

Giving credit where it is due

How closing the credit gap for women-owned SMEs can drive global growth

February 2014



Anna Stupnytska, GSAM
44(20)7774-5061
anna.stupnytska@gs.com
Goldman Sachs International

Kathryn Koch, GSAM
44(20)7774-5619
kathryn.koch@gs.com
Goldman Sachs International

Amy MacBeath, GSAM
40(20)7774-7464
amy.macbeath@gs.com
Goldman Sachs International

Sandra Lawson, GIR
1(212)902-6821
sandra.lawson@gs.com
Goldman, Sachs & Co.

Kathy Matsui, GIR
81(3)6437-9950
kathy.matsui@gs.com
Goldman Sachs Japan Co., Ltd.

The authors would like to thank Koby Sadan for his contributions to this paper.

The Global Markets Institute is the public-policy research unit of Goldman Sachs Global Investment Research Division, designed to help improve public understanding of capital markets and their role in fueling economic growth.

Giving credit where it is due



Global Markets
Institute

Investing in women and girls is one of the highest return opportunities available in the developing world, as a wide range of economic research shows. Our own work has demonstrated that bringing more women into the labor force can significantly boost per capita income and GDP growth. Our research has also shown that women's higher propensity to use their earnings and increased bargaining power to buy goods and services that improve family welfare can create a virtuous cycle: female spending supports the development of human capital, which fuels economic growth in the years ahead.

Given these significant benefits, we look at the role of women-owned small- and medium-sized enterprises (SMEs) in raising labor force participation and boosting economic growth in emerging markets. Only one-third of the world's SMEs in the formal sector are currently run by women, with a wide variation across countries and plenty of scope for growth.

Women-owned SMEs face barriers to entry and business growth that include access to education and training, legal and cultural barriers and infrastructure-related challenges. Access to finance is typically identified as a critical constraint. While financing is almost always a challenge for SMEs, the difficulties are often intensified by gender-related factors, including women's lack of collateral, weak property rights and discriminatory regulations, laws and customs. The International Finance Corporation estimates that as many as 70% of women-owned SMEs in the formal sector in developing countries are unserved or underserved by financial institutions – a financing gap of around \$285 billion.

We assess the potential impact that closing this credit gap for women-owned SMEs can have on economic development, estimating the link between credit to SMEs and growth in income per capita. Our results suggest that closing the credit gap for women-owned SMEs in the BRICs and N-11 countries over the next few years could boost real income per capita growth rates in those countries by around 85bp on average. If the credit gap is closed by 2020, incomes per capita could be on average around 12% higher by 2030 across the BRICs and N-11, relative to our baseline scenario. Closing the credit gap for women-owned SMEs across the developing world as a whole could boost income per capita growth rates by over 110bp on average. While eliminating the whole gap is a tall order, the impact on growth could be dramatic.

Initiatives to expand SME financing exist, but few have a gender-specific component. As a result, targeting women-owned SMEs in the developing world represents a significant financing opportunity. Solutions should tackle both the supply side (such as policy bias, discrimination and misconceptions about female credit risk) and the demand side (such as women's reluctance to apply for loans). Adding business training and mentoring will help to ensure productive use of capital. Because improved access to credit is most impactful when coupled with strong institutional environments, efforts should be made to establish more robust institutions and favorable business conditions.

Against a backdrop of a weaker growth trajectory in emerging markets, the substantial growth premium that can result from investing in women-led SMEs should matter deeply to policymakers, corporates and asset owners around the world.

Contents

I. Introduction: Investing in women-owned SMEs can drive global growth	1
II. Women are key drivers of economic growth	2
Box 1: The power of the purse	5
Helping women work	6
III. The global landscape for women-owned SMEs	7
Geographical differences, with Asia as a standout	7
Why women-owned SMEs have historically underperformed	8
Box 2: Formal versus informal MSMEs	9
IV. Access to finance is a major constraint for women-owned SMEs	11
Main sources of finance for women-owned businesses	13
Both supply and demand factors contribute to financial barriers for women-owned businesses	14
Box 3: Post-crisis trends in SME financing	16
Box 4: How entrepreneurship can boost Womenomics in Japan	18
Credit needs for women-owned SMEs	19
Box 5: Estimating the SME credit gap	21
V. Boosting economic growth by closing the credit gap for formal women-owned SMEs	22
Estimating the impact of SME credit on economic growth	23
Applying the gender lens	25
VI. Closing the credit gap: Solutions and investment implications	28
Women-specific solutions should tackle both demand and supply	29
Strengthening institutions related to women's legal parity	31
Implications for investors	31
VII. Appendices	33
Appendix 1: Methodology, data and limitations	33
Appendix 2: Selected initiatives targeting women in small business	37
Box 6: Goldman Sachs 10,000 Women	40
VIII: Bibliography	41

I. Introduction: Investing in women-owned SMEs can drive global growth

Investing in women and girls is one of the highest return-on-investment opportunities available in the developing world, as a wide range of economic research has shown. Our own research has demonstrated that bringing more women into the labor force can provide a substantial boost to per capita income and GDP growth. For example, narrowing the gender gap in employment in the BRICs and N-11 countries¹ could boost GDP growth trends by around 0.8% per year on average and push incomes per capita more than 10% higher than our baseline projections for 2030.

Our research has also shown that, as female labor participation rates rise, countries can reap the benefit of a 'double dividend' as women are more likely than men to use their earnings and increased bargaining power to buy goods and services that improve the family's welfare. This has the potential to create a virtuous cycle, as women's spending supports the development of human capital, which in turn will fuel economic growth in the years ahead. At the same time, economic growth should continue to bolster gender and income equality, which are critical to sustainable development.

Given the significant economic and social benefits to be reaped from bringing more women into the workforce, policymakers, business leaders and investors regularly ask us how this gap in labor force participation can be closed. In this paper we look at the role of women-owned small- and medium-sized enterprises (SMEs)² in raising labor force participation and boosting economic growth, with a particular focus on the BRIC and N-11 countries. Only one-third of the world's SMEs in the formal sector are currently run by women, with a wide variation across countries and plenty of scope for growth.

Women-owned SMEs face a number of barriers to entry and business growth, such as access to education and training, legal and cultural barriers and infrastructure-related challenges, among others. Access to finance is typically identified as a critical constraint. While financing is almost always a challenge for SMEs, the difficulties are often intensified by gender-related factors, including women's lack of collateral, weak property rights and discriminatory regulations, laws and customs. The International Finance Corporation (IFC)³ estimates that as many as 70% of women-owned SMEs in the formal sector in developing countries are unserved or under-served by financial institutions. This amounts to a financing gap – and opportunity – of around \$285 billion.

We assess the potential impact that closing this credit gap for women-owned SMEs can have on economic development. We estimate the link between credit to SMEs and growth in income per capita, controlling for individual countries' initial level of development and institutional environment. Our results suggest that closing the existing credit gap for women-owned SMEs in the BRICs and N-11 countries over the next few years could boost real income per capita growth rates by around 85bp on average. If the credit gap is closed by 2020, incomes per capita could be on average around 12% higher by 2030 across the BRICs and N-11, relative to our baseline scenario. This gain could be as large as 25-28% for Brazil and Vietnam, where the credit gaps in the formal SME sectors are currently widest.

¹ The BRIC countries are Brazil, Russia, India and China. The N-11 (emerging economies that Goldman Sachs has identified as having high growth potential over the coming decades) are Bangladesh, Egypt, Indonesia, Iran, Mexico, Nigeria, Pakistan, Philippines, Turkey, South Korea and Vietnam.

² In line with the International Finance Corporation (IFC), we define SMEs as including "very small" enterprises (5-9 employees), "small" enterprises (10-49 employees) and "medium" enterprises (50-250 employees). See Section III for further details.

³ The International Finance Corporation, a member of the World Bank Group, is the largest international development organization focused exclusively on the private sector in developing countries.

Closing the entire credit gap for women-owned SMEs across the developing world as a whole could boost income per capita growth rates by over 110bp on average. While eliminating the whole gap is certainly a tall order, these numbers illustrate that the impact on growth could indeed be dramatic – if it could be achieved.

Various initiatives to expand SME financing have been developed over the past few years, but few have had a gender-specific component. Microfinance institutions have played a key role in addressing the financial needs of female entrepreneurs. However, by focusing (by definition) on the micro segment, this type of financing does not provide sufficient scale for businesses to transition to the SME sector. As a result, targeting women-owned SMEs in the developing world represents a significant financing opportunity. Incorporating women-specific approaches into the existing SME frameworks for credit access should be an important step on the road to female empowerment. Women-specific solutions should tackle both supply-side issues (such as policy bias and discrimination, misconceptions about female credit risk and ensuing unfavorable credit terms for women) and demand-side issues (such as women's reluctance to apply for loans given a lack of business training and higher rejection rates). Finally, improved access to financing needs to be complemented with business training and mentoring to ensure a productive use of capital.

We also find that improved access to credit is most impactful when coupled with strong institutional environments at the individual country level. Emerging market (EM) policymakers would be well served to pursue reforms aimed at establishing more robust institutions and more favorable business conditions. This is particularly important in the current environment, in which emerging markets are growing below their trend rates of growth, due to a number of challenges, including slower growth in China, lower commodity prices and higher interest rates globally. Against this backdrop of a weaker EM growth trajectory, the substantial growth premium that can result from investing in women-led SMEs should matter deeply to policymakers, corporates and asset owners around the world.

II. Women are key drivers of economic growth

As we have written previously, the Chinese saying 'women hold up half the sky' is more aspiration than fact, particularly in the developing world. Despite some significant gains in parts of the developing world, women still lag men in terms of education, access to healthcare and political participation. Cognizant of these critical deficits in female human capital, we sought to benchmark the magnitude of potential economic improvement – the growth premium – that could be achieved in a world of greater gender parity.

At the macroeconomic level, we identified female education as a key source of support for gender equality and long-term economic growth. Educating girls and women leads to higher wages, a greater likelihood that they will work outside the home, lower fertility, reduced maternal and child mortality, and better health and education for the family. The impact is felt not only in women's lifetimes, but also in the health, education and productivity of future generations. In the BRICs and N-11 countries, we found that greater investment in female education could yield a 'growth premium' that raises trend GDP growth by about 0.2% per year (Lawson, 2008).

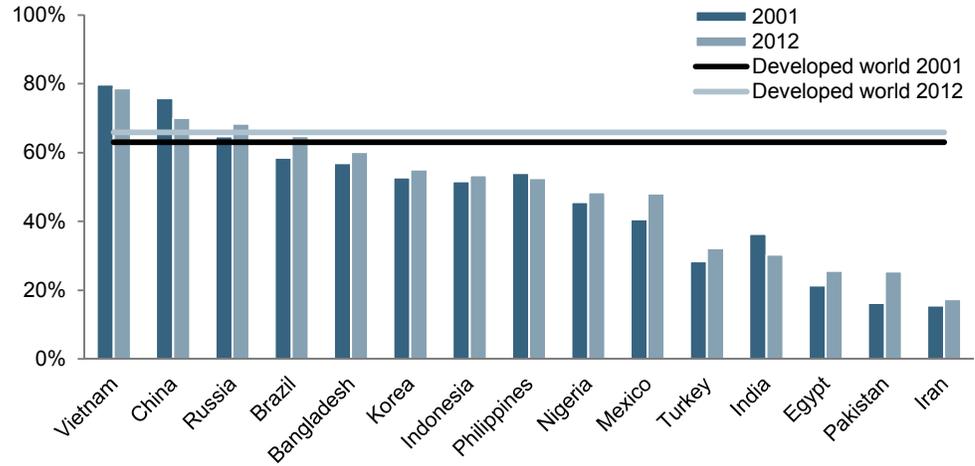
While there have been some gains in female labor participation rates over the past few years, results vary dramatically by country, and overall there is still substantial room for improvement. For example, across the BRICs and N-11 countries, at one end of the spectrum, labor force participation rates for women in China and Vietnam are at or above 70%, as Exhibit 1 illustrates. At the other end of the spectrum, the labor force participation

rate is less than 30% in Egypt, Pakistan and Iran. This compares to around 60-70% in most Developed Market (DM) countries.

Although female participation rates have risen over the past decade in the majority of the BRICs and N-11 countries, as well in the developed world, nearly all BRIC and N-11 countries remain below the developed world average. As shown in Exhibit 2, the gender gap in labor force participation rates remains wide.

Exhibit 1: Female labor force participation rates in developing countries are generally below the developed world average

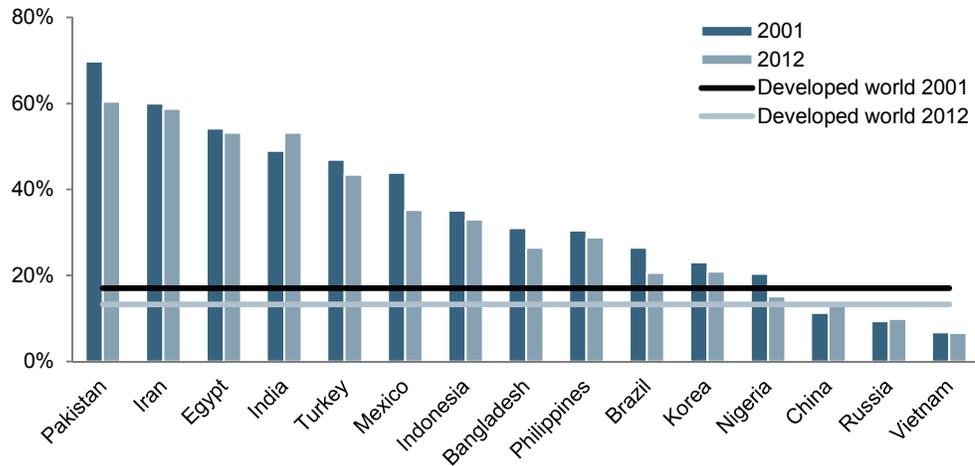
Female labor force participation rates (% of working-age female population aged 15-64)



Source: World Bank

Exhibit 2: The labor force gender gap in developing countries remains wide

Gender gap for labor force participation rate (difference between rates for men and women of working age)

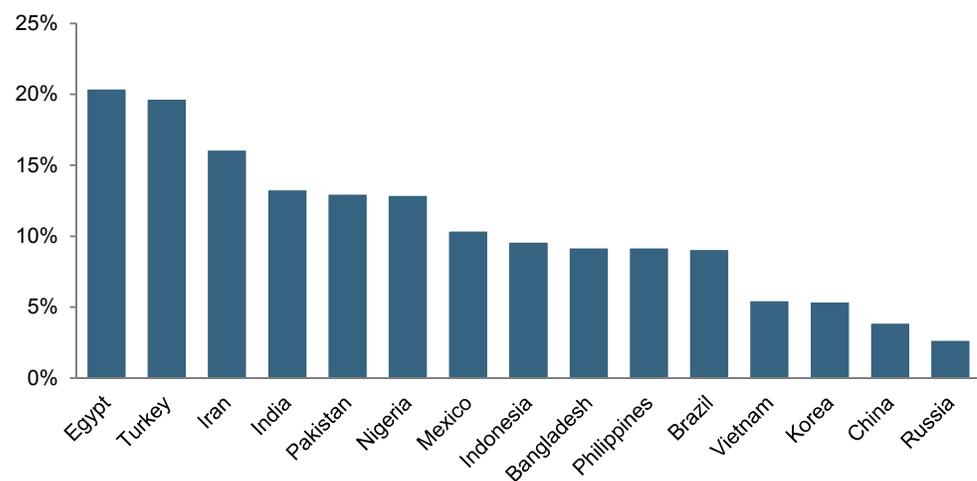


Source: World Bank

We estimated that if the female employment rate in the developed world rose to match that of males, the overall level of GDP could be boosted by over 12% on average. Narrowing the gender gap in employment in Japan, for example, could add around 8 million employees to the workforce, and could boost the level of Japan's GDP by as much as 14% (Matsui et al., 2005). We estimate that, for the BRICs and N-11 countries, narrowing the gender gap in employment could push income per capita more than 10% higher than our baseline projections by 2020, and as much as 20% higher for some countries by 2030 (Lawson, 2008), as Exhibit 3 shows.

