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# Female Entrepreneurs: How and Why Are They Different?

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Eliana Carranza, Chandra Dhakal and Inessa Love

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# ABSTRACT

This paper reviews and critically evaluates existing evidence on female entrepreneurial activity. First, we identify how female-run businesses are different, by examining both economic and non-economic outcomes which are frequently overlooked. Second, we offer a comprehensive discussion of drivers to explain why these differences. We group these drivers in four categories: (i) preferences, (ii) endowments, (iii) external constraints, and (iv) internal constraints. Third, we review evidence on the types of policies that have been effective or have potential to address the different drivers. Finally, we offer a discussion of the gaps in the literature and identify areas for future research.

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# EXECUTIVE SUMMARY

This paper reviews and critically evaluates existing evidence on female entrepreneurial activity. First, we identify how female-run businesses are different. Second, we offer a comprehensive discussion of the reasons (i.e. drivers) to explain why they are different. Third, we identify policies that are based on the different identified drivers. Finally, we offer a discussion of the gaps in the literature and point to areas for future research.

Most of the research surveyed in this paper finds that women-owned businesses tend to have weaker economic performance. They tend to be smaller, are less profitable, grow more slowly and have higher closure rates. They also use less external finance.

Many of these differences in economic outcomes can be explained by the choice of sectors women tend to operate in, which are predominantly service, retail, and hospitality. These sectors are more crowded and register lower profits and growth potential than male-dominated sectors. It is then important to understand why women make their choice of sectors.

Men and women also differ in their concept of what defines success. While men describe success in terms of achieving goals and higher profits, for women success also means having control over their own destinies, building ongoing relationships with clients, doing something fulfilling, or achieving a better work-life balance. The metric of success also includes empowerment through which women can gain power and status in the household, market, and community. Thus, it is important to consider non-economic outcomes of women's entrepreneurial activities.

To facilitate the discussion of why female entrepreneurs are different, we offer a novel taxonomy of four different drivers: (1) choices and preferences, (2) endowments, (3) external constraints, and (4) internal constraints.

Women would often prefer wage employment over self-employment. They are more likely to be "pushed" into entrepreneurship by economic necessity (i.e. lack of jobs or insufficient family income) rather than "pulled" by opportunity (i.e. a creative idea for a new business).

Women tend to have lower growth aspirations than men do and prefer a "slow and steady" business to a fast-growing or risky business. Some of these preferences are explained by differences in risk aversion, dislike of growth-associated stress or a desire to achieve better work-life balance. Women who are "pulled" into entrepreneurship have higher growth aspirations than those who are "pushed".

Furthermore, women's motivations and goals are influenced by the stage in their life, career, family, preferences and values. There is significant heterogeneity among women entrepreneurs. Thus, it is important to consider the extent to which their selection to be a business owner and their business decisions are affected by their preferences and life circumstances.

The preponderance of evidence suggests that cultural and social norms disadvantage women in the labor market and their entrepreneurial ventures. These norms prescribe what is socially acceptable of women's behavior and what choices are available to them. This results in limited endowments (education, asset ownership, networks), discrimination (legal and financial), and other restrictions (mobility, location, family



responsibilities). We argue that social norms are the origin of legal, financial, and labor market discrimination of women.

Access to finance is an important constraint of women entrepreneurs. However, the low use of external finance is likely to be a combination of supply side constraints (i.e. gender discrimination in financial markets which restricts women's access to credit or increases the cost of credit) and demand side constraints (i.e. women refrain from applying for external finance because they are more risk averse, expect to be rejected or have a negative perception of banks). More research is needed to determine if low use of finance by women entrepreneurs is supply or demand driven.

The nature of female-run businesses (i.e. smaller, home-based, service sector) is another important factor that is both a determinant of their financial constraints (because banks objectively lend less to these types of businesses) and their consequence (because women lack external finance they are forced into low capital requirement sectors). Disentangling the cause and effect is difficult but important for correct policy interventions.

The sorting of females into traditional female-dominated sectors is one of the main reasons for their economic underperformance. Women choose traditional sectors due to: restrictive social norms that prescribe what sectoral choice is acceptable for women; vertical and horizontal labor market segregation; lower usage of capital which is result of a combination of supply-side and demand-side factors; lack of information, experience or connections needed to enter male-dominated sectors; women's comparative advantages in empathy and people-skills that naturally draw them into service sectors.

Different drivers call for different policies. We use the proposed four-driver taxonomy to suggest policies to address different drivers. As a general statement, the policies should prioritize those drivers that have a significant contribution to the gender gap in business outcomes, as established by country-level decomposition analysis of gender gaps. Unfortunately, there is no conclusive evidence up to date on which of the drivers are the main determinants of the gender gap in entrepreneurial outcomes. The relative importance of different drivers may vary according to the country context. Furthermore, the success of a policy will depend on how effectively it addresses the most binding constraints and the interactions between various constraints.

Unlike other drivers, differences in preferences do not necessarily indicate problems that need to be fixed. For example, coaxing women to pursue higher risk, higher growth, higher stress or more time-demanding ventures than they prefer may result in lower well-being. There are two main policy options to address differences in preferences: attempt to change preferences via norm-based interventions, or accept preferences as given and provide options based on their preferences. More research is needed to clarify what preferences call for which approach.

Policies to address differences in endowments should focus on equalizing endowments. For example, asset endowments can be improved by encouraging women to open bank accounts in their name or changing the inheritance and property ownership laws. Education and experience can be improved by business training. Network endowments can be strengthened by networking and mentoring opportunities.

Policies to address external constraints should include implementing legal reforms that make laws more equitable for women, reducing financial and labor market discrimination, and creating a more gender

friendly business environment. A policy priority is to relax restrictive social norms and equalize the playing field for women (i.e. make it socially acceptable for women to have freedom of movement outside of home, to interact with non-relative males, to delay marriage and childbearing, and to have more control over assets).

Policies to address internal constraints may include supporting women in developing a more positive self-esteem, especially as it comes to career related tasks, educating women about debt and reducing their negative perceptions of banks, or creating mentorship and group support programs.

Finally, it is important to emphasize that especially in developing countries women are often “pushed” into entrepreneurship by unfavorable labor market conditions. Improving the labor market conditions could do more to increase women’s well-being than any other policy aimed at their business ventures.

While identifying the primary drivers is the overarching theme for future research, we identify five gaps in the literature that we believe are a priority:

First, evaluating non-economic outcomes and creating a more balanced performance measures. Despite a growing awareness that non-economic outcomes are important in women’s definition of success, most of the literature on enterprise performance is predominantly focused on economic outcomes.

Second, more research is needed to understand women’s internal constraints, such as self-confidence, resistance to seek external finance, or perceptions of hostility in their environment. Identifying whether the environment is indeed more hostile to women, or their perception of hostility is higher than facts prove, is a difficult but very important task.

Third, it is important to understand the most important determinants of women’s sectoral choice. It is likely that a multitude of factors listed above need to be addressed to create a more level-playing field. Disentangling the role of external finance as a cause or a consequence of their sectoral choice is also important.

Fourth, we posit that the cause of many constraints is in the restrictive cultural and social norms. However, there is no empirical evidence that such norms dominate other constraints. It is also important to know how to change the restrictive social and cultural norms that are deeply entrenched in the society.

Fifth, most studies of the differences in performance consider gender as a dummy variable, which does not address why gender matters. In addition, it is important to properly account for different choices women make and investigate whether these choices carry more penalty for women than they do for men.

Last, but not the least, it is important to study heterogeneity among women entrepreneurs and recognize that a one-size fits all policy approach is unlikely to be effective because life circumstances have important influence on women’ entrepreneurial activities.

# INTRODUCTION

Entrepreneurial activities play a critical role in the development and well-being of societies (Herrington and Kew, 2017). Thus, various stakeholders including governments, non-profits, researchers, and individuals are interested in facilitating the development of supportive entrepreneurial ecosystems. However, growth of female entrepreneurship has lagged those of men in many developed and in most developing countries. Understanding potential roadblocks that female entrepreneurs face is important for increasing their participation in the entrepreneurial activity.

This paper reviews existing evidence on female entrepreneurial activity. We propose a conceptual framework to evaluate and synthesize key evidence from various sources. Our goal is to identify how female entrepreneurs differ from their male counterparts, what are the unique barriers and constraints they face, and how to address these barriers to improve women’s entrepreneurial activity and boost women entrepreneur’s outcomes. We also identify gaps in existing evidence and suggest avenues for future research.

**Figure 1: Outcomes, Drivers and Policies**

## OUTCOMES

- How female-run firms are different in:
- Economic outcomes
    - Size, industry, number (and type) of employees, growth potential, profitability, survival and failure rates.
  - Non-economic outcomes:
    - Self-empowerment, flexibility, desire to serve the community, happiness/well-being/satisfaction with life, status, work-life balance.

## DRIVERS

1. Preferences	2. Disadvantages in endowments	3. External constraints	4. Internal constraints
Motivation (push/pull factors)	Assets	Legal system	Low self-confidence
Goals and aspirations	Education	Financial discrimination	Reluctance to seek credit
Personality traits	Skills and experience	Social norms (culture, religion)	Negative perception of banks
Risk and time preferences	Networks and social capital	Family and social responsibilities	Perceived lack of opportunities
Preference for wage work			Perceived hostile environment
Values			

## EXAMPLES OF POLICIES IMPLIED BY EACH DRIVER

Improve labor market conditions for wage employment	Improve asset allocation, equalize endowments	Reduce constraints (eg. Legal, social, financial)	Provide information, education, mentoring, or training
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The paper proceeds in four parts. In Part 1 we evaluate evidence on differences in outcomes of female entrepreneurs. Most of the literature focuses on economic outcomes (i.e. size, sector, growth, employment, profitability). We expand the discussion to non-economic outcomes (such as personal fulfillment, work-life balance, empowerment and life satisfaction), which are no less important for female entrepreneurs than economic outcomes. In addition, the decisions women make about non-economic outcomes may be connected to their choices regarding the economic outcomes that often are the primary focus of policymakers. Thus, we attempt to offer a more nuanced and comprehensive picture than presented in other reviews and aim to move the discussion toward a broader view of outcomes, in which performance and profitability are balanced with well-being and quality of life.

In Part 2 we discuss possible reasons for the differences in outcomes and offer a new taxonomy of the drivers that can explain these differences. We identified four types of drivers: (1) choices and preferences, (2) endowments, (3) external constraints, and (4) internal constraints. Figure 1 provides more details on how different reasons fit into the proposed taxonomy and offers examples of policies motivated by different drivers.

In Part 3 we discuss policies that are implied by each driver. Unfortunately, there is no conclusive evidence up to date on which of the drivers are the main determinants of the gender gap in entrepreneurial outcomes.

In Part 4 we identify the gaps in the literature and suggest avenues for future research. While the predominant theme in most related literature is the underperformance of female entrepreneurs and the ways in which they are lacking (i.e. in endowments), not all observed differences between male and female have a negative or a statistically significant impact on business outcomes.

While the literature on female entrepreneurship has expanded rapidly in recent years and there are several high-quality surveys available, this survey is different in several important ways.<sup>1</sup> Specifically, we make three important contributions to the literature:

The first contribution is proposing a new four-part taxonomy of the drivers of differences in female entrepreneur's outcomes. As with any taxonomy, we do not expect it to be perfect and there could be grey areas and overlaps. With this taxonomy our aim is to support a more comprehensive discussion than is currently dominating the literature on female entrepreneurship.<sup>2</sup> In addition, we aim to call increased attention on the drivers that are less commonly discussed, such as the subjective perceptions, the differences in preferences, and the values and choices women make. A related contribution is that our taxonomy acknowledges and emphasizes that decisions regarding economic outcomes are interdependent with decisions regarding non-economic outcomes. As a result, we are better able to understand and explain findings that from the perspective of reviews solely focused on the economic decisions may not be optimal.

The second contribution is to use our taxonomy to highlight how different drivers call for different policies. There is growing evidence that some policies are not as effective as expected (e.g. microfinance, cash grants or business training). It is possible that these policies have not addressed the most binding

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<sup>1</sup> See Bruin, Brush and Welter (2007); Klapper and Parker (2011); Pogessi, Mari and De Vita (2016); and Campos and Gassier (2017) among others.

<sup>2</sup> For example, Campos and Gassier (2017) focus predominantly on drivers 1 and 2 (i.e. endowments and external constraints), while Klapper and Parker (2011) focus on drivers 2 and 4 (i.e. constraints and choices).

constraints. Thus, we call for a more holistic approach to policies that consider all four drivers that we identify.

Our third contribution is to discuss the limitations of existing evidence, identify gaps in the literature, and propose new avenues for future research. While the main purpose of this review is to inform academic discourse and policy aimed at improving outcomes in developing countries, the proposed conceptual framework and the taxonomy of drivers draws on available evidence from developed and developing countries. It is important to note that the evidence from individual studies may not be generalizable to different settings, such as countries with different income levels. External validity, more generally, is an important issue to keep in mind when evaluating different studies. Therefore, we use available evidence as aid in formulating our conceptual framework and guiding the discussion, rather than as a normative prescription for policy.

As a final note, our goal for this paper is not to present a comprehensive review or include every single paper on the subject, but to develop the conceptual framework and present critical discussion of evidence.

