpretation and implications of the results for NA countries. The purpose is to shed light on the challenges and opportunities that shape the performance of female-owned SMEs in NA. We explore some of the ways in which the barriers may be removed. We do this by looking at specific policies and offering examples of the strategies that may help to enhance the role of women in SMEs in both formal and informal sectors.

The key cross-country micro dataset that we use is WBES for the years 2002-2010, which covers large samples of formal-sector firms (altogether 136,424) in 134 countries, including three in NA—Algeria (1157 observations), Egypt (4016 observations), and Morocco (1509

observations)—and 8 ME countries with 7873 observations<sup>4</sup>. Parts of our analysis also take advantage of a cross-country, representative and consistent micro-level data provided by the Global Entrepreneurship Monitor (GEM)<sup>5</sup>. The GEM dataset provides information about the employment status and some key characteristics of 428,242 individuals across 74 countries in 2009 and 2010, including 3 NA countries—Algeria (1869 observations), Morocco (1375 observations), and Tunisia (1906 observations)—and 10 ME countries with 31,116 observations. We combine these datasets with the available country-level data from a variety of sources—World Development Indicators (WDI)<sup>6</sup>, Worldwide Governance Indicators (WGI)<sup>7</sup>, World Values Survey (WVS)<sup>8</sup>, Doing Business (DB)<sup>9</sup>, and Women, Business and the Law (WBL)<sup>10</sup>—to examine the determinants of female employment and ownership rates in SMEs and large firms across countries, thus enabling us to compare the conditions in NA with ME and other world regions.

Although we discuss informal sector entrepreneurship, our use of WBES dataset focuses most of our analysis on the formal sector. We recognize that in NA economies, there exist a huge number of informal SMEs and micro enterprises, where women entrepreneurs' presence is significant and the challenges they face there are even greater than those in the formal sector. These types of enterprises are often intertwined with the formal sector and their activities have significant consequences for the economy as a whole. However, a large part of our analysis concerns the role of gender in the ownership and employment of formal sector firms for three reasons. First, much can be learned about the formal sector, which is a more desirable type of enterprise formation, especially for women entrepreneurs. Second, formal sector data is more accessible and its study can offer insights about informal firms, for which useful data is much more limited. Third, we want to take advantage of WBES, which offers extensive data on the formal enterprises.

In addition, deeper understanding of the constraints and opportunities for women's economic activity requires detailed studies that flesh out the specificities of each industry in each country. One might also want to look at sectors which do not exist which could benefit women, which are successful in other countries and regions given the changing nature of enterprise and demands. However, it is important to have the cross-national and cross-regional picture as frame of reference as a starting point of case studies that can help fill the richer details of the picture.

<sup>3</sup> These analyses and their results are based on our related papers: Bahramitash, Esfahani, and Lin (2014), Esfahani and Bahramitash (2014), and Esfahani and Lin (2014).

<sup>4</sup> For more details about the source and nature of this dataset, see: <http://www.enterprisesurveys.org>.

<sup>5</sup> For details, see <http://www.gemconsortium.org>.

<sup>6</sup> <http://databank.worldbank.org/data/databases.aspx>.

<sup>7</sup> <http://info.worldbank.org/governance/wgi/index.aspx#home>.

<sup>8</sup> <http://www.worldvaluessurvey.org>.

<sup>9</sup> [www.doingbusiness.org](http://www.doingbusiness.org).

<sup>10</sup> <http://wbl.worldbank.org>.

## II. Patterns of Women’s Entrepreneurship and Employment in North Africa

In this section, we present a broad picture of the pattern of women’s entrepreneurship and employment in formal enterprises around the world based on the WBES dataset. As noted above, the Enterprise Surveys do not cover microenterprises and typically focus on firms with several workers or larger enterprises. They also include relatively a small number of firms with more than 100 workers. Therefore, for ease of presentation and analysis, we divide the sample firms into two groups: firms with 5-49 workers, which we designate as SMEs, and those with 50 or more workers, which we call large firms.

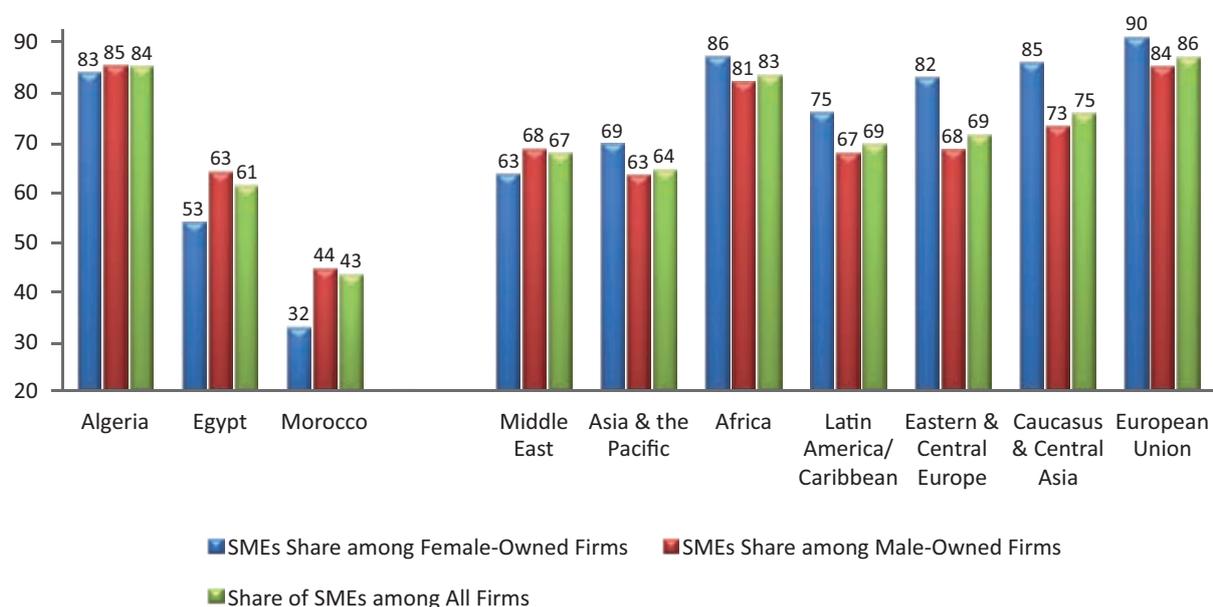
As we have pointed out above, Figure 3 confirms the relatively low share of female-owned SMEs in the NA region. However, the figure also shows that the female ownership rates among larger firms in NA tend to be high compared to those prevailing in other regions. Interestingly, this is the case for ME countries as well. Indeed, NA and ME are the only world regions in which female ownership is less common among SMEs than among large firms! The regional averages,

of course, mask significant variations among countries in each region. In particular, in NA there is a notable contrast between Egypt with high rates of female ownership and Morocco with quite low rates.

The relative scarcity of SMEs, especially female-owned ones, in NA and ME countries can also be seen in Figure 4, where we present the share of SMEs in total number of firms by the gender of the owner in each country. Algeria with its high share of SMEs is a rare exception in the ME and NA regions. Figure 4 also highlights an important fact that ME and NA are the only world regions in which the share of SMEs among female-owned firms is less than their share among male-owned firms. These observations point to structural issues in those regions that constrain SMEs generally and female-owned ones in particular. Shedding light on these constraints is important for understanding whether promoting SMEs is a dead end or an opportunity for expanding employment.

Figure 4

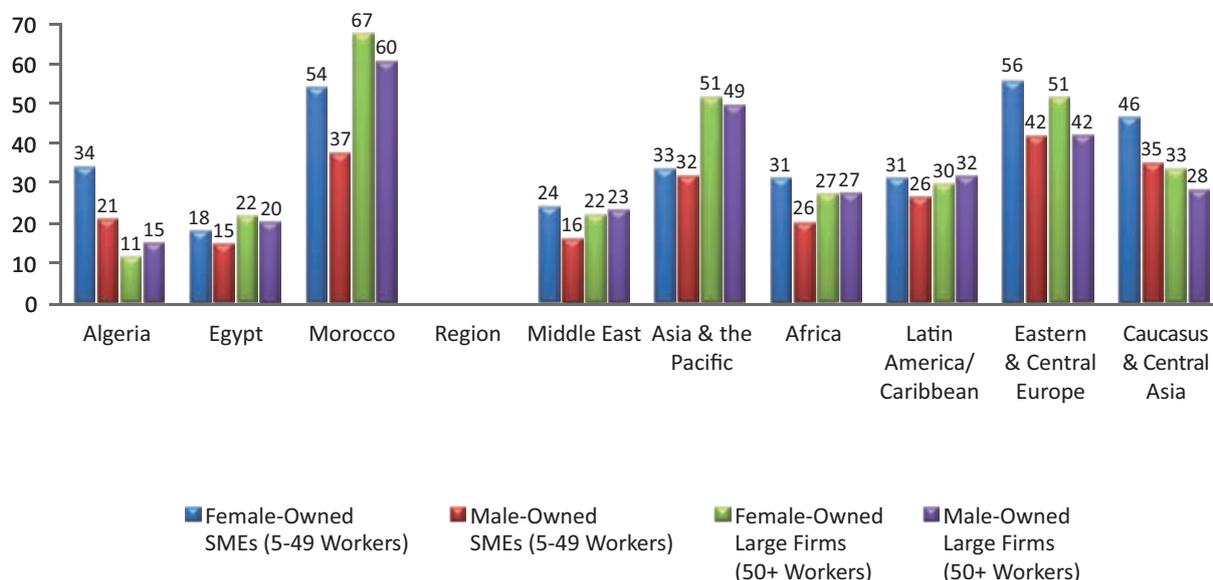
Share of SMEs Among All Firms by Gender of the Principal Owner  
NA Countries and Cross-Country Regional Averages  
(Based on WBES Sample)



The potential of female-owned SMEs for creating jobs for women around the world can be seen in Figure 5, which compares the workforce share of women in different firm types in NA countries and various regions. As other studies have also observed, female-owned firms employ more women than male-owned ones, and the edge is generally more marked among SMEs. This has been clearly the case in the past in Algeria, but

not in Egypt and Morocco. However, in all three countries, newer female-owned firms have been hiring increasingly more women for their workforce (Esfahani and Bahramitash, 2014). Furthermore, if the constraints on female-owned SMEs are removed and they are enabled to achieve the relative position that their European counterparts have, they would be the biggest job creators for women in NA.

**Figure 5**  
**Share of Women in Enterprise Employment in North Africa**  
**Compared to cross-Country Regional Averages**  
**(Based on WBES Sample)**



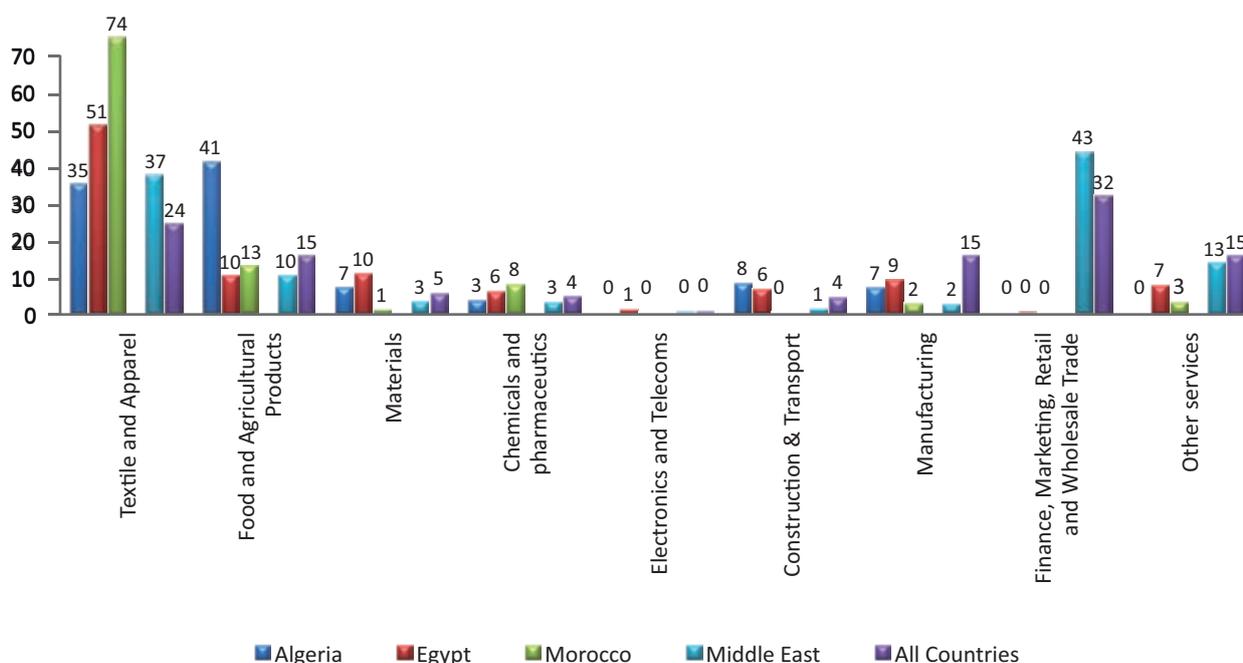
The sectoral pattern of women’s employment in female-owned SMEs that emerges from the WBES dataset can be seen in Figure 6. The figure suggests that the jobs generated for women by SMEs in NA are overly concentrated in textile and apparel sector, when compared to the rest of the world. Indeed, based on the WBES survey results, the share of this sector in the total employment of female-owned SMEs in Algeria, Egypt, and Morocco is about 35 percent, 52 percent, and 74 percent, respectively. The situation is not very different in most of ME region. Outside ME and NA, the regional averages of female ownership rate among SMEs are less than 35 percent, with the world average being no more than 24 percent. The textile and apparel sector tends to be labor-intensive and very competitive, but it is technologically not dynamic and has little room for market expansion. As a result the firms in the sector often suffer from low profit margins and offer low-skill/low-pay jobs. It should be noted that female-owned SMEs in NA also offer relatively good employment

opportunities for women in food and agricultural products, materials, chemicals, pharmaceuticals, construction, and transport, which in some cases have higher labor productivity and better pay. Newer SMEs are also emerging in electronics, telecoms, and manufacturing that tend to have higher female-ownership rates and employ more women. However, these developments still remain quite limited.