Exhibit 3: Predicted additional increase in incomes per capita from narrowing the gender gap in employment by 2030

Income per capita boost relative to our baseline projections

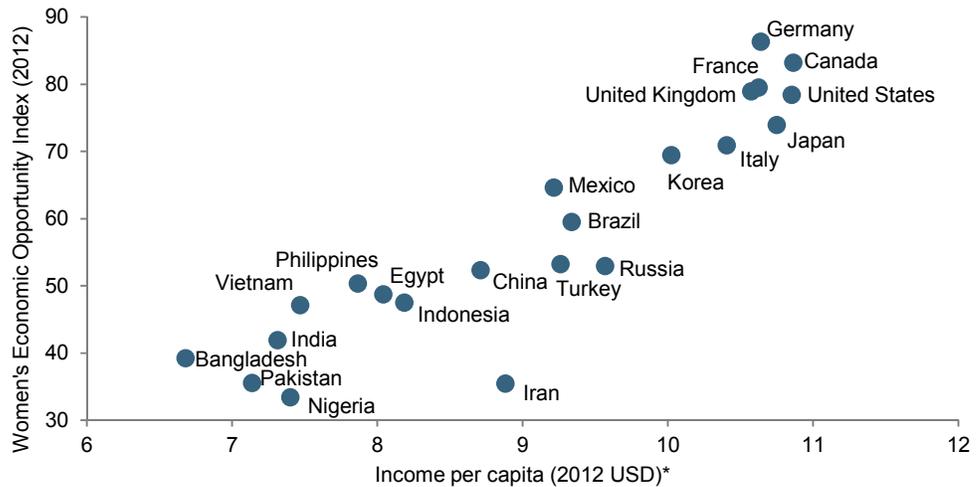


Source: Goldman Sachs Global Investment Research

Our research has also shown that one of the best environments for investment in human capital is an environment where more income is in the hands of women. As female labor participation rates rise, countries can reap the benefit of a 'double dividend,' given that women are more likely than men to use their increased bargaining power to buy goods and services that improve the family's welfare (see Box 1 for further details). This increased bargaining power has the potential to create a virtuous cycle as female spending supports the development of human capital, which in turn will fuel economic growth in the years ahead. At the same time, economic growth should continue to bolster gender equality. This is critical not only to sustainable development, but also to reducing income inequality and bolstering social cohesion. Exhibit 4 shows the positive relationship between economic opportunity for women, as measured by The Economist Intelligence Unit's index,⁴ and income per capita.

⁴ The Women's Economic Opportunity Index, published by the Economist Intelligence Unit, assesses progress in the economic advancement of women across 128 countries. The index is based on 29 indicators across five categories: labor policy and practice, access to finance, education and training, women's legal and social status, and the general business environment.

Exhibit 4: Women’s economic opportunity is positively correlated with GDP per capita



* Logarithm of income per capita. Source: The Economist Intelligence Unit, International Monetary Fund

Box 1: The power of the purse

Progress in gender equality can be measured across a range of factors, including education, employment, income, health, political participation and social norms. Improvement in one area typically fuels improvements in others, making gender equality a self-reinforcing phenomenon. As women become more educated, join the workforce and earn more income, the gender gaps narrow and women gain bargaining power.

Growing gender equality and women’s increasing household spending power coincide with a period of rising incomes and rapid growth in the global middle class – what Goldman Sachs economists have termed ‘the expanding middle’. Pulling together these developments suggests that households are not only likely to spend more, but also that they will spend differently. We find that women’s spending priorities differ from men’s, with women notably more likely to buy goods and services that improve the family’s welfare. In particular, they are likely to buy:

- **Food**, especially higher-quality and protein-intensive products.
- **Healthcare**, including pharmaceuticals, preventive vaccinations for children, hospital care and general health services.
- **Financial products**, for savings and investment vehicles held outside the household.
- **Education**, for children and women themselves.
- **Childcare**, enabling women to work outside the household and allowing girls to go to school instead of caring for younger siblings.
- **Consumer durables**, such as dishwashers, washing machines and apparel.

Helping women work

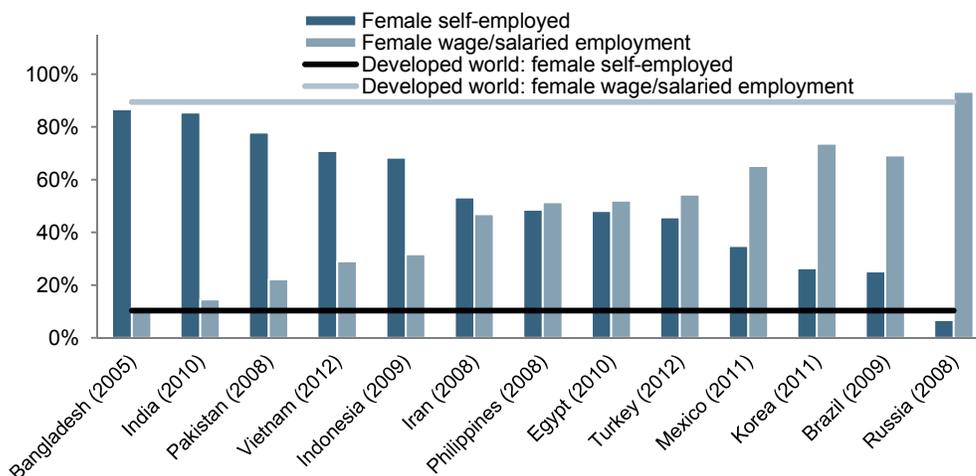
Whether women can fully realize economic returns on their investment in education is subject to the structure of the job market. If formal employment opportunities are limited, whether by economic slowdowns, discriminatory labor regulations and practices or obstacles for female entrepreneurs, it may be impossible for women to reap the full benefits of their education. Such a scenario can create a vicious cycle because the failure of educated women to secure paid employment may devalue female education in the eyes of parents making education decisions about their own children.

Accordingly, governments that want to realize the maximum gains from their investments in female education would do well to address the obstacles that keep women in lower-paying jobs or out of the labor force entirely. Steps could include introducing – and enforcing – anti-discrimination laws, equalizing retirement ages for men and women so that women are not forced out of the labor force early, eliminating tax penalties on two-income families and providing benefits such as affordable child care, tax credits and maternity leave. The private sector can also play a role by offering female-targeted on-the-job training, as well as by pursuing anti-discrimination policies and offering family-friendly benefits.

A potentially powerful means to raise female labor participation in developing countries is to improve opportunities for women-owned SMEs. Operating a business offers women an alternative way to participate in the labor force if factors such as discrimination, cultural norms and family responsibilities limit them from entering as employees. Self-employment, a proxy for business ownership, is an extremely important component of female labor participation in developing countries, as shown in Exhibit 5. All of the BRICs and N-11 countries for which data are available, with the exception of Russia, have a rate of self-employment that is greater than the developed world average, and in half of these countries self-employment represents over 50% of female labor participation. As such, bolstering opportunities for self-employed women to grow their businesses, as well as incentivizing other women to start businesses, has the potential to generate significant employment and economic gains. In addition, female business owners may be more inclined to hire women and mentor them, thus reinforcing the benefits of female labor force participation and empowerment.

Exhibit 5: Self-employment is a significant contributor to overall employment in developing countries

Female self-employment versus wage/salaried employment (% of total female employment)



Source: World Bank

III. The global landscape for women-owned SMEs

The IFC estimates that there are more than 40 million formal SMEs⁵ globally, with approximately two-thirds in the developing world. Around one-third of the global total are owned by women,⁶ although there is considerable variation across countries. This translates into approximately 12 million women-owned formal SMEs worldwide, of which approximately 7 million are in developing regions.⁷

Geographical differences, with Asia as a standout

Of the nearly 7 million women-owned SMEs in the formal sector in developing regions, over one-half – around 3.5 million – are in East Asia and over 1 million are in each of Latin America and Central Asia/Eastern Europe, with the rest in Sub-Saharan Africa, the Middle East/North Africa and South Asia. Women own more than 40% of formal SMEs in East Asia and Central Asia/Eastern Europe but less than 15% in the Middle East/North Africa and South Asia, compared with an average of roughly 35% in developed economies. The tails of the distribution are long: women own more than 50% of formal SMEs in Brazil and the Philippines but less than 3% in Pakistan, as illustrated in Exhibit 6. The number of formal women-owned SMEs per capita is generally lower in developing countries than in developed countries, as shown in Exhibit 7.

Regions that traditionally encourage education and labor participation for women, such as East Asia and Latin America, tend to have higher rates of female SME ownership, while regions that are more restrictive for women, such as the Middle East/North Africa, tend to have lower rates. Institutional factors, such as technological progress and the degree of sophistication of markets, along with the level of economic development, also influence female SME ownership. Countries with higher rates of women-owned SMEs per capita tend to have higher rates of men-owned SMEs per capita as well, indicating that such countries may have better *overall* conditions for entrepreneurial and economic activity. We discuss the link between the SME sector and the overall business environment later in this paper.

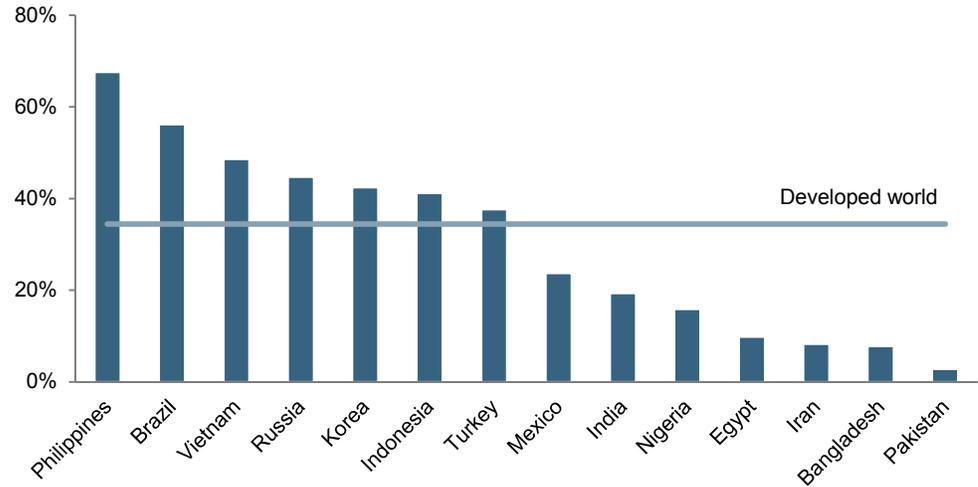
⁵ In line with the IFC, we categorize SMEs as “very small” (5-9 employees), “small” (10-49 employees) and “medium” (50-250 employees). We focus on formal SMEs, given that “micro” businesses (1-4 employees) and informal businesses are less likely to have access to a financial institution. Also consistent with IFC definitions, “formal” enterprises are those that are registered with government and tax authorities, while “informal” enterprises are those that are not, as well as non-employer firms (operated by their owners with no paid employees). For further discussion on informal SMEs, see Box 2.

⁶ An enterprise is considered women-owned if the sole proprietor, or at least one joint owner, is female.

⁷ These numbers exclude entrepreneurs with unidentified ownership by gender, potentially underestimating the number of formal women-owned SMEs.

Exhibit 6: Women’s SME ownership shows considerable variation across developing countries

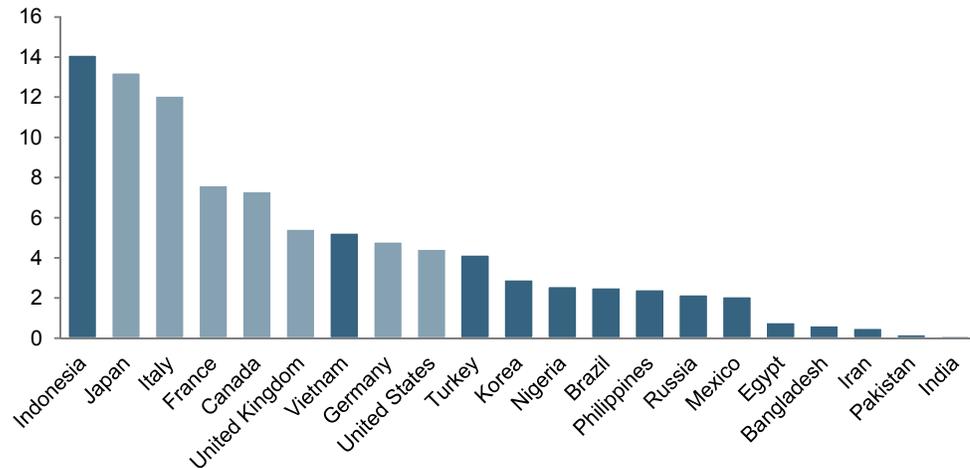
% of formal SMEs that are women-owned



Source: IFC Enterprise Finance Gap Database

Exhibit 7: The number of women-owned formal SMEs per capita is generally lower in the developing world

Women-owned formal SMEs per 1000 working age capita



Source: IFC Enterprise Finance Gap Database, World Bank

Why women-owned SMEs have historically underperformed

It has been well-documented that, in developing and developed regions alike, women-owned enterprises on average exhibit lower growth and lower productivity, and are less profitable than men-owned enterprises. It has also been reported that women-owned enterprises have lower survival rates, although the evidence on this is more mixed (World Bank, 2012). While

the differences have decreased over time, attributable in part to improvements in education for women and girls, they remain material in many countries. It is important to understand whether this dispersion in historical performance is driven by differences in skill and ability, or whether it can be explained by a set of environmental factors.