## **PART 1. DIFFERENCES IN OUTCOMES OF FEMALE ENTREPRENEURS**

### **1.1. ECONOMIC OUTCOMES**

#### **1.1.1. Size**

Most studies find that women run smaller businesses in terms of sales, assets and number of employees. For example, Bruhn (2009) finds that female-owned firms throughout Latin America tend to be smaller than male-owned firms in terms of sales and number of employees. Similarly, Bardasi, Sabarwal, and Terrell (2011) find that female-owned firms in Sub-Saharan Africa have sales that are 31 percent lower than male-owned firms. There could be many reasons why female-run businesses are smaller. Many drivers that we discuss below could contribute to these differences. For example, reduced endowments of assets lead to smaller business size at start-up, credit constraints limit the growth and expansion potential, and limited access to business networks or unfavorable location (in a home) limit their customer base and their sales. An important reason for small size could be the sectoral choice as we discuss below.

#### **1.1.2. Sector and industry**

There is a strong sector-specific effect, meaning women business owners choose to operate in traditional female-dominated areas. This effect is observed in both developed and developing countries. Early studies in the U.S. found that women tend to operate in the service, retail and hospitality sectors (Loscocco and Robinson, 1991; Hisrich and Brush, 1984). Women-owned firms are also over-represented in lower order services, those that require less human capital and formal qualifications as opposed to professional services (Thompson, Jones-Evans and Kwong, 2009).

While studies in developing countries are limited, a few existing studies show results similar to those obtained in developed countries. In Africa, women entrepreneurs tend to concentrate in sectors such as hotels, food and restaurants, wholesale and retail trade, garments, textiles and leather goods, and other

services such as tailor or hair salons (Bardasi, Sabarwal and Terrell, 2011; Aterido, Hallward-Driemeier and Pagés, 2011). African men on the other hand have businesses distributed across a wider range of sectors, including construction and manufacturing, metal, machinery, wood, furniture, and electronics.<sup>3</sup> In Indonesia, female-operated businesses are also concentrated in traditionally female industrial sectors as well as in the low-income informal sectors (Singh, Reynolds and Muhammad, 2001).

As we discuss below, the sectors women choose to operate in are less profitable than male-dominated sectors. The businesses in these sectors tend to be naturally smaller whether or not they are run by women. For example, in the U.S., 80 percent of all small businesses are in the service sector (Small Business Administration, 2010).

An important question arises as to why women choose to operate in less economically rewarding sectors. Some of the reasons have to do with the nature of these sectors, such as lower start-up costs (Storey and Greene, 2010), lower human capital requirements, or a more “people-oriented” nature of the service business. Due to lower start-up costs and human capital requirements, these sectors tend to be more crowded and more competitive, hence with lower profits and growth potential. Thus, by default, women-owners are limited by market conditions underlying their sectoral choice in addition to other constraints and challenges they face. In Part 2 we discuss how different drivers help explain the sectoral composition of female-owned businesses.

### **1.1.3. Location**

Women’s businesses are more often located in their homes (Bosma and Harding, 2006). According to the International Labor Organization (ILO) statistical report (2004), 80 percent or more of “homeworkers”—defined as industrial workers who work at home—in developing countries are women.

As we discuss in Part 2, one reason for this is the need for flexibility in child care and ease of combining and managing business and family life. In many developing countries an important reason for home-based location is the restricted social norms that prevent women from traveling outside of home. This location choice has been shown to constrain their operations. For example, home location may undermine the legitimacy of the enterprise in the eyes of customers and creditors (Marlow, 2002). In addition, home-based business may be far from input markets and have reduced visibility for potential clients (Ypeij, 2000). It may also reduce their networks and the opportunities to interact with potential clients or providers. For example, one study in India found that 36 percent of female entrepreneurs sell to purchasers who come directly to their homes, compared to 20 percent of their male counterparts (Kantor, 2005).

While allowing women more flexibility in caring for children, a home-based location makes it more difficult for women to focus on the business and not be distracted by home and child rearing responsibilities. For example, Loscocco and Smith-Hunter (2004) find that while home-based women entrepreneurs report lower levels of conflict between work and family, their businesses had lower economic performance than similar non-home-based women-run businesses. They conclude that “home-based women owners may

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<sup>3</sup> Interestingly, Aterido, Hallward-Driemeier and Pagés (2011) also find that men and women are present in every sector of their sample. This means that some women are able to enter predominantly male sectors. Studies of such exceptions are rare (among a few exceptions is mixed-methods work by Campos and Gassier, 2015). However, such studies are important as they can inform policymakers on the ways women may be encouraged and helped to enter more profitable sectors.

be trading off work/family balance for economic success.” Home-based firms also are less likely to grow compared to other small and micro enterprises (Mead and Liedholm, 1998).

#### **1.1.4. Productivity and profitability**

Many studies find that female-owned enterprises exhibit lower profitability and productivity than male-owned ones. The differences vary widely across studies. For example, in Sub Saharan Africa, Aterido, Hallward-Driemeier and Pagés (2011) estimate the gender gaps in labor productivity to be 12 percent. Costa and Rijkers (2012) analyze rural non-farm entrepreneurship in Ethiopia and find that male-owned firms are three times more productive than female-owned ones.

Some of the differences in performance can be explained by the type of firms women operate. In particular, the size and sector of the firm often explain a large portion of the differences in performance. For example, in the U.S., Hundley (2001) estimates that women’s concentration in the personal services sector explains as much as 14 percent of the earnings differential. De Mel, McKenzie and Woodruff (2009) find that once differences in sector are accounted for, there is no longer a significant difference in performance between male and female-owned businesses.

However, many studies find that even after controlling for firm characteristics, there are still differences in performance. For example, in Madagascar, Nordman and Vaillant (2014) find that the estimated gender performance gap in value added is 28 percent even after controlling for factor inputs endowment, sectors and the owner's human capital. In Sub-Saharan Africa, only about one-third of the productivity gap is explained by differences in the types of businesses women run: smaller firms, firms that are unaffiliated with other businesses, and firms that are not registered (Aterido, Hallward-Driemeier and Pagés, 2011). In Uganda, a small sample mixed-methods study by Campos and Gassier (2015) find that when women cross over into male-dominated sectors, they attain higher returns than women in female-dominated sectors. In other words, the returns in male-dominated sectors are high not only for men. Even if women get lower profits than men they are still making more than in female-dominated sectors.

An important aspect of performance evaluation that received little attention is the risk-return trade-off. Because women tend to be more risk averse than men (as we discuss in Part 2), they may choose to focus on lower risk/lower return strategies, rather than high risk/high return strategies. Watson and Robinson (2003) find that although profits are significantly higher for male-controlled small and micro enterprises, so is the risk (i.e. the variation in profits). Robb and Watson (2012) argue that it is inappropriate to compare returns from these different types of businesses without considering the differences in risk. They posit that inadequate control for differences in risk may explain why most of the previous literature observed differences in performance between male and female businesses. Indeed, when they control for risk adjusted returns using the Sharpe ratio, measured as the ratio of profits over the variance of the profits, they find no differences in performance in their U.S. sample. Therefore, it is important to evaluate to what extent differences in risk can explain differences in performance. Unfortunately, studies of risk adjusted returns in developing countries are non-existent to the best of our knowledge.<sup>4</sup> This is an important avenue for future research.

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<sup>4</sup> In addition, the level of acceptable risk for a particular entrepreneur may depend on the overall household’s ability to take on financial risk, so household dynamics may also be at play.

### **1.1.5. Growth**

Slower growth is one reason why female-run firms remain small. The evidence on slower growth rates is noted in developed and developing countries alike. For example, in Latin America and Asia only one in ten firms that grow to at least 15 employees is women-owned (Kantis, Angelelli and Koenig, 2005). In Indonesia, employment growth of female-owned firms is also significantly lower than that of male-owned businesses (Singh, Reynolds and Muhammad, 2001). Evidence from developed countries is remarkably similar.<sup>5</sup>

An exception is Kevane and Wydick (2001) who find that, on average, there are no significant differences between sales growth of male and female-run firms in Guatemala. But they do find that during childbearing years and when women allocate much of their time to caring for children, female entrepreneurs generate less employment growth compared to other entrepreneurs in the sample. These results suggest that it is important to consider the life stage and family situation of women entrepreneurs when analyzing the growth rates. Also, Bardasi and Sabarwal (2009), using data on 22 countries in Sub-Saharan Africa, found that firms partly or fully owned by females are as productive and grow as quickly as male-owned firms. However, Aterido, Hallward-Driemeier and Pagés (2011) argue that female ownership is not the same as female control of the enterprise (i.e. the decision-making power). For a subset of six Sub-Saharan Africa countries, they find that while ownership per se does not lead to significant differences in performance, the control does: female-controlled enterprises have a 12 percent productivity gap, which is significant. They conclude that “in looking at issues of women’s empowerment, it is important to consider issues of decision-making control and not simply participation in ownership.”

Slower growth of female-owned business can at least in part be explained by the choice of sectors women tend to operate in because of the limited potential for growth in those sectors. Another possible explanation could be the external or internal constraints women businesses face. Finally, a non-trivial possibility is that women may choose to pursue slower growth because of their preferences and values. We discuss these possibilities in Part 2.

### **1.1.6. Survival and failure**

Evidence in developed and developing countries suggest that female-owned firms are less likely to survive. For example, in the U.S., Boden and Nucci (2000) find that the survival rate for male-owned businesses is higher, but only by six percent. Similarly, in four Southern African countries, Mcpherson (1995) find that female-run businesses have lower survival rates.

While female-owned firm exit rates tend to be higher than those of males across countries, not all firm exit means failure (Fairlie and Robb, 2009). For example, Justo and DeTienne (2008) found that exit is more likely to be voluntary in the case of women than it is for men. Women are more likely to close their business to attend to family matters and they more often pass their firms on to new generations (Kanniainen and Poutvaara, 2007). In Africa and Latin America, Liedholm (2002) found that while female headed small and micro enterprises were less likely to survive the year, this difference was largely due to

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<sup>5</sup> For example, in the U.S., Hisrich and Brush (1987) found that the majority of female-run businesses have slightly slower growth than the average for male-owned ventures. In Britain, Cowling and Taylor (2001) found that male entrepreneurs were three times more likely to expand their ventures from single self-employed operation to a business employing others. In Sweden and Finland the evidence shows slower growth in sales for female-run businesses (Du Rietz and Henrekson, 2000).



non-business related causes, such as personal reasons.<sup>6</sup> When pure business failures were analyzed separately, the gender of the entrepreneur was no longer found to be a significant determinant of survival.

The selection into entrepreneurship may also be a contributing factor in business survival rates. For example, the most talented and educated women may select into wage labor, which as we discuss below in Part 2, they may prefer. This will leave less capable women in self-employment, which may be reflected in their lower survival rates (Rosti and Chelli, 2005). Thus, Nafziger and Terrell (1996) find that in India new firms established by formally well-educated entrepreneurs are less likely to survive because their founders face better opportunities in wage employment and rent seeking.

As discussed above, there is a very strong tendency of female owners to concentrate in certain industries. When evaluating survival and failure rates it is important to control for industry effects as different industries have different failure rates. For example, in Australia the survival rate of female-owned businesses and those of men were not significantly different after controlling for industry (Watson, 2003). Other studies also find that after controlling for size and industry, the survival rates of female businesses are not different from those of men (eg. Kepler and Shane, 2007).

## **1.2. NON-ECONOMIC OUTCOMES**

Most of the literature so far has predominantly focused on economic outcomes such as those discussed above. However, many non-economic outcomes such as self-empowerment, time flexibility, status in the community, satisfaction with life, and work-life balance are more important for women than for men. As we discuss below, the narrow definition of success that highlights only economic motivations for entering entrepreneurship tends to better fit the male model. Women often have different motivations when they enter self-employment and they evaluate the success of their business using different metrics than men.

Thus, in discussing female entrepreneurial performance, it is important to include non-economic outcomes, which are frequently the driving forces behind women's choice of self-employment. However, the literature on non-economic business outcomes of women entrepreneurs is very sparse. There is some limited evidence that in evaluating their firm's performance, women tend to focus more on non-economic factors, such as personal fulfillment, flexibility and desire to serve the community (Anna et al. 1999). In Sweden, Holmquist and Sundin (1988) found that while women entrepreneurs were similar to men in their pursuit of economic goals, women also valued other goals, including customer satisfaction and personal flexibility. In a study of Lebanese female entrepreneurs, Jamali (2009) found that many women named non-financial aspects of their businesses, such as love of what they do every day and rendering an important service to the community, as important satisfying factors. A study of U.S. entrepreneurs revealed that women were more likely than men to develop strategies that emphasized product quality and less likely to emphasize cost efficiency (Chaganti and Parasuraman, 1997).

Thus, focusing only on economic outcomes in discussing female entrepreneurial outcomes presents a too narrow view of success. If women value non-economic outcomes more than men do, they may feel successful even though economically speaking their business "underperforms." Thus, economic measures

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<sup>6</sup> The reason for business closure is based on a survey question "Why do small and micro enterprises close?" The authors considered two categories of business closure: business failure (low profit or more loss), or "personal reasons" (illness, social and traditional norms, and other responsibilities).

may underestimate women's success. On the other side, if women are not able to take full advantage of the economic outcomes their business generates (for example, if their spouse has the right to control all financial resources in the household), the narrow economic focus will overestimate the true impact on women's lives.

Thus, Kantor (2002) argues that the definition of success has to include empowerment through which they can gain power and status in the household, market, and community. This dimension is especially important in cultural contexts which limit women's economic opportunities.<sup>7</sup> In theory, the decisions women make about their business should be driven by the profit maximization motives and should be independent of other choices they make, such as how many hours to work, or how much of the profits to reinvest into the business vs. spend on household consumption. In other words, the profit maximization problem should be solved first, before utility maximization. In this case the maximum profit will be achieved. However, when makers fail, the profit maximization decisions become non-separable from utility maximization decisions (De Janvry and Sadoulet, 2015). Some of the market failures relevant for women entrepreneurs include lack of access to credit, which allows for consumption smoothing and optimal investment into the business; lack of insurance markets, which could allow women to take on more risk and realize higher rewards; lack of child care options, which may allow them to put more optimal hours into their business; or lack of flexibility in the labor markets, which may allow them to opt for wage work. Therefore, women might be simultaneously maximizing their utility and their business profits, which leads to sub-optimal economic outcomes for their business.