The sectoral patterns of SMEs in NA discussed above by and large apply to larger enterprises and male-owned firms in the region as well. The concentration of women’s employment in low paying sectors contributes to large female-male wage gaps in NA and most of ME. Overall, next to parts of Asia, the MENA region lags behind the rest of the developing world in terms of economic opportunities for women. This is especially worrisome because this region has gender segregated labor markets and public spheres that may constrain participation and productive of use of female labor.

Figure 6

**Distribution of Female Employment Across Sectors in Female-Owned SMEs in North Africa Compared to Simple Cross-Country Averages for MENA and All Countries in WBES Sample (Percent of Total Female Employment in All Women-Owned SMEs)**



A common aspect of SMEs, especially the smaller and less capital intensive ones, is their much high rate of failure than larger enterprises (VVG P et al., 2013). When this turnover is the result of technological dynamism, the SMEs have upside chances of fast growth as well as downside risks. However, in competitive and technologically stagnant sectors, the short average life span reduces the upside opportunities for growth. This factor has been highlighted as a major problem in Sub-Saharan Africa (Rostam 2012, GSGIR 2014, Triki and Fay 2013, AfDB2014). But, it may apply to NA and some other regions as well.

It should be noted that high levels of female participation in the economy or SME ownership do not automatically translate into economic empowerment and higher incomes. While numbers and statistics are a concern, it does not necessarily mean that in regions such as Sub-Saharan Africa or part of the Caribbean where women's shares of employment and SME ownership are larger, women necessarily enjoy more prosperous economic conditions or benefit from being SME owners. This also applies to Egypt, where female-owned SMEs are relatively more common, and Morocco, where female employment in large firms is quite high.

### III. Challenges and Opportunities of Female-Owned SME Expansion in North Africa

As mentioned earlier, AfDB's inclusive growth strategy emphasizes the role of gender with three main focus areas: legal status and property right, economic empowerment, knowledge management and capacity building. Our analysis of barriers and enhancements to female-owned SME formation in NA follows that general framework. However, in discussing legal issues, we extend the framework to take account of social and cultural factors that interact with legal rules and shape their outcomes. We start with legal aspect of gender inequality and then discuss the role of social and cultural factors. We follow this discussion by examining economic and regulatory factors. We end the section by exploring the factors that influence capacity building.

#### a. Legal Factors

Many observers have attributed women's economic underperformance in NA to social and cultural factors. Some of these claims are difficult to substantiate or put to rigorous tests. Commonly held views suggest that NA women's major barriers to achievement are social and legal (specifically, traditional cultural attitudes. However, as far as legal barriers are concerned, there are no direct laws preventing women to own businesses in NA, though there is a host of indirect barriers. These are coded in personal and family laws, such as laws governing inheritance, according to which women's share of inheritance from their parents and spouses are remarkably less than men's. This results in women's low property ownership, which translates into having less access to collaterals. There are other barriers to ownership as well that are encoded in the civil laws in some countries. These often reinforce the obstacles enshrined in traditional and local rules and norms. Indeed, legal rules that are not embedded in local culture often have little tangible consequences. In this sense, social and cultural factors are critical because they shape the laws and their implementation. In this subsection, we focus on legal rules. The next subsection expands on the role of socio-cultural factors affecting women's participation in economic life in NA.

Discriminatory legal rules are a source of economic inequality for women. Reviewing the WBL panel data of 143 countries for over 50 years, World Bank-IFC (2014) points out that there are visible legal disparities between men and women lingering in 128 of them. This point is also confirmed by other sources especially in connection with

the difference in formal economic rights in the law (GSGIR 2014). Such inequalities differ from country to country and their effects vary for different groups of women. For example, unmarried women seem to face fewer barriers than married women in 25 countries. The inequities also range in their nature. For instance, in some countries there are legal barriers for women regarding choice of place to live, in some others they cannot be identified as the head of households in the same way that men are. Another common barrier is restrictions on property ownership and control through, for instance, unequal inheritance rules or lack of equal access to the justice system.

In the NA region, where multiple sources of law exist along Islamic legal codes, there are no direct laws preventing women to own businesses (just as it is the case in ME countries). However, there are a host of indirect barriers related to Sharia and secular laws as well as local customary legal systems. These are coded in personal and family laws, such as laws governing inheritance, according to which women's share of inheritance from their parents and spouses are remarkably less than men's. There are also some legal rules in ME countries that have not been coded legally in NA countries, but their influence is present in the latter because of cultural affinity between the two regions. An important example of this is the requirement for married women to have permission from their husbands for travel outside home. According to the WBL dataset such a rule formally exists in eight countries in the world, six of which are in ME. This is very important for women's entrepreneurship because, as our statistical analysis in the Appendix confirms, it has a significant negative impact on female ownership of firms, especially SMEs.

With regard to entrepreneurship, property ownership and control are among the most significant issues (Triki and Faye 2013, AfDB/ILO 2014). This is not surprising since in many countries ownership of property, particularly land, is a core factor in one's ability to maintain a business and to obtain loans. Perhaps one of the most significant aspects of legal right to property rights and ownership are rules concerning ownership and management of property under marriage. There are a number of different legal assignments of property under marriage, but two of them are most common: partial community of property and separation of property. Under the partial community of property, the assets acquired prior to marriage are regarded as the separate property of the acquiring spouse, and assets and income

acquired after marriage are regarded as joint property of the couple. However, since in most situations husbands manage the joint property, this regime effectively puts men in control of most household assets and impedes the ability of women to seek financing and pursue entrepreneurial activity. As a result, women who would like to be economically active are more likely to seek employment rather than entrepreneurship. In contrast, under separation of property, all property acquired by the spouses before they marry, as well as all property acquired during the marriage, remain the separate property of the acquiring spouse. This property regime is more conducive to formation of SMEs by married women and may enable many of them to run their own businesses rather than becoming employees of others. These predictions are indeed confirmed by our statistical analysis of WBES data, which shows that when women do not have separate ownership and control over property under marriage, they are much less likely to establish firms, particularly SMEs. The findings suggest an important potential for the expansion of female-owned SMEs in NA because separation is the dominant regime of marriage property in the region. (This is also the case in ME countries except Turkey.)

For a more comprehensive overview of women's property rights we combined the GEM micro data on allocation of female labor across various market and non-market options with a set of indicator from WBL to explore the effects of the legal rule concerning the administration of property under marriage. Indeed, our statistical analysis of WBES and GEM datasets also shows that when women do not have separate ownership and control over property under marriage, they are much less likely to establish firms, particularly SMEs. We chose the possibility of separate administration of property with spousal consent as the base case. Compared to that case, in countries where the husband is in charge, women tend to stay home at much greater rates and have fewer part-time employment positions. The effects are similar but somewhat smaller when both spouses must agree. When the original owner manages his/her property, still the homemaking rate is significantly higher and part-time employment is lower than under the base case. However, in this case, there is also a significant shift from self-employment to full-time employment. It seems that separate administration is associated with the highest labor force participation, employment, and self-employment among women. Around the world, joint agreement is the most common form of property administration during marriage (45 percent of countries), followed closely by original owner rule (43 percent of countries). The latter rule is practiced in all NA countries (and in all ME countries except Turkey, which employs a joint agreement rule). Thus, compared to the situation in the rest of the world, the legal arrangement for administering property under marriage in NA tends to be more

favorable toward female labor force participation and employment and offers a potential for expanding women's market activity.

While legal codes are important, the extent and nature of their enforcement also matter. One factor that is likely to shape the degree of the gender bias in the legal system is gender imbalance among judges. The relative absence of women among bench holders is likely to reduce the probability of lawsuit filing by women as well as the outcome of the cases in which they get involved. While there is no data on the share of women among judges across countries, WBL dataset provides information about the share of women on the constitutional court benches, which is quite low among NA countries: Egypt has no women on its high court, Morocco has one (out of 12), and Algeria has 2 (out of 9). To the degree that this share reflects the extent of women's presence among judges more generally, the situation does not seem very encouraging for women entrepreneurs in NA. Indeed, our statistical analysis indicates a positive correlation between women's share in the constitutional court and the rate of firm ownership by women.

Addressing the legal challenges of female entrepreneurs in NA is not easy to tackle. A major problem is that legal barriers have multiple layers that need to be addressed from different angles. Some of the legal barriers are tied to cultural roots and, therefore need to be approached in very sensitive ways in order not to create a backlash (see more on this in the next subsection). However, as AfDB's Gender Strategy has spelled out (AfDB 2014), there are concrete steps that can serve as starting point and may prepare the ground for deeper reforms. For example, defining the head of household in ways that recognizes women's rights more effectively appears to be feasible and helpful. Another practical step is to appoint more female judges to ensure that the court system gain is sympathetic towards women's legal concerns and is perceived that way by women who need to rely on it.

## b. Social and Cultural Factors

Socio-cultural factors shape the perceptions (or misperceptions) and the extent and nature of knowledge that individual acquire regarding an issue that affects their lives. Sometimes, misperceptions and lack of knowledge prevent individuals to take advantage of the potentials of existing laws or to generate political support for legal reforms that could help improve their economic conditions. Because of this, it is important to understand and tackle such indirect and implicit barriers to women's participation in economic life. Indeed, some of the interviews that we conducted with women's advocates and activists

in NA countries offer insightful stories in this regard. For example, according to a Moroccan legal activist<sup>11</sup>:

“Many women are unaware of their legal rights either within the Sharia law or that of the civil law. The problem for us is that many women in the rural areas in Morocco where land is the source of income are illiterate and unaware of their legal rights religious or otherwise and this undermines their access and use of land”.

To examine the role of cultural attitudes towards women’s economic participation, we used the results of a key variable in the World Values Surveys (WVS) that shows whether the survey respondents agree or disagree with the following statement: “When jobs are scarce, men should have more right to a job than women”. The percentage of those who agree with this statement is typically much higher in both NA and ME countries and, according to our statistical analysis of WBES dataset, has a negative and significant association with the share of women in the workforces of SMEs and larger firms. Interestingly, the effect is stronger in female-owned firms.

Another important socio-cultural factor that effects women’s economic participation and empowerment is sexual harassment at work. Sexual harassment of workingwomen is a prevalent and widely recognized problem throughout the world. Indeed, most countries have legislation and legal punitive measures against perpetrators. Our statistical analysis of combined WBES-WBL dataset shows that the presence of criminal sanctions for sexual harassment in employment tends to raise the share of women in male-owned SMEs. In NA, Algeria, Morocco, and Tunisia have the relevant legislation, though only Algeria and Morocco have provisions for criminal sanctions and Egypt has none. Furthermore, there is no government office in any of these countries to address the problem. Similar situations are common among ME countries.

Indeed, as mentioned earlier, laws do not guarantee that the problem can be resolved. The presence of legislation could only be a starting point since sexual harassment continues to take place even where there are clear laws addressing it. Laws or government offices dealing with sexual harassment do not necessarily ensure that women who encounter the problem actually report it. There are often doubts about proper handling and prosecution of complaints in the legal system. As a result, the subjects of sexual harassment may not even pursue their grievances through formal channels because they lose hope

that their concerns could be reasonably addressed. There could also be a perception that women who work in the non-traditional private sector jobs put themselves in wrong positions, a perception that could also make them vulnerable. Such problems are sometimes mitigated by gender segregation and formation of female-only workspaces, which are common in NA countries. However, the prevalence of gender segregation could sometimes exacerbate the problem in other spaces where both genders are present.

Until recently, the literature on women’s entrepreneurship produced by major development agencies had rarely explored the topic of sexual harassment. The issue has been researched and discussed by other organizations and scholars. One key area of attention in this literature is that sexual harassment in workplace may be an important reason why women prefer public employment, which is often regarded as being less prone to this kind of problem. World Bank (2013: 7), for example, discusses the issue of women’s preference for public employment and their low rates of participation in the private sector. This literature has not extended much in the context of NA with a few exceptions such (Assaad and Barsoum 2007, ECWER 2008, Population Council 2011) which shows how harassment in the workplace is a barrier for many women who consider entering the labor market, especially in non-traditional and small private companies. However, the AfDB is aware of the need for further research and has called for identifying measures to address the problem (AfDB 2014).