A significant amount of the variation in SME performance reflects the differences in size and sector of the enterprises that women tend to run. In both EM and DM, on average, businesses owned by men are twice as large, measured by number of employees, as women-owned enterprises (GPFI and IFC, 2011). Globally, female ownership is more prevalent for smaller enterprises, with women owning approximately 35% of very small enterprises, 30% of small enterprises and only 20% of medium enterprises. While contributing significantly to economic growth and employment, smaller enterprises tend to have higher failure rates, shorter life spans and, at least in certain sectors, lower levels of technological sophistication than larger enterprises (IFC, 2013d; Ayyagari et al., 2011).

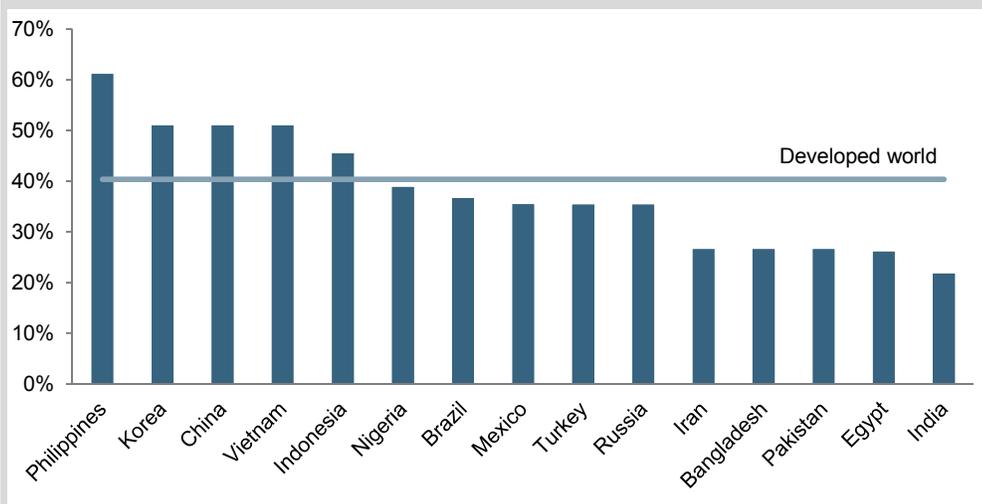
Box 2: Formal versus informal MSMEs

Consistent with IFC definitions, formal enterprises are defined as those that are registered with government and tax authorities, while informal enterprises are defined as those that are not. Informal enterprises also include non-employer firms, which are operated by their owners with no paid employees.

The IFC estimates that there are over 340 million informal enterprises worldwide, accounting for approximately 75% of total MSMEs (micro, small and medium-sized enterprises) and over 80% of women-owned MSMEs globally. The IFC estimates that approximately 40% of informal MSMEs globally are women-owned (IFC, 2013f), although there is significant variation across countries, as shown in Exhibit B2. There are also 80 million formal micro enterprises worldwide, of which approximately 30% are women-owned.

Exhibit B2: Female informal MSME ownership varies significantly across countries

% of informal MSMEs that are women-owned



Source: IFC Enterprise Finance Gap Database

Female ownership and employment also tend to be concentrated in less profitable and more competitive sectors such as food, garments and retail, while male ownership and employment tend to be in more profitable sectors such as materials and construction (World Bank, 2012). This can be due to a number of factors. For example, a lack of training

can result in skill differentials and societal expectations about appropriate jobs for women. Exhibits 8 and 9 illustrate the sector skew for two N-11 countries, Indonesia and Mexico.

This concentration in the small business segment and more competitive, labor-intensive sectors tends to contribute to the bias in the performance of women-owned businesses relative to their men-owned counterparts. Indeed, as the World Bank shows, a significant gap in labor productivity for men-owned versus women-owned businesses in Sub-Saharan Africa disappeared when enterprises of the same sector, size and capital intensity were compared (World Bank, 2012). Other studies have found similar results in different regions.

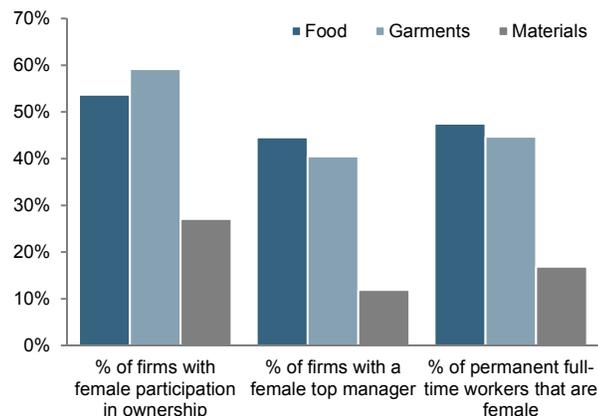
Independent of size and sector, factors relating to institutional environment can also explain the weaker business metrics attributed to women-owned enterprises. These include institutional and regulatory constraints such as weak property rights, limited access to finance and policy-induced barriers restricting access to technologies and markets. Moreover, lower rates of business education or work experience among women in general, higher risk aversion and the burden of household management responsibilities could also account for differentials.

We conclude that a significant proportion of the historical performance dispersion can be explained by differences in size, sector and institutional support, rather than by differences in ability. The World Bank’s World Development Report 2012 supports this conclusion and further demonstrates that productivity discrepancies between female-owned and male-owned businesses can be largely explained by access to and use of productive resources. Efforts to equalize the access to training, resources and institutional protections should result in a narrowing of the performance gap. The possibility of productivity and performance gains is yet another reason to argue for investing in female-led SMEs.

In this paper, we focus on formal enterprises, given that such businesses are more likely to have existing relationships with financial institutions, or can more easily produce the necessary documentation to establish such a relationship, thereby facilitating credit access. Moreover, the availability and quality of data for formal enterprises are generally better.

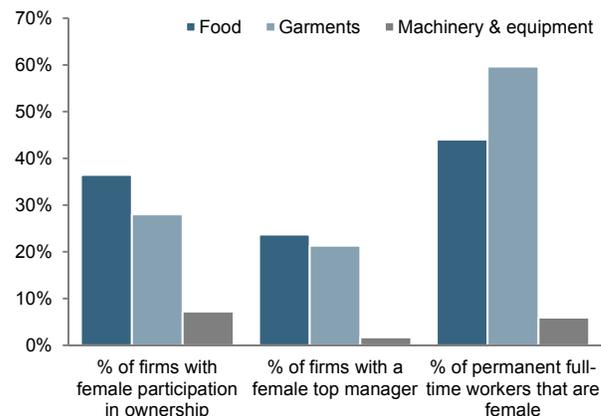
However, we include a discussion on informal enterprises given their importance to economic activity and labor markets in developing countries (see Box 2). As financing constraints are often significant for informal firms, which tend to be small in nature and depend on less reliable informal financing, improving access to credit for such businesses can have a significant impact on productivity and growth.

Exhibit 8: Female firm ownership and employment is skewed across sectors in Indonesia*...



*As of 2010 (latest). Source: Enterprise Surveys

Exhibit 9: ...and the sector skew is even more pronounced in Mexico*



*As of 2009 (latest). Source: Enterprise Surveys

Informal enterprises may not have the capacity to formalize, or may choose not to do so, given the increased regulatory burden of such a decision. Encouraging firms to formalize requires strong laws, institutions, government and infrastructure, as well as perceived economic benefits that outweigh the increased costs and burdens associated with registration.

IV. Access to finance is a major constraint for women-owned SMEs

While all SMEs face challenges, some barriers are more specific to women-owned enterprises. These hurdles can, separately or together, reinforce inequality and limit the ability of women to start and expand their businesses. We review five major constraints for SMEs, highlighting a gender-specific aspect of each.

1. Legal and regulatory barriers

Sound legal frameworks and clear property rights provide the foundations for entrepreneurial activity, encouraging business owners to innovate, invest and grow. However, in many developing countries, women do not enjoy these protections. Legal obstacles include inheritance laws that favor sons, property rights that fail to protect women's ownership, divorce laws that assign assets to the husband and formal restrictions on women's ability to open bank accounts and access credit. According to the IFC (2014), of 143 countries studied, almost 90% have at least one legal difference between women and men that restricts women's economic opportunities. A total of 28 economies have 10 or more legal gaps, and in 15 economies husbands can object to their wives working and prevent them from accepting jobs. As the IFC (2014) and World Bank Enterprise Surveys data show, lower legal gender parity is indeed associated with fewer women participating in the ownership of firms.

2. Access to education and training

Education creates a strong foundation for business owners, not least because it aids in the development of critical thinking skills and can provide at least a basic grasp of business planning, management and accounting. The disparity in education levels between men and women presents a major challenge for female business owners, particularly in developing countries. Less educated women are less likely to start their own business and lower levels of education may contribute to lower survival rates among women-owned SMEs.

3. Microeconomic conditions and macroeconomic environment

Supportive microeconomic conditions, such as good infrastructure (both physical and virtual), low costs for starting a business, strong patent protection and limited corruption, are critical for a sound business environment. Despite some improvements in recent years, developing countries still lag in the quality of microeconomic environment relative to developed countries. Moreover, improvements in microeconomic conditions may not accrue to the benefit of men and women equally. For example, there is evidence that women lag men in technology adoption owing to the high costs of acquiring and maintaining new technologies, as well as the lack of information and training. If they are unable to adopt new technologies, women may be prevented from expanding their businesses because, for example, existing accounting or distribution systems may be unable to handle higher turnover.

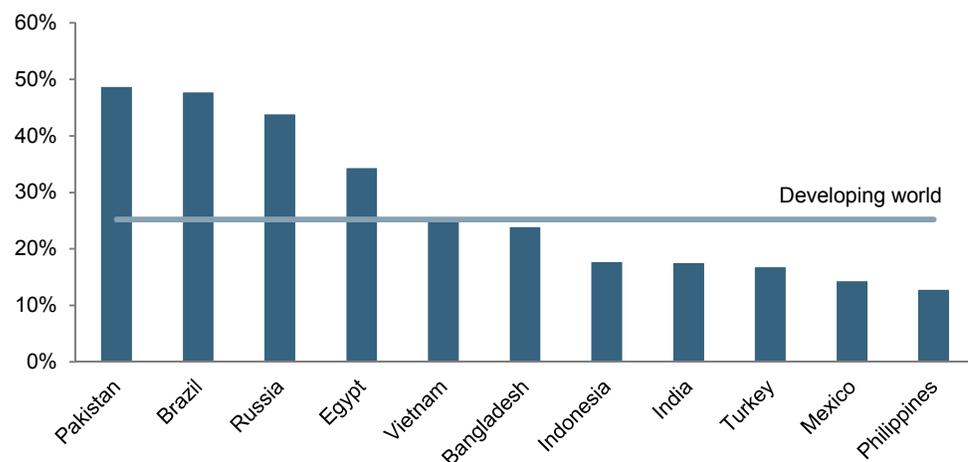
4. Culture and traditions

Social conventions dictate the roles of men and women in the household, workforce and society. These conventions can disadvantage women in countries and communities where they are expected to marry early and bear responsibility for the childrearing and general welfare of the family. These responsibilities have a negative impact on women's ability to start and grow their businesses because this unpaid work limits mobility and decreases the amount of time that women can dedicate to their businesses. As discussed earlier, societal expectations about appropriate jobs for women may have the effect of clustering women in less productive and less lucrative sectors. Finally, when women are able to start a successful business and make meaningful profits, the data show that they may be more inclined to invest these profits back into their families, leaving less capital available for reinvestment in their businesses, even when the marginal returns are high.

5. Access to finance

A wide range of surveys suggest that SMEs report access to credit as their biggest constraint in both the developed and the developing world.⁸ Evidence also shows that, in general, women-owned businesses have more restricted access to external finance than male-owned businesses (Powers, Magnoni, 2010; GPFI and IFC, 2011). As Exhibit 10 illustrates, among formal SMEs in the developing world, over one quarter of women entrepreneurs cite access to finance as a major barrier for their business (IFC, 2013f). There is notable variability across the BRICs and N-11, with almost half of women-owned businesses in Pakistan and Brazil citing access to finance as a severe constraint. This number is higher in many Sub-Saharan African countries. Critically, all of the barriers discussed above contribute significantly to the capital constraints for female-owned SMEs. Given its critical role in the ability of women-owned SMEs to thrive, we look at the finance barrier in more detail.

Exhibit 10: Access to finance is a major barrier for women-owned SMEs
% of formal women-owned SMEs with access to finance as a 'major or severe' barrier



Source: IFC Enterprise Finance Gap Database

⁸ For example, the ECB's 'Survey on the access to finance of small and medium-sized enterprises in the euro area (SAFE)', ECB, 2013.

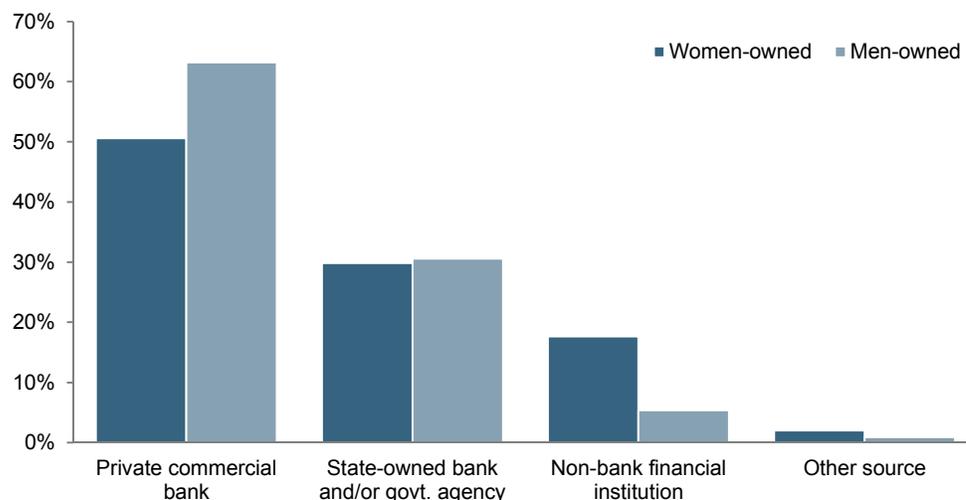
Main sources of finance for women-owned businesses

A range of studies show that women facing difficulties in accessing external sources of finance tend to fund their businesses using personal money or rely on informal borrowing from family and friends.⁹ Among SMEs that do use external funding, half of women-owned businesses in the developing world use loans from private commercial banks, which may offer more flexible credit terms relative to other external sources. This proportion is lower than for men-owned businesses, as Exhibit 11 illustrates. About one third of SMEs finance their businesses from state-owned banks and government agencies, independent of gender. One fifth of women-owned SMEs rely on non-bank financial institutions¹⁰ and other sources, a significantly higher share than for their male counterparts (IFC, 2013f).