It appears from this that women do not separate their business decisions from the rest of their lives as much as men do. However, most of the research up to date used a male model in which business performance is evaluated based on the assumption that the venture is a separate economic entity designed primarily to achieve profit through competitive advantage (Brush, 1992). Thus, it is important to include the economic business outcomes along with other non-economic outcomes in evaluating female entrepreneurial performance. As we discuss in Part 4, more research is needed to better understand the interplay of economic and non-economic outcomes for women entrepreneurs to get a more balanced approach to evaluating their success.

Another important aspect that is often overlooked is the level at which outcomes should be measured—meaning whether the focus should be on individual or family/household outcomes. There is likely a reallocation of resources within households that maximizes overall household outcomes at the expense of suboptimal individual outcomes. Most of the literature focuses on individual outcomes, while women's individual goals may be set at the household level. More research is needed on the household outcomes as they relate to entrepreneurial activities of men and women.

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<sup>7</sup> Kantor (2002) offers three main criticisms of purely economic measures of success: "The first is that such measures concentrate more on access to economic resources versus control over them; second, they tend to define success as growth, dismissing other motivations for self-employment whose achievement may not be measurable by economic outcomes alone; and third, they ignore the effects of unequal market access on marginalized groups in society, making economic success a partial measure that misses the effects of culturally specific power relations."

# PART 2. FOUR DRIVERS OF DIFFERENCES IN PERFORMANCE

Part 1 discussed the differences in outcomes between women-owned and men-owned businesses. Part 2 considers the reasons—i.e. the “drivers”—for these differences. We propose a taxonomy consisting of four main categories of drivers: (1) choices and preferences, (2) endowments, (3) external constraints, and (4) internal constraints. Note that every taxonomy will have drawbacks and imperfections. Our goal is not to argue that the four categories we identify represent a perfect classification, but to offer a way to organize a multitude of factors into logically distinct categories.

## 2.1. CHOICES AND PREFERENCES

### 2.1.1. Motivation for entering self-employment

It is important to start our discussion of why the outcomes are different by considering the choice to enter entrepreneurship. The differences in the motivation and reasons for starting a business could be a fundamental determinant of subsequent business performance. The early literature identified two types of factors that influence people’s decisions to become entrepreneurs. The “pull” factors are characterized by taking advantage of an opportunity, such as a creative business idea. The “push” factors describe an unsatisfactory situation such as lack of job prospects, lack of fulfillment, or flexibility in a current job position. In essence, the push factors capture the economic necessity, the second-best choice when the first choice (such as wage employment) is not available.

Many studies find that women enter entrepreneurship for different reasons compared to men. Some authors argue that women more often tend to be motivated by the push factors than pull factors (Moore and Buttner, 1997). The economic necessity, such as lack of jobs and need for extra income is the most prominent of the push factors (Eversole, 2004; and Holmén, Min and Saarelainen, 2011). Also, gender inequality in wage and salary earnings may positively influence some women’s decision to leave wage employment for self-employment (Boden, 1996). Lin, Picot and Compton (2000) find that women’s self-employment is more influenced by the national unemployment rate. Several more recent studies noted that women can also be motivated by the pull factors, such as desire for achievement, independence, and self-fulfillment.<sup>8</sup> Personal freedom, security, and satisfaction were the primary goals of women entrepreneurs in Pakistan (Shabbir and Di Gregorio, 1996). In a U.S. sample, Scott (1986) found that men stressed the desire to be their own bosses, and women reported wanting more personal challenge and satisfaction.

Importantly, many women choose self-employment as a means of balancing work and home or child care responsibilities. For example, in a New Zealand study, work-life balance and family related factors were much more prominent in women’s decision-making than in those of men (Kirkwood, 2009). In addition, flexibility of schedule was another important factor for women but not so for men (Boden, 1999). An early U.K. study by Birley and Westhead (1994) identified seven different needs that motivate female

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<sup>8</sup> Such studies include Gray and Finley-Hervey (2005) in Morocco; Naser, Mohammed, and Nuseibeh (2009) in United Arab Emirates; Welter and Smallbone (2008) in Uzbekistan; and Ljunggren and Kolvereid (1996) in Norway.

entrepreneurs: need for approval, need for independence, need for personal development, welfare considerations, wealth considerations, tax implications, and the desire to follow role models. Interestingly, the authors did not find any relationship between the motivations for business start-up and the subsequent size and growth of the business. Finally, some authors note that the traditional push/pull dichotomy ignores the complexities of women's lives and that in reality the two factors rarely exclude each other (Patterson and Mavin, 2009).

We can conclude that men and women are motivated by different factors when they start a new business. If women start businesses to achieve autonomy or independence, one would expect them to start small businesses and keep them small because in larger businesses entrepreneurs tend to lose their independence (Davidsson, 1989).

### **2.1.2. Goals and growth aspirations**

Female-owned enterprises experience lower growth. An important question is whether such lower growth is the choice made by women based on their priorities and preferences, or whether such choice is restricted by the environment they operate in and the type of businesses they choose to create.

Research shows that women tend to have lower expectations and goals for their business growth and expansion. For example, DeMartino and Barbato (2003) find that female MBA students have lower preferences for advancement and wealth creation, and greater emphasis on family and lifestyle aspects. In Canada, Cliff (1998) find that women tend to establish maximum business size limits beyond which they prefer not to expand, and that these limits are smaller than the limits set by male entrepreneurs. In Sweden, Du Rietz and Henrekson (2000) argued that women-owned businesses were performing in line with their more modest personal growth preferences, which is not the same as underperforming. Morris et al. (2006) documented that in their U.S. sample the majority of women entrepreneurs only sought moderate growth. However, there was notable heterogeneity among women as they sorted into the high growth or modest growth models. They concluded that "growth is a deliberate choice. Women have a clear sense of the costs and benefits of growth, and they make careful trade-off decisions."

Some note that one of the reasons women have lower growth orientation is because they are discouraged by the growth-related stress associated with personal demands on their time (Orser and Hogarth-Scott, 2002). Cliff (1998) also argues that women are more concerned with risks that accompany fast expansion and they prefer slow and steady growth to fast growth. Morris et al. (2006) documented that in their U.S. sample of modest growth entrepreneurs, the word "growth" was often associated with "stress". The same group also viewed adding more employees as adding heavy responsibility and risk.

The motivation for entering self-employment influences the growth aspirations of entrepreneurs and their actual growth. Some evidence suggests that women who are "pulled" into entrepreneurship (i.e. by opportunity) have higher growth aspirations than those who are "pushed" by necessity (Morris et al, 2006). Additionally, owners in husband/wife partnerships have lower growth aspirations, whereas owners with business partners other than a spouse are more likely to be growth oriented (Baines and Wheelock, 1998; Chell and Baines, 1998). Finally, women growth aspirations are influenced by their perceptions of hostile environment and lack of opportunities. For example, Nichter and Goldmark (2009) argue that women's primary concern in developing countries is business survival rather than growth.

It is important to have a dynamic view on women's motivations. The values and goals can change depending on women's stage in their life, career and family. The effects of family and children are different

for men and women. The addition of dependents increases the growth expectations for men but not for women, as men typically consider themselves to be the main providers for the family (Orser and Dyke, 2009). Marriage and motherhood can reduce the amount of attention women devote to firm creation (Buttner and Moore, 1997; Reynolds and Renzulli, 2005). DeMartino and Barbato (2003) also found that marital status and the presence of dependent children increased the differences in career motivations between men and women entrepreneurs. Specifically, compared to married men with dependents, married women with dependents ranked lifestyle motivation much higher, and advancement and wealth creation much lower. Mothers may choose entrepreneurship primarily to pursue a more favorable and flexible balance between work and non-work life (Arai, 2000). Davis and Shaver (2012) found that while on average men desire higher growth than women, these differences are the most pronounced among the youngest group. Manolova et al. (2007) also found that in Bulgaria younger women had higher growth expectations than older women.

In summary, it is plausible that female-run businesses grow more slowly, at least in part, because of their preferences. To what extent their preferences can explain their slower growth is not well understood and more work is needed to test whether the hypotheses presented here will be robust in different settings. Better understanding of the interaction between women's life stage, and their career and family status is another important area for future research.

### **2.1.3. Risk preferences**

Risk is an important element of any entrepreneurial activity. Risk tolerance is important as a bridge between opportunity recognition and entrepreneurial enactment (Marlow and Carter, 2004). Many studies find that women tend to be more risk-averse than men (see Eckel and Grossman, 2008, for a review of experimental evidence). As a result of their higher risk aversion, women may avoid high growth or high potential return ventures because they typically involve more risk. Kepler and Shane (2007) found that among U.S. nascent entrepreneurs, females are significantly more likely to "prefer a business with a low risk-to-return ratio". Similarly, in Canada, Cliff (1998) found that women reported more concerns about the risks associated with fast growth, and generally preferred to adopt a slower and steady growth rate. Another Canadian study found that female entrepreneurs preferred to have "small and stable business" (Lee-Gosselin and Grisé, 1990). Sexton and Bowman (1986) have also found that women business owners have lower risk-taking propensity. Smith-Hunter and Boyd (2004) suggest that women entrepreneurs shy away from nontraditional business areas at least partially because of the higher risk of such ventures.

Consistent with their higher risk aversion, women are more conservative with their businesses. For example, Downing (1990) found that while male borrowers tend to invest in a single relatively high-yielding project, women tend to diversify their entrepreneurial activity to guarantee a subsistence level of household income. This diversification and subsistence tendencies may also lead to lower growth of female led businesses.

### **2.1.4. Preference for wage work**

Scherer, Brodzinski and Wiebe (1990) found that males have a higher preference for being entrepreneurs compared to females. Brush (1992) stated that men more frequently desire to be entrepreneurs, whereas women choose to be entrepreneurs to accomplish goals such as work family balance. Mathews and Moser (1996) measured prospective interest in self-employment among college graduates in the U.S. and found that men are more interested in starting their own business than women. Interestingly, after 5 years as

employees, the difference between men's and women's interest in self-employment increased even further. This finding suggests that as women get more comfortable with their current employment situation, their interest in self-employment dampens. In addition, Mathews and Moser (1996) found that growing up with a self-employed family member had a stronger impact on men's interest in self-employment than it had on women's interest. The authors hypothesized that one of the reasons for this could be that women who had a self-employed family member were more aware of the time demands of running their own business. Additional support for these predictions is offered by a natural experiment in Mexico when Banco Azteca opened branches exogenously located in pre-existing stores. Due to its focus on low documentation requirements, this new bank improved access to finance for informal business owners (Bruhn and Love, 2011). As a result, the proportion of informal businesses and their survival increased for both men and women. Importantly, by analyzing transitions between different employment states, the authors find that men are more likely to switch from wage work to informal business ownership than women. Thus, more men than women expressed a preference towards being informal business owners rather than wage earners. In contrast, women chose informal business ownership as an alternative to being unemployed, and not as an alternative to being wage earners.

There are several reasons that explain women's preference for wage work over self-employment. First, as we discussed above, the profitability of women-owned businesses tends to be lower than those of men's. So, the return on their investment of money, time and energy in the business is lower. Second, starting a business is a riskier activity than wage employment, and as we discussed above women are more risk-averse than men. Third, women face more external and internal constraints to starting and running their businesses, as we discuss below. Bruhn and Love (2011) argue that women are less likely to voluntarily switch from being a wage earner to operating an informal business than men. Thus, women prefer paid work and when that choice is not available they enter entrepreneurship as a second best.

#### **2.1.5. Values and personality traits**

There is substantial evidence showing that women dislike competition more than men do. For example, Gneezy and Rustichini (2004) show that males' performance increases in a competitive environment relative to a non-competitive environment, while female' performance does not. Niederle and Vesterlund (2007) find that men are substantially more eager than women to enter into competition. The difference in competitiveness may be influenced by differences in the cost of reproduction: females endure a much higher cost in parental investment than males, and so inherently they are choosier rather than competitive (Gneezy, Leonard and List, 2009). Bente and Piegeler (2013) found that women's average scores of competitiveness are significantly lower than average scores of men in 32 countries. They suggest that gender differences in competitiveness contribute significantly to the gender gap in entrepreneurship.

Women tend to focus more on meaningful work and place less importance on earning income. For example, a study in North Ireland concluded that women did not display "classic" entrepreneurial values, in particular rejecting risk taking and profit motivation (MacNabb et al., 1993). Kanazawa (2005) argues that men place a much higher value on earning income than women do and that these "evolved (not learned) differences in preferences are largely responsible for sex differences in pay." In line with this hypothesis, he used data from the U.S. to argue that there is no sex gap in earnings among childless unmarried workers under 40. These findings should not be interpreted to mean that women will choose poverty over an opportunity to earn income. However, they may not place as high a value on income as men do, especially in their reproductive years. More research is needed in other contexts, as values and associated behaviors may be specific to the environment and social norms.

Men and women also differ in their concept of what defines success. For women “success” means having control over their own destinies, building ongoing relationships with clients, and doing something fulfilling. Men described success in terms of achieving goals (Romano, 1994). Women chose self-fulfillment and goal achievement as primary measures of success rather than financial profitability (Buttner and Moore, 1997). In another U.S. study, three quarters of women entrepreneurs selected customer loyalty ahead of sales growth as their measure of success (Morris et al., 2006). Gaggerson (1993) found that women valued equality more highly than men. As we discussed in Part 1, focusing only on economic outcomes misses important non-economic benefits that women experience from their business ownership.