### c. Economic Factors

One key economic factor that shapes the extent and type of women’s labor market activity is the level of education. In a recent paper that analyzes GEM dataset, we found that while labor force participation of women rises with education, the relationship of entrepreneurship with educational attainment is not linear (Bahramitash, Esfahani, and Lin 2014). Specifically, as the educational level rises from primary or lower to secondary, women tend to seek more part-time or full-time employment and engage less in self-employment or firm ownership. While on average the probability for employment for women keeps rising as they achieve higher education levels of education, the decline in entrepreneurship eventually reverses when they obtain graduate degrees. Since average years of schooling among women in NA countries is in the range of 3-7 years, many of them are in the mid-range of education, and are more likely to seek employment rather than to engage in self-employment or SME ownership. As we argue

<sup>11</sup> Hurria Kamal, legal activist, Morocco, interview on March 29, 2014.

further below in the context of access to resources and networks, this finding makes a case for the expansion of higher education in NA in ways that helps the available set of skills to extend and deepen for women from middle and lower income groups.

An important aspect of education that has received little attention in the case of women is vocational and business-skill training. While formal education in the NA region, especially at primary level, has increased and the gender gap has narrowed, as GSGIR (2014) documents, financial literacy and management skills gap continues to persist. Providing vocational, trade, business, and technical education can help increase women's productivity and employability. Such an outcome would not only enrich the labor force, but would also create a greater potential for SMEs to grow. It should be noted that these tasks cannot be left entirely to firms to train their own workers because there is a great deal of evidence that firms may discriminate against women in the kinds of training that they provide (Ariga and Brunello 2002, Seguino 2011).

Another important economic factor that affects women's economic activity as well as SME growth opportunities is the accessibility and quality of infrastructure (Richardson, Howarth and Finnegan 2004). Because women are often the primary caregivers of their families, absence of reliable infrastructure (transportation, communication, electricity, water and sanitation) can constrain their ability to work away from home, thus curbing their options to seek employment or entrepreneurship. Unreliable or poor infrastructure can also act as a barrier to SME formation and performance. Large firms can weather infrastructure problems more effectively than is the case for smaller firms because their scales enable affordable substitutes at less cost. For example, when electricity supply is unreliable, large firms often invest in electricity generation to deal with shortages and power cuts, while this is less economical for SMEs to do the same. For women entrepreneurs, whether they intend to form SMEs or larger firms, dealing with the inefficiency and unreliability of electricity supply seems to be particularly problematic. This is confirmed in the statistical analysis provided in the Appendix. Using the GEM dataset, we find that the time it takes a woman to obtain electricity could hamper her becoming an entrepreneur. The WBES dataset further shows that the same factor is associated with lower probability that a given firm may be female-owned, especially among SMEs.

NA countries have generally decent infrastructure compared to most other developing countries, though each one still has its own notable inadequacies in some parts. Egypt is relatively weak in terms of

transportation and telecommunication. Tunisia and Morocco, on the other hand, have better infrastructures and higher female participation rates. However, there is a great deal of room in all countries of the region to develop their infrastructures further and empower women economically while enhancing economic growth more generally. Good quality infrastructure can potentially improve the ability of the region's entrepreneurs, especially women who can establish SMEs, to access other services, such as banking and government. For example, reliable telecoms and mobile technology could help the development of branchless banking that can potentially widen people's access to finance significantly.

NA countries have experienced major slowdowns in recent years due to the long recession in Europe and the instability caused Arab uprisings. NA's link to Europe is through various channels, particularly tourism, consumer good exports, and capital flow (FDI, portfolio investment, and aid). Tourism matters most for Egypt and Tunisia and consumer goods exports, especially textiles and agricultural products, are important particularly for Morocco. The dominant features of these patterns are likely to remain unchanged for some time to come since NA is close to Europe's large market. Therefore, it makes a great deal of sense to provide support for NA firms to expand further into that market and benefit from it as Europe recovers from its current slump. However, NA countries are also seeing new opportunities emerge in other parts of the world for them to engage and gain. In particular, many Sub-Saharan African countries have started to grow faster and could gain a great deal from trade and mutual economic cooperation with NA. East and South Asia are also likely to be growth leaders in the world and strengthening ties with them could benefit NA. Parts of ME and Latin America may also offer export markets for NA countries. All these countries could also be the source of expansion of investment and tourism in the region.

These shifting NA countries' trade patterns and trends could bring about major opportunities and challenges. Some traditionally dominant industries such as textiles may not have much more room to grow, while others such as IT, marketing and finance services might find wider options to expand. SMEs, especially female-owned ones, could play a key role in this diversification strategy. With proper support and coordination, they could serve as vehicles to develop new products tailored for expansion into new markets and further penetration into old markets. Economic policies, infrastructure, and education matter a great deal in this process because they can lower the cost of trade and increase market access for NA SMEs.

#### d. Business Environment of SMEs: Governance and Regulatory Factors

Creating a supportive environment for SMEs is very important in enabling them to survive and function well. Small firms, especially female-owned ones, often operate in highly competitive environments with small margins and little capital to cushion them against economic shocks. As a result, when costs of doing business are high and uncertain, such firms can suffer greatly and may be driven out of the market much more easily than larger firms and importers. High turnover rates of SMEs are often very costly for the economy because they destroy many small and young firms that have the potential to develop efficiency and grow if they are in supportive environments where they can become competitive and strong to better survive adverse shocks. Rigid rules and environments are particularly cumbersome for female-owned SMEs and could negatively affect their survival rates because women entrepreneurs and workers often have a greater need for flexibility in their jobs, at least in part due to their roles as primary family caregivers.

The business environment of SMEs has different aspects, ranging from legal and policymaking frameworks to training, market development and finance. Perhaps the most significant aspect is the nature of governance that underlies policymaking and public service delivery. Where there are problems with governance, small firms become vulnerable. In particular, when the government is weak and open to corruption, the fixed costs of “getting things done” for businesses is high and smaller firms suffer most. This is especially true for female-owned SMEs, which often work with limited capital and have little capacity to overcome barriers caused by weak governance. The problem is often compounded for women because some officials may view women as targets for extortion and women may not demand public services to which they are entitled when they perceive that they are likely targets for such treatment (GSGIR 2014). We find empirical support for such effects in our statistical analysis of GEM data when we include an indicator of rule of law from WGI datasets to explain the allocation of female labor across various activities around the world. The analysis shows that the strength of the rule of law is associated with a significantly higher probability that women of working age end up as SME owners and employees rather than homemakers. These observations suggest that efforts to improve the governance conditions in NA could payoff in terms of increased female labor force participation, employment and SME ownership.

Another aspect of governance that helps SMEs, especially the female-owned ones, is policy coordination. In particular, bringing together different ministries responsible for the development and implementation

of national gender strategies and ensuring their strong links with ministries in charge of economic development can help boost women SMEs. In particular, official SME support programs, which are common in many countries, need to be linked with plans to deal with gender issues, otherwise the needs women SMEs may not be met. An absence of such links seems to be the case in all NA countries.

The nature of rules and regulations also matters a great deal, but their effects on women’s entrepreneurship and employment are complex. Some rules and practices seem to help female employment and ownership of firms, while others prove more constraining. Also, some rules that are constraining for male-owned firms, may create opportunities for female-owned ones. To explore these possibilities, we have taken advantage of WBES and GEM micro datasets together with the country level data on business and labor policies and institutions from Doing Business and gender-related regulations from WBL sources.

One finding of our analysis is that the presence of small claims courts and reduced costs and the time for insolvency resolution help female-owned enterprises much more than the male-owned ones, possibly due to low margins and high turnover rates of the former. Another interesting finding is that some labor market regulations impose disproportionate costs on female-owned SMEs, while some others are more costly to male-owned large firms. For example, when fixed-term contracts are prohibited for permanent tasks, large firms may find it easier dealing the regulation because in case they have a problem with a worker in a particular position, they may have the option of offering them other positions to which they can reassign that worker which would enable them to manage long-term contracts. Such possibilities are more limited in SMEs and, as a result, they face greater difficulties in dealing with this type of regulation. The matter is more serious for female-owned firms because they tend to rely more on flexibility for making their work environments attractive to female workers. This issue is important for NA countries because prohibition of fixed-term contracts is much more common there than in the rest of the world. Among NA countries, only Egypt is the only country which has not adopted this type of labor regulation.

Two contrasting labor regulations that seem to match the characteristics of female-owned firms better are: (1) the requirement for employers to provide break time for nursing mothers, and (2) higher mandatory working days of annual leave (i.e. vacation) with pay. Indeed, our statistical analysis shows that these rules are associated with increased share of women in their workforces and with the increased rate of female ownership among firms, especially SMEs. In NA, paid leave is much longer, but break time for nursing mothers

is less common, when compared to the labor market rules prevalent in other regions.

Exploring the ways to improve regulations is a worldwide concern. In Europe, for example, there has been increasing recognition of administrative burdens as a factor in informalization and lack of growth of SMEs. Indeed, the EU 2010 report on “Action Programme for Reducing Administrative Burdens in the EU: Delivering on Promises”<sup>12</sup> recommends reducing the administrative burden for small companies by 25% in order to facilitate their formalization. Though different from Europe, the situation in NA has similarities. A large number of women are active in the informal sector and regulatory reforms designed to bring them into formal sector can help them benefit more effectively from government services, finance, and other formal sector possibilities.

An enabling SME environment must also include support for the development of a range of competencies. A 2012 report by OECD-MENA Women’s Business Forum (WBF), *Women in Business*, emphasizes the fact that there are gaps in training and other business development services for SMEs, particularly for female-owned ones, with obvious consequences for growth-oriented firms. This is especially pertinent to marketing, product quality, and general management<sup>13</sup>. Based on a survey reported by Vital Voices Global Partnership (2011), 76% of women entrepreneurs ranked a number of business management skills as major problems, 69% expressed concern about inadequate knowledge about financial products such as SME lending services or equity capital, 66% had problems with exporting their products, 63% faced challenges regarding accounting and financial management, while 60% identified lack of information about sales to large multinational corporations among their marketing barriers.

Enhancing the demand for the products of women’s SMEs is also important for building a supportive environment. For example, the government can make a conscious effort to involve female-owned firms in its procurements. Such a policy could have important multiplier effects because women-owned firms are more likely to buy their inputs from other women-owned firms than from male-owned ones. Indeed, a 2007 survey of women consumers between the ages of 35 and 55 years conducted by Women’s Business Enterprise National Council in the United States found that 79% of them felt more inclined to make their purchase from women-owned businesses. The survey also

showed that it was possible to build consumers loyalty to brands associated with women-owned businesses. Based on this observation, the US government now tries to purchase more from female-owned firms, thus boosting the markets for such firms and allowing them to raise their productivity and develop stronger brands.

The aspects of the SME environment discussed above and the policies associated with them show that there are many channels through which governments can contribute to the development of female-owned firms and enhance their contribution to the economy and job creation, especially women’s employment. However, it is important to keep in mind that these policies need to be persistent and coordinated. Government commitment to promote women’s economic empowerment is essential and other economic actors can energize it. The government can enhance the business environment for women through orchestrating different initiatives involving civil society organizations as well as international development institutions. In such cases, the approach is much more effective when different stakeholders develop synergies. There is certainly a need for dialogue, cooperation and coordination between different stakeholders.

The World Bank puts special emphasis on the private sector as a collaborator with government to enhance the role of women as enterprise owners. For this reason, it has created a program to support female entrepreneurship at the level of research and operation and as part of their effort to improve women’s participation in the labor market. This program has produced new research and dataset for gender disaggregated analysis of the private sector and its barriers and potentials for women.

In the NA region, there have been a variety of efforts by governments to adopt national economic development plans aimed at enhancing women’s economic integration. But, the coherence and impact of these policies have not been adequately researched to assess their performance and to identify the ways in which their full potential could be raised and realized. One shortcoming that seems visible from a preliminary review of the evidence is the lopsided forms of government involvement. In particular, in most of the region women are considered a target group most commonly when it comes to micro finance for low-income women, but not so much in other aspects of the business environment. For example, finance policies have not focused much on growth-oriented firms. Moreover, more sophisticated business support such as IT and bookkeeping and skill development as well

<sup>12</sup> [http://ec.europa.eu/dgs/secretariat\\_general/admin\\_burden/docs/abr\\_delivering\\_on\\_promises\\_en.pdf](http://ec.europa.eu/dgs/secretariat_general/admin_burden/docs/abr_delivering_on_promises_en.pdf)

<sup>13</sup> [wlsme.org/sites/default/files/resource/files/Women%20in%20Business.pdf](http://wlsme.org/sites/default/files/resource/files/Women%20in%20Business.pdf). For information about OECD-MENA Women’s Business Forum, see [www.oecd.org/mena/investment/womenempowerment.htm](http://www.oecd.org/mena/investment/womenempowerment.htm).

as trade information and accounting services remain underdeveloped in the NA region.

Improving the business environment for female-owned firms in NA are likely to yield high returns. There is a large pool of well-educated women in the region, with an increasing number of them holding MBA degrees. However, a large part of this pool remains unemployed, which is a major loss to the economy. Utilizing the reservoir of their high skill will greatly benefit the country especially as SMEs. As part of this effect, the governments of the region need to devise policies for increasing women's participation in the labor force, which is a major challenge throughout the MENA region.

Multilateral institutions can be of considerable help with regard to female entrepreneurship and employment. Indeed, a World Bank initiative under Gender Action Plan (GAP) has been exploring women's leadership in micro and SME projects. In the case of Egypt, for example, where unemployment among women is high, the private sector jobs are encouraged to engage in innovations which are led by women. The project provides seed funds as well as loans for innovative products and is coupled by evaluation and assessment of credits for SMEs as part of economic empowerment for women in Egypt (for more on the GAP see Buvinic, 2011).