The data suggest that access to bank financing, on average, seems to be more restrictive for women relative to men. That said, as always, averages hide important cross-country differences, as shown in Exhibit 12. Across the BRICs and N-11, this gap is particularly pronounced in Indonesia, Brazil and Turkey. Vietnam stands out at the other end of the spectrum, with women considerably more likely than men to use private commercial banks as a source of funding. In other countries, the metric seems to show no significant gender gap.

Data availability issues make it difficult to evaluate how access to different sources of funding for women-owned SMEs has evolved over time in developing countries. We do know, however, that economic downturns have a strong impact on SMEs in general, as credit conditions tighten and financing options dry up. The global financial crisis is likely to have had major implications for SME financing, given tighter lending standards in many countries. We provide more detail on the post-crisis trends in Box 3.

Exhibit 11: Sources of financing differ between women-owned and men-owned formal SMEs
 % of financing from external sources for formal SMEs



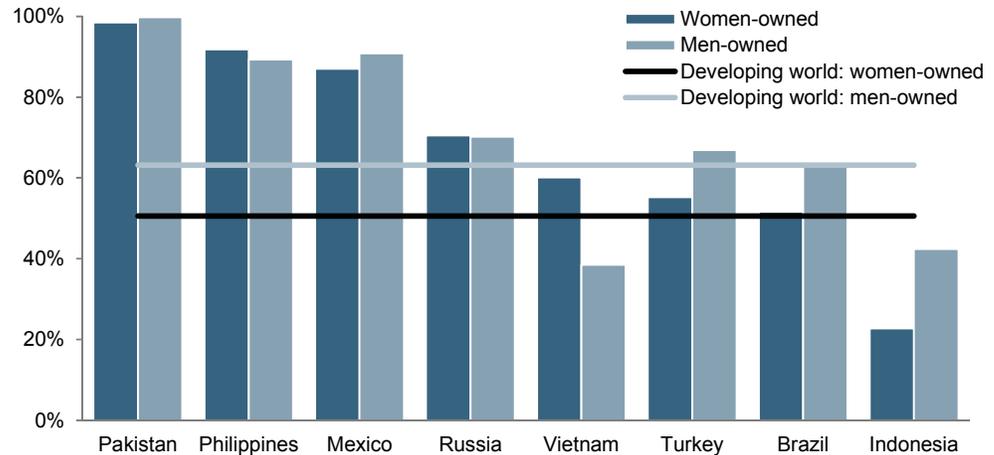
Source: IFC Enterprise Finance Gap Database, GSAM calculations

⁹ A survey of Latin America and Sub-Saharan Africa finds that around 60% of women-owned start-ups fund their businesses using these sources, relative to just over 50% for men-owned businesses. About 15% of women-owned businesses rely on bank funding for start-ups, as well as for working capital and equipment needs, while the rest use funds from other sources, such as community groups, moneylenders, microfinance institutions, religious organizations and international organizations (GPFI and IFC, 2011).

¹⁰ Non-bank financing institutions include insurance companies, housing finance providers, pension funds and investment funds that mobilize savings, provide market-based safety nets and fund long-term investments.

Exhibit 12: Access to bank financing is on average more restrictive for women-owned SMEs

% of formal SMEs using a commercial bank as source of external financing



Source: IFC Enterprise Finance Gap Database

Both supply and demand factors contribute to financial barriers for women-owned businesses

Several factors on both the supply and demand sides constrain women's access to finance relative to men-owned businesses. On the **supply side**, these include:

- **Typical features of women-owned SMEs.** Women-owned SMEs in developing countries often have limited or no credit history, incomplete or missing financial statements, limited savings and lower and more uncertain profitability. These common factors make such enterprises less attractive for credit. Additionally, the fact that women-owned SMEs tend to be smaller may also affect their ability to obtain credit, as banks may incur higher administrative costs relative to loan sizes, reducing the incentive to lend.
- **Lack of collateral.** To secure credit, borrowers often need to put down collateral to deal with information asymmetry, i.e., where lenders are not familiar with the repayment behavior of individual borrowers. Women in developing countries frequently lack sufficient collateral owing to legal barriers (e.g., restrictions on owning and inheriting property), sector-specific factors (e.g., no physical assets in services), or lack of savings (e.g., no previous employment history). Much evidence suggests that gender differences in ownership of assets is one of the most influential factors affecting women's ability to access credit and one of the main reasons for rejection of loans (Powers, Magnoni, 2010).
- **Limited information on female credit risk.** This often results in banks disadvantaging women-owned SMEs in their lending decisions or refraining from engaging them at all. As little market data are available on default rates for SMEs, banks often use traditional credit scoring models that rely on credit history and collateral to assess creditworthiness. As mentioned above, women frequently have insufficient or no collateral, as well as incomplete business records, making it

hard to demonstrate creditworthiness under such models. One study found that the difficulty in establishing creditworthiness of SMEs was a key barrier in accessing credit, with 80% of banks identifying challenges in this area (Dalberg Global Development Advisors, 2011).

- **Policy bias and discrimination.** Financial institutions may be dissuaded from lending to women-owned SMEs owing to various policy biases. These include direct gender biases, perhaps because of discriminatory credit criteria, the perception that women are riskier borrowers or the prejudices of staff. These also include more indirect biases, such as a preference for lending to larger companies or certain sectors, thus ignoring the small enterprise sector, where women-owned businesses are concentrated. Policies aimed at actively seeking out female entrepreneurs are also generally lacking in financial institutions in developing countries.

Box 3: Post-crisis trends in SME financing

SMEs are strongly affected by a number of factors during economic downturns, such as fewer options for financing, the difficulty involved in downsizing given their already smaller size, less diversified business activities and lower levels of capital. During the 2008 global financial crisis, SMEs suffered on two fronts: credit became less available, and the demand for their goods and services declined. The impact on SMEs in developing regions may not have been as strong as for those in developed regions, given that they tend to have looser connections with world markets and less reliance on foreign financing. However, developing regions still faced repercussions from the crisis through trade and capital flows, and are unlikely to have benefited as much from supportive government intervention.

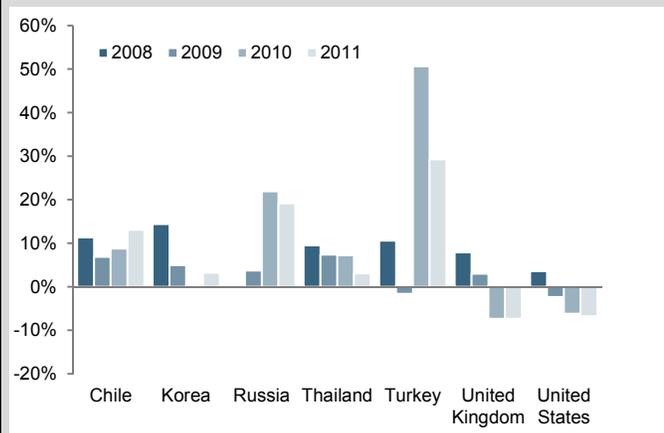
The financial crisis resulted in increased risk aversion, which drove financial institutions to tighten lending standards for SMEs by increasing collateral requirements, demanding higher interest rate premiums and reducing loan maturities. These trends widened an already substantial credit gap for SMEs (Dalberg Global Development Advisors, 2011). As Exhibit B3.1 shows, growth rates in outstanding SME business loans after the crisis were generally higher in EM relative to the UK and US, particularly in Russia and Turkey.

SMEs were also hurt by reduced demand for their goods and services as household consumption and business investment decreased. Curtailed demand has a direct impact on revenue and also reduces the attractiveness for credit. Levels of bankruptcies rose in most of the 23 countries surveyed by the OECD from 2007 to 2011; Canada, Chile, Korea and New Zealand were the only countries where bankruptcy rates were lower in 2011 than 2007. Again, developing countries generally fared better than DM, as shown in Exhibit B3.2.

While data offering a gender breakdown of SME ownership throughout the crisis are limited, the impact of the financial crisis on women-owned SMEs relative to those owned by men is likely to be highly dependent on enterprise size, sector, region of operation and reliance on exports. As discussed in Section III, women-owned SMEs are, on average, smaller than those owned by men, and are thus more vulnerable to shocks and tight financial conditions. Export-oriented, labor-intensive manufacturing sectors that tend to attract women, such as textiles and garments, have been heavily affected by the crisis, while others with few ties to global markets, such as healthcare and domestic services, have fared better. Indeed, some of the hardest hit sectors through the crisis, such as construction, mining and business services, are dominated by men. Given that the global financial crisis is still relatively recent, the severity and extent of the impact on women versus men, in terms of SME-ownership and labor force participation, is yet to be established. But as the global economy improves, rising interest rates may make securing financing for both men- and women-owned SMEs challenging.

Exhibit B3.1: Through the financial crisis, developing countries generally experienced stronger growth in SME loans....

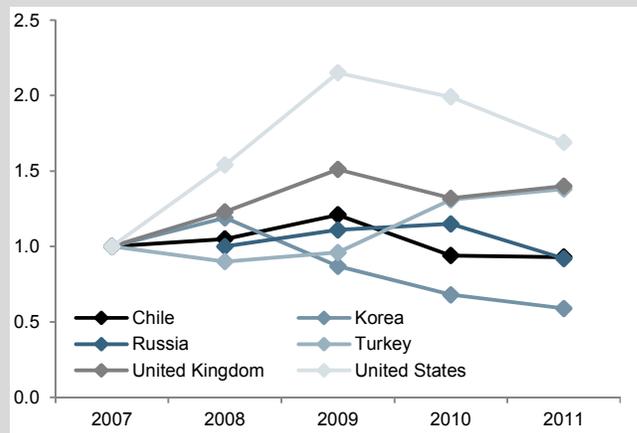
Outstanding SME loans (\$ volume), year-on-year change



Source: Organization for Economic Co-operation and Development

Exhibit B3.2: ...and lower growth in bankruptcies

Bankruptcies relative to 2007 (2007=1)

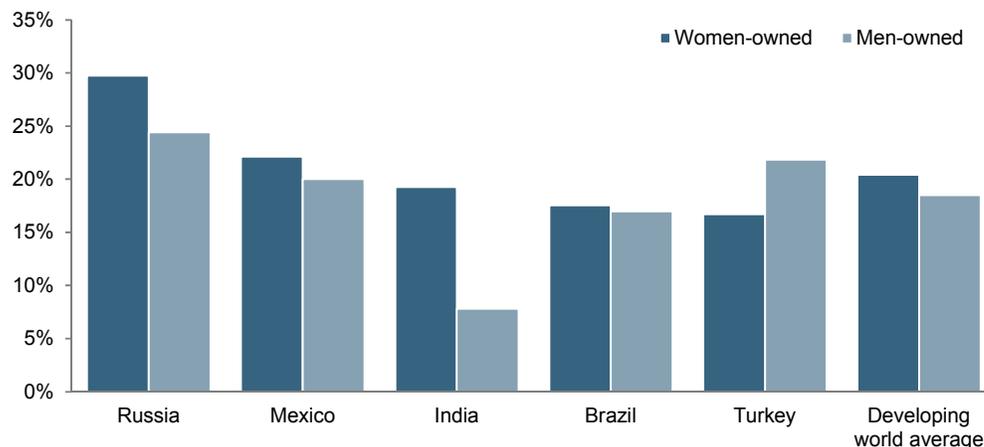


Source: Organization for Economic Co-operation and Development

On the **demand side**, women-owned businesses may seek less financing for several reasons:

- **Financing terms.** Studies show that women-owned SMEs are likely to face higher borrowing costs, be required to collateralize a higher share of loans and have shorter-term loans than male-owned SMEs (GPFI and IFC, 2011). This could be because banks perceive women's creditworthiness to be weaker. In addition, adverse selection may play a role, i.e., if only the riskiest women-owned SMEs seek external financing, perhaps because of a higher overall tolerance for financial risk, this could result in tougher borrowing terms.
- **Perceived lack of need.** Female business owners may not recognize their need for credit, not realizing that credit would help them to grow faster, create more jobs and increase profitability. As such, the 'no-need for credit' category may be smaller than reported.
- **Informality.** As shown in Box 2, the majority of women-owned SMEs in the developing world are in the informal sector, and thus typically cannot access formal credit markets.
- **Anticipation of rejection.** Studies show that women may be discouraged from applying for credit because of the anticipation of rejection. Numerous surveys show that rejection rates for loan applications are higher for women-owned businesses in the developing world, as Exhibit 13 illustrates. For instance, in India the rejection rate for loans to women-owned businesses is 2.5 times higher than that for men.
- **Complicated application processes and procedures.** Given the often limited business and management training opportunities, as discussed above, women may find loan application procedures complicated, which could deter them from applying altogether.
- **Risk aversion.** Women, especially in lower income segments, may be more cautious about the amount of financing and business risk they are willing to take on relative to men. Concerns about insolvency and collateral loss – perhaps due to family responsibilities – may result in less risk being taken, which may limit opportunities for business expansion.

Exhibit 13: Loan rejection rates are, on average, higher for women-owned formal SMEs
Loan rejection rate for formal SMEs



Source: IFC Enterprise Finance Gap Database

The constraints that we have discussed thus far have come from evidence on developing countries. However, similar constraints also apply, to varying degrees, in developed countries. In Box 4, we discuss the current situation in Japan, where female labor participation and entrepreneurship rates remain among the lowest in the developed world.

Box 4: How entrepreneurship can boost Womenomics in Japan

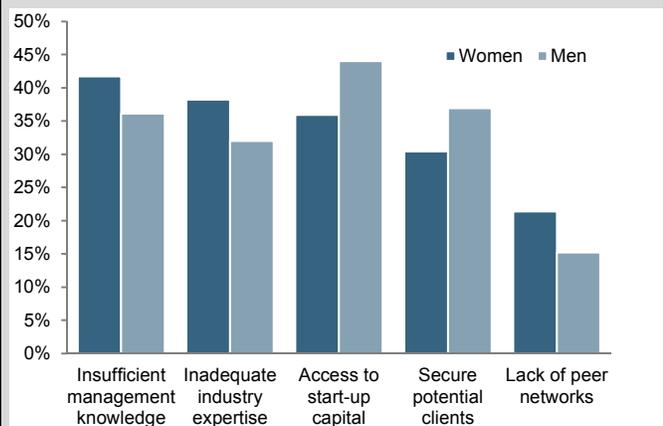
As part of his ‘Abenomics’ agenda, Japanese Prime Minister Shinzo Abe has stressed that higher female labor participation is key to raising Japan’s potential growth rate – a point we have been arguing since 1999, when we first broached the topic of Womenomics. The potential economic gains from closing Japan’s gender employment gap are sizeable, and we estimate that if Japanese female labor participation matched that of males, the overall level of Japanese GDP could rise by as much as 14%.