There is also extensive evidence that women put more weight on family and children responsibilities in their entrepreneurial decisions than men do. Traditionally, women are considered the primary caretaker of children and are responsible for domestic chores. Thus, women devote higher share of their time and income to the welfare of children (Duflo, 2003; Duflo and Udry, 2004; Nordman and Vaillant, 2014). Parasuraman and Simmers (2001) suggest that while women entrepreneurs may enjoy greater autonomy and flexibility, many experience greater levels of work-family conflict. Jennings and McDougald (2007) suggest that female entrepreneurs cope with work-family conflict in ways that intentionally or unintentionally constrain rather than enhance the growth of their business. They also find that while owning a business provides some flexibility and autonomy, it also takes time away from family and children. In addition, there is some evidence that women entrepreneurs tend to spend more on household health, nutrition and education of their children than men entrepreneurs (Herrington and Kew, 2017). This could be because they place relatively higher values on health, nutrition and education of their children than men do.

Finally, women place more emphasis on building interpersonal relationships than men do. Their “reality” is characterized by connectedness and relationships rather than the autonomy and logic, more typical of men's reality (Aldrich, Reese and Dubini, 1989). Thus, women are directed towards cultivating strong relationships and connecting family, work, and community while men are more focused on achieving independence and position (Gilligan, 1982). Another study of rural women entrepreneurs found that they placed greater importance on relationships and strived to minimize interpersonal conflict among employees (Robinson, 2001). In the U.S., Bucar and Hisrich (2001) found that female entrepreneurs and managers were slightly more ethical in certain situations than their male counterparts. Brush (1992) proposes an integrated framework in which women business owners view their businesses as a “cooperative network of relationships” rather than a separate profit-making entity.

## **2.2. ENDOWMENTS**

### **2.2.1. Assets**

There is ample evidence showing that in developing countries the distribution and control of land, property and assets is skewed toward men, and women’s property rights are less secured.<sup>9</sup> Thus, securing

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<sup>9</sup> For instance, in Uganda, 30 percent of men owned transport-related assets compared to only one percent of the women (Kes, Jacobs, and Namy 2011). In South Africa, men owned around seven different types of assets on average, while women owned only four different types (Jacobs et al., 2011). From the individual-level asset data from Ghana, Deere et al. (2013) found that married women own only 19 percent of the couple’s total wealth, and this gender asset gap was more pronounced in rural than

property rights over productive assets is important (O’Sullivan, 2016). Such property rights play a central role in investment decisions, allocative resources, and economic development (Acemoglu and Zilibotti, 2001).

There are many reasons women have fewer assets than men. First, wage discrimination and fewer years spent working (because of pregnancies, child birth and child care) result in lower potential to accumulate savings and other assets. Second, in many countries social and sometimes legal norms require assets are registered in a male spouse’s name. For example, Kantor (2002) reports that women in South Asia have more limited ownership of assets and property that can be used as collateral due to both legal and traditional bars on female ownership. Horrell and Krishnan (2007) also report that female headed households often lack either assets or income and this constrains their ability to diversify economic activities. These legal and traditional bars on female asset ownership inhibit entrepreneurship by women (Greer and Greene, 2003). As we discussed above, a large part of the economic performance differences can be explained by the fact that women operate in lower performing sectors than men. Brush and Hisrich (1991) argue that women’s choice to enter and operate in less profitable sectors is at least in part explained by availability of start-up capital and the fact that the traditional female-dominated sectors have lower start-up costs. Thus, lower endowments of assets may be one of the factors for choosing lower performing sectors. Lower endowments of assets means women have less collateral, which inhibits their access to external finance. Another result of limited asset ownership is that women are less likely to have a credit history and are underrepresented in credit bureaus and registries (Hampel-Milagrosa, 2010; Shaw, Carter and Brierton, 2001). This limits their access to finance in similar ways as limited collateral, since credit information is often used by banks as a substitute for assets.

Recent interventions that gave poor women a large productive asset, such as a cattle or goats, with intensive asset-specific training along with other bundled services, found significant impacts on their occupational choices (Buvinic and O’Donnell, 2016). A randomized evaluation of similar programs in six countries showed “that ‘big push’ which includes large asset transfer does help overcome poverty traps and has positive economic outcomes (on per-capita consumption, household assets and food security) that are maintained a year after the program ends” (Buvinic and O’Donnell, 2016). An asset-transfer program in Burkina Faso indicated that women’s control over and ownership of assets improved social perceptions about asset ownership, which demonstrates that social norms can be shifted (van den Bold et al., 2013). Programs that give women control of farm land have been classified as proven to increase the productivity and economic security of women farmers (Buvinic and O’Donnell, 2016).

### **2.2.2. Education, skills and experience**

Human resources such as the knowledge and skills of business owners are important determinants of business success. In many developing countries there still exists a gender gap in education, especially at the secondary level. Often families invest less in their daughters’ than in their son’s education and training, which restricts the human capital women bring to self-employment (Brush et al., 2004). One reason for this is patrilocal residence upon marriage—common in many parts of South Asia and other regions—which

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urban areas. Doss et al. (2015) found that the share of land owned solely by men was greater than that of women. Also, the ratio of documented land area under male versus female control ranged from 2 to 1 in Malawi and Uganda, to 12 to 1 in Niger.



implies that parents will not directly gain from daughters' human capital (Kantor, 2002).<sup>10</sup> Even in developed countries, where men and women are more likely to have similar education levels, women are less likely to have formal education in business or financial issues. For example, in the U.S. women's education was most often in the liberal arts, health and natural sciences rather than business or technical areas (Hisrich and Brush, 1984; Menzies, Diochon and Gasse, 2004). On the other side, women are considered to have better empathy and people skills, which they may use to compensate for lack of other skills (Hisrich and Brush, 1984).

The type of human capital owners bring to their business may matter more than the overall level of human capital.<sup>11</sup> In the U.S., Boden and Nucci (2000) found that women were disadvantaged in terms of previous managerial experiences (in particular managing other employees) and therefore had less human and financial capital needed for running their businesses. DeTienne and Chandler (2007) also found that among business founders, men have significantly more years of relevant industry experience and have more technical expertise. In Britain, Cowling and Taylor (2001) found that male entrepreneurs were more mature and had more life experience and therefore more human capital, and these differences were significant factors in the growth of the business. This lack of relevant managerial skills and human capital could be one of the explanations for the women's choice of less profitable sectors which tend to have lower human capital requirements (Brush and Hisrich, 1991).

### **2.2.3. Networks and social capital**

Networks and social connections are important for business success. For example, Lerner, Brush and Hisrich (1995) found that membership in an association or network of businesswomen had a highly significant effect on profitability. Reliance on the immediate network or channel for information can be more important to women business owners than it is to men business owners (Chan and Foster, 2001). However, women's networks are more limited in two major ways. First, they contain mostly other women, which limits their information and contributes to gender-based segregation (Smeltzer and Fann, 1989). Second, they are mainly based on relatives and friends.

Women tend to rely more on extended families than men do, which in many settings is their only available social network. Such networks could be a double-edged sword. On one side, family and relatives can serve as support for the entrepreneur, including by providing the financial resources necessary to start-up the business, helping with childcare or offering encouragement. On the other side, they can drain the resources away from the business and slow down its growth. For example, one study found that high proportion of kin in the network had negative consequences for small business owners (Renzulli, Aldrich and Moody, 2000). Thus, strong family connections can be both an asset and a liability for a female entrepreneur (Powell and Eddleston, 2013).

In addition, women's social networks are frequently a function of their children (i.e. parent-teacher associations, school committees), and they are often excluded from informal business networks and

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<sup>10</sup> As more of an exception, a study done in Poland found that female entrepreneurs were more highly educated than the male entrepreneurs and had equal or better levels of business experience (Zapalska, 1997). In Britain, Cowling and Taylor (2001) also found that women entrepreneurs were better educated than their male counterparts.

<sup>11</sup> Based on a meta-analysis of three decades of human capital research in entrepreneurship, Unger et al. (2011) concluded that there is a significant but small relationship between human capital and firm success. Importantly, the relationship was stronger for human capital that was directly related to entrepreneurial tasks compared with human capital with low task relatedness.

professional business clubs (Gould and Parzen, 1990). Marlow and McAdam (2013) conclude that women's absence from traditionally masculine sectors (such as science, technology, manufacturing or higher order services) is not because of lack of ambition or qualifications. Instead, they argue, it is at least in part because the "prevailing masculinized fraternal cultures" exclude women from accruing the required range of capitals and connections necessary to enter those sectors.

## **2.3. EXTERNAL CONSTRAINTS**

### **2.3.1. Legal system**

Institutions provide the rules by which all economic agents operate; they constrain or enable various economic behaviors and influence economic choices. Institutions can be formal, such as those encoded in laws and business regulations, or informal, such as uncodified attitudes embedded in society. This section describes the former aspect while the next section describes the latter.

The World Bank's report *Women, Business and the Law, 2018* identifies many countries where laws restrict women's economic activities (World Bank Group, 2018). For example, 104 countries have laws preventing women from working in certain jobs, 59 countries have no laws to restrict sexual harassment in the workplace, and in 18 countries husbands can legally prevent their wives from working. In Nigeria, Chad and Guinea-Bissau, civil law does not allow women to open bank accounts without their husbands' permission, and in Equatorial Guinea women need their husbands' permission to sign a contract. Also, in 16 of these economies a male head of household has an explicit or implicit tax deduction, as compared to a female head of household. Such legal disparities are negatively correlated with the proportion of new female business owners and sole proprietors, implying that they constitute a significant barrier for the development of female entrepreneurship (Meunier, Krylova and Ramalho, 2017). Even a "gender-neutral" legal and regulatory environment may have gender-differentiated outcomes (Aidis and Weeks., 2016).

In many African countries the law gives husbands sole control over marital property (World Bank Group, 2015). Other legal provisions restrict women's ability to buy, own, sell and use property to finance their businesses (Campos and Gassier, 2015). Many countries have restrictions on inheritance of property. In 35 of 173 economies examined, female surviving spouses do not have the same inheritance rights as the male surviving spouses (O'Sullivan, 2016). Also, in many countries daughters cannot inherit property from their parents. Using a database of women's legal rights covering 100 countries over 50 years, Hallward-Driemeier, Hasan and Rusu, (2013) found that restrictions on women to initiate legal proceedings, open bank accounts, or enter into contracts are still common in most of the analyzed countries. Women also face asymmetrical legal rights that limit their access to markets and information (Downing and Daniels, 1992; Kevane and Wydic, 2001).

In addition to statutory laws, business regulations can also negatively affect female entrepreneurs. Such regulations include entry into the product markets, contract enforcement (indicators measuring the efficiency of the justice system in resolving legal disputes), and labor market regulations. For example, using Global Entrepreneurship Monitor data from thirty-seven countries, Ardagna and Lusardi (2010) provide evidence that such regulations play a critical role in the individual decision to start a new business, particularly for individuals who engage in an entrepreneurial activity to pursue a business opportunity.

Differences in legal and property rights have real economic consequences. For example, Besley (1995) demonstrated that individuals in Ghana vary their investment in agriculture business based on the security

of their property rights. Similarly, Goldstein and Udry (2008) find that individuals with more secure tenure rights invest more in land fertility and have substantially higher output. In Rwanda, female household heads experience lower levels of tenure security than men, which constrains their willingness to make or maintain investments in structures such as bunds, terraces, and dams (Ali, Deininger and Goldstein, 2014). Several studies find increased productivity when women have larger control over the resources (Saito, Mekonnen and Spurling, 1994; Udry et al., 1995; Besley and Ghatak 2009). Thus, addressing the gender gap in property rights can provide a key pathway toward women's economic empowerment (O'Sullivan, 2016).

### **2.3.2. Social norms and culture**

Social norms are powerful reflections of both formal structures of society as well as its informal rules, beliefs, and attitudes (Klugman et al., 2014). Social norms define what is deemed appropriate behavior and desirable attributes for women, men, boys and girls, creating gender roles. They include rules and traditions regarding many relevant aspects of business, such as property ownership (i.e. whether or not women are allowed to own assets in their name), location (i.e. whether or not women have freedom of movement and location), restrictions on contact with men who are not their relatives, types of economic behaviors that are allowed for women, including their career choices, and social attitudes on working outside of home. We discuss these different aspects below.

Many social norms include patrilineage where descent, and often resources, flow through males (Christopher Baughn, Chua and Neupert, 2006). The previous section described legal restrictions on asset ownership. Even if the legal system is not explicitly discriminatory against women, the social norms and traditions, especially in rural areas, can still prohibit women from owning property (see Bortei-Doku, 2002; Dowuona-Hammond, 2008). Thus, in some countries customary law dominates the statutory law. For instance, the constitution of Lesotho does not consider customary law that prohibits women from inheriting property to be invalid even though it violates legally prescribed gender rights (World Bank Group, 2016).<sup>12</sup>

It is often socially acceptable for the husband to take control of all family finances, leaving women's business undercapitalized and underperforming. For example, Fiala (2017) found that in Uganda women who hide money from their husbands show increased economic outcomes suggesting that women have little control over resources in the family, and so hiding money is the only way to keep control of it. Another study found that in cases when men disapprove of women's choice to work, depositing women's wages into their personal account, rather than the account of the male head of the household increases their labor force participation (Field et al., 2016). These norms of unequal intra-household power can severely limit women's ability to gain the benefits of their entrepreneurial activities (Kantor, 2002).