### e. Access to Finance

The literature on gender and entrepreneurship indicates that one of the most important barriers to women's entry to entrepreneurship is lack of access to credit (Piras, Presbitero, and Rabellotti 2013, Bahramitash 2013b, AfDB 2014). According to a survey carried out in 2007 by the Center of Arab Women for Training and Research (CAWTAR) covering over 1200 women entrepreneurs in five Arab countries (Jordan, Bahrain, Lebanon, Tunisia and UAE), a major complaint of women entrepreneurs is lack of access to formal financing for business growth. Although the survey is primarily on ME, similarities between ME and NA may shed light on the importance of paying attention to the matter.

We examined the issue of access to finance in our empirical analysis of WBES data by employing an indicator of access to finance from the Doing Business dataset and assessing its impact on the share of female-owned SMEs vs. larger or male-owned firms in a country. The indicator was the percent of adults in a country who are covered by public credit registry. Such registries can facilitate borrowing, especially for lower income groups and women. Our analysis showed that expansion of public credit registry coverage is associated with

significant rise in the share of female-owned SMEs among firms in a country. The average coverage rate of public credit registry in NA countries is currently around 1 percent, compared to an average of about 4 percent in other developing countries and well over 20 percent in Europe. So, this is clearly an area where progress is practical and needed. Private credit bureaus may also help, but they are mostly effective for large borrowers and in higher income countries. The coverage of private credit bureaus in NA countries is negligible. In MENA, only Turkey and Saudi Arabia have non-trivial coverage by private bureaus.

Limitations of women's access to finance have different angles. On the supply side, a survey by IFC-GPFI (2014) indicates that women entrepreneurs often view commercial banks as being too cautious about giving them access to loans for small businesses because the banks consider the associated risks to be excessive. When they do offer loans to small enterprises, they charge high interest rates that in themselves, become a major barrier. The issue is significant throughout the developing world, but it is a particularly acute one in the MENA region. There are undoubtedly other factors, such as lack of business track record and sector of activity as well as discrimination due to being a woman (Klapper and Parker 2011).

Another concern is the need for women to develop a greater understanding of the intricacies of the banking systems and the general business environment facing SMEs. The IFC-GPFI survey indicates that many SME female owners are concerned that they are not sufficiently knowledgeable and experienced in bank-related matters to deal with the needs and requirements of their firms. Yet, perhaps one of the most important aspects of the problem is absence of programs and products geared specifically to the needs of women business owners.

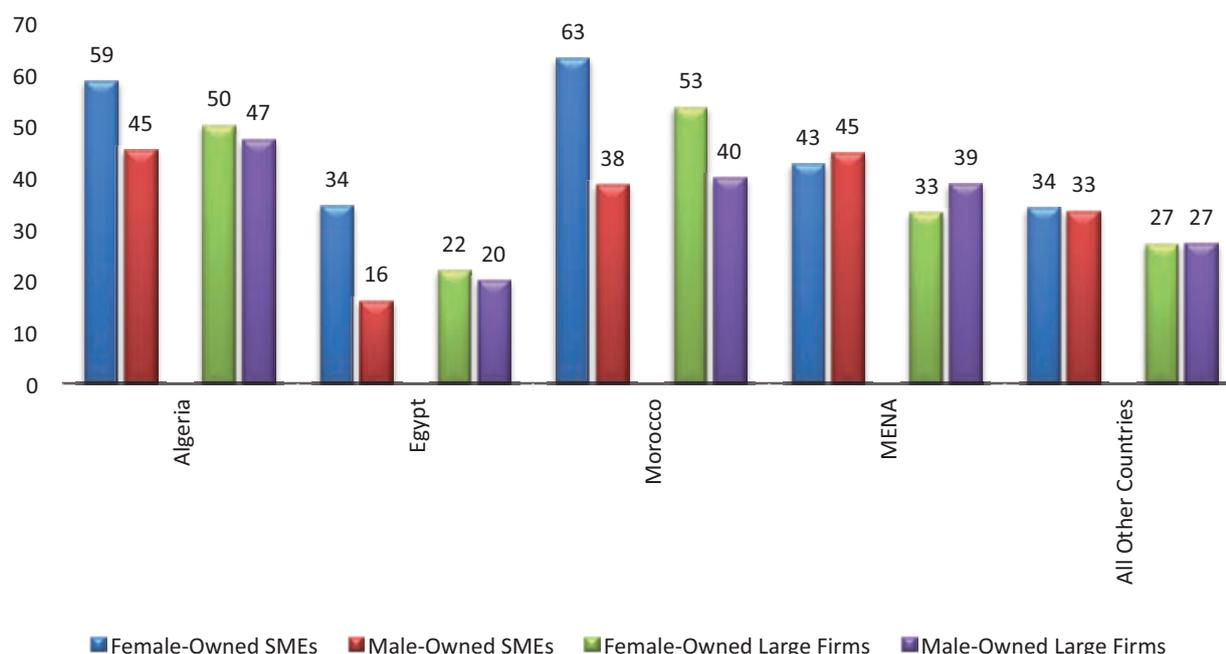
A demand-side angle is the attitudes towards rejection and failure. There are many indications that in anticipation of rejection, some women entrepreneurs may never apply for a bank loan or limit themselves to small and inadequate loans. As a result, it might be that the problem is not entirely a matter of supply but also absence of demand on the part of women entrepreneurs. Stefani and Vacca (2013) argue that this is even true in Europe, where some women entrepreneurs fail to apply for external financing and, as a result, lose the chance to use a wide range of funding sources. In another recent study on 17 European countries, Ongena and Popov (2013) illustrate that compared to men, women are indeed less inclined to rely on bank credits and more on trade credit. Interestingly, Ongena and Popov find that once women obtain loans, the loan terms are similar

to those offered to men. A further demand side factor is lack of familiarity of female SME owners with the financial services and products geared towards SMEs. Many women are unaware of

commercial banking products available to them, such as equity capital, supply chain financing, or other instruments that distribute risks efficiently.

**Figure 7**

**Percent of Firms Declaring Access to Finance as Major or Very Severe Constraint on Business in WBES Sample of Firms**



The combination of all these demand and supply side effects seems to be truly constraining. Indeed, IFC-GPFI (2013) estimates that women’s access to commercial bank financing ranges between 2 and 10 percent of its potential. The problem is particularly severe in NA, as can be seen in Figure 7. This figure shows the share of firms in WBES dataset that view credit constraint as a major or very severe constraint on their operations in four different categories of firms: female-owned SMEs, male-owned SMEs, female-owned large firms, and male-owned large firms. A striking observation in this figure is that female-owned SMEs in NA report credit constraint much more frequently than their counterparts elsewhere (in Morocco and Algeria, the frequencies are almost twice the non-MENA world average of 34 percent). Another point emerging from the figure is that while in the rest of the world female-owned SMEs report severe credit constraints at virtually the same rate as male-owned SMEs, in NA there is a comparatively large: The share of credit constrained female-owned SMEs is about 15 percent higher than the share among male-owned SMEs. Interestingly, this gap is smaller among large firms in the region, though still very different from the situation outside MENA where there

is virtually no difference between female- and male-owned large firms concerning access to credit as a constraint on business. There is clearly a need in NA for improving access to finance, capacity building, financial literacy, and enhanced information and training in accounting and financial management for women entrepreneurs.

The limitations of women’s access to finance in developing countries has raised widespread concerns. In 2000, the Global Banking Alliance for Women (GBA) was established as a joint organization of major financial institutions to contribute to women’s wealth creation worldwide. Today it has twenty-five member institutions and works in 135 countries to build innovative, comprehensive programs that provide women’s business enterprises with access to capital, markets, education, and training. In return for their membership, the Alliance offers women entrepreneurs technical assistance and peer learning. It also serves as a global clearinghouse for best practices. Along with building its member institutions’ capacity to serve their women customers, the GBA uses its collective voice to advocate for the needs of women entrepreneurs. In their website they state: “GBA

members recognize the immense potential that the women's market represents. Women are now creating small and medium enterprises at rates approaching or surpassing those of men in many markets. We look forward to increasing awareness about the business case for banks to focus on women, to expanding our membership, and as a result, to increasing opportunities for women in business worldwide".

There are also examples of successful private lending institutional strategies such as DFCU Bank in Uganda. The Bank has noted that Ugandan women own 39% of registered businesses, but receive only 9% of business credits. It has argued that there are opportunities to increase the Banks' SME lending portfolio. With the help of IFC, it has created the Women in Business Program, which has extended lending to women entrepreneurs. This has been in conjugation with complementary services that raise the chances of success with loans, especially through provision of advice and other services and training programs for the borrowers. The program has been aware of the problem of lack of collateral (e.g., women own only 6% of land) and has used other assets and mechanisms, such as equipment lease, for financing instead of traditional loans. IFC has provided training for women to enable them to navigate the banking system, to gain greater financial literacy, and to access business networking and mentoring. Such programs make a great deal of difference. When such programs are absent or limited, women who face credit constraints tend to approach family members for loans. Such loans are helpful, but they are often quite small and could involve complexities. This is related to the issues women's SMEs informality and, more broadly, to the functions of social networks (Bahramitash 2013a, World Bank 2013).

## f. Access to Business Networks

Another barrier to female SME ownership, which has some connection with the issue of access to finance, involves the limitations of women's social (business or otherwise) networks. Networks are crucial for arranging finance, gaining access to supply chains, finding business opportunities, and learning about how deals are negotiated and sealed. Also, networks often help entrepreneurs benefit from mentorship and other forms of support. Effective social networks can reproduce and reinforce access to business communities. However, there is a tendency for women to be excluded from influential financial and business networks. This impedes women entrepreneurs' access to credit and other advantages of networking (Bahramitash 2013a, Shaw and Carter 2007).

In the absence of access to formal business networks, many women find ways of benefiting from informal networks. According to the

IFC-GPFI (2011) survey, more than half of female SME owners earned their capital through personal savings and borrowing from family and friends. However, this limits opportunities for enterprise formation and growth, especially for women. While funding sources through non-commercial means may be crucial to start a business, they are too limited for the survival and growth of most firms. This argument is supported by our statistical analysis of WBES data, in which we explored the impact of a measure of reliance on informal capital on the distribution of firm size and ownership by gender. The measure is the average of the shares of funds from family and friends used for investment and working capital in the country samples of firms. Our regressions show that a higher value of this measure, which indicates greater reliance on personal networks, is associated with lower presence of large firms owned by either gender, especially men. However, while the reduction in the share of male-owned large firms is over-compensated by an increase in the share of male-owned SMEs, there is no increase in the share of female-owned SMEs when the share of large female-owned firms declines. In other words, limitations of formal finance seem to reduce the firm sizes generally, but to push some female-owned SMEs out of the market.

The above observations are consistent with the view that relying on private and informal funding sources traps women in their limited social network (Furstenberg and Kaplan 2004). While men's networks are typically more formal and extensive, women's networks tend to be more informal and family based. The problem extends itself in many different angles. For example, women tend to seek advice and consultation from their husbands and family members and limited networks instead of reaching out to professional advisors. Since they are more rooted in their immediate community, their business advice and consultation sources often lack sufficient professional expertise.

Among NA countries, Algerian firms tend to rely on family networks more than the median world country, but Egypt is close to the median and Morocco is well below that level. We don't have data on Tunisia and Libya, but formal networks are probably relatively more developed in the former, and rather underdeveloped in the latter. However, all five countries seem to have room for improvement in formal networks, particularly those that help women entrepreneurs get access to finance and business support.

There is a great deal awareness around the world that women's access to formal business networks is limited. This has prompted efforts at national and international levels to address the issue. For example, in 2005, a Pan-African conference on "Promoting the Development of African Women in Business: Towards Economic and Social Leadership" was co-organized by the African Network for

Support to Women Entrepreneurs (ANSWE) and ILO, with the aim of creating an environment that would energize female-owned SMEs in Africa.

In the MENA region, the MENA Businesswomen's Network (MENA BWN) was launched last year for the first time and convened its inaugural forum with around 350 participants. The forum sought to provide a peer-to-peer event that offered businesswomen of the MENA region the specific, hands-on skills and contacts necessary to transform and grow their businesses. Some other related networks that operate at national levels in NA are Association for Women's Total Advancement & Development (AWTAD) and Egyptian Business Women Association (EBWA) in Egypt, *Chambre Nationale des Femmes Chefs D'Entreprises* (CNFCE) in Tunisia, *Association des Algériennes Managers et Entrepreneurs* (AME) in Algeria, and *Association des Femmes Chefs d'Entreprises du Maroc* (AFEM) in Morocco. There are also further regional networks initiated by OECD, such as OECD-MENA Women's Business Forum (WBF) and a forum designed to monitor the implementation of 2007 "Declaration of Fostering Women's Entrepreneurship in the MENA Region", which try to expand national networks and connect them with international networking organizations.

The AfDB's private sector framework to develop SMEs in Africa has also included programs that combine finance with network support for women entrepreneurs. For example, in the 2000, AfDB together with ILO launched three initiatives in this regard in Sub-Saharan Africa: (i) Franchising development in Africa, which financed franchisees; (ii) African Women Entrepreneurs (AWE), aimed at promoting increased associative capacity and networking of AWE, while facilitating their access to credit; and (iii) Build up and strengthen linkages between business development services providers and the local financial sector (Stevenson and St-Onge 2005).

A further helpful policy is to facilitate the integration of qualified women-owned SMEs into supply chains. This can enhance supply diversity and bring added value and innovation. So far, only two countries have adopted such policies in explicit ways: the US and South Africa. In the US, the government aims to reach a 5% goal for contracting women-owned businesses from the base line of 3.4% in 2010 (Niethammer 2013).