Specifically, Prime Minister Abe has stated three goals: (1) raise the employment rate for women aged 25-44 from 68% to 73% by 2020, compared with the current male rate of 91%; (2) target 30% female representation in leadership positions across Japanese society by 2020; and (3) boost the supply of childcare facilities with the aim of eliminating daycare waitlists by 2017 (there were nearly 25,000 waitlisted children as of April 2012). These goals are laudable, but one area that has received insufficient attention, in our view, is support for female entrepreneurship. SMEs currently account for over 99% of all private-sector businesses in Japan, around 70% of all jobs and approximately 50% of total value added.

Since many of the factors preventing greater Japanese female labor participation overall are related to the rigidities of organizational structures, such as inflexible work arrangements, lack of objective performance measurement and gender pay gaps, one would assume that Japanese female entrepreneurship – where women can work on their own terms – would be much higher.

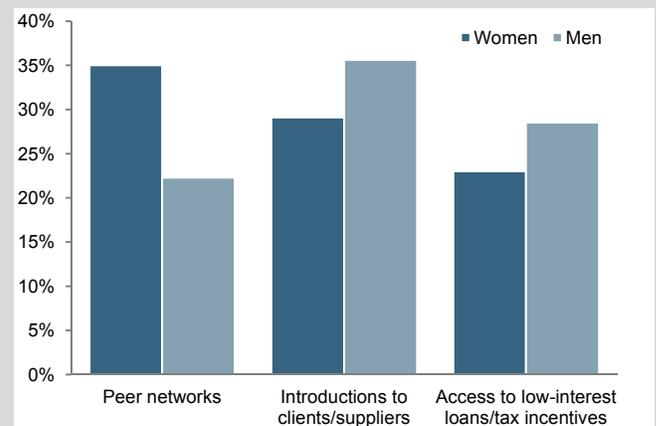
However, the irony is that not only is the overall level of Japanese entrepreneurship low, but it is particularly low for women. Based on the 2012 Global Entrepreneurship Monitor, the level of total entrepreneurial activity (TEA) for Japanese men stood at 6% (meaning 6% of Japanese men were engaged in entrepreneurial activity), which was much lower than the US rate of 15% and Europe’s 9%. Japanese female entrepreneurship is even lower, with a TEA ratio of just 2%, versus 10% in the US and 5% in Europe.

Exhibit B4.1: Challenges faced by Japanese entrepreneurs during the start-up phase (multiple responses allowed)



Source: Japan Ministry of Economy, 2010

Exhibit B4.2: Support that Japanese entrepreneurs wish they had prior to start-up (multiple responses allowed)



Source: Japan Ministry of Economy, 2010

Box 4 (cont'd): How entrepreneurship can boost Womenomics in Japan

What are the key microeconomic obstacles to Japanese female entrepreneurship? A 2010 government study of entrepreneurship cited access to capital as a major challenge for both male and female entrepreneurs. Japan also ranks as one of the lowest among OECD countries in terms of venture capital investment to GDP. However, while access to capital was cited by male entrepreneurs as their top challenge, female entrepreneurs cited “insufficient managerial knowledge” and “inadequate industry expertise” as even greater challenges, as shown in Exhibit B4.1. Moreover, the support that female entrepreneurs wish they had access to before establishing their businesses include peer networks and household support, such as childcare, as shown in Exhibit B4.2 (Japan Ministry of Economy, 2010).

To support access to funding, Prime Minister Abe’s government recently allocated ¥20 billion (\$200 million) for a fund specifically to support female entrepreneurs, complementing an existing facility that provides female entrepreneurs with low-interest loans from the Japan Finance Corp (JFC). During fiscal year 2012, more than 3,200 female start-ups tapped into the JFC’s preferential financing facility (a 21% year-over-year increase), and the total amount of financing rose 46% year-over-year to nearly ¥22 billion (\$220 million).

While this is encouraging, we believe a more holistic approach is required to move the needle on Japan’s female entrepreneurship much further in the right direction. Measures should include the provision of training in managerial skills and industry expertise, the establishment of peer networks and the expansion of childcare support services, in addition to greater capital accessibility.

Credit needs for women-owned SMEs

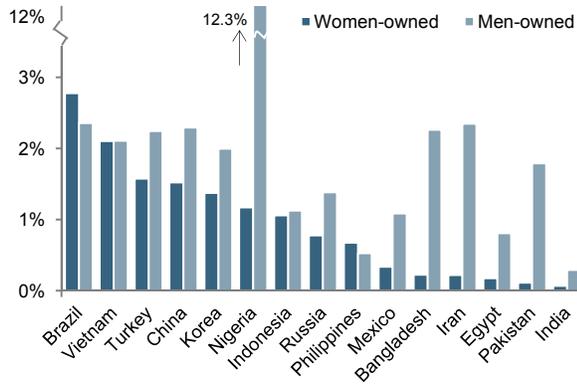
Given that access to finance is consistently identified as a major constraint for women-owned businesses, we look at the associated credit gap. This is the value of formal financing needed but not available (see Box 5 for further detail on the definition). According to IFC estimates, there are roughly 7 million formal women-owned SMEs in developing countries, of which as many as 70% are unserved or under-served by financial institutions (IFC, 2013f).¹¹ This amounts to a credit gap of around \$285 billion. The BRICs and N-11 countries together account for about 40% of the total, with Brazil, China, Korea, Turkey and Russia representing the majority in absolute terms. As larger countries are likely to have larger credit gaps, a comparison of standardized credit gaps – as a percentage of GDP and per enterprise – is more illustrative.¹² Brazil and Vietnam have the largest credit-gap-to-GDP ratios for formal women-owned SMEs, as Exhibit 14 illustrates. Per enterprise, the gap is widest for Korea and Brazil (Exhibit 15).

¹¹ Note that this figure is higher than that for female SME owners citing access to finance as a ‘major or severe’ barrier, as shown in Exhibit 10. This may be because the threshold for ‘major or severe’ is high, as well as women not recognizing that their businesses are credit constrained and/or the benefits that increased credit may potentially bring, as discussed in Section IV.

¹² Note that credit gap estimates in USD date back to different years across the countries, depending on the timing of the World Bank’s Enterprise Surveys. The credit gap estimates for the BRICs and N-11 countries are as of the following years: Bangladesh 2007, Brazil 2009, China 2003, Egypt 2008, India 2006, Indonesia 2009, Iran (average EM credit gap year as the estimate is based on extrapolation), Mexico 2006, Nigeria 2007, Pakistan 2007, Philippines 2009, Korea 2005, Russia 2009, Turkey 2008, Vietnam 2009. To calculate the credit gap-to-GDP ratio, we use each country’s GDP as of the respective credit gap date. This assumes that credit gaps have been growing at the same rate as nominal GDP since the survey date. This, in our view, is a more plausible approach than using GDP in the same year across countries to calculate the ratio, which would introduce unnecessary distortions to the data.

Exhibit 14: Brazil has the largest credit gap for women-owned formal SMEs as a share of GDP...

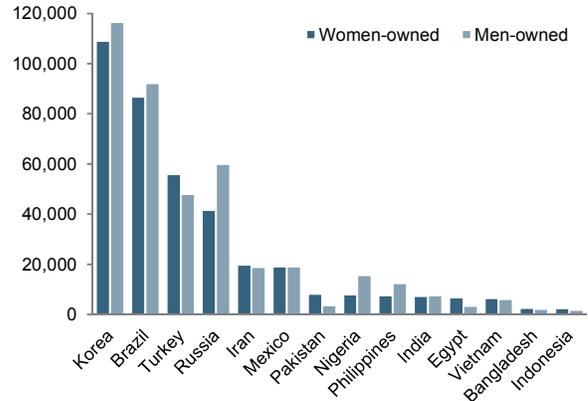
Credit gap as % GDP, formal SMEs



Source: IFC Enterprise Finance Gap Database, International Monetary Fund

Exhibit 15: ...while Korea stands out in terms of the credit gap per enterprise

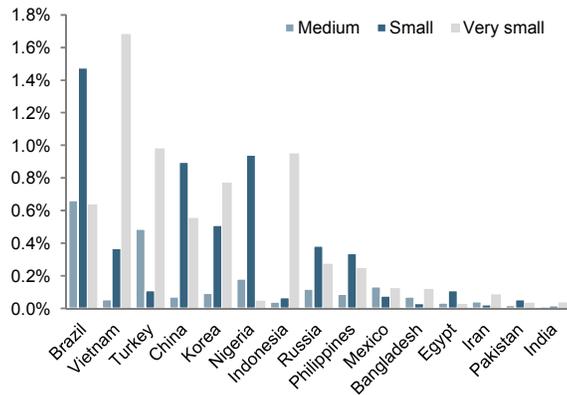
Credit gap per enterprise (US\$), formal SMEs



Source: IFC Enterprise Finance Gap Database

Exhibit 16: Small and very small enterprises tend to have the widest credit gap in GDP terms...

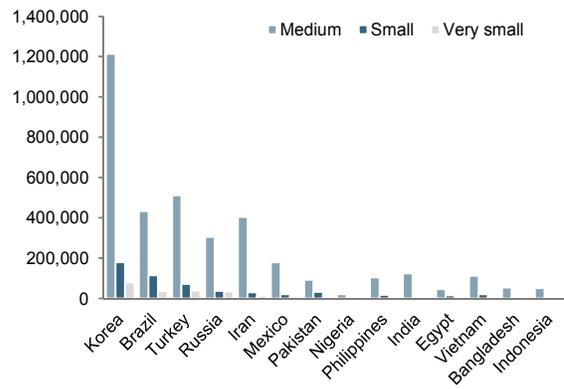
Credit gap as % GDP, formal women-owned SMEs



Source: IFC Enterprise Finance Gap Database

Exhibit 17: ...but the medium-sized sector has the highest credit needs per enterprise

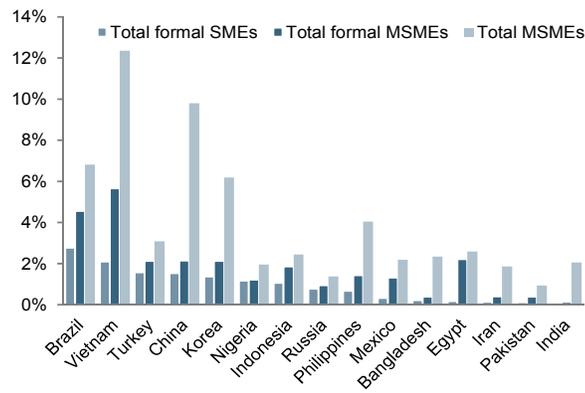
Credit gap per enterprise (US\$), formal women-owned SMEs



Source: IFC Enterprise Finance Gap Database

Exhibit 18: Women's credit needs are also substantial in the micro enterprise sector

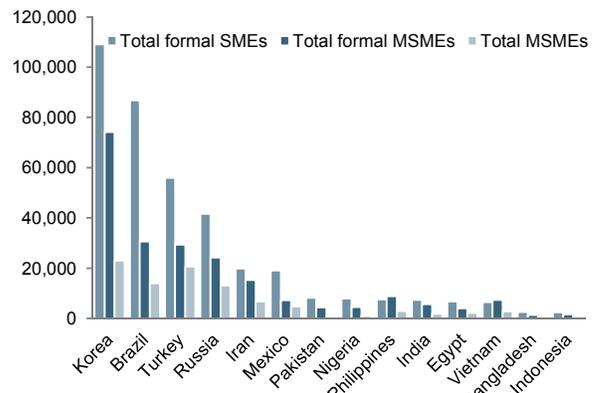
Credit gap as % GDP, formal women-owned SMEs



Source: IFC Enterprise Finance Gap Database

Exhibit 19: The credit gap per enterprise is much higher in the formal sector than in the informal sector

Credit gap per enterprise (US\$), formal women-owned SMEs



Source: IFC Enterprise Finance Gap Database

Box 5: Estimating the SME credit gap

We use the IFC's definition and estimate for the credit gap. The IFC defines the value of the credit gap as formal financing that is needed but not available. Formal financing is assumed to be debt that would be included on a company's balance sheet, such as loans, overdrafts, trade financing, leasing and factoring (IFC, 2013f).

To estimate the credit gap, the IFC classifies enterprises according to the following categories:*

- **No need** enterprises: Do not have or need credit.
- **Unservd** enterprises: Need but have no access to credit.
- **Under-served** enterprises: Have access to some credit but not as much as needed.
- **Well-served** enterprises: Need credit and have access to sufficient credit.

These classifications are based on availability of loans and/or overdrafts from financial institutions. The IFC assumes that enterprises without access to loans and/or overdrafts also lack access to other forms of formal financing.

For formal SMEs, the credit gap is assumed to be 50% of outstanding credit for under-served enterprises and 20% of revenues for unserved enterprises. This assumption is based on interviews with IFC experts and verified through analysis by McKinsey & Co. Data are from the World Bank Enterprise Surveys or are estimated by extrapolation where data is not available.

* More detail can be found on the IFC's methodology at <http://financegap.smefinanceforum.org/>.

Looking across the size spectrum of formal women-owned businesses in Exhibit 16, small and very small businesses tend to have the widest credit gap as a percentage of GDP across most countries. This is hardly surprising given the skew towards smaller businesses among women-owned SMEs discussed in Section III. But this also highlights a key point: that limited access to finance may prevent women from growing their businesses and from moving up from the small segment into the middle-sized sector. In terms of the size of the credit gap per enterprise, as shown in Exhibit 17, the medium-sized businesses in the formal sector face wider gaps, which is also unsurprising given that larger businesses require higher financing.

Looking beyond formal SMEs, women's credit needs are also clearly substantial among micro enterprises and businesses in the informal sector, as shown in Exhibit 18. In fact, for a number of countries the credit gap as a percentage of GDP for all MSMEs (formal and informal) is exceptionally high – as high as 12% of GDP for Vietnam and 10% for China, although India is a notable standout – its credit gap for total women-owned MSMEs (formal and informal) is over 30 times larger than for formal women-owned SMEs. As shown in Exhibit 19, credit gap per enterprise is generally highest in the formal SME sector.

Substantial financing needs that are unmet clearly limit opportunities for business expansion, employment growth and innovation. Moreover, SME financing constraints are likely to have broader macroeconomic implications. We explore this in the next section.