In some Middle Eastern, North African and South Asian nations, female seclusion norms are common, influencing women's access to the public sphere. Estrin and Mickiewicz (2011) found that restrictions on freedom of movement make it less likely for women to have high entrepreneurial aspirations in terms of employment growth. Such restrictions also limit women's knowledge of the sector in which they work, making them less aware of the range of suppliers working in the sector and the markets through which to sell their products or services (Kantor, 2002). Patrilocality is a norm which requires women to move near

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<sup>12</sup> Paradoxically, in environments where tradition allows only secondary land rights for women or where women are explicitly not allowed to inherit land, the reforms that improve institutions, such as introducing individual property titles, could actually deteriorate women's common rights (Hampel-Milagrosa, 2010).

their husband's family upon marriage. While it does not limit the freedom of movement per se, relocating away from the women's family of origin may reduce their social support, networking opportunities and status in the community. The norms of early marriage and motherhood at young ages can affect women's ability to access education and market opportunities and can lead to health problems with negative productivity effects (Kantor, 2002).

Other social restrictions preclude women from coming in contact with men who are not their family members (Field et al., 2010). Such restrictions limit women's access to credit because loan officers are predominantly male (Guérin, 2006; Fletschner and Carter 2008). Roomi (2013) find that independent mobility and being allowed to meet with men increase sales and employment growth of women-owned enterprises in Pakistan.

In many societies women's roles are defined primarily through family and household responsibilities. Where such norms are common, community and family members may respond with disapproval to women's choice to leave their kids at home to work on their business. Many women internalize the societal role expectations, which results in feelings of guilt when they choose to engage in wage work or entrepreneurial activity (Jamali, 2009).

Many cultures do not take women business activities as "serious" because business is often considered a male's role. Jamali (2009) found that one of three obstacles mentioned by Lebanese women entrepreneurs was the negative societal attitude toward women entrepreneurs. Brush and Hisrich (1991) argue that women's choice to enter and operate in less profitable sectors is at least in part explained by differences in social norms and expectations.

If a society does not value or respect entrepreneurial activity by women and restricts their choices or the actions they can take, women will be discouraged from starting a business and will be limited in the options for growth and expansion that they consider or are able to implement. Social norms and constraints placed on women are essential for understanding how and why women and men perform differently in self-employment.

### **2.3.3. Financial discrimination**

It has often been observed that female-run businesses use less external finance than male-run ones.<sup>13</sup> However, as with any equilibrium outcome, it is not obvious whether this result is due to discriminatory behavior by financial institutions (i.e. the supply side, which is an external constraint) or the choices women make (i.e. the demand side, which is an internal constraint). In this section we will discuss the former, while in a later section we will discuss the latter.

In developed countries there is mixed evidence on the presence of discrimination against female borrowers. Some studies find evidence of discrimination (Marlow and Patton, 2005) while others don't (Coleman, 2002). Read (1994) finds that 12.5 percent of the women business owners believed they had experienced gender-related discrimination in their banking relationships. Hill, Leitch and Harrison (2006) studied business women in Northern Ireland, reporting emotional accounts of the abusive, dismissive and objectionable behaviors of the bank staff. Brush (1997) reported that women entrepreneurs believed they were perceived as riskier and less credit worthy than their male counterparts, despite having a business

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<sup>13</sup> See Sabarwal and Terrell (2008), Coleman (2007). Fletschner and Kenney (2011) also reports that in seven out of nine countries rural female-headed households are less likely to use credit than those headed by men.

track record of solid sales and profits. Mijid (2015) also found that banks hold a stereotypical misperception that women owners are less capable of paying back a loan than their male counterparts. However, some recent research shows that the nonperforming loan rates for women small-business customers is 33 percent lower than the rate for men (D'espallier, Guerin and Mersland, 2012). In addition, experimental studies in the U.S. showed that lenders' stereotypes perceive women to be less successful as entrepreneurs (Buttner and Rosen, 1988).

In developing countries, access to finance is commonly noted as an important barrier to business success. For example, Aidis et al. (2007) showed that access to funds was a more significant barrier to the progress of female business owners in Lithuania and Ukraine than to males. Muravyev, Talavera and Schäer (2009) used cross country data and found that female-managed firms are less likely to obtain a bank loan and are charged higher interest rates when loan applications are approved. Female borrowers were also more likely to pay higher interest rates and have higher collateral requirements (Coleman, 2000, Riding and Swift, 1990).

Limited access to credit could be due to the types of businesses women operate rather than gender based financial discrimination. As we discussed in Part 1, females tend to operate smaller businesses in less profitable sectors and these types of businesses are costlier and riskier for lenders to finance. In addition, the types of businesses women operate (i.e. service sector) often lack collateral, precluding formal access to credit (Bruhn 2009). Thus, accounting for sector and size is important in establishing whether or not there is financial discrimination against female borrowers. For example, in Canada, Haines, Orser and Riding (1999) found no lending discrimination when controlling for business size and sector. Fabowale, Orser and Riding (1995) also found no differences in the rate of loan rejections, nor any other objective measures of terms of credit after accounting for observable differences (such as size and sector) between male- and female-owned businesses. In Sub-Saharan Africa, Aterido, Hallward-Driemeier and Pagés (2011) and Bardasi, Sabarwal and Terrell (2011) found that women are not disadvantaged or discriminated in their access to finance when key characteristics of the firm and the entrepreneur are controlled for.

Women operate smaller businesses for two key reasons: lower start-up capital (because of lower endowments of assets as we discussed above), and less access to credit to grow their businesses. Thus, there is a circular relationship between their small size businesses and the lack of access to credit; they reinforce each other. It is then important not to discount the severity of financial constraints even if the evidence suggests that conditional on small business size there is no discrimination. In line with this argument, Coleman (2000) argued that lenders discriminate against women indirectly because they prefer to lend to larger and more established firms. In addition, even if there is no overt discrimination, the banks could be rationally responding to women's disadvantaged background and endowment. For example, Fay and Williams (1993) noted, "Bank staff are not guilty of discrimination [...] Rather applicants' socialization and work-related experiences have disadvantaged them compared to male applicants." Such indirect discrimination leaves a significant role for policy aimed at improving access to credit for women entrepreneurs.

If women are more disadvantaged in their access to capital, then providing them with capital should improve business outcomes. A large literature evaluated effectiveness of microfinance on alleviating poverty. While the jury is still out, more often than not the studies did not find large or significant impacts

on business outcomes (e.g. Banerjee et al., 2015).<sup>14</sup> Other studies evaluated the effectiveness of cash grants, but the results are again mixed. There was no significant impact of grants for female entrepreneurs in Sri Lanka (De Mel, McKenzie and Woodruff, 2008), while there was a positive impact of cash grants in Uganda (Blattman et al., 2013). Fafchamps et al. (2014) found that only in-kind grants increased profits of women who run larger businesses, while cash grants did not have an effect.<sup>15</sup>

There is also evidence that women rely disproportionately more on internal finance and informal sources of funds. Haynes and Haynes (1999) found that, even in the U.S., women-owned small businesses showed a higher probability of borrowing from family and friends. Similarly, in Singapore women entrepreneurs were also more likely to use personal capital and loans from family and friends (Maysami and Goby, 1999). Note that heavier reliance on family and friends and self-financing practices by women may be due to financial discrimination on the supply side, or demand side factors, that we will discuss in a later section.

#### **2.3.4. Labor market discrimination**

In many developed countries and in most developing countries there is gender discrimination in the labor markets and frequently women are paid less than men performing the same job. Furthermore, women have lower chances of getting a wage job to start with. For example, a recent experiment in Malawi found that skilled women get less referrals for a job than men, which limits their ability to get a job (Beaman, Keleher and Magruder, 2018).

Different societal expectations for men and women are one of the reasons behind labor market discrimination. For example, social norms may dictate career choices appropriate for women, which can lead to gender-segregated labor markets. The segregation can be horizontal or vertical. In horizontal segregation women are clustered in different occupations than their male counterparts, (such as the less productive service sector). In vertical segregation women hold lower status positions, such as secretarial, administrative, and clerical work, affecting women's managerial experience and access to business networks. Both types of segregation have been associated with lower levels of pay, skill, and status for women (Marlow, 2002). Employment-based gender segregation is discussed in more detail in Carranza, Das and Kotikula (2018).

The sectors women traditionally choose for self-employment mirror the segregation of women in the labor market, where they are overly concentrated in poorer quality, lower remunerated sectors (Halford and Leonard, 2006; Bowden and Mummery, 2009). The unfavorable labor market segregation leads to unfavorable segregation in their self-employment choices. Interestingly, there is some evidence that the wage gap among women entrepreneurs is even larger than that in paid work (Hughes, 1999).

Gender inequality in the labor market can have two opposing effects on female participation in entrepreneurship. On the one side, higher inequality may lead to reduced labor market participation of women as wage workers, which leaves them lacking confidence, skills and experience they need to start their own businesses. There is evidence that managerial skills and capabilities are related to productivity (Cirera and Maloney, 2017). Thus, higher inequality may lead to less labor market participation and less

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<sup>14</sup> A recent report concludes that “the positive economic impact of standalone micro-credit is small and by no means transformative” (Buvinic and O'Donnell, 2016).

<sup>15</sup> More nuanced results on intra-household financial decisions are offered by a recent study by Bernhardt et al., (2018). They find that cash grants tend to be allocated to the most profitable business venture within household, which is often the male-run business. When women are the sole household enterprise operator, capital shocks lead to large increases in profits.

entrepreneurship. On the flip side, higher inequality and discrimination may push some women into entrepreneurship as a coping mechanism (Carter and Marlow, 2003). Frustration and discontent stemming from wage discrimination, unequal treatment, and lack of opportunities for advancement in organizational settings lead many women to see entrepreneurship as a solution to the problem (Heilman and Chen, 2003; Weiler and Bernasek, 2001). In addition, wage discrimination and limited prospects for wage employment reduce the opportunity cost of self-employment, making it a more attractive alternative. The empirical evidence is very limited. Kobeissi (2010) found that especially in developing countries, higher salary differential in the labor market led to higher levels of female entrepreneurs. Christopher Baughn, Chua and Neupert.(2006) further suggest that gender equality per se is not a significant predictor of female entrepreneurship, while the societal attitudes toward female entrepreneurs are more important.

Besides outright discrimination, the labor market opportunities for women could be limited by job availability, high unemployment, low wages or the mismatch between women's skills and job requirements. These labor market constraints may force many women into self-employment even when they prefer a wage job. For example, during the transition from a socialist to a capitalist regime, high unemployment coupled with labor market discrimination—women were generally the first to be fired and the last to find new employment—led many women to start their own firms (Welter and Smallbone, 2003). As we discussed, women have a preference for wage jobs and choose self-employment as a second-best option when suitable wage jobs are not available.

### **2.3.5. Family and social responsibilities**

Almost all modern societies place unequal responsibility for family and household care on women. This makes it more difficult for them to maintain a wage job in a formal sector because such jobs often have inflexible hours. This problem is exacerbated in developing countries due to lack of childcare and limited time-saving household appliances. Self-employment may be the only way to offer women flexibility, which may not be available in wage or salary employment (Minniti and Arenius, 2003; Mitra, 2002).

Unequal family responsibility may push women into entrepreneurship on one side and limit their potential as business owners on the other. For example, Jamali (2009) found that the primary obstacle mentioned by Lebanon women entrepreneurs was the tough act of balancing work and family. In another study of female married entrepreneurs in Turkey, respondents reported role conflict in their personal and professional lives and said that being an entrepreneur had a negative impact on their family life, even though it had a positive effect on their social, economic, and individual lives (Ufuk and Özgen, 2001). Many authors argue that increased responsibility for family is one of the explanations for the lower profitability of women-owned firms (Longstreth, Stafford and Mauldin, 1987). Self-employed women are much more likely than men to work part-time (Thompson, Jones-Evans and Kwong, 2009) and to pursue fragmented and flexible working patterns (Rouse and Kitching, 2006; Bradley, Green and Leevs, 2007). As Marlow and McAdam (2013) argue: “such responsibilities are socially constructed and historically attributed, so women are not exhibiting a choice reflecting restricted entrepreneurial ambitions or limited capital when operating part time, home-based firms but responding to social imperatives and ascribed roles.”

The extra burden of household and family care has real consequences on female entrepreneurial outcomes. For example, Williams (2004) found that the amount of time spent caring for children was negatively related to self-employment duration in many countries. Hundley (2001) argued that “the presence of small children and greater hours of housework have a negative effect on female earnings.” In

Madagascar, Nordman and Vaillant (2014) found that while returns to capital in female-owned firms are significantly lower than in male-owned firms, the returns to time and hours of labor are actually higher for female-run firms. This suggests that economic outcomes can be improved if women could devote more time to their business ventures. Even if women work outside of home, they are still expected to carry the disproportionate burden of childcare and care for elderly and dependent relatives (Greer and Greene, 2003; Marlow, 2002). Thus, women are expected to work a “double day” unlike men who tend to focus only on market work and give fewer hours to household tasks.<sup>16</sup> Such double duty can reduce their energy levels and concentration with detrimental effects on productivity and earnings (ILO, 1999).

Another way women’s family responsibility may adversely affect business outcomes is because of the pressure to spend money on household expenditures or children rather than invest in their business. For example, Fafchamps et al. (2011) found that in Ghana women tend to spend cash grants on household expenses and transfers rather than invest in the business. In addition to family responsibilities, women are more often subject to social responsibilities and redistributive pressures from the family and kin. In many poor communities, social ties oblige people to contribute financially to their relatives in the times of need (i.e. loss of job, accidents, illness or death) as well as the times of celebrations (new births, baptisms or weddings). While providing much needed insurance, which is often the only available source of insurance against adverse events, such family and kinship ties may become an important business obstacle if successful entrepreneurs are expected to share with their less successful relatives (Grimm et al., 2013). This lowers the potential gains that the entrepreneurs could end up keeping and dampens their efforts to succeed and “stand out” from the crowd.