### g. Women's Time Constraints, Double Burden, and the Double Dividend Effect

Owing to the fact of their roles as primary family caregivers especially in the context of the developing countries, evidence shows that women

have much less time to work outside the home than do men and this affects their overall performance in the labor market. This higher demand on women's labor affects not just their available time but also their mobility. There is a great deal of research on the impact of family obligations on women's time that shows the adverse consequences for their labor force participation and entrepreneurship. For example, IFC & GPFI (2011) quotes a recent study carried out on women in Mexico that shows how demand on women's time for providing care for their children is a major restriction on female-owned firm growth. This is specially the case for women with children under the age of 12 and the effect is quite sizable because it could reduce the profitability of their firms by up to 40%. The same report documents that in the case of Bolivia, women with children are two to three times more likely to have their businesses home based. IFC & GPFI (2011) further argues that if there are provisions for lifting the burden, as illustrated by improved childcare support in Tanzania, the productivity of male-owned firms could increase substantially, by around 44% in terms of output and at least 10% in terms of income.

Childcare, is only one part of the women's double burden. Other parts typically include meal preparation, clothes and house cleaning, and care for the sick and the elderly (Kabeer 2012). Dreze and Goyal (2003) and Berlinski and Galiani (2005), among others, provide ample further evidence that lifting women's care burden enhances their role in the labor market both as employees and as employers.

The government has an important role to play regarding the provision services that reduce women's double burden because without public support, caregiving tasks typically come to be viewed as excess burden of employing women rather than a cost that must be borne by men as well. This is again the consequence of the dominant culture that sees family care as the responsibility of women, so the value of their employment is commonly assessed net of the value of family caregiving, while typically no such deduction is considered for men. The literature on this topic is quite vast and confirms the problem of the excess burden or the "double day" dilemma for women. The concept of double day as well as unpaid labor (as primary family caregiver) has been documented by academics in the past few decades (Moser 1991, Lourdes 1995, Flora 1995, Lind 1997). Our cross-country statistical analysis based on GEM and WBL datasets indicates that public provision of childcare raises the probability of employment for women by an average of almost 6 percent and helps reduce their unemployment rate substantially. In NA, Egypt, Morocco, and Tunisia provide some public childcare for children under the age of primary education, though there is not sufficient data available to make cross-country comparisons regarding the extent, quality, and accessibility of such services.

While public childcare provision is helpful, it does not fully address the double burden issue. This is pertinent in NA, where women continue to be the primary family caregivers, responsible not only for childcare, but also for elderly care and most household tasks (De Groot 2001, UNIDO 2003). This is a particularly serious barrier to female-owned SMEs as their profit margins tend to be low and therefore the cost of family caregiving could outweigh the economic gains from business activities. When the issues of more pronounced gender segregation and sexual harassment are added to the double burden the effects could be much more profound. In the case of more mature women, time limitation could be less severe, but lack of access to education, business experience, and networks often keeps them trapped in the informal sector. Generally, and perhaps more in the case of NA countries, women lack sufficient confidence to fully explore their entrepreneurial possibilities (Delmar and Holmquist 2004).

#### **h. Informal Economy and Micro, Small, and Medium Enterprises (MSMEs)**

The informal sector constitutes a vast part of the economy in the developing world, including NA countries. It is typically characterized as a sector that provides low paid and precarious jobs. The workers in this sector are, by definition, outside of labor protection laws (Chen, Vanek, and Carr, 2004, Sethuraman 1995). For women, there is a significant correlation between working in the informal sector and suffering from low income and poverty throughout the world (Chen 2001). The estimates about the share of women in the informal sector in some parts of the developing world are as much as 50% who work as self-employed (GSGIR 2014:6). IFC estimates of MSMEs owned by women provide a similar picture and suggest that of well over 270 million such firms operating around the world, about 40% are female owned (IFC 2013). Many women who engage in the informal sector remain concentrated in home-based activities, largely due to their responsibilities

as primary family caregivers, as mentioned earlier (Chen, Vanek, and Heintz 2006, Chen, Vanek, and Carr 2004: 5). Despite these limitations, the informal sector remains indispensable in developing countries as a means of job creation and product and service provision because informal activities take place in highly flexible labor markets and often require little capital for starting and operating firms. These characteristics provide major opportunities to many women to enter into gainful employment and entrepreneurship. In the case of self-employment in particular, the informal sector is highly flexible and accommodating for women who lack time and are bound by their reproductive work. Women who engage in self-employment or informal sector entrepreneurship can serve as role models for other women and may provide incentives as well as mentorship for other women who are out of employment. Thus, while the type of employment opportunities generated by the sector is far from ideal, it offers opportunities for those who lack other options. For many women, the informal sector can be the first step towards expansion and entering into the formal sector. Because of these benefits, as we recommend at the end of this paper, it is important to explore policies that assist women to participate in the informal sector when formal options are constrained (Bahramitash 2013a).

While informality remains important in NA and ME region, it is worth noting that there has also been a great deal of effort on the part of women to expand their roles in the formal sector. A recent survey conducted by IFC and MENA BWN suggests that women entrepreneurs in the region have exerted significant efforts to become formalized (IFC 2013)<sup>14</sup>.

The AfDB has been aware of the informality issues in Africa, which applies to millions of women in the continent. It has recognized the need to support the enterprises in the informal sector as a means of promoting growth and reducing poverty (AfDB/ILO 2003). However, as discussed earlier lack of social protection remains a concern.

<sup>14</sup> <http://www.vitalvoices.org/node/649>

## IV. Conclusion

The review of evidence in this report has shown that a key mechanism for providing better job opportunities for women especially within the context of inclusive growth in NA has not been working well. Female-owned SMEs that employ many women elsewhere in the world tend to be scarce in NA countries, and the existing ones do not employ as many women as their counterparts do in the rest of the world. To examine the reasons behind these phenomena and derive policy implications, we follow a framework based on the AfDB gender strategy, which relies on three pillars: the legal status and property rights, economic empowerment, and knowledge management and capacity building (AfDB 2014). Our analysis of points to a host of significant challenges facing women becoming SME owners in the region. These include women's double burden, legal and cultural barriers, lack of access to training and business related support, limited access to property and credit, absence of effective networks, and problems associated to economic infrastructure. While some of the challenges are common to many other parts of the developing world, some others are more specific to NA either in terms of nature or their level of intensity.

The key results of our examination of the available cross-country data and the literature can be summarized as follows:

1. While in NA there are no direct laws preventing women to own businesses and the property rights under marriage are even-handed, many legal rules emanating from tradition or civil and religious codes restrict women's asset accumulation and economic and financial activity. This is the case with the family laws, especially the laws governing inheritance. The institutions for interpretation and enforcement of laws are also open to bias against women's access to economic and financial resources.
2. Traditional social and cultural norms and perceptions reinforce the constraints on women's employment and entrepreneurship. This includes lack of knowledge of existing rights or understanding of the potential for legal reform. Sexual harassment of working women is also a major barrier to women's economic engagement that has not been adequately tackled in NA countries.
3. Education plays a key role in enabling women to seek employment and engage in entrepreneurship. NA countries have had some achievements in this regard, but the educational attainment so far has provided more impetus for women to seek more part-time or full-time employment and engage less in self-employment or firm ownership. Women's entrepreneurship starts to rise more markedly at higher levels of education.
4. Infrastructure availability and quality is important for women's economic activity and SME formation. NA countries have mostly infrastructure systems that are above average among developing countries. However, there is a great deal of room for improvement in some aspects of the region's infrastructure.
5. The recent changes in world economic conditions and trade patterns offer both challenges and opportunities for women entrepreneurs in NA. Female-owned SMEs could be placed in good positions to take advantage of the new possibilities.
6. Governance deficiencies tend to affect entrepreneurship negatively, much more in the case of SMEs than large firms and more when the principal owner is a woman than a man. NA countries are often ranked in the middle or lower rangers of the distribution across world countries. As a result, improvement in governance in NA could enable women to expand their roles in the economy in significant ways.
7. Government policies and regulations that facilitate flexibility in marketplace and work environments are important for women's participation. The record of NA countries is mixed in this regard. Most NA countries have labor market regulations that tend to protect workers, but are of benefit mainly to male employees and serve as constraints on women-owned SMEs. Some regulations that are of importance for women workers are less common (e.g., break time for nursing mothers).
8. Lack of adequate access to finance and business networks is a major constraint on NA women's entrepreneurship, especially SME formation. Reliance on family and friends networks limits the size of firms generally and acts as a major barrier for the establishment of SMEs by women. Business networks are weak for NA women. The coverage of public credit registry is quite low and private credit bureaus are almost non-existent in NA countries. Basic

finance education and facilitation of credit for female-owned SMEs are badly needed.

9. Women's role as primary family caregivers is major barrier to their market participation as workers and employers. This is the case in NA no less than other developing countries. Support for maternity and provision of childcare, especially through public channels, could help reduce this burden.

It is important to note that digging deeper and uncovering the exact problems in various parts of each NA country requires a lot more data with richer detail. Indeed, research on women's economic activity in the region has remained rather limited, partly due to scarcity of gender disaggregate data and partly because of lack of awareness on the

part of policy analysts, policymakers, and policy analysts. These factors have also hampered effective policymaking in the region. While there are some gender-disaggregate micro and macro datasets, including those we use in this report, they are often deficient because of missing observations. For example, our main dataset in this report, WBES, lacked data for Tunisia, which is an important case. Data for Libya was missing from almost all the datasets that we could use. An additional problem with the existing datasets is that they are mostly recent and do not have a sufficiently long time dimension to allow for deciphering the dynamics of the firms and markets over time. Fortunately, there is increasingly awareness about these research issues and more gender disaggregate data is being gathered. Such an approach is indeed part of the AfDB Gender Strategy 2014-2018 (AfDB2014).

## V. Policy Implications and Recommendations

In light of our findings and analysis, a number of policies seem worth considering. These policy recommendations can be listed as follows:

1. There is a need for a supportive ecosystem for female-owned SMEs. Two pillars of such a system are:
  - a) Good governance and infrastructure, which are essential for economic growth, but also have particularly positive effects on women's entrepreneurship.
  - b) Energizing and establishing communication and coordination among various governmental, non-governmental and international organizations in order to create a synergy between the three and to ensure coherence in their policies and programs.
2. It should be made clear to policymakers and stakeholders that promoting economic activity of women and supporting female-owned SMEs are not a humanitarian matter. Rather, the goal of such policies is employment generation, economic growth, and fair distribution of income for the entire population. It should also be borne in mind that supporting SMEs and formalizing and energizing MSMEs are sources of tax revenue, which the governments can in turn use for economic development.
3. It is important for all stakeholders to be cognizant that while female-owned SMEs are important for employment generation, their contributions to the economy are much broader. Women entrepreneurs can enhance the range of innovations in the economy and help expand the variety of goods and services as well as jobs available to the economy. This would enable households to find better matches for their needs in both product and labor markets.

In addition, women tend to employ more women, which enhances gender equity, given the enormous existing gender imbalance in employment and unemployment pools in NA. Expanding the job market for women has also indirect consequences for product markets because when women have an income of their own, their expenditure pattern differs from those of men. Women typically spend their income disproportionately on goods and services that are geared toward the welfare of their families and, therefore, boost

demand for essential goods while contributing to human capital. Both channels are important in boosting economic growth and overall economic wellbeing.

To help the stakeholders, especially government departments to develop better understanding of the barriers to participation and SME ownership of women, there is a need for fora for dialogues including workshops and conferences that bring together government officers, academics, partners and policy advocacy groups and other stakeholders to discuss and reflect on problems and solutions. AfDB is in a very good position to help in this regard.

4. National governments could engage more extensively in the social inclusion programs adopted by international organizations such as AfDB. These programs have multi-faceted goals of growth, distributional justice, and gender equity and can serve as important vehicles for empowering women and promoting their SMEs.
5. Given the differences among NA countries, there needs to be more specific research on the topic of female employment and entrepreneurship in the context of each country. Lumping together those countries and analyzing them as one group with ME countries, as is often done, can serve as a starting point, but does not do justice to their significant distinctions. A goal of future research must be to determine local problems, to find solutions that are tailored to each specific country, and to identify organizations that can help implement the required policies for promoting women SMEs. To this end, there is a need for more detailed country case studies to delve into a deeper understanding of each country. There is also a need for further field work and more extensive, gender-disaggregated data on entrepreneurship and on economic activities of individuals and firms.
6. Access to finance is a major hurdle for female-owned SMEs. The problem needs to be addressed from different angles:
  - a) On the supply side, it is important to promote special financial packages designed and tailored to meet the needs of SMEs owned by women. The choice set should also include packages that are articulated in simpler and straightforward ways for women with low financial literacy to understand them.

In general, the credit packages should entail fewer barriers to access, especially with regard to collateral and business track records. They could also include incentives for the commercial banks to lend to female-owned SMEs, such as partial credit guarantee programs. Multilateral organizations that lend to public or private organizations could also encourage lending to such firms as part of their credit programs, along the lines of IFC's programs targeting SMEs, which require the financial intermediaries to provide at least 25 percent of the loans to women-owned businesses (VVG et al. 2013). These effort should include mechanism to augment knowledge and awareness of successful lending initiatives (e.g., DFCU Bank collaborative work with Global Banking Alliance for Women, GBA).