V. Boosting economic growth by closing the credit gap for formal women-owned SMEs

In this section we look at the channels through which SMEs can affect macroeconomic growth outcomes, and explore how SME access to credit can facilitate this process.

SMEs stimulate domestic demand through job creation. According to the World Bank, SMEs are the biggest contributors to employment across countries, especially in the developing world. On average, SMEs account for two-thirds of total permanent, full-time employment in the private sector (Ayyagari et al., 2011).¹³ This number is much higher in lower-income countries – for example, in many African countries, including Nigeria, SMEs account for 90-100% of private-sector employment. SMEs also contribute indirectly to employment through their supply chains, although this impact is harder to quantify.

Extensive research evaluating the impact at the firm, industry and country levels confirms the positive link between SMEs and job creation. It has also been shown that SME growth boosts employment more than the growth of large firms because SMEs tend to be more labor-intensive. In developing countries, small mature firms also have the largest share of job creation (Ayyagari et al., 2012). Moreover, evidence suggests that women-owned SMEs tend to employ more women, helping boost female employment, and this has indirect benefits as women reinvest earnings into their families, as discussed in Section II (IFC, 2013d). Such benefits at the microeconomic level, including human capital formation, culture of savings and community development, among others, are less visible but also matter.

Access to finance can contribute to SME employment through the creation of new firms and their subsequent growth, alongside the growth of existing firms. The few studies conducted in this area confirm the link between access to finance and employment. Easier access to external finance has been found to be positively related to the number of start-ups (Ayyagari et al., 2012). Analysis based on the World Bank Enterprise Surveys finds that financial access indicators (having a loan, sales credit, external finance and being credit-constrained) have a significant effect on a firm's employment growth (growth in the number of permanent employees) (Dinh et al., 2010). Having a loan and external finance are particularly important for small firms.

In addition to job creation, SMEs enhance competition and entrepreneurship and thus boost efficiency, innovation and productivity growth in the economy. Access to finance allows higher investment in capital and new technologies, supports research and innovation, and can improve a firm's liquidity position and risk management. All of these factors allow firms to grow and develop. One study based on the Enterprise Surveys database (Ayyagari et al., 2011) finds that the externally financed proportion of a firm's investment expenditures is positively related to its ability to innovate, controlling for investment opportunities. Moreover, bank financing is associated with higher levels of innovation in developing countries relative to financing from all other sources, including internal funds, leasing arrangements, investment funds, trade credit, credit cards, family and friends and other informal sources.

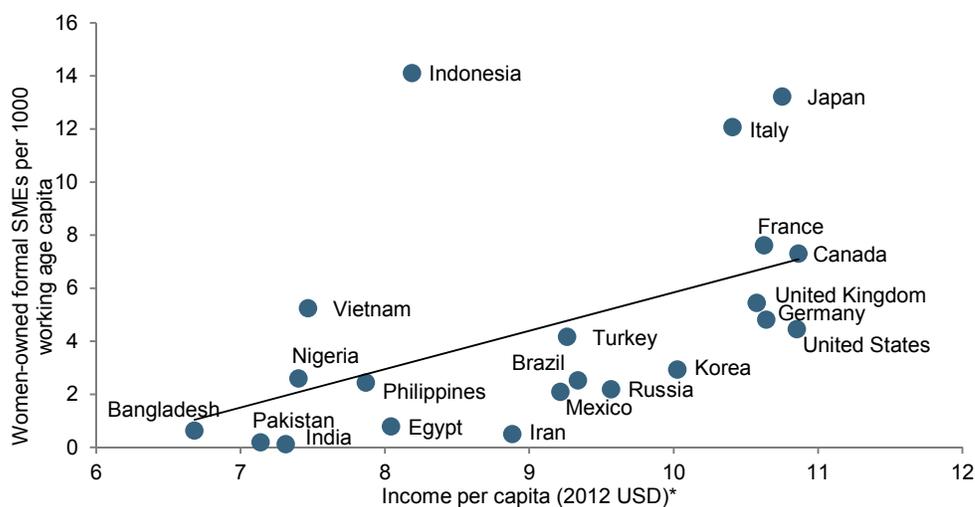
It is important to note that while access to finance does seem to be associated with better productivity outcomes, cross-country evidence on the SME contribution to productivity and economic growth is mixed. There certainly appears to be a robust *correlation* between the size of the SME sector and economic development, as Exhibit 20 illustrates for the BRICs and N-11 countries, as well as for the major advanced economies. It is worth noting that, excluding DM, the correlation is still positive but less strong, perhaps suggesting that other

¹³ These figures are based on the definition of SMEs used by individual countries. These definitions vary and, in some countries, include micro and informal enterprises.

factors in addition to income per capita may also matter in explaining female SME ownership across developing countries in particular (such as the level of institutional development, which we discuss below).

However, there appears to be a weak empirical *causal link* between SMEs and economic development. This could be due to data biases, as well as the institutional shortcomings that skew the relationship. For example, focusing on the SME’s size as a percentage of total value added in manufacturing is likely to bias the results, particularly given that a vast majority of SMEs in developing countries – particularly women-owned SMEs – are concentrated in the services sector. Outside of the data and methodological biases, the link could be affected by financial and institutional deficiencies that prevent SMEs from growing (Beck, Demirgüç-Kunt, 2006). Rather than simply having a large SME sector, it is important to have a competitive business environment that allows for the entry of new and innovative entrepreneurs, with low entry and exit barriers, well-defined property rights, effective contract enforcement and access to finance. Access to finance also plays a crucial role in the overall business environment, which in turn is positively linked to productivity growth, innovation and overall economic growth. Hence, the overall business environment is a crucial factor linking SMEs and economic growth.

Exhibit 20: Female formal SME ownership is positively correlated with GDP per capita



*Logarithm of income per capita. Source: IFC Enterprise Finance Gap Database, World Bank, International Monetary Fund

Estimating the impact of SME credit on economic growth

Given the centrality of SME credit to economic growth, we attempt to estimate the link in a formal way. A number of studies have tried to assess the microeconomic link between SME credit and the development of the SME sector, including the number of start-ups, revenue growth and employment, for specific countries and initiatives. But few have looked at the macroeconomic impact of SME credit, particularly as it relates to women-owned businesses, largely due to a lack of data.

To estimate the macroeconomic link, we look at how SME credit affects income per capita growth across countries. We take into consideration the level of development, proxied by initial income per capita, and the overall institutional environment, proxied by GS Growth

Environment Scores (GES),¹⁴ given its importance in facilitating the link between SMEs and the broader economy. We then use our estimates to gauge the impact on growth and income per capita of closing the credit gap for women-owned SMEs, focusing on the BRICs and N-11. We explain our methodology in more detail, show our estimation results and discuss some caveats in Appendix 1.

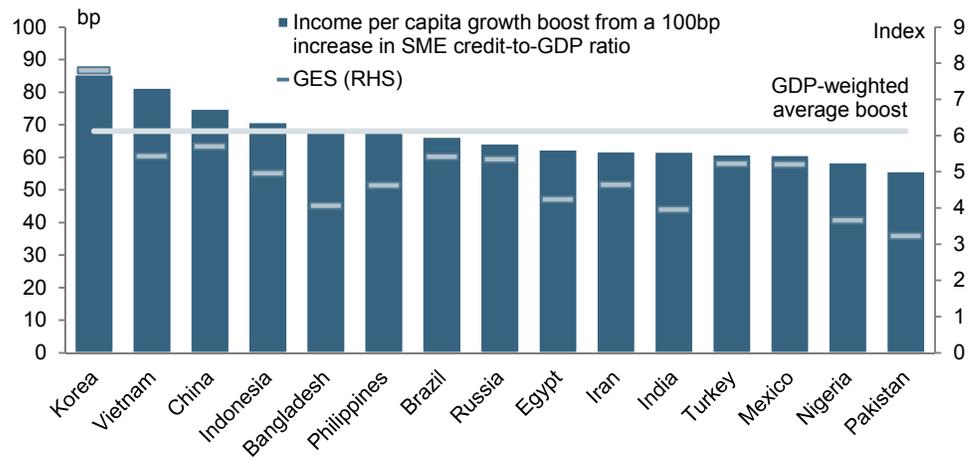
We find a strong relationship between SME credit and income per capita growth. This relationship suggests that the growth boost to income per capita from a 100bp increase in the SME credit-to-GDP ratio – one step on the road to closing the credit gap – could be as high as 70bp for the BRICs and N-11 on average.¹⁵ The exact impact will differ across countries, depending on an individual country's initial level of development and its institutional environment. The impact of increasing SME credit is more dramatic for less developed countries and stronger for countries whose institutions are more robust. It is the interplay between the two variables – initial income per capita and institutional environment – that determines the overall impact of SME credit on income per capita growth.

Exhibit 21 shows the potential boost to income per capita growth, as well as the respective GES, for the BRICs and N-11. Note that lower-income countries, such as Bangladesh, Pakistan, Nigeria and India, do not necessarily gain the most from a 100bp rise in the SME credit-to-GDP ratio – because their less robust institutional environments weaken the link. Of these four, Bangladesh could gain the most – almost 70bp – because its GES is highest. But even higher-income countries, such as Turkey, Mexico and Russia, could boost their income per capita growth by an impressive 60bp or so. And in Korea, which has a strong growth environment, as reflected in a high GES, SME credit has the potential to boost growth substantially – by over 80bp – even though its income is already much higher than that of others in the group.

¹⁴ The Growth Environment Scores are Goldman Sachs proprietary indicators that are designed to capture important features of the economic, political and institutional environment that affect countries' growth potential. The GES components fall into six major areas: macroeconomic conditions, macroeconomic stability, political conditions, technology, human capital and microeconomic conditions. For more details and the latest update, please see *Global Economics Paper 223: 'Our 2013 GES: Surprising the markets'*.

¹⁵ All country averages are GDP-weighted, which, in our view, is a better gauge of the 'global impact' related to raising SME credit. The individual country results are shown in the related exhibits.

Exhibit 21: Growth gains from raising SME credit-to-GDP ratio could be significant across the board



Source: IFC Enterprise Finance Gap Database, International Monetary Fund, GSAM calculations

To illustrate the powerful impact of the growth environment in amplifying the link between SME credit and economic growth, we take India as an example. India’s boost to income per capita growth from a 100bp increase in the SME-credit-to-GDP ratio could be 62bp, all else equal. However, if at the same time India were to improve its overall GES of 4 to the current developing country average of 5, it could gain an incremental growth bonus from a 100bp increase in the SME-credit-to-GDP ratio of roughly 12bp, bringing the total growth boost to 74bp. This is in addition to the direct growth boost from improving the overall growth environment, which could be substantial, particularly for a low-income country. Appendix 1 shows more detail on this.

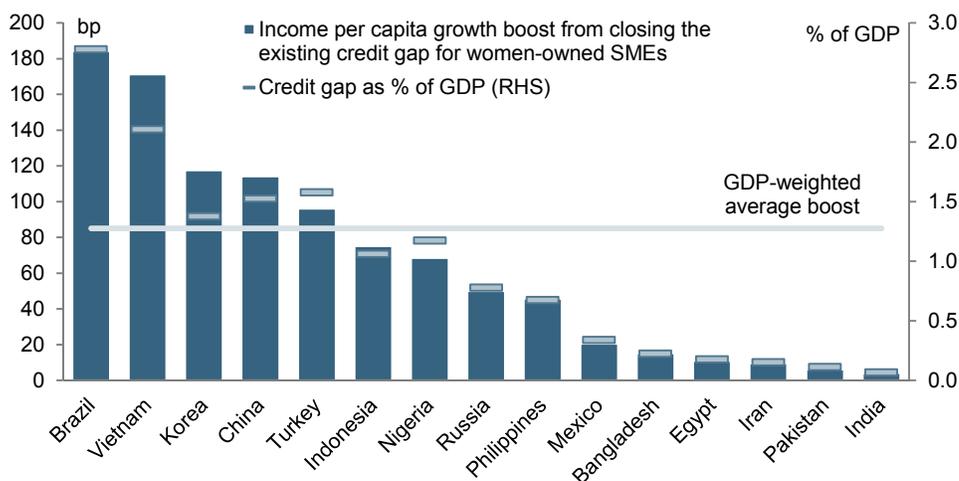
Applying the gender lens

Having established the relationship between SME credit and economic growth, we apply our findings to women-owned businesses. While in our analysis we assume there is no significant differentiation between the growth impact of credit to women-owned SMEs and male-owned SMEs, it is reasonable to suggest that we potentially underestimate the full impact of women-owned SME credit on growth. This could result from omitting the indirect benefits of women in employment, including women reinvesting earnings into their families. It is also true that the base effect should be at work: because women are generally more credit-constrained than men, making access to finance easier for women-owned businesses should have a larger impact on growth. It is harder to predict what the effect might be in relative terms. Some recent evidence does suggest that female entrepreneurs tend to use credit more effectively relative to their male counterparts (D’Espallier et al., 2009).

Combining the IFC data for the credit gap for formal women-owned SMEs and our findings above, we estimate the potential boost to income per capita growth across the BRICs and N-11, accounting for initial incomes per capita and GES, from closing the credit gap. As Exhibit 22 illustrates, the size of the credit gap-to-GDP ratio is closely correlated with the

potential growth boost, as expected, with a few exceptions.¹⁶ The average growth boost for the BRICs and N-11 countries from closing the entire credit gap could be around 85bp. Vietnam and Brazil could benefit most, boosting their income per capita growth by 170-185bp. Closing the entire credit gap for women-owned SMEs across the full developing world could boost income per capita growth by over 110bp on average. While eliminating the whole gap is certainly a tall order, these numbers illustrate that – if it were to happen – the impact on growth could indeed be dramatic.