There is evidence that the social pressure to redistribute is higher for women. For example, a study of women entrepreneurs in Madagascar found that the share of ethnic group in the neighborhood significantly increased the inefficiency of female entrepreneurs when they were home-based (Nordman and Vaillant, 2014). This could indicate that the local community could be taking advantage of the entrepreneur, asking her for favors, or diverting money from her business or imposing social commitments that are distracting her from productive activities. A female tailor or hairdresser may feel obliged to sew dresses for her friends and family or do their haircuts and hairdos. The authors also found stronger social pressures in poorer communities. On the flip side, enterprises operating further from home are shown to be more efficient, which the authors interpret as having less redistributive pressure from the family of origin. Similarly, Grimm et al. (2013), using data on informal firms in West Africa, found that looser ties with the family and kin group members who remained in the village of origin of migrant entrepreneurs are associated with higher capital and labor inputs, in particular for women.

While most of the literature discusses family and social ties as a source of constraints and tension, there is also an alternative view of the family as a source of support for female entrepreneurs. The family resources that women can draw on include human, social, and financial capital. For example, Powell and Eddleston (2013) identify “affective family-to-work enrichment”—which involves the transfer of positive affect (e.g., positive mood or happiness) from the family domain to the work domain—and “instrumental family-to-work enrichment”—which involves transfer of skills (e.g., ability to multi-task) and behaviors (e.g., being supportive) acquired or nurtured in the family domain to the work domain. They also identify

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<sup>16</sup> For example, data from India highlight this difference. Female homebased garment producers in Ahmedabad work on average 6.4 hours in market work and 5.9 hours in household work compared to male producers who work on average 9.5 hours in market work and 1.6 hours in household work (Kantor, 2002).



“social support” as another resource that may transfer from the family to business. Thus, family may provide a unique source of enrichment and support which may be especially beneficial to female entrepreneurs who often lack other types of resources. Such family support is also more in line with the female gender role that emphasizes a holistic and synergistic view of “work and family” versus a male gender role which encourages independence and autonomy.

In line with these arguments, Powell and Eddleston (2013) found that women entrepreneurs benefit from family-to-business enrichment and support while men do not. Ljunggren and Kolvereid (1996) also found that women perceive stronger social support during the start-up process than men do, and that such support is more important for them than it is for men. Cruz and Nordqvist (2012) also argued that due to women's traditional role as nurturers and caretakers, and their unique management style, they are better able to leverage the benefits of family ties. In support of their contentions, they found that employing family members produced greater gains in sales for women-led small and micro enterprises than for those led by men. They concluded that “women seem to know better than men how to make the most of family involvement in the business.”

## **2.4. INTERNAL CONSTRAINTS**

### **2.4.1. Low self-confidence and self-perception**

Many studies find that women tend to have less confidence than men. Cech et al. (2011) define professional role confidence as “one’s confidence in his or her ability to successfully fulfill the roles, competencies, and identity features of his or her profession.” Their research found that women have less such confidence than men. Self-assessed competence in financial skills has been frequently rated lower by females than males (Hisrich and Brush, 1984; Chaganti, 1986). Similarly, women appear to have less confidence when it comes to financial decision making and investment (Powell and Ansic, 1997).

Scherer et al. (1990) also found that men have a higher perception of their competency at performing tasks necessary for owning and managing their business than women. Correll (2004) presents experimental evidence that women’s self-assessments of their own competence at career-relevant tasks leads to lower aspirations for their career paths, and lower performance at activities believed to require competence at these tasks. Negative self-perceptions were noted as the most significant gender-based barrier in a Canadian study by Shragg, Yacuk and Glass. (1992). Similarly, Minniti (2010) found that a significant portion of the gender gap in start-up activity can be attributed to differences in self-perception regarding having the necessary skills and knowledge to be a firm founder. Yueh (2009) found that in China lack of self-confidence is a significant constraint to women’s entrepreneurial entry.

An interesting aspect of self-perception differences was discovered in a U.S. study of high school students’ attitudes toward entrepreneurship (Kourisky and Walstad, 1998). While both male and female students revealed low level of entrepreneurship knowledge, females were more aware of their knowledge deficiency in this area. However, Javadian and Singh (2012) argued that, among female entrepreneurs in Iran, the fear of failure and lack of self-confidence are “non-factors” because of the challenges they face in their daily lives.<sup>17</sup>

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<sup>17</sup> An exception to these patterns, in a Norway study, women were found to believe that they possessed greater entrepreneurial abilities (specifically, they found a higher ability to see the venture to fruition) than men (Ljunggren and Kolvereid, 1996). A

Self-perceptions and lack of confidence have real consequences. The perception of having insufficient skills to start a new business was found to have a negative effect independent of institutional settings, culture, and overall level of entrepreneurial activities (Langowitz and Minniti, 2007). In addition, women's negative perception of their own abilities may prevent them from applying for formal finance and exacerbate any objective external financial constraints that women have (Poggesi, Mari and De Vita, 2016).

#### **2.4.2. Reluctance to seek credit**

As we discussed above, the lower use of external finance commonly observed in female-run businesses could be either due to supply side factors, such as financial discrimination by banks, or the demand side factors in which women choose not to seek credit. Earlier we discussed the supply side factors and here we focus on demand side factors.

First, there could be social norms that discourage women from obtaining credit. For example, applying for a loan can breach socially acceptable behaviors for women. In their experimental study from Paraguay, Fletschner and Carter (2008) found that a higher proportion of women with access to external finance in the reference group makes it more socially acceptable for women to seek external finance. Second, the demand side constraints can also arise when long travel distance and inconvenient schedules become obstacles to bank access for women, due to their household, reproductive and childcare roles (Fletschner, 2009).

Third, women may be reluctant to apply for loans because they expect to be rejected (Carter and Shaw, 2006; Marlow, 1997). Kon and Storey (2003) define such entrepreneurs as "discouraged borrowers" who are running good firms but do not apply for a bank loan because they assume they will be turned down. Garwe and Fatoki (2012) found that, in South Africa, female entrepreneurs were more discouraged from applying for credit because of lack of collateral, lack of business registration, or weak educational background. Furthermore, Mijid (2015) found that women are discouraged from applying for a loan because of their previous negative experience with banks, more so than men are. Mijid disentangles the objective probability of rejection based on observable characteristics that banks care about, from women's subjective perception of being rejected. He argues that female owners' "reasons for fearing being denied a loan are inaccurate." In contrast, Orser, Riding and Manley (2006) argue that the reasons for not seeking external financing did not significantly differ across genders.

Fourth, lack of demand for external finance by women business owners may also be attributed to the type of businesses they run. As discussed, females tend to run small businesses in the service sector, which often have lower capital requirements. In a study of 462 entrepreneurs from Israel, Heilbrunn (2005) found that women's ventures are cheaper to operate and hence they are less likely to need external finance than men. Similarly, Marlow and Carter (2004) argued that women are less likely to seek growth which reduces their need for external finance. On the other side, Smith-Hunter and Boyd (2004) provide some evidence that women entrepreneurs stay away from nontraditional business areas at least in part because of their greater capital requirements. Thus, it is not clear whether women choose to run low capital requirement businesses because they have more limited access to capital or whether they choose

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possible explanation for this finding could be that women in their sample are more likely to be motivated by the "pull" factors than "push" factors. In line with this hypothesis, the authors find that women are more likely to cite autonomy for their choice of starting a business. The authors also argued that another reason for this unexpected result could be because women go through a more thorough self-screening process prior to entering a business formation process.

to run such businesses for other reasons (i.e. their preferences). If their choice of low capital requirement businesses is unrelated to access to capital, the low use of external finance will be an optimal choice and would not suggest discrimination or external constraints. However, if they run small businesses because they cannot access the capital to expand to a bigger business, this would imply an important role for policy. Isolating these two possibilities is not an easy task and is an important avenue for future work.

Fifth, women's lower demand for and use of business finance can be due to risk avoidance because external borrowing is riskier than reliance on internal funds, as we discussed how women are usually more risk averse than men (Marlow, 2013; Carter and Shaw, 2006).

Sixth, women may lack confidence to ask for what they need. There is some evidence that when women seek external finance, they are more likely to request smaller amounts. For example, in a small study of women entrepreneurs who were successful in obtaining venture capital finance, Amatucci and Sohl (2004) found that most women wish they would have asked for more than they actually did.<sup>18</sup> This finding is consistent with the negotiation research which finds that women are likely to settle for less, whereas men anticipate greater financial needs and ask for more (Carter 1997, Babcock and Laschever 2003). Lower financing amounts disadvantage women in the initial start-up phase as well as during the later stage of business development, as banks or venture capitalists may be wary of continued request for finance. In addition, the transaction costs are relatively higher for smaller loans, which could be another reason why women don't apply for loans in the first place.

Finally, there is evidence that women have negative perceptions of banks which prevents them from seeking external finance. For example, Hill, Leitch and Harrison (2006) studied business women in Northern Ireland and found that relatively few women sought finance from the banks because of their negative perceptions of banks as a source of finance.<sup>19</sup> Authors further reported that some women felt betrayed when their bank refused them funding, which contributed to their negative perceptions of banks. Roper and Scott (2009) found that in UK women are around 7.4 percent more likely to perceive financial barriers to business start-up than men, which has a disproportionate effect on women's start-up decisions. Greer and Green (2003) found that women business owners are less likely to use their bank as a source of financial advice and are reluctant to respond to that advice.

### **2.4.3. Perceptions of opportunities and environment**

Identifying profitable business opportunities is a key skill necessary for success. The perception of low self-efficacy may restrict the possibility for women to recognize or pursue business opportunities (Poggesi, Mari and De Vita, 2016). This can lead to self-imposed barriers when women perceive that they may not have the right opportunities, while in reality the opportunities are there. For example, Singer, Herrington and Menipaz (2018) illustrate that across 52 economies around the world, regardless of the level of development, men are more likely to be involved in entrepreneurial activities than women, reflecting differences in culture, customs, and, importantly, self-perceptions regarding female participation in the economic activities. The same report noted that the lowest rates of perceived business opportunities and self-perceptions about entrepreneurial intentions are observed mostly in developing regions such as

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<sup>18</sup> One of the women in the study commented: "Multiply by five what you think you need... Investors don't like you to come back and say you need more."

<sup>19</sup> Hill, Leitch and Harrison (2006) report women's actual comments that indicate their negative perceptions: "The company is not interested in bank finance because the banks are risk averse and don't understand the needs of small businesses" and "banks have little knowledge about the business."

Africa, and the regions of Asia and Oceania. Furthermore, the perception of what is considered an opportunity to start a business may differ substantially across economies and across individuals. Thus, women may indeed have fewer opportunities for self-employment, or they may perceive fewer opportunities. However, separating such perceptions from reality is not an easy task and the existing evidence on this topic is very scant.

Women entrepreneurs can face more hostile environment than men or they may perceive the environment is more hostile when it actually isn't. The external constraints section discusses the former situation while here we discuss the latter possibility. Some authors argue that women indeed perceive the environment as more hostile to them (eg. a study of Nigeria and Zimbabwe by Mboko and Smith-Hunter, 2009 or a study of Bulgaria by Yordanova, 2011). A study in Britain, Norway, and New Zealand found a significant gender difference in the perceived environmental hostility and uncertainty, with female entrepreneurs perceiving higher political uncertainty than their male counterparts (Hart, 2003).<sup>20</sup> Clearly, the political uncertainty should not vary by gender, so the difference in perception indicate that women perceive the environment to be more hostile to them than men. In a study of 17 countries, Langowitz and Minniti (2007) found that women viewed themselves and the entrepreneurial environment less favorably than men.

While some of the perceptions of hostility may be subjective and not based on reality, there are clearly cases when women entrepreneurs are subjected to a more hostile environment. For example, according to the World Bank report (2011), women traders in the Great Lakes region are exposed to physical abuse, verbal insult, stripping, sexual harassment, and mandatory payment of bribes. The same report found that Congolese women traders crossing the border to Burundi were often required to pay an unofficial tax.<sup>21</sup>

Thus, it appears that there is evidence for both—situations when environment is more hostile to women and situations when they perceive it to be more hostile when it isn't. Empirically separating these two possibilities is very difficult and there is limited research on this topic. This is an important area for future research.

## **PART 3. POLICY RESPONSES TO DIFFERENT DRIVERS**

Many countries around the world aim to increase women participation in entrepreneurial activity and, more importantly, improve economic outcomes of women entrepreneurs. To achieve such goals, it is important to know which of the drivers discussed are the most prominent in determining women's participation and business outcomes.

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<sup>20</sup> It's worth noting that there is a possibility that women's businesses could be more sensitive to political uncertainty, although there is no a priori reasons to expect this, and there is no evidence that we are aware of to confirm this.

<sup>21</sup> A typical account of such hostile environment is provided by one of the women traders (egg and sugar trader) from Goma: "I buy my eggs in Rwanda; as soon as I cross to Congo I give one egg to every official who asks me. Some days I give away more than 30 eggs" (World Bank, 2011).