- b) On the demand side, a need to raise women entrepreneurs' awareness of existing financial packages exists. This is important because there is a tendency among female SME owners not to approach financial institutions or not to apply for sufficiently large loans because of lack of knowledge of the possibilities or in anticipation of being rejected. One part of the strategy to address this concern could be enhanced advertising and financial literacy programs that target women entrepreneurs. Another part is support for the expansion of women's business networks, which we discuss in more detail below.
  - c) At the market level, it is crucial to establish and expand the coverage of public credit registries to establish credit histories and better information banks about small and medium borrowers. Also, existing micro-loan programs that are contributing to the activities of MSMEs/SMEs could be made more effective by connecting them with other means of support for the sector.
7. Multi-faceted business education programs need to be expanded and made more accessible for women. Services such as business management skills, learning how to use financial products, accounting and financial management, knowledge about how to expand geographically and to export to other countries as well as legal advice are key to the business literacy needed by female SME owners succeed. In addition to formal training programs, governments and multi-lateral organizations should help provide venues for knowledge dissemination and business facilitation
- in the form of official support centers and private professional forums. These centers and forums should include:
- a) Low-cost or free consultation on how to start and run a small enterprise or to obtain credit, assistance with market research and market expansion, and information and incentives for product diversification and quality improvement. Such center can be strengthened through collaborations with networks such as MENA BWN<sup>15</sup>.
  - b) Assistance to women to enable them to go beyond home markets and venture into the international markets. This may entail, facilitating exports and imports for female-led enterprises.
  - c) Assisting the acquisition and effective use of new information and communication technologies (ICT) by women, especially those who venture into entrepreneurship. This may specifically be of benefit in situations where gender segregation and multiple burdens are more serious problems. By incorporating ICT, female-owned businesses can expand their information gathering horizons in procurement, sales, and networking. They will also be in better positions to innovate and to provide jobs that fit the needs of female workers, hence creating better jobs for them.
8. Centers that offer business education and support services should have trained female consultants and advisors who can relate more effectively to women entrepreneurs and have better insights into the kinds of problems that businesswomen face and the solutions that they can adopt. Gender segregation may be needed to facilitate female consultants' outreach to women, though the connection with non-segregated forums should also be maintained.
9. A central component of the strategy to expand female entrepreneurship and employment should be support for the formation and expansion of local, national, international formal business networks for women as a means of empowering them to improve their entrepreneurial capabilities through mentorship, information exchanges and other forms of support. Such initiatives can be taken in collaboration with country-wide or region-wide networks such as MENA BWN. Of particular value are networks that offer more comprehensive sets of support. An example is Global

<sup>15</sup> For similar organization in the US see <http://wedcbiz.org>

- Banking Alliance for Women (GBA) that provides its members with access to capital, markets, education, training technical assistance and peer learning, while also serving as a global clearinghouse for best practices. These services could be of vital importance for female SME owners in NA. Women entrepreneurs in the region can also benefit greatly from collaboration with Africa Businesswomen's Network (ABWN).
10. Government programs that are aimed at enhancing women's engagement in the economy should encourage informal firms to formalize, so that they can take better advantage of government, financial, and legal services.
  11. Facilitating business group formation by microenterprises and SMEs could be a useful way to strengthen them. As in most of the developing world, women entrepreneurs in the NA region are clustered around self-employment or microenterprises that are plagued with a variety of limitation and short life spans. Coming up with policies that bring together such enterprises and SMEs can widen their networks and potentially reduce their risks and limitations. Moreover, formation of business collectives can help them to have a greater chance of formalization and to be in better positions to take advantage of market opportunities, finance options, and policies designed to assist SMEs. In this regard, it is worth examining a project of this type that is supervised by ILO in Lebanon as an example of the way to transform microenterprises into business groups. Such policies may be enhanced by helping SME owner associations to develop partnership with donor agencies, angel investors, NGOs, and corporations.
  12. Governments should be encouraged to include women-led SMEs in their procurement policies by creating awareness about the additional social benefits of purchasing from such enterprises, as has been shown by the experiences of the US and South Africa, where the necessary policies have been adopted.
  13. Public programs of care provision such as daycare, elderly care, and public health should be encouraged. Such programs make a big difference for women's ability to engage in employment and entrepreneurship.
  14. It is important to reexamine regulations to ensure that they allow for the greater flexibility that women entrepreneurs and workers would like to have in their jobs. For example, exemption from prohibition of fixed-term contracts for permanent tasks should be broader in most NA countries. At the same time, requiring break time for nursing mothers should be universal.
  15. There are potential reforms in the legal rules that can enhance women's employment and entrepreneurship in NA. Legal and traditional cultural inequities in the region are important obstacles for women's business activity. Campaigns, civil society activity, and public debates for legal reforms in these areas can help raise awareness and bring about change over time. Such campaigns and activity need not be culturally insensitive. History of NA countries since 19<sup>th</sup> century is abound by legal reforms that have brought about significant change while remaining congruent with the region's traditions. There have also been cases that changing values and perspectives in the society have been enhanced by legal change. Such campaigns and changes are neither simple nor straightforward. But, the examples show that they are not impossible.
  16. Appointment of more female judges and gender aware male judges can have positive effects on women's perceptions of the judicial system and the outcome of the business cases that end up in the courts. This could enhance their willingness and ability to engage in entrepreneurship.
  17. Last but not least, there is a need for effective systems of assessment for the policies, packages, and organizations that provide support services to women entrepreneurs, especially female-led SMEs.

## References

- African Development Bank (AfDB) (2014), "Gender Strategy 2014-2018: Investing in Gender Equality for Africa's Transformation", Quality Assurance and Results Department, Gender and Social Development Monitoring Division. Accessed from AfDB website:  
[http://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/2014-2018\\_-\\_Bank\\_Group\\_Gender\\_Strategy.pdf](http://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/2014-2018_-_Bank_Group_Gender_Strategy.pdf).
- AfDB/ILO (2007). *Assessing the Enabling Environment for Women in Growth Enterprises: An AfDB/ILO Integrated Framework Assessment Guide*. Geneva: ILO.
- Ariga K., and Brunello, G. (2002). "Are the More Educated Receiving More Training? Evidence from Thailand", Discussion Paper, 577, IZA, Bonn.
- Assaad, R. and Barsoum, G. (2007), "Youth Exclusion in Egypt: In Search of 'Second Chances'", Working Paper Number 2. Dubai: Dubai School of Government.
- Bahramitash, R. (2013a). *Gender and Entrepreneurship in Iran: Microenterprise and the Informal Sector*, New York: Palgrave.
- (2013b). "Women, Islam and Business Ownership", *The Oxford Encyclopedia of Islam and Women*, Vol. 2., 106-111.
- Bahramitash, R., Esfahani, H.S., and Lin, B. (2014). "Labor Market Institutions, Employment, and Gender in MENA Countries". Manuscript.
- Berlinski, S., and S. Galliani (2008). Pre-school and Maternal labor Outcomes: Evidence from a Regression Discontinuity Design. IFS Working Paper W09/05. London: Institute of Fiscal Studies.
- Buvinic, M. (2011). Gender Equality as Smart Economics, Available at the World Bank Website:  
<http://siteresources.worldbank.org/INTGENDER/Resources/336003-1205954955184/GAPBooklet.pdf>.
- Chen, Martha. A. (2001), "Women in the Informal Sector: A Global Picture, the Global Movement". SAIS Review, Vol. 21, pp. 71.
- Chen, Martha Alter, Joann Vanek, and Marilyn Carr. (2004), *Mainstreaming Informal Employment and Gender in Poverty Reduction: A Handbook for Policy-Makers and Other Stakeholders*, New Gender Mainstreaming Series on Development Issues. Ottawa London: International Development Research Centre; Commonwealth Secretariat and International Development Research Centre.
- Chen, Martha, J. Vanek, and J. Heintz (2006). "Informality, Gender and Poverty a Global Picture". Available at WIEGO website:  
<http://wiego.org/sites/wiego.org/files/publications/files/Chen-Vanek-Heintz-Informality-Gender-Poverty.pdf>.
- De Groot, T.U., (2001). 'Women Entrepreneurship Development in Selected African Countries'. Vienna: United Nations Industrial Development Organization (PSD Technical Working Paper 7). Available at UNIDO website:  
<http://www.unido.org/index.php?id=o4810>, Available at UNID website.
- Delmar, F., and Holmquist, C. (2004) *Promoting Entrepreneurship and Innovative SMEs in a Global Economy: Towards a more Responsible and Inclusive Globalization*, Available at OECD Website:  
<http://www.oecd.org/cfe/smes/31919215.pdf>.
- Drèze, J., and Goyal, A. (2003), "Future of Mid-Day Meals", *Economic and Political Weekly*, 38 (44), 4673–4683.

- Esfahani, H.S., and Bahramitash, R. (2014), "Institutions, Policies and Women's Employment Share in MENA Enterprises". Manuscript.
- Esteves, A.M. (2011), "Women-Owned SMEs in Supply Chains of the Corporate Resources Sector Women", in Kuntala Lahiri-Dutt (ed.), *Gendering the Field: Towards Sustainable Livelihoods for Mining Communities*. Australia: Australian National University, pp: 133-137.
- Egyptian Center for Females' Rights (ECWR). 2008. *Clouds in Egypt's Sky: Sexual Harassment from Verbal Harassment to Rape*. Available at:  
[http://egypt.unfpa.org/Images/Publication/2010\\_03/6eeeb05a-3040-42d2-9e1c-2bd2e1ac8cac.pdf](http://egypt.unfpa.org/Images/Publication/2010_03/6eeeb05a-3040-42d2-9e1c-2bd2e1ac8cac.pdf)
- Fletschner, D. (2009). "Rural Women's Access to Credit: Market Imperfections and Intrahousehold Dynamics". *World Development*, 37 (3), 618–631.
- Flora, M.S. (1995). "Economic Restructuring, Gender and the Allocation of Time", *World Development*, Vol. 23, N° , pp. 1-25.
- Goldman Sachs Global Investment Research [GSGIR] (2014), *Giving Credit Where It Is Due: How Closing the Credit Gap Between Women-Owned SMEs Can Drive Global Growth*. New York: Goldman Sachs Global Market institute.
- International Finance Corporation (IFC). (2014), *IFC Annual Report*. Washington DC: International Finance Corporation.
- International Finance Corporation (IFC). (2013). *Banking on Women Accessed from IFC*. Available at IFC website:  
<http://www.ifc.org/wps/wem/connect/9be5a00041346745b077b8df0d0e71af/FINAL+NEW+BANKING+ON+WOMEN+FACT+SHEET+SEPT+16+2013.pdf?MOD=AJPERES>.
- International Finance Corporation & Global Partnership for Financial Inclusion (IFC&GPFI). (2011), *Strengthening Access to Finance for Women-Owned SMEs in Developing Countries*. Washington DC: International Finance Corporation.
- Kabeer, N. (2012). *Women's Economic Empowerment and Inclusive Growth: Labour Markets and Enterprise Development*, Ottawa: IDRC.
- Klapper, L. F. and Parker, S. C. (2011). "Gender and the Business Environment for New Firm Creation". *The World Bank Research Observer*, 26 (2), 237–257.
- Lourdes, B. (1995). "Towards a Greater Integration of Gender in Economics", *World Development*, Vol. 23, N° 11: 1839-50.
- Lind, A. (1997). "Gender, Development and Urban Social Change: Women's Community Action in Global Cities", *World Development*, Vol.25. N° 8, 1205-23.
- Moser, C. (1991). "Adjustment from Below: Low Income Women and Time and the Triple Role in Guayaquil, Ecuador", *The Third World*, London: Macmillan Press.
- MENA-OECD. (2012) *Empowering Women-led SMEs: Economic Development andn the New Arab World*. OECD Program, Accessed from OECD Program website  
<http://www.oecd.org/mena/investment/Empowering%20women-led%20SMEs.pdf>.
- Nelson, J., (2007). *Building Linkages for Competitive and Responsible Entrepreneurship*. UNIDO, Available at:  
[www.unido.org/fileadmin/user\\_media/Services/PSD/Building\\_Linkages\\_for\\_Competitive\\_and\\_Responsible\\_Entrepreneurship.pdf](http://www.unido.org/fileadmin/user_media/Services/PSD/Building_Linkages_for_Competitive_and_Responsible_Entrepreneurship.pdf).

Niethammer, C. (2013). "Women, Entrepreneurship and the Opportunity to Promote Development and Business", Brookings Blum Roundtable Policy Briefs. Available at:

<http://www.brookings.edu/research/reports/2013/09/bbr-women-entrepreneurship-development>.

Ongena, S. and Popov, A. (2013). "Take Care Of Home and Family, Honey, and Let Me Take Care of the Money: Gender Bias and Credit Market Barriers for Female Entrepreneurs", Electronic copy. Available at:

<http://ssrn.com/abstract=2148914>.

Piras, Claudia, Andrea F. Presbitero, and Roberta Rabellotti. (2013). "Definitions Matter: Measuring Gender Gaps in Firms' Access to Credit", Inter-American Development Bank, Capital Markets and Financial Institutions Division (CMF/IFD), Discussion Paper N°. IDB-DP-314.

Population Council (2011), *Survey of Young People in Egypt*, Cairo: Population Council.

Seguino, S. (2011). "Gender Inequality and Economic Growth: A Reply to Schober and Winter-Ebmer". *World Development*, 39 (8), 1485-1487.

Sethuraman, S.V. 1995. *The Rural Informal Sector in Asia: Policies and Strategies*. Geneva: ILO.