Exhibit 22: Closing the existing gap for women-owned SMEs could boost income per capita growth by around 85bp on average across the BRICs and N-11



Source: IFC Enterprise Finance Gap Database, World Bank, International Monetary Fund, GSAM calculations

As closing the credit gap would almost certainly take time (unfortunately, at present there are no historical data to give us a rough idea of the potential time horizon), it is best to think about this growth boost in cumulative terms of a period of a few years. For instance, closing the credit gap in Brazil by the end of the current decade could boost the country’s income per capita growth by around 26bp a year, permanently raising the growth rate by 184bp by the end of the period (assuming an additive effect, and all else being equal). By 2020 this would raise Brazil’s income per capita by over 7% relative to our baseline scenario. Assuming this growth gain is permanent, by 2030 the level of Brazil’s income per capita could be up to 28% higher relative to our baseline scenario. Exhibit 23 shows Brazil’s potential income path under both scenarios to 2030. This potential income boost is important, given that Brazil is currently growing below its trend rate, and at less than half the average of the EM trend rate of growth. Exhibit 24 illustrates these estimates for the BRICs and N-11 countries. It shows that by 2030 incomes per capita could be on average around 12% higher, relative to our baseline scenario.¹⁷

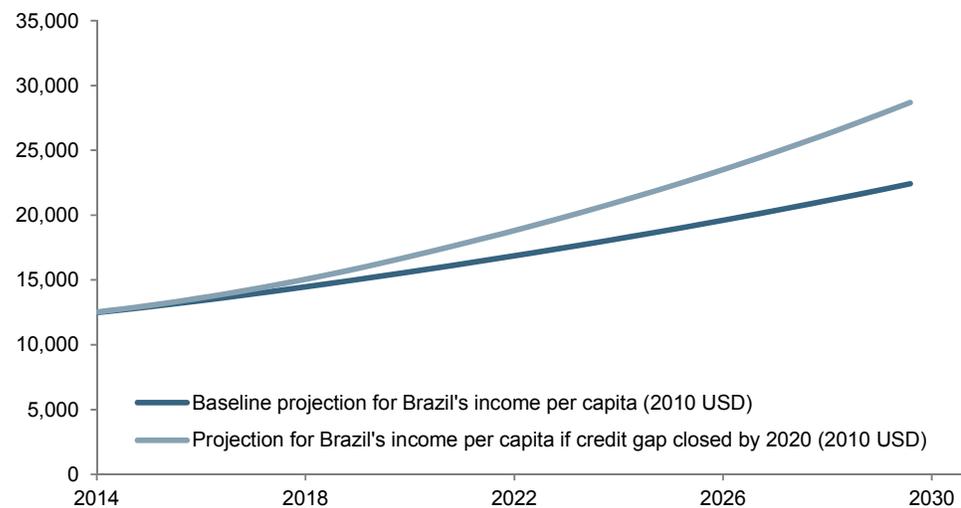
¹⁶ As mentioned in Section IV, we estimate credit gap-to-GDP ratios using the countries’ respective GDP dating to the year of each individual survey. Dates of the survey vary widely. This effectively assumes that credit gaps have been growing at the same pace as nominal GDP. It can be argued that some countries have managed to narrow their credit gaps since while some have widened them further. Given the available data, it is not possible to prove this either way. To avoid introducing additional biases to the data, we stick to the given survey year to normalize each credit gap to its corresponding GDP.

¹⁷ Note that due to broader EM growth underperformance over the past couple of years, our projections for some countries may appear too high relative to the current numbers. Our long-term projections are based on several

It is important to note, however, that the size of credit gaps for formal women-owned SMEs in certain countries seems surprisingly small, perhaps most notably in India. While part of the explanation likely lies on the demand side (i.e., certain factors that prevent women from applying for credit, as explained in Section IV), it is also the case that the vast majority of women-owned SMEs are in the informal sector. In fact, in India, the number of informal women-owned MSMEs is estimated to be 50 times larger than the number of formal women-owned MSMEs. Correspondingly, the informal credit gap is much higher, around 1.9% of GDP (versus 0.07% in the formal SME sector). Women-owned SMEs are also much more prevalent in the informal sector than the formal sector in Bangladesh, Iran and Pakistan, although not to the same extent.

By ignoring the informal sector in our estimations, we clearly underestimate the overall potential growth boost from closing the gap for women-owned SMEs. But because it is not necessarily clear if credit in the informal sector has the same effect on growth as credit in the formal sector (perhaps the link is not as effective), we can only speculate about the conservative nature of our projections.

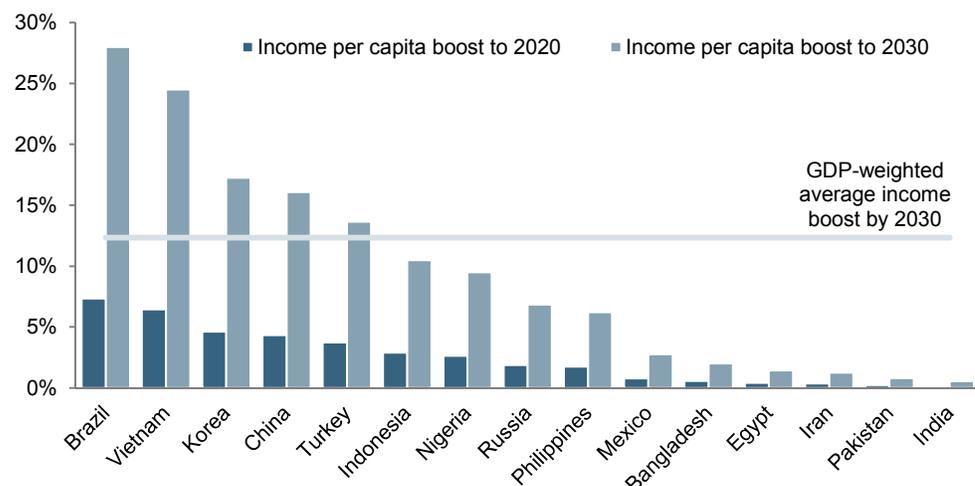
Exhibit 23: Closing the women-owned SME credit gap could drive Brazil's income per capita up to 28% higher, relative to the baseline scenario, by 2030



Source: IFC Enterprise Finance Gap Database, World Bank, International Monetary Fund, GSAM calculations

fundamental factors driving economic growth, namely labor, investment and productivity, and thus are meant to reflect potential long-term growth trends. These trends can and do diverge from actual growth rates due to cyclical fluctuations.

Exhibit 24: Closing the credit gap for women-owned SMEs could drive income per capita in the BRICs and N-11 12% higher on average, relative to the baseline scenario, by 2030



Source: IFC Enterprise Finance Gap Database, World Bank, International Monetary Fund, GSAM calculations

VI. Closing the credit gap: Solutions and investment implications

Closing the credit gap in the women-led SME sector should not only boost long-term macroeconomic performance, particularly in low-income countries, but also bring benefits associated with higher gender equality and social cohesion. Programs to help women entrepreneurs grow their businesses through education and training have emerged recently around the world. Other programs have been developed with the specific aim of providing financing for SMEs, but these tend to be regional and not focused on women-owners.

Very few initiatives have combined both dimensions – providing financing in the SME sector with a specific gender dimension (see Appendix 2 for a brief summary of the major initiatives). Most that have combined both dimensions target the micro segment, rather than SMEs. While microfinance institutions have been quite successful at providing unserved and under-served women entrepreneurs with access to short-term loans to meet their working capital needs, microfinance has been less successful at developing products that meet women’s investment capital needs. The scale of microfinance is usually too small – by definition – to support the long-term growth and expansion of women-owned businesses and to help them migrate into the SME segment. The few programs focusing on women-owned SMEs have tended to be of limited scale and have lacked capacity-building support to ensure sustainability.

The IFC has been the leader in this space to date. Its goal is to ensure that in the coming years 25% of its own loans provided to SMEs through financial intermediaries go to women-owned businesses (IFC, 2013d). The IFC’s Banking on Women program brings together financial institutions and women entrepreneurs, using its investment capital to help institutions expand their portfolios while helping entrepreneurs strengthen their businesses with new forms of financing. Community banks, cooperatives and chambers of commerce are used as non-traditional models for increasing the reach to women-owned SMEs in need of finance.

Women-specific solutions should tackle both demand and supply

As discussed in Section IV, there are significant differences in the ways women and men SME owners approach, access and use credit to start and grow their businesses. In light of these differences, it should be a priority to incorporate women-specific solutions into the frameworks for improving credit access in the SME sector. Areas of potential improvement on the **supply side** include:

- **More suitable credit terms.** Offering loans with terms that are more aligned with the actual risk that women represent, rather than perceived risk, would make bank credit more attractive to female business owners. Offering alternative options to fulfil collateral requirements, as well as longer-term loans for investment purposes rather than shorter-term loans to manage working capital, could also prove beneficial. Such changes may help break out sector clustering by helping women start businesses in more capital-intensive areas such as industry and manufacturing, resulting in more equal business ownership by gender across different SME segments. It would also help women grow their businesses, increasing the proportion of women owning medium-sized enterprises relative to smaller enterprises.
- **Better assessment of credit risk.** Contrary to (some) common belief, the experience of lending to women in developing countries through microfinance and other more traditional methods suggests that women are reliable borrowers with strong repayment records (Powers, Magnoni, 2010; D'Espallier et al., 2009).¹⁸ As such, means to assess the credit risk of women accurately at the individual level are needed to ensure that misconceptions do not unnecessarily impede access to loans for women-owned SMEs. New credit scoring models, based on psychometric testing, are being developed and tested by the Multilateral Investment Fund (MIF) (a member of the IDB Group) and Harvard's Entrepreneurial Finance Lab.¹⁹ Evidence from Latin America and Africa suggests that the new models generate significantly fewer rejections of creditworthy female business owners than traditional models that rely on credit history and availability of collateral (Lee, 2013). The creditworthiness and "investability" of women-owned SMEs remains a significantly under-researched area for now, but more gender-specific lending initiatives should be helpful in building up evidence.
- **Improvements to financial infrastructure.** Financial infrastructure encompasses the institutions, physical structures, technology and networks that allow for the effective exchange and holding of information and capital. It includes such things as collateral registries, credit bureaus and payment and settlement systems. Enhancing financial infrastructure in developing countries would make financial services more accessible to women. For example, more accurate and comprehensive collection and dissemination of data on the default rates for female borrowers may help dispel the misperception that women present a higher credit risk than men.
- **Other innovative financial offerings.** In addition to credit, other financial offerings targeted at the female market may prove useful in helping women in

¹⁸ D'Espallier et al. (2009) used a large global dataset covering 350 microfinance institutions in 70 countries to show that having more women clients is associated with lower portfolio-at-risk, lower write-offs and lower credit-loss provisions. Although this study focused on microfinance rather than lending to SMEs, it provided important evidence on gender differences related to credit risk.

¹⁹ The new models of financial risk assessment are based on psychometric testing, an automated screening tool that takes into account entrepreneurs' honesty, intelligence and personality, among other personal qualities, to gauge their ability and willingness to repay loans. These models go beyond the traditional methods that focus on collateral and future cash flows to assess financial risk.

developing countries grow their businesses and support loans (Powers, Magnoni, 2010). For example, contractual savings would assist women in accumulating capital to invest in their businesses, improving growth prospects. It would also provide a buffer in the event of an unexpected costly event, such as an illness in the family, thereby decreasing the possibility of having to redirect business funds or default on loan payments. Another example is tailored insurance, which would provide downside protection for women-owned SMEs. Both of these examples may serve to alleviate risk aversion for female business owners and the financial institutions serving them, increasing the likelihood that credit for women-owned SMEs will be both demanded and supplied.

- **Profitable lending models for women-owned SMEs.** The loan market for women-owned SMEs in developing countries is relatively untapped and represents a substantial opportunity for financial institutions and other providers. According to the IFC, female entrepreneurs only account for between 2% and 10% of commercial bank finance, and there is significant unmet demand for credit from women-owned SMEs (IFC, 2013 c; IFC 2013, d). Aside from anecdotal evidence that women may be better-performing borrowers than men, they may also be more loyal customers once they have secured and purchased multiple products from banks. Identifying and implementing profitable SME financing models for the female market would be mutually beneficial both for financial institutions providing loans and for the enterprises being served. It would also encourage other participants to enter the market. It has been suggested that successful models combine access to finance with business education and training (GPII and IFC, 2011). Further research in this area will be useful.

More generally, as governments and international organizations continue to place more emphasis on investing in women's and girls' education, both the quality of the labor force and rates of female workforce participation should rise, easing many issues on the **demand side**, particularly the constraints related to knowledge and perception. However, more targeted approaches, mainly via specific educational programs and courses, to address specific constraints for women who run SME businesses remain crucial:

- **Addressing perceptions and risk aversion.** Education to help women better understand risk/return trade-offs may encourage movement into more profitable sectors, increase risk tolerance for credit and improve decision-making. In addition to education, offering loans with more favorable terms for women-owned SMEs may encourage those who otherwise would not seek credit to apply for credit.
- **Demystification of credit and the application process.** Lack of knowledge and/or misperceptions about the application process and success rates may deter women from applying for financing. Training on the credit application process may help alleviate such concerns. Additionally, business and management training, especially in developing business plans, may help women be more confident in their prospects for receiving credit, as well as improve the likelihood that financial institutions will approve them for loans. At an even more fundamental level, some women do not apply for loans because they do not understand credit or believe it will not help their business. Education on the benefits of credit and increased transparency into the process of receiving and servicing loans may allay some of these concerns.
- **Bringing informal enterprises into the formal sector.** Encouraging women in the informal sector to bring their businesses into the formal sector, by registering with government and tax authorities, would help them to access formal credit markets. Potential ways to do this include educating women on the benefits of entering the formal sector, making the government and tax registration processes simpler and more accommodating, and reducing the perceived burdens of

transitioning to the formal sector, such as complicated ongoing tax filing requirements. This would boost growth by benefiting all SMEs, not just those owned by women.

Strengthening institutions related to women's legal parity

While improving access to finance is crucial, other initiatives addressing a broader set of constraints, as discussed in Section IV, are also important for creating a more conducive business environment for female entrepreneurs. Specific policies for women-owned businesses should focus on improving their growth potential and profitability to allow women to reinvest in their households and their businesses, contributing to broader economic growth. This includes further development and provision of business and technical training, as well as mentoring for female entrepreneurs. Some studies show that programs that combine management training with financial support yield better performance in firms in developing countries (Cho, Honorati, 2013). More should also be done to address social conventions and gender-based perceptions of family responsibilities to encourage a more equitable division of household responsibilities.

If the overall investment climate is not conducive to private-sector growth, however, targeted training programs, credit provision and other initiatives in the women-owned SME space are less likely to be effective. Stronger institutions overall, particularly those related to women's legal parity, including well-defined property rights and rule of law, are key to improving growth outcomes in the developing world. Easing financing constraints for SMEs and increasing their access to formal sources of external finance can in turn contribute to financial and institutional development.

A competitive business environment facilitates the entry, exit and growth of firms, and is essential for development. Access to finance is an important component of a competitive business environment. Thus, a focus on improving institutions and the overall business environment is instrumental to reducing the growth constraints that SMEs face and facilitating their contribution to economic growth. This is more important than simply trying to promote a large SME sector, which might be characterized by a large number of stagnant firms.

Structural reform aimed at building more robust institutions is an essential component of boosting productivity in developing countries, which in turn is crucial for achieving their growth potential. This should become increasingly important in an environment of higher global real interest rates and the less supportive backdrop for developing economies that we expect over the next decade and beyond.

Implications for investors

Given the centrality of the EM growth trajectory to global growth outcomes, the economic enfranchisement of women entrepreneurs should matter to asset owners globally. Indeed, while governments and NGOs clearly have an important role to play in directing more capital to women-owned SMEs, asset owners can also play a catalyzing role.