While literature focuses on the underperformance of female entrepreneurs and identifies ways in which they are lacking (i.e. in endowments, skills, or discrimination), not all observed differences between male and female entrepreneurs have a negative impact on their business outcomes. For example, female entrepreneurs may have better social skills and stronger family support (endowments), which may positively contribute to their entrepreneurial success. Similarly, some of the drivers, such as differences in endowments or some of the external constraints may play at disadvantage for women in many ways, but not actually contribute much to the observed gaps in their entrepreneurial outcomes. Thus, policy solutions should focus on equalizing the endowments or remedying the obstacles that actually contribute to the gaps in outcomes. Furthermore, the most binding constraints may be specific to each type of women entrepreneur or different institutional and business environments.

In this section, we offer examples of policies called for by different drivers. We intentionally do not discuss evidence on impact of various policies because several good reports already do that (i.e. Buvinic and O'Donnell, 2016; Campos and Gassier, 2015). Instead, our goal is more modest: to demonstrate how our conceptual framework can be used to inform policies. What we offer is a menu of policy options based on different drivers and not a normative recommendation of which policies to implement. To make policy prescriptions, more research is needed on which drivers represent the most binding constraints. Unfortunately, as we discuss in the next section, there is no conclusive evidence on what constraints are the most binding and/or contribute the most to the gender gap in entrepreneurship outcomes.

### **3.1. POLICIES TO ADDRESS ENDOWMENTS LIMITATIONS**

Improvement of asset allocation within households could be done, for example, by encouraging women to open bank accounts in their name or changing the inheritance and property ownership laws and influencing customs that permit women to have control of the financial resources of their household. The evidence also shows that women often lack relevant business and financial skills, experience and education. Therefore, remedying these deficits could improve women's outcomes. For example, Blenker, Dreisler and Nielson (2003) suggest information could be disseminated to potential entrepreneurs, and courses on how to compile a business plan, small business marketing or the legal problems of starting a firm could help potential entrepreneurs. Carter and Allen (1997) suggest programs that focus on financial management skills could facilitate growth. Business training programs and management education could be especially beneficial to women entrepreneurs (Wennekers et al., 2005). However, recent studies of business training programs in developing countries show mixed impact on performance.<sup>22</sup>

Women do not have the same extent of business connections with successful entrepreneurs for business advice and support, compared to men (Herrington and Kew, 2017). Deficiencies in women's networks could be remedied via networking opportunities. Connecting women with successful business owners could be helpful to ameliorate this problem. For example, Field et al. (2016) found that women business owners who participate in a business training program with a friend are more likely to have taken out

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<sup>22</sup> Berge, Bjorvatn and Tungodden, 2014 in Tanzania, or De Mel, McKenzie and Woodruff, 2014 in Sri Lanka; Valdivia, 2015 in Peru and Field et al., 2010 in India. More recently McKenzie and Puerto (2017) found that in Kenya business training of female-run businesses contributes to increases profits, sales and owner well-being. A recent meta-analysis of 27 interventions aimed at women empowerment found that "high-quality business management training of reasonable duration can have positive economic outcomes for poor women entrepreneurs" (Buvinic and O'Donnell, 2016). However, the report rated business training as "promising" rather than "proven" intervention, suggesting that more work is needed to solidify evidence.

business loans, are less likely to be housewives, and report increased business activity and higher household income. The positive impacts of training with a friend are even stronger among women from religious or caste groups with social norms that restrict female mobility. This study suggests that encouraging female entrepreneurs to form more connections with other women entrepreneurs may be beneficial for their success.

### **3.2. POLICIES TO ADDRESS EXTERNAL CONSTRAINTS**

Among major external constraints discussed earlier are legal, financial, labor market and social norms. To reduce legal constraints, policies should eliminate laws that treat women differently from men such as different tax requirements for women or provisions that restrict women's ability to buy, own, sell and use property, initiate legal proceeding, open bank accounts or enter into contracts. Regarding financial discrimination, passing anti-discrimination laws and enforcing them would be a first step. This is justified not only based on equality but also makes a good business sense (IFC, 2017). Encouraging banks to hire female loan officers (or reducing discrimination in hiring policies) would create more women-friendly environment. Reducing labor market discrimination would also start with appropriate legal measures that explicitly prohibit gender discrimination. Affirmative action type policies can also be helpful. To reduce negative impact of family and social responsibilities, provision of government-sponsored childcare centers can help women achieve better work life balance and devote more energy to their businesses. Allowing maternity leave and more flexible working hours for working mothers could also be helpful.

Social norms are most likely to be the origin for external constraints that affect labor market, financial market, sectoral choice and many other aspects of women's entrepreneurial choices and outcomes. While influencing social norms is not easy, and it is substantially more difficult to achieve than for example providing microfinance loans or business training, research shows that it is possible that over time norms can be influenced. For example, there is evidence that telenovelas (i.e. soap operas) were effective in influencing the social norms regarding fertility choices in Brazil (La Ferrara, Alberto and Duryea, 2012). Swain and Wallentin (2009) argue that women empowerment occurs when females are able to challenge existing social norms and the culture of a society. They found that in India women who participated in a micro-finance program had greater propensity to resist negative stereotypes, norms and culture that restricted their ability to develop and make choices. A recent study by Bursztyn, Gonzalez and Yanagizawa-Drott (2018) found that in Saudi Arabia men have incorrect perceptions of how acceptable female labor force participation is among their male peers. They show that correcting these beliefs increased men's willingness to let their wives join the labor force. This change in attitude resulted in more women applying and interviewing for a job outside of home.

To equalize the playing field, policies should relax restrictive social norms and change men's attitudes regarding women's freedom of movement outside of home, interactions with non-relative males, delaying marriage and child-bearing, sharing child-care and housework, and registering assets in their name. Policies can also help make it more acceptable for women to be entrepreneurs and improve perceptions regarding their occupational choices. Women from some of OECD countries are increasingly accepted as equal to their male counterparts in their entrepreneurial endeavors, which fosters a cordial business environment supportive of female entrepreneurial success (Singh, Reynolds and Muhammad, 2001). Burr and Strickland (1992) also found that a positive attitude towards women business owners from business and political leaders is critical to the development of a strong female entrepreneurial community. As we

discuss in the next section, more research is needed on how to change social norms and attitudes, and the impact of such changes on female entrepreneurs.

Most existing literature has focused on policies aimed at addressing differences in endowments or external constraints. The other two drivers—internal constraints and differences in preferences, have received substantially less attention.

### **3.3. POLICIES TO ADDRESS INTERNAL CONSTRAINTS**

To relax internal constraints, policies may include supporting women with training programs especially designed to develop a more positive self-esteem and confidence, particularly as it comes to career related tasks;<sup>23</sup> providing information about returns to capital in different sectors, which may encourage them to recognize opportunities in those sectors;<sup>24</sup> educating women about debt and reducing their negative perceptions of banks and borrowing in general, which may increase their demand for external finance and improve their ability to access external capital; evaluating whether their perceptions of hostility are correct and correcting such perceptions of hostility when they are incorrect; and creating mentorship and group support programs that would help increase confidence, information and support. For example, a recent randomized control trial in Nigeria found that training programs can help women overcome self-defeating biases that could hamper their mobility and reduce efficiency in the labor market (Croke, Goldstein and Holla, 2017). Unfortunately, little research is available about ways to mitigate these deficits in soft skills and internal constraints.

### **3.4. POLICIES TO ADDRESS DIFFERENCES IN PREFERENCES**

While external and internal constraints should be addressed by policy, the difference in preferences and choices that women make voluntarily do not necessarily indicate problems that need to be fixed. For example, coaxing women to pursue higher risk, higher growth, higher stress or more time-demanding ventures than they prefer may result in lower well-being. Instead, women’s welfare can be increased if the environment can be adapted to make their preferences more viable and ensures that implementing these preferences doesn’t command a disproportionate penalty. For example, if women prefer to spend more time caring for young children by working shorter hours or having a more flexible schedule, they should not be penalized for doing so.

There are two main policy options to address differences in preferences: attempt to change preferences with norm-based interventions, or accept preferences as given and provide services based on their preferences. For example, women prefer to take on less risk because they are more risk-averse. Although risk tolerance can be malleable (Sahm, 2012), nudging women to invest in riskier enterprises may lead to lower well-being if the psychological costs of higher risk and stress overweight the economic benefits of higher return. More research is needed to clarify what preferences call for which approach.

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<sup>23</sup> For example, a recent paper found that in Togo a psychology-based personal initiative training approach, which taught a proactive mindset and entrepreneurial behaviors was more successful than traditional training program (Campos et al., 2017).

<sup>24</sup> This recommendation is based on a small-sample mixed methods study by Campos and Gassier (2015) who found that women who run businesses in male-dominated sectors attain higher returns.

An issue of high interest among researchers and policymakers is the slower growth of female-run businesses. As discussed earlier, some of this lower growth could be due to external or internal constraints which can be alleviated, but it could be also due to women's preferences and lower growth orientation. Women who prefer to maintain "stable and steady" business should not be and cannot be forced into high growth ventures. The value of "stable and steady" business models should be recognized as a valid way to improve women's financial situation and their social status, without a high pressure for growth. It is important to keep in mind that the goal of the policy should be improved well-being, rather than improved growth or economic performance. Thus, policy responses to slower growth will be drastically different depending on which of the drivers are the main determinants of growth. Women may have other goals alongside of growth and profitability, such as improving their empowerment and status in the household or community, achieving better work-life balance and other non-economic goals which should not be discounted. This follows from our earlier discussion that women define success as a balance between economic and non-economic outcomes, while men are more likely to focus more on purely economic outcomes.

As there could be substantial heterogeneity among women entrepreneurs, "one size fits all" policies are unlikely to be effective. Thus, different policies need to be applied to women entrepreneurs who aim for high growth and those who aim for stable and sustainable business. This perspective recognizes that different women start businesses for different reasons. Some are more motivated by the push factors and some by the pull factors. Neither motivation is inherently a problem as long as it is recognized and incorporated into policy prescriptions.

Last, but not the least, there is evidence that women prefer wage employment to self-employment more so than men do. This implies that policy focus should prioritize improvements in the labor markets and creation of fair and equal opportunities for women in wage work. The focus on increasing self-employment of women may not be the most optimal way to improve their overall well-being, which includes economic and non-economic outcomes. This further strengthens the argument that women's preference must be fully taken into account when deciding policy interventions that aim to improve their lives.

### **3.5. POLICIES TO ADDRESS SECTORAL CHOICE**

Sectoral choice is one of the cross-cutting issues that involves many different drivers. As we discussed above, one of the main reasons women command lower profits and growth is the nature of the sectors they operate in, which have limited profit and growth potential. The consequences of sectoral choice have a permanent impact on business outcomes. First, because of the structural differences between sectors, and secondly because once part of a sector it is not easy to switch to another one due to persistence of occupational segregation.

Why women choose the sectors they choose is an important factor in the determination of policies that aim to improve their outcomes. There could be many reasons for their sectoral choice.

First, women may be socialized into choosing "socially-approved" sectors for their businesses, which also follows the horizontal segregation in the labor markets discussed above. In this case, the solution is to influence social norms that expand the possibilities of what is socially acceptable for women in terms of their career choices.



Second, their business sector choice follows labor market segregation. Reducing labor market segregation by promoting equal opportunities for women in various sectors of the economy (i.e. horizontal segregation) and at various levels of hierarchy (i.e. vertical segregation) would indirectly reduce women concentration in low performing sectors.

Third, women could be limited by access to capital (because of a combination of lower endowments of assets, financial discrimination, or reluctance to seek credit and negative perceptions of banks) and therefore choose businesses with lower capital requirements, such as those in the service sector. In this case, reducing financial discrimination and improving access to capital would be the solution. Unfortunately, most of the microfinance research has not produced striking positive results, suggesting that finance may not be the most binding constraint, or that several constraints are simultaneously binding. In addition, increasing education about credit and reducing negative perceptions of banks could stimulate demand for more external finance.

Fourth, women simply may not be aware of the higher earnings potential in the traditionally male-dominated sectors, or don't have the right skills to operate in those sectors. In this case, providing them information, education and training on how to enter those sectors could help open the doors to higher earning potential for female entrepreneurs.

Fifth, women may not have a "way in" to enter male-dominated sectors, either because they are explicitly excluded from those sectors or because they don't have networks or connections to enter those sectors. Expanding their networking opportunities or establishing mentoring programs could be potentially effective.

Finally, women may be drawn towards the service sector because of their high empathy skills and more relational nature. In this case, the choice of sector is their voluntary choice and not a constrained choice, and this would not necessarily call for policies to change that. Clearly, the reasons why women choose their sectors will dictate which policies can be effective.

## **PART 4. FUTURE RESEARCH DIRECTIONS**

Part 3 makes it clear that understanding what drivers make the most difference in women's entrepreneurial outcomes is essential for effective policy. Unfortunately, there is no conclusive evidence up to date on which drivers are the main determinants of the gender gap in entrepreneurial outcomes. While identifying the primary drivers is the overarching theme for future research, there are specific gaps in the literature that we believe are a priority. We group the discussion of these gaps into five areas below: evaluating non-economic outcomes and creating more balanced performance measures; changing women's confidence and negative perceptions; understanding and influencing the reasons behind sectoral choice and growth performance; investigating and changing the negative impact of the social and cultural norms and attitudes, and addressing heterogeneity and interaction effects.

#### **4.1. NON-ECONOMIC OUTCOMES AND BALANCED PERFORMANCE MEASURES**

As we discussed above, most of the literature evaluating enterprise performance is predominantly focused on economic outcomes such as profitability, growth or survival. However, there is a growing awareness that non-economic outcomes are important in women's definition of success. Aspects of non-economic outcomes such as empowerment, status in the community, self-esteem, self-fulfillment, work-life balance and life satisfaction are important dimensions that define what women want from their business activities. Still, the literature on non-economic outcomes of women entrepreneurs is very sparse. Investigating non-economic outcomes and their interplay with the social and cultural context is an important avenue for future research.