Shaw, E. Carter, S. (2007) *Entrepreneurial Capital: Convertibility, Personal Reputation and Firm Performance*, Institute for Small Business & Entrepreneurship 7-9. Available at:

[www.isbe.org.uk/content/assets/BP07-M.pdf](http://www.isbe.org.uk/content/assets/BP07-M.pdf). (accessed 2014).

Stefani, M. L. and Vacca, V. (2013). *Credit Access for Female firms: Evidence from a Survey on European SMEs*. Occasional Paper 176, Banca d'Italia.

Stevenson, Lois, and Annette St-Onge. (2005). "Support for Growth Oriented Women Entrepreneurs in Ethiopia, Kenya and Tanzania: An Overview Report". Geneva: International Labour Office. Available at ILO website:

[http://www.ilo.org/public/libdoc/ilo/2005/105B09\\_30\\_engl.pdf](http://www.ilo.org/public/libdoc/ilo/2005/105B09_30_engl.pdf).

Richardson P., R. Howarth and G. Finnegan (2004). "The Challenges of Growing Small Businesses: Insights from Women Entrepreneurs in Africa", SEED Working Paper, N°. 47, Geneva: ILO.

Rostam, A. (2012), Risk Sharing and Financial Inclusion: *Opportunities and Challenges for Islamic Finance for SME's*, Washington DC: World Bank.

Triki, I., and I. Faye, eds. (2013), *Financial Inclusion in Africa*, Ghana: AfDB.

UNIDO (United Nations Industrial Development Organization), (2003), *A Path Out of Poverty: Developing Rural and Women Entrepreneurship*. New York: UNIDO.

Vital Voices Global Partnership, MENA Businesswomen's Network, and IFC [VWGP et al.] (2013). *Ready for Growth: Solutions to Increase Access to Finance for Women-Owned Business in the Middle East and North Africa*, Washington, DC: International Finance Corporation (IFC).

## Appendices

### A. The Determinants of Firm Size and the Gender of Firm Owner, WBES Dataset

Tables A1-A3

### B. The Determinants of Women's Share in Enterprise Employment, WBES Dataset

Tables A4-A6

### C. The Determinants of Allocation of Female Labor Across All Options, GEM Dataset

Tables A7-A8.

Table A1

Marginal Effects of Firm Age and Sector on the Probability of a Sample Firm Belonging to Different Categories: Bi-Probit Estimation				
Right-Hand-Side Variables	Firm Category			
	Female-Owned SMEs	Male-Owned SMEs	Female-Owned Large Firms	Male-Owned Large Firms
Log of Firm Age (in Years)	-0.0185*** (0.0013)	-0.0898*** (0.0020)	0.0158*** (0.0005)	0.0925*** (0.0017)
Textile & Apparel	0.0479*** (0.0034)	-0.1278*** (0.0056)	0.0373*** (0.0016)	0.0425*** (0.0048)
Food & Agricultural Products	0.0192*** (0.0034)	-0.0646*** (0.0057)	0.0155*** (0.0014)	0.0299*** (0.0050)
Materials	-0.0122*** (0.0033)	0.0090 (0.0057)	-0.0033*** (0.0012)	0.0065 (0.0049)
Chemicals & Pharmaceuticals	0.0137*** (0.0046)	-0.0695*** (0.0077)	0.0155*** (0.0020)	0.0403*** (0.0066)
Electronics & Telecoms	-0.0157** (0.0072)	-0.0410*** (0.0125)	0.0037 (0.0031)	0.0530*** (0.0109)
Construction & Transport	-0.0229*** (0.0038)	-0.0252*** (0.0072)	-0.0005 (0.0015)	0.0486*** (0.0065)
Retail & Wholesale Trade	0.0505*** (0.0035)	0.0445*** (0.0054)	-0.0043*** (0.0011)	-0.0907*** (0.0044)
IT, Finance, & Marketing Services	0.0097 (0.0061)	0.0378*** (0.0102)	-0.0048** (0.0019)	-0.0427*** (0.0088)
Other Services	0.0619*** (0.0042)	-0.0129** (0.0064)	0.0077*** (0.0014)	-0.0568*** (0.0052)
Country and Year (Dummies)	Yes	Yes	Yes	Yes
Observations	95,819	95,819	95,819	95,819

Sector effects are measured relative to the default sector, which is manufacturing

Standard errors in parentheses

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

**Table A2**

Marginal Effects of Firm Age and Sector on the Share of Women in Enterprise Employment				
Right-Hand-Side Variables	Firm Category			
	Female-Owned SMEs	Male-Owned SMEs	Female-Owned Large Firms	Male-Owned Large Firms
Log of Firm Age (in Years)	-4.842*** (1.082)	2.966*** (0.371)	-3.340** (1.471)	3.423*** (0.672)
Textile & Apparel	51.815*** (1.799)	35.023*** (0.860)	35.215*** (3.241)	33.856*** (0.874)
Food & Agricultural Products	24.570*** (1.563)	21.544*** (0.801)	17.608*** (2.379)	17.551*** (0.940)
Materials	1.334 (1.836)	2.591*** (0.784)	1.443 (2.200)	3.293*** (0.977)
Chemicals & Pharmaceuticals	21.799*** (1.986)	24.323*** (1.028)	19.412*** (2.715)	17.078*** (1.221)
Electronics & Telecoms	9.881* (5.109)	17.394*** (1.736)	10.728** (4.818)	20.229*** (1.744)
Construction & Transport	-45.134*** (2.556)	-17.824*** (1.007)	-45.268*** (3.562)	-22.931*** (1.333)
Retail & Wholesale Trade	-17.321*** (2.671)	-4.151*** (0.850)	-23.810*** (2.979)	-7.485*** (1.327)
IT, Finance, & Marketing Services	-31.138*** (3.696)	-14.386*** (1.400)	-36.473*** (6.214)	-13.807*** (1.981)
Other Services	-15.050*** (2.827)	-1.172 (0.897)	-22.033*** (2.835)	-9.680*** (1.301)
Country and Year (Dummies)	Yes	Yes	Yes	Yes
Observations	6,996	28,531	2,497	12,661

Sector effects are measured relative to the default sector, which is manufacturing  
Standard errors in parentheses  
\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Table A3

Marginal Effects of Country Characteristics and Policies on Firm Type				
Right-Hand-Side Variables	Firm Categories			
	Female-Owned SMEs	Male-Owned SMEs	Female-Owned Large Firms	Male-Owned Large Firms
Log of Land Area	-0.344 (0.534)	-1.931*** (0.626)	0.249* (0.141)	2.025*** (0.522)
WGI Voice and Accountability	-1.047 (2.140)	9.729*** (2.396)	-0.787* (0.468)	-7.897*** (2.133)
WGI Rule of Law	-0.670 (1.891)	-5.847*** (2.194)	0.358 (0.446)	6.159*** (2.088)
Share of Natural Resource Rents (in % of GDP)	-0.070 (0.064)	0.226*** (0.072)	-0.023* (0.012)	-0.132** (0.058)
Ethnic Diversity Index	8.034*** (2.960)	-2.062 (3.963)	1.730** (0.780)	-7.700** (3.607)
Ratio of Average Years of Female to Male Schooling	3.879*** (1.097)	-1.447 (1.159)	0.600*** (0.209)	-3.030*** (1.095)
Trade (% of GDP)	0.071 (2.726)	-8.340*** (2.843)	1.705*** (0.571)	6.565*** (2.250)
Getting Credit-Public registry coverage (% of adults)	0.171** (0.072)	-0.055 (0.058)	0.001 (0.011)	-0.117* (0.060)
Are fixed-term contracts prohibited for permanent tasks?	-2.845 (1.744)	-1.945 (2.190)	0.324 (0.397)	4.466** (1.966)
Are there priority rules that apply to redundancy dismissals or lay-offs?	0.338 (1.844)	3.567 (2.152)	-0.395 (0.397)	-3.512** (1.672)
Can a married woman travel outside her home in the same way as a man?	8.846*** (2.938)	-13.220*** (4.060)	1.550** (0.734)	2.823 (3.797)
Property ownership under marriage is	-3.367* (1.843)	-4.125** (1.891)	0.275 (0.461)	7.217*** (1.802)
Resolving Insolvency-Time (years)	-1.567** (0.673)	1.225** (0.605)	-0.139 (0.125)	0.480 (0.586)
Resolving Insolvency-Cost (% of estate)	0.013 (0.071)	-0.305*** (0.095)	0.048*** (0.016)	0.244*** (0.079)
Starting a Business-Cost (% of income per capita)	0.005 (0.006)	0.017*** (0.006)	-0.002 (0.001)	-0.020*** (0.005)
Are employers required to provide break time for nursing mothers?	5.645*** (2.065)	-4.928* (2.889)	0.778 (0.483)	-1.492 (2.587)
Number of observations	108	108	108	108

Standard errors in parentheses  
\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$

Table A3 Continued

Marginal Effects of Country Characteristics and Policies on Firm Type				
Right-Hand-Side Variables	Firm Categories			
	Female-Owned SMEs	Male-Owned SMEs	Female-Owned Large Firms	Male-Owned Large Firms
Is there a small claims court or a fast track procedure for small claims?	1.272 (1.536)	-3.130* (1.598)	0.739** (0.331)	1.123 (1.516)
Registering Property-Cost (% of income per capita)	0.023 (0.118)	0.309** (0.124)	-0.074*** (0.026)	-0.258* (0.140)
Mandatory working days of annual leave (i.e. vacation) with pay in manufacturing	0.379** (0.157)	0.113 (0.163)	0.061 (0.039)	-0.553*** (0.157)
Are there restrictions on night work?	-3.408** (1.594)	2.380 (1.871)	-0.683* (0.385)	1.710 (1.579)
Starting a Business-Procedures (number)	0.278 (0.244)	0.634** (0.293)	-0.128** (0.061)	-0.783*** (0.270)
Constant	-12.308 (10.803)	25.058** (11.424)	-4.882** (2.068)	-7.867 (8.774)
R-Squared	0.420	0.572	0.483	0.676
Number of observations	108	108	108	108

Standard errors in parentheses  
\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Table A4

Summary Statistics of the Country Fixed Effects from Tobit Regressions of Female Employment Share				
Indicators	Firm Categories			
	Female-Owned SMEs	Male-Owned SMEs	Female-Owned Large Firms	Male-Owned Large Firms
<b>MENA</b>				
Number of observations	10	10	9	10
Mean	-26.59	-9.54	-3.03	8.74
Std. Dev.	32.59	28.98	60.39	25.46
Minimum	-89.14	-64.64	-161.56	-39.16
Maximum	11.41	23.80	35.89	48.52
<b>Non-MENA</b>				
Number of observations	102	113	91	113
Mean	9.76	10.32	38.90	29.11
Std. Dev.	42.64	34.31	40.19	18.53
Minimum	-307.82	-112.15	-139.26	-7.03
Maximum	87.86	52.54	268.91	87.63

**Table A5**

Marginal Effects of Country Characteristics and Policies on Women's Share in Enterprise Employment				
Right-Hand-Side Variables	Firm Categories			
	Female-Owned SMEs	Male-Owned SMEs	Female-Owned Large Firms	Male-Owned Large Firms
Full or partial community of property under marriage	23.588*** (8.576)	17.720*** (3.849)	13.097* (7.273)	7.819** (3.529)
Married and unmarried women can be head of household (dummy)	-19.908* (12.066)	1.620 (5.399)	16.574* (8.730)	7.782* (4.077)
Religious Diversity Index	4.767*** (1.501)	2.013** (0.885)	2.089 (1.377)	1.030 (0.805)
Agriculture, value added (% of GDP)	0.554*** (0.188)	0.436*** (0.124)	0.599*** (0.225)	0.289*** (0.109)
Total natural resources rents (% of GDP)	-0.442** (0.198)	-0.355** (0.143)	-0.891** (0.416)	-0.252** (0.109)
Trade (% of GDP)	0.124 (0.114)	0.039 (0.062)	0.170* (0.091)	0.143*** (0.046)
Average years of female schooling	5.187*** (1.308)	3.552*** (0.800)	3.748*** (0.932)	1.603*** (0.504)
Constant	-52.448*** (17.302)	-30.530*** (6.608)	-29.689*** (10.551)	-8.905 (5.834)
R-Squared	0.379	0.606	0.428	0.486
Number of observations	94	98	87	99

Standard errors in parentheses  
\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$