One reason for which the literature largely ignores non-economic outcomes is the difficulty in measuring them. For example, measuring profits or growth in sales is much simpler than measuring economic empowerment, which has to be reflected in the increased control, choice and decision making. In addition, access to a resource does not necessarily translate into control over such resource. While access and ownership are relatively easy to measure, the control is not. However, control is likely to be more important than access. Studies that make this distinction are rare. One of the exceptions is Aterido, Hallward-Driemeier, and Pagés (2011) who find that simply considering female ownership of a business does not result in differences in performance, while the actual decision-making authority does. More studies that distinguish between access to resources and control over them are needed.

Another important aspect of performance evaluation that deserves more attention is the risk-return trade-off. Because females tend to be more risk averse than males, they may prefer lower-risk/lower-return strategies. Only few studies explicitly consider the risk-return trade-off and they are conducted in developed countries (for instance, Robb and Waston, 2013). Therefore, it is important to evaluate to what extent risk-return trade-off can explain differences in performance in developing countries.

Another issue rarely discussed is the portfolio of activities of women and men entrepreneurs. Many entrepreneurs run several small businesses, but there is little evidence up to date on how these different businesses are chosen. For example, do men run more businesses in parallel than women? Or are women engaged in more but smaller businesses, while men are engaged in fewer but larger businesses? Are there any linkages among the several businesses that women hold? Do different businesses serve a diversification role (and therefore reducing the risk), or do they reduce external constraints and market failures? For example, a woman who sells milk may also run a transportation business to transport her milk to markets. Also, if women are maximizing the portfolio, under certain conditions this could be different from optimizing each individual business. Thus, performance measures should extend to capturing the portfolio performance rather than individual business performance.

#### **4.2. CONFIDENCE AND NEGATIVE PERCEPTIONS**

As discussed, women often lack self-confidence especially when it comes to performing career-oriented tasks. However, to the best of our knowledge, there are no studies aimed at changing women's self-perception as capable and successful entrepreneurs. Some ways of improving women's self-image could include presenting them with successful role models and matching them with successful and experienced female entrepreneurs as mentors. For example, in the U.S., BarNir, Watson and Hutchins (2011) present evidence that role models have a particularly large effect on the entrepreneurial self-efficacy of women.

In Norway, being peered with another female had a strong influence on women's decision to enter entrepreneurship (Markussen and Røed, 2017). Both genders prefer to have same gender role models, but distant and famous entrepreneurs do not usually serve as role models (Bosma et al., 2012). This suggests that providing women with accessible role models may be a successful intervention that needs more research.

Training programs to address specific skills can remedy women's deficits of skills and expertise, and also enhance their self-confidence. For example, a study in South Africa found that participation in a training program increased women's confidence in their entrepreneurial abilities and their probability of starting new businesses (Botha, Nieman and Van Vuuren, 2006). While there is a significant amount of recent research on the effectiveness of training programs on economic outcomes (see De Mel, McKenzie and Woodruff, 2014, for a survey), more evidence is needed on the impact of such programs on confidence and self-perception for women.

The perception of low self-efficacy may also restrict the capacity of women to recognize or pursue business opportunities (Poggesi, Mari and De Vita, 2016). This can lead to self-imposed barriers when women perceive that they may not have the right opportunities, while in reality the opportunities could be there. Relatedly, women are more likely to perceive their environment as hostile. However, separating whether the environment is actually more hostile to women or whether they perceive it to be more hostile, even though it isn't, is a difficult empirical exercise. This is an important area for future research.

One way to boost women's self-confidence and expand their business networks at the same time could be through entrepreneur support groups. A recent study of young firms in China found that firms randomly assigned to attend peer support meetings significantly increased sales, profits, employment, productivity, and the number of business partners (Cai and Szeidl, 2016). However, this study did not address whether the impacts of peer support groups were different by gender, which is an important area of future research. Feigenberg et al. (2014) also found that more frequent meetings among microfinance groups in India contributed to creation of valuable social capital among women. Similarly, Field et al. (2016) found that attending a business training with a friend improved business outcomes. More research is needed to evaluate whether creating informal self-support groups among women entrepreneurs could lead to better business outcomes.

#### **4.3. SECTORAL CHOICE AND GROWTH**

There is strong evidence that women choose to run small businesses predominantly in the service and other female-dominated sectors. These types of businesses usually have lower capital requirements on one side, and lower growth and profit potential on the other. There is also evidence that women use less external capital for their businesses than men. However, it is not clear whether women choose to run low capital requirement businesses because they have more limited access to capital, or whether they don't seek external capital because their businesses have lower capital requirement. In other words, the equilibrium outcomes we observe (small business with lower capital requirements and low use of external finance) could be due to either demand factors (i.e. women preferring to run smaller and lower capital requirement businesses for reasons other than availability of finance) or supply side factors (i.e. women are limited in access to capital and therefore are forced to choose businesses with low capital

requirements). Isolating these two possibilities is not an easy task and is an important avenue for future research.

The evidence on the impact of micro-credit is mixed and there is growing recognition that “the positive economic impact of standalone micro-credit is small and by no means transformative” (Buvinic and O’Donnell, 2016). More work is needed to evaluate whether improved access to capital assets is associated with improved business outcomes for female entrepreneurs. In addition, more work is needed on the issues of transition from informal to formal sector and transition from micro loans to business loans. For example, a study in Ethiopia identified a “missing middle phenomenon” whereby small enterprises are more credit constrained than either micro or medium/large enterprises (World Bank, 2015).

Interventions aimed at encouraging women to start ventures in higher performing sectors should also be evaluated. Currently there is no evidence whether such interventions may alter choices women owners make regarding the sector of their business. Providing information on potential returns in nontraditional sectors, mentoring and networking opportunities could be some of the potentially beneficial interventions. For example, a small sample mixed-methods study in Uganda by Campos and Gassier (2015) found that one reason women do not enter more profitable male-dominated sectors is lack of information about higher potential returns in these sectors and lack of exposure to these sectors. Finding ways to provide such information and expose women to opportunities in higher return sectors could be another potentially beneficial intervention that deserves more research. However, information may not be enough when the choice of sectors reflects deeply embedded socio-economic norms. If their choices are constrained by norms, then providing information or encouragement to enter more lucrative sectors may not be effective. Social norms greatly influence women entrepreneurs and deserve a lot more research, as we discuss below.

Slower growth is also impacted by the sectoral choice or can be a result from a multitude of constraints, obstacles and differences in endowments that we discussed. However, at least partially, the differences in growth could be explained by the different preferences and aspirations females have regarding their firm’s growth. To what extent their preferences can explain their slower growth is not well known and only few studies attempt to tackle this question. More research is needed to evaluate to what extent slower growth is a preference determined by female owners or a result of constraints and obstacles.

More generally, women are likely to make different choices than men and such choices will lead to differences in performance. Their preferences and capacities determine the types of choices they make, such as the sector to operate in, the size and growth aspirations, their relational management methods, how much time to allocate to business versus family, or their tendency to take on less risk. For example, if the main reasons for which female-owned firms are smaller and grow more slowly than male-owned firms are personal preferences and attributes (such as risk aversion), then policies aimed at alleviating financing constraints, such as credit or grants will not increase their size or growth performance. Thus, in order to isolate the impact of gender per se from the impact of different choices made by each gender, all the different choices voluntarily made by women have to be adequately controlled for.

#### 4.4. SOCIAL AND CULTURAL NORMS AND ATTITUDES

While some literature recognizes that women face unequal access to assets, legal system, financial markets, and networks and technology, there is little discussion as to why these inequalities exist. It is likely that social and cultural norms are the “mother” of all other inequalities, constraints and disadvantages women face in the economy. For example, Williamson (2000) argues that rules borne out of tradition and norms are the highest-level rules in society, taking root at the “social embeddedness level”. Furthermore, he states that such rules dominate the legal, regulatory and other institutions. It is possible that once the social norms are accounted for, the legal or financial constraints may not matter much. Future research should investigate whether this is indeed the case by including indicators of social, legal, cultural and financial constraints into the business outcomes regressions.

One of the main reasons for which such studies are missing is because of lack of data to capture in detail women’s social and cultural constraints. The data produced as part of the World Bank’s *Doing Business* initiative brought a lot of attention to the various regulatory constraints, and such attention over time led to noticeable improvements. However, the *Doing Business* data does not address whether there are differences in business environment impact for women.<sup>25</sup> While the business regulations are most likely to be gender neutral, their implementation and enforcement are unlikely to be. More recently a dataset with legal constraints on women was created by the *Women, Business and the Law* project (World Bank, 2018). Constructing a similar dataset, focused on social norms and traditions affecting women’s economic behavior, could help to shed more light on the importance that social and cultural factors still play in their labor market and entrepreneurial outcomes.

One specific cultural norm that was found important for entrepreneurial outcomes is the societal attitudes towards women entrepreneurs, which are often negative rather than supportive of their ventures. For example, Burr and Strickland (1992) argues that a positive attitude towards women business owners from business and political leaders is critical to the development of a strong female entrepreneurial community. Transformation of gender specific stereotypes could make it more acceptable for women to assume nontraditional responsibilities both in the labor market and in their self-employment arena. However, up to our knowledge, no studies exist that attempted to change societal attitudes toward women business owners. More research is needed to understand whether such attitudes can be changed and whether changing such attitudes could improve their outcomes.

Another relevant social norm is the disproportionate burden placed on women to care for children and housekeeping. Such norms lead women to choose businesses that are located at home or close to home, and work part time and fragmented hours. These choices play a large role in explaining gaps in economic outcomes. However, it is not clear whether women view the social norms as an unfair burden, or whether women internalize the constraints to the point they become what they themselves believe in, or whether women actually prefer to have a disproportionate role in childcare and would make the same choices even if they did not have to. Teasing out these possibilities is not easy but important for effective policy prescriptions. For example, providing free or subsidized child care may change women’s choices in the first scenario (when they face unfair burden of responsibility for childcare) but will not make a difference in the second and third scenarios (i.e. when they internalize the belief that women should be the primary child care providers or when they actually prefer to prioritize child care). Separating whether these are

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<sup>25</sup> Doing Business, The World Bank (<http://www.doingbusiness.org>)

culturally imposed beliefs, self-imposed beliefs, or genuine preferences is not easy to do and more research is needed here as well.

An important distinction between “under-performance” and “constrained performance” is made by Marlow and McAdam (2013). They write: “under-performance suggests that women fail to fulfil their entrepreneurial potential and so, require encouragement, education, support and advice to achieve the entrepreneurial norms of their male counterparts. Constrained performance, however, suggests that the firm (regardless of the owner’s gender) meets the market norm limited by context—the gender influence here lies with broader socio-economic influences which funnels women into such competitive sectors. Accordingly, encouragement, education, etc. is unlikely to address this issue [...]” The constrained performance in this quote refers to the social norms and expectations discussed above, which limit women’s choices.

Thus, social norms permeate every aspect of women’s lives, and while the regulations can be changed relatively easy, the social and cultural practices are more difficult to break down because they are deeply entrenched in the population. Interventions to change such norms have a much longer-term gestation period before results could be noticeable relative to business training, cash grants or microfinance programs. It is possible that rigid social norms can explain why many of the interventions tested so far have not produced great results. More research is needed to evaluate how the social norms can be changed to level the playing field and allow women to enter and operate more profitable sectors of the economy and to achieve their full potential as entrepreneurs.

#### **4.5. HETEROGENEITY AND INTERACTION EFFECTS**

Most studies investigate gender effects as a dummy variable which leaves out the big question as to why gender matters. It is important to understand to what extent each of the drivers discussed can explain differences in performance. To address this question, it is necessary to include interactions of different drivers, such as social norms, legal norms, endowments, family structure and other factors with the gender variable. However, this is rarely done in practice. Such analysis would have a high added value and tell us how much each factor matters and which are the primary drivers.

In addition, the same choices may have a different impact on business outcomes when made by women rather than by men. In other words, women may be penalized more for their choices than men do. For example, there is some evidence that women are penalized more than men in the labor market for choices related to having children (eg. the “motherhood penalty,” Budig and England, 2001). There could be similar heterogeneity in many of the choices women make in relationship to their business decisions. Thus, it is important to investigate the interaction of gender and the choices made by business owners be they male or female.

Focusing on heterogeneity among women entrepreneurs is another important research avenue. Women entrepreneurs may differ depending on their life stage, their family situation, their values and priorities, or their motivations to enter self-employment. Considering only the average outcomes may mask the substantial variation that may exist within the same gender. Better understanding of the interaction between women’s life stage, their career and family status and their business is an important area for future research. More research is also needed regarding the transitions between wage work and entrepreneurship. In other words, under what conditions women switch from wage work to

entrepreneurship or from entrepreneurship to wage work; how easy or difficult are these transitions; how their local labor market environment and job availability affects their choices; and how these choices vary with women's family situation.

Some authors even argue that the differences among women entrepreneurs are larger than the differences between women and men (Ahl, 2006). For example, while on average women are more risk averse and lean toward lower risk/lower return strategies, there could be men who choose lower risk/lower return models and women who choose higher risk/higher return business models. Thus, the difference in outcome may be better explained by the type of business model chosen rather than the owner's gender. However, without controlling for the type of model chosen, the difference in performance will be attributed to the gender variable, and incorrect conclusions will be reached as to the reasons for the differences. Unfortunately, most of the studies up to date do not adequately control for all possible choices and preferences and therefore attribute differences in performance to discrimination or other external constraints. An important area for future research is to properly isolate the impact of different choices women make from the external constraints that they face.

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