Table A6

Marginal Effects of Country Characteristics and Policies on Women's Share in Enterprise Employment				
Right-Hand-Side Variables	Firm Categories			
	Female-Owned SMEs	Male-Owned SMEs	Female-Owned Large Firms	Male-Owned Large Firms
Full or partial community of property under marriage	11.041* (6.111)	17.873*** (4.229)	14.207*** (5.466)	9.094** (3.592)
Married and unmarried women can be head of household (dummy)	-13.838 (10.985)	0.420 (6.135)	17.484* (9.615)	7.248* (4.118)
Religious Diversity Index	4.238*** (1.360)	1.627** (0.807)	1.456 (1.032)	0.754 (0.783)
Agriculture, value added (% of GDP)	0.350* (0.184)	0.396*** (0.126)	0.495** (0.227)	0.260** (0.106)
Total natural resources rents (% of GDP)	-0.637*** (0.213)	-0.329* (0.179)	-0.672* (0.369)	-0.264** (0.119)
Trade (% of GDP)	0.116 (0.115)	0.044 (0.048)	0.149** (0.061)	0.127*** (0.046)
Average years of female schooling	5.211*** (1.510)	2.229*** (0.565)	1.586 (0.990)	0.923 (0.673)
Credit information index (sum of public registry and private bureau coverage as % of adults)	-0.176 (0.154)	-0.145** (0.060)	-0.406*** (0.133)	-0.164*** (0.049)
Cost of starting a business as ratio of income per capita	4.489** (1.932)	-2.215 (2.695)	-7.902** (3.159)	-0.936 (1.022)
Paid-in minimum capital requirement for starting a business as ratio of income per capita	-0.873 (0.642)	-0.868*** (0.303)	-0.194 (0.418)	-0.635*** (0.225)
Government pays maternity benefits	14.291** (5.601)	5.568 (3.442)	20.352*** (6.962)	3.627 (4.081)
Mandatory working days of annual leave with pay in manufacturing	1.268** (0.540)	-0.631** (0.262)	0.229 (0.387)	-0.561* (0.325)
Employer can legally terminate the employment contract of a worker on redundancy basis (dummy)	19.514** (8.630)	7.845 (7.133)	46.635** (23.598)	11.935*** (4.263)
Employer must notify a third party before dismissing one redundant worker (dummy)	-12.148* (6.890)	-5.823** (2.764)	-1.138 (7.592)	-2.098 (3.128)
Indicator of laws mandating non-discrimination based on gender in hiring (dummy)	7.250 (7.414)	1.851 (3.373)	14.587** (6.046)	-2.779 (2.910)
Constant	-91.137*** (32.605)	-9.189 (12.255)	-69.579** (32.096)	3.237 (11.764)
R-Squared	0.463	0.695	0.579	0.592
Number of observations	94	98	87	99

Standard errors in parentheses

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

**Table A7: Multinomial Probit Model of Female Labor Allocation†  
(Pooled Data from GEM Dataset)**

Age, Education, and Female Labor Allocation Alternatives: Marginal Probability Effects Based on a Multinomial Probit Model with Country Fixed Effects										
Explanatory Variables	Home-maker	Retired Disabled	Student	Unempl-oyed	Part-Time Employee	Full-Time Employee	Self-Employee	Small Firm Owner	Medium Firm Owner	Large Firm Owner
<b>Ages 30-39 Dummy</b>	0.063*** (0.0093)	-0.0388*** (0.0049)	-0.0189** (0.0072)	-0.0992*** (0.0057)	-0.0007 (0.0042)	0.0365*** (0.0075)	0.0103*** (0.0027)	0.0444*** (0.0051)	0.0029*** (0.0008)	0.0004 (0.0004)
<b>Ages 40-49 Dummy</b>	0.0544*** (0.0112)	-0.0556*** (0.0055)	0.0121 (0.0086)	-0.1217*** (0.0099)	0.0035 (0.0049)	0.0327*** (0.0093)	0.0095*** (0.003)	0.0608*** (0.0047)	0.0038*** (0.0009)	0.0005 (0.0004)
<b>Ages 50-59 Dummy</b>	0.0548*** (0.0116)	-0.0572*** (0.0065)	0.0894*** (0.0091)	-0.1261*** (0.0103)	-0.0175** (0.0056)	-0.0044 (0.0098)	0.0067** (0.0029)	0.0503*** (0.0047)	0.0037*** (0.0009)	0.0004 (0.0004)
<b>Ages 60-69 Dummy</b>	0.0964*** (0.0145)	-0.0631*** (0.0094)	0.1903*** (0.0078)	-0.1054*** (0.0103)	-0.031*** (0.0075)	-0.1541*** (0.0108)	0.0079** (0.0039)	0.0533*** (0.0061)	0.0045*** (0.0011)	0.0013*** (0.0004)
<b>Some Secondary Education</b>	-0.0748*** (0.0117)	-0.0011 (0.0046)	0.0029 (0.0046)	0.022** (0.0092)	0.0067 (0.0048)	0.0586*** (0.0106)	-0.0045 (0.0034)	-0.0098* (0.0052)	0.0003 (0.0013)	-0.0004 (0.0006)
<b>Secondary Education</b>	-0.1783*** (0.0137)	-0.0118* (0.0066)	0.0015 (0.0049)	0.0562*** (0.0124)	0.0116* (0.0068)	0.1427*** (0.0127)	-0.0066* (0.0034)	-0.0182*** (0.0056)	0.0031** (0.0012)	-0.0002 (0.0005)
<b>Post-Secondary Education</b>	-0.2812*** (0.014)	-0.0213*** (0.0064)	0.0008 (0.0066)	0.0437** (0.0159)	0.0159** (0.0076)	0.2474*** (0.0135)	-0.0046 (0.0043)	-0.0067 (0.0076)	0.0054*** (0.0011)	0.0004 (0.0005)
<b>Graduate Education</b>	-0.3697*** (0.0235)	-0.0252** (0.0121)	-0.0072 (0.0096)	0.0447** (0.0157)	0.0157 (0.0106)	0.3152*** (0.0169)	0.0066 (0.0053)	0.0121 (0.0104)	0.0062*** (0.0015)	0.0015** (0.0007)
<b>Other</b>	-0.2666*** (0.0346)	-0.0148 (0.0094)	-0.0087 (0.0116)	0.0283** (0.0139)	0.003 (0.0089)	0.2363*** (0.0264)	0.0039 (0.0047)	0.0146 (0.0115)	0.0034 (0.0021)	0.0006 (0.0008)
<b>Observations</b>	167,590	167,590	167,590	167,590	167,590	167,590	167,590	167,590	167,590	167,590

†The model includes country dummies, which are used for assessing the marginal probabilities of country fixed effects

Standard errors are shown in parentheses

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

**Table A8: Explaining the Country Fixed Effects for Female Labor Allocation Based on the GEM Dataset**  
**Dependent Variables: Marginal Probability Changes of Female Labor Allocation Alternatives Due to**  
**Country Fixed Effect**

Age, Education, and Female Labor Allocation Alternatives: Marginal Probability Effects Based on a Multinomial Probit Model with Country Fixed Effects										
Explanatory Variables	Home-maker	Retired Disabled	Student	Unemp-loyed	Part-Time Employee	Full-Time Employee	Self-Employee	Small Firm Owner	Medium Firm Owner	Large Firm Owner
Log of PPP GDP per Capita in 2005 Prices	0.000 (0.000)	-0.042** (0.019)	0.003 (0.032)	-0.000 (0.000)	0.033 (0.049)	-0.000** (0.000)	-0.033 (0.025)	0.059 (0.043)	-0.033*** (0.012)	0.012*** (0.004)
Log of PPP GDP per Capita in 2005 Prices Squared	0.003 (0.003)	0.001 (0.001)	0.001 (0.002)	-0.004** (0.002)	0.003 (0.003)	-0.002 (0.002)	-0.000 (0.002)	-0.003 (0.003)	0.002*** (0.001)	-0.001*** (0.000)
Average Years of Schooling	-0.000 (0.011)	0.010*** (0.003)	-0.009* (0.005)	0.005 (0.007)	-0.006 (0.005)	-0.002 (0.007)	0.006* (0.003)	-0.003 (0.006)	-0.000 (0.000)	0.000 (0.000)
Ratio of Average Years of Female to Male Schooling	-0.105 (0.139)	0.036 (0.041)	-0.090 (0.063)	0.076 (0.084)	-0.286*** (0.071)	0.362*** (0.092)	-0.018 (0.045)	0.021 (0.078)	0.011** (0.005)	-0.006*** (0.002)
Log of Land Area	0.009 (0.010)	0.002 (0.003)	0.003 (0.005)	-0.015** (0.007)	-0.006 (0.006)	0.002 (0.007)	0.005 (0.003)	-0.000 (0.006)	0.000 (0.000)	0.000 (0.000)
Share of Agriculture Value Added in GDP	-0.002 (0.004)	-0.000 (0.001)	-0.003 (0.002)	-0.007*** (0.002)	0.000 (0.002)	-0.001 (0.003)	0.000 (0.001)	0.012*** (0.002)	0.000*** (0.000)	-0.000 (0.000)
Voice and Accountability	-0.038 (0.048)	-0.015 (0.013)	0.030 (0.020)	0.010 (0.028)	0.040* (0.023)	0.004 (0.030)	-0.017 (0.014)	-0.012 (0.025)	-0.001 (0.001)	-0.001** (0.000)
Religious diversity	0.241*** (0.082)	0.033 (0.023)	-0.001 (0.036)	0.049 (0.049)	-0.128*** (0.041)	0.005 (0.053)	-0.033 (0.025)	-0.169*** (0.045)	0.004 (0.003)	-0.001 (0.001)
Share of Natural Resource Rents in GDP	-0.191 (0.165)	-0.022 (0.045)	0.007 (0.069)	0.095 (0.095)	-0.037 (0.078)	-0.026 (0.104)	0.096** (0.048)	0.071 (0.085)	0.006 (0.005)	0.000 (0.002)
Trade Freedom Index (0-10)	-0.029 (0.025)	0.016** (0.008)	-0.006 (0.012)	-0.017 (0.017)	-0.029** (0.014)	0.062*** (0.018)	0.009 (0.009)	-0.010 (0.015)	0.003*** (0.001)	0.001*** (0.000)
Observations	56	56	56	56	56	56	56	56	56	56

†The model includes country dummies, which are used for assessing the marginal probabilities of country fixed effects

Standard errors are shown in parentheses

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$

**Table A8 Continued: Explaining the Country Fixed Effects for Female Labor Allocation Based on the GEM Dataset Dependent Variables: Marginal Probability Changes of Female Labor Allocation Alternatives Due to Country Fixed Effects**

Age, Education, and Female Labor Allocation Alternatives: Marginal Probability Effects Based on a Multinomial Probit Model with Country Fixed Effects										
Explanatory Variables	Home-maker	Retired Disabled	Student	Unemp-loyed	Part-Time Employee	Full-Time Employee	Self-Employee	Small Firm Owner	Medium Firm Owner	Large Firm Owner
Minimum Paid-in Capital for Starting a Business as % of Income per Capita	-0.002 (0.003)	0.000 (0.001)	0.001 (0.001)	-0.001 (0.002)	-0.001 (0.001)	0.006*** (0.002)	-0.000 (0.001)	-0.004*** (0.001)	0.000 (0.000)	0.000** (0.000)
Cost of Enforcing Contracts as Share of Claim	0.003 (0.002)	-0.001 (0.000)	0.001 (0.001)	-0.002 (0.001)	0.002* (0.001)	-0.004*** (0.001)	0.001* (0.001)	0.000 (0.001)	-0.000 (0.000)	0.000 (0.000)
Getting Credit-Public registry coverage (% of adults), Squared	-0.023 (0.061)	-0.002 (0.017)	0.003 (0.026)	-0.006 (0.036)	0.103*** (0.029)	-0.088** (0.039)	0.039** (0.018)	-0.027 (0.032)	0.000 (0.002)	0.002*** (0.001)
Time to get electricity in months	-0.004 (0.007)	0.003* (0.002)	0.007** (0.003)	0.004 (0.004)	0.003 (0.003)	0.004 (0.005)	-0.007*** (0.002)	-0.010*** (0.004)	-0.000 (0.000)	-0.000 (0.000)
Are there priority rules that apply to redundancy dismissals or lay-offs?	-0.050 (0.032)	0.016* (0.009)	0.030** (0.014)	-0.038** (0.018)	0.008 (0.015)	0.073*** (0.020)	-0.003 (0.009)	-0.035** (0.017)	-0.000 (0.001)	-0.000 (0.000)
Can the workweek for a single worker extend to 50 hours per week for 2 months?	0.040 (0.064)	-0.008 (0.018)	0.020 (0.027)	0.050 (0.037)	-0.094*** (0.031)	0.038 (0.041)	-0.027 (0.019)	-0.016 (0.034)	-0.001 (0.002)	-0.001* (0.001)
Paid annual leave (working days) After one year of employment	-0.002 (0.003)	0.000 (0.001)	-0.002* (0.001)	0.002 (0.002)	-0.001 (0.001)	0.003* (0.002)	-0.001* (0.001)	0.000 (0.001)	-0.000 (0.000)	0.000*** (0.000)
Is it legal for an employer to terminate the employment contract of a worker on redundancy	-0.059 (0.149)	0.012 (0.044)	-0.021 (0.068)	0.013 (0.094)	-0.117 (0.078)	0.176* (0.102)	0.158*** (0.048)	-0.173** (0.085)	0.007 (0.005)	0.003** (0.002)
Government pays the maternity benefits	-0.048 (0.040)	0.019* (0.011)	-0.002 (0.017)	0.026 (0.023)	-0.005 (0.019)	-0.038 (0.025)	0.021* (0.012)	0.023 (0.021)	0.003** (0.001)	0.000 (0.000)
Can a married woman travel outside her home in the same way as a man?	-0.053 (0.070)	-0.004 (0.019)	-0.037 (0.029)	0.083** (0.041)	-0.031 (0.034)	-0.010 (0.045)	0.023 (0.021)	0.021 (0.037)	0.007*** (0.002)	0.001 (0.001)
Property ownership under marriage is partial community of property	-0.010 (0.036)	0.031*** (0.010)	0.026* (0.015)	-0.000 (0.021)	-0.020 (0.017)	0.023 (0.023)	0.001 (0.011)	-0.048*** (0.019)	-0.002** (0.001)	-0.000 (0.000)
Constant	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.444* (0.231)	0.246 (0.293)	-0.731*** (0.229)	0.000 (0.000)	-0.000 (0.000)	0.103* (0.061)	-0.062*** (0.019)