We see a number of opportunities to facilitate such an investment. First, investors can use the economic empowerment of women as a lens through which to view individual company investments. This could be relevant for banks and non-banks, as well as for EM- and DM-listed corporates. Appendix 2 offers some examples of corporate programs involved in this area.

Additionally, from a financial institutions perspective, asset owners seeking to promote female economic empowerment should focus on banks, particularly at the local and regional level, that use their investment capital to expand their loan portfolio profitably

while helping women entrepreneurs access finance and strengthen their businesses. Of course, one of the reasons why banks have empirically been reluctant to lend to women is that they may be perceived to be a higher credit risk. There are a number of gender-neutral funds at the country and regional level that pool capital to provide direct or counter-guarantees to intermediaries (local banks) that ultimately disburse loans to credit-worthy, but potentially overlooked, enterprises. A fund taking a similar approach with a gender lens may appeal to asset owners who want to promote female entrepreneurship. Private equity investments in female-owned businesses, either through direct stakes or more practically through a fund structure, can offer another source of critical financing.

Ultimately, the credit gap is too large to be closed by any one initiative or organization acting alone. It can best be addressed through the collective understanding among the private, public and not-for-profit sectors that it is possible to drive better growth outcomes by bolstering the financial and human capital of women-owned SMEs.

VII. Appendices

Appendix 1: Methodology, data and limitations

To estimate the macroeconomic link between SME credit and economic growth, we look at how SME credit affects income per capita growth across countries, taking into account their levels of development and the overall institutional environment. We use data on outstanding loans to SMEs from the IMF's Financial Access Survey database²⁰ to gauge the impact of credit on economic growth, namely income per capita growth. We estimate two regressions that look at the relationship between outstanding loans to SMEs from commercial banks as a share of GDP and the resulting growth in income per capita across 47 countries from 2004 to 2012.²¹ Table A1.1 shows the estimation results for the two slightly different specifications (Equations 1 and 2).

Table A1.1: Regression results

	Equation 1	Equation 2
Dependent variable		
Real income per capita growth		
Independent variables		
Loans to SMEs	0.86**	0.70*
log(income)	-20.58***	-19.51***
(loans to SMEs)*log(income)	-0.12**	-0.19***
(loans to SMEs)*GES		0.12*
R-Squared (adjusted)	0.35	0.35

Note: * indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

Source: IFC Enterprise Finance Gap Database, World Bank, International Monetary Fund, GSAM calculations

Drawing from the extensive growth literature that highlights the differences in starting points between countries as an important factor explaining the divergence in growth outcomes, we control for initial income per capita (which refers to the previous year), as well as fixed country effects, in both regressions. The addition of the interaction variable between the initial income and credit as a share of GDP is aimed at exploring nonlinearities in this link, i.e., it tests whether the effect of SME credit on economic growth is varied across different income levels. Our estimation confirms the hypothesis: the negative coefficient on this variable in both regressions suggests that as income rises, the impact of increasing SME credit declines.

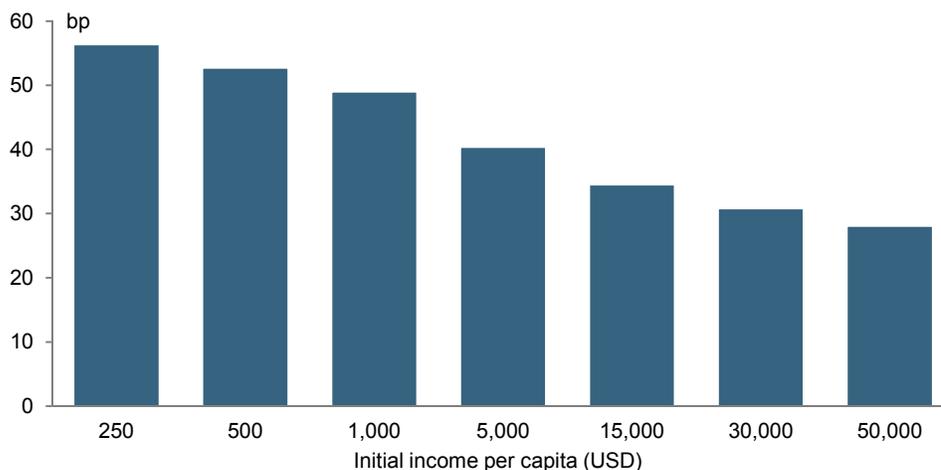
²⁰ The FAS is the sole source of global supply-side data on financial inclusion, encompassing internationally comparable basic indicators of financial access and usage. This unique global database provides data on SME credit across countries and over time, offering a rare opportunity for meaningful cross-country analysis in this area of research. However, this database does not split the data by gender. As meaningful data on credit to women-owned SMEs do not exist, we use total credit numbers for both women- and men-owned SMEs in our estimation. This assumes that the impact of SME credit does not depend on gender. See Section V for further discussion.

²¹ The choice of the sample and time period is determined by data availability. The FAS database covers 2004 to 2012. Only around 50 countries out of 189 have data on outstanding loans to SMEs from commercial banks for varied years. As a result, the panel is unbalanced, with 278 observations in total. Both equations are estimated using country fixed effects. Adding time fixed effects yields similar results.

Equation 1 shows a strong relationship between SME credit and income per capita growth – implying that a growth boost to income per capita from a 100bp increase in the SME credit-to-GDP ratio would generally be in the range of 30-60bp, depending on an individual country’s income level. We find that the impact of increasing SME credit is more dramatic for less wealthy countries. As Exhibit A1.1 illustrates, for countries with annual incomes of \$500 per capita (such as Tanzania or Chad), a 100bp increase in the SME credit-to-GDP ratio could permanently boost annual GDP per capita growth by 53bp. This effect would be slightly smaller for countries with income of \$1,000 per capita, such as Nigeria, India or Bangladesh, just below 50bp. The \$5-15k income bracket would see a boost of around 35-40bp, in countries such as Brazil, Russia, Mexico and Turkey. Exhibit A1.2 shows the respective income boost for the BRICs and N-11 countries.

Exhibit A1.1: Income per capita growth boost from raising the SME credit-to-GDP ratio varies across income levels

Income per capita growth boost from a 100bp increase in SME credit-to-GDP ratio (accounting for initial income per capita, Equation 1)

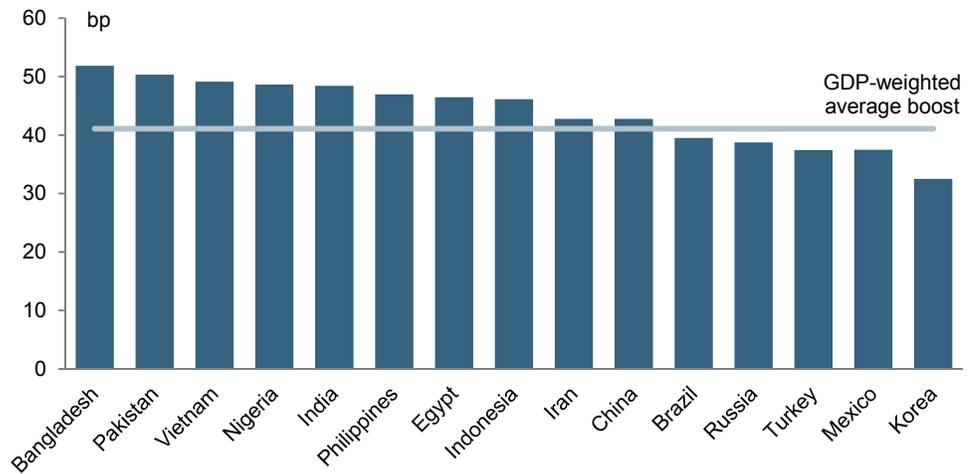


Source: IFC Enterprise Finance Gap Database, World Bank, International Monetary Fund, GSAM calculations

As discussed, the overall business environment plays an important role in the link between SMEs and growth. To control for this interaction, the second regression (Equation 2) is augmented by the interaction variable between SME credit and the GES. The GES is our proprietary measure of growth conditions across countries designed to capture important features of the economic, political and institutional environment that affect productivity performance and growth. The positive coefficient on this variable in Equation 2 suggests that the effect of SME credit on growth also depends on the institutional backdrop – it is stronger where institutions are more robust and smaller where institutions are weak. This is consistent with previous findings on this topic.

Exhibit A1.2: Income per capita growth boost from raising SME credit is stronger for less wealthy countries

Income per capita growth boost from a 100bp increase in SME credit-to-GDP ratio (accounting for initial income per capita, Equation 1)



Source: IFC Enterprise Finance Gap Database, World Bank, International Monetary Fund, GSAM calculations

Table A1.2 illustrates the sensitivity metric – a boost to income growth from a 100bp increase in the SME credit-to-GDP ratio, for a given level of income. The first column shows the results from Equation 1, i.e., the estimation controlling for initial income. The subsequent columns show the results from Equation 2, which also controls for the growth environment, i.e., across different GES levels. It is clear that improvements in growth conditions (proxied by the GES) amplify the effect of SME loans on income per capita growth, and vice versa. Exhibit A1.3 shows the respective income boost for the BRICs and N-11 countries.

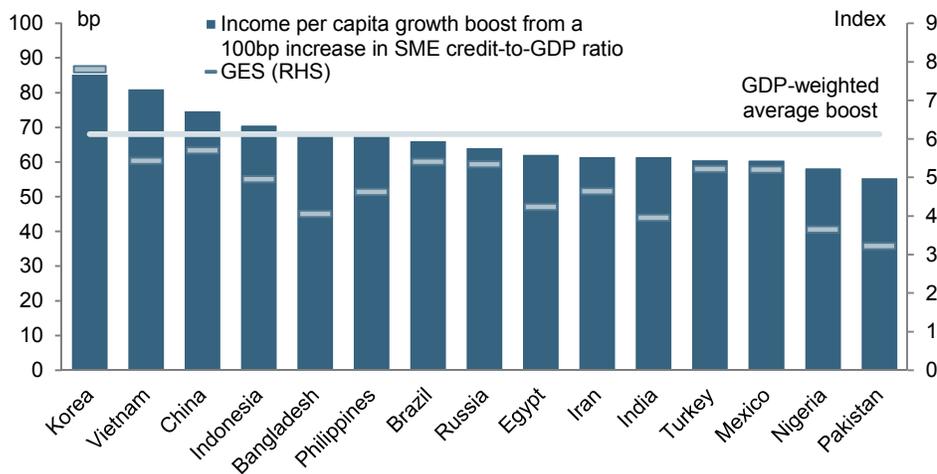
Table A1.2: Sensitivity of income per capita growth boost (bp) from raising the SME credit-to-GDP ratio by 100bp to initial income and GES

	Equation 1	Equation 2 (per given GES)									
		1	2	3	4	5	6	7	8	9	10
Initial income per capita (USD)											
250	56	37	49	62	74	87	99	112	124	137	149
500	53	31	44	56	69	81	94	106	119	131	143
1000	49	26	38	51	63	75	88	100	113	125	138
5000	40	13	25	37	50	62	75	87	100	112	125
15000	35	4	16	28	41	53	66	78	91	103	116
30000	31	-2	10	23	35	48	60	73	85	98	110
50000	28	-6	6	19	31	44	56	68	81	93	106

Source: IFC Enterprise Finance Gap Database, World Bank, International Monetary Fund, GSAM calculations

Exhibit A1.3: Institutional environment is important in strengthening the link between SME credit and economic growth

Income per capita growth boost from a 100bp increase in SME credit-to-GDP ratio (accounting for initial income per capita and GES, Equation 2)



Source: IFC Enterprise Finance Gap Database, World Bank, International Monetary Fund, GSAM calculations

We encountered several data and methodology limitations in our analysis:

Data availability and reliability: A significant challenge across development economics research is data availability and reliability. Data for developing countries often have a short history, are not consistently compiled across countries, are based on assumptions or are unavailable. Specific to this research, data on SMEs disaggregated by gender are limited. At times, we had to use proxies (e.g., female self-employment as a proxy for SME contribution to female employment) and data not disaggregated by gender (e.g., loans to SMEs). Better data availability and reliability are needed to continue meaningful progress on the topic. The IFC’s initiative to improve data collection and dissemination in the field will prove valuable for future research.

Caveats to regression analysis: To assess the impact of SME credit on growth, we used a regression model that has various caveats. While we do show that the impact of SME credit on growth depends on the overall business environment, we do not attempt to tackle the endogeneity issue explicitly. In addition, we only focus on the causal effect of SME credit on growth, although it is plausible that the direction of causation also runs the other way. For examples of related studies, see Ayyagari et al. (2012).

Drawbacks to program-specific assessments: In our research, we used as much macro and cross-country evidence as possible. We supplemented this with evidence from micro-studies and specific program assessments. While useful, assessments of implemented programs often have shortcomings, including lack of control groups and the fact that participants are not chosen at random. Moreover, the global nature of this research presents challenges in that cultural, institutional and developmental factors vary greatly across countries. This makes it hard to apply conclusions from regional studies more broadly.

Appendix 2: Selected initiatives targeting women in small business²²

Training female SME-owners and entrepreneurs

- **IFC:** Through its relationships with an extensive network of financial institutions in developing countries, the IFC provides business training to female entrepreneurs. Its Business Edge program trains owners, managers and staff of SMEs. Since the IFC began using Business Edge, one third of those trained have been women.
- **International Labor Organization – Women’s Entrepreneurship Development (WED):** Launched in 2002, WED aims to support women entrepreneurs in starting, strengthening and expanding their enterprises in developing countries. So far, over 60,000 women have been reached through the program.
- **Vital Voices and WEConnect Initiative:** Vital Voices and WEConnect are collaborating with over 20 corporations, NGOs and international organizations on a five-year initiative to train 15,000 women business owners and spend \$1.5 billion with women-owned businesses in developing countries by 2018. Vital Voices and WEConnect are two prominent NGOs committed to supporting the economic potential of women; this initiative was announced in 2012.
- **Goldman Sachs – 10,000 Women initiative:** Launched in 2008, the \$100 million initiative aims to provide business education, networking and mentoring opportunities to 10,000 female entrepreneurs in developing regions. The 10,000th participant was enrolled in 2013. See Box 6 for additional detail on this initiative.
- **The Cherie Blair Foundation for Women:** Founded in 2008 and partnering with local institutions, the foundation provides business training, technology and networking opportunities, and enhances access to capital and markets, for female entrepreneurs in developing countries.
- **Walmart – Women’s Economic Empowerment Initiative:** Announced in 2011, Walmart’s initiative aims to provide skills to women to help them scale their businesses and bring them into Walmart’s supply chain. Other components of the initiative include increasing the value of products sourced from women and training to empower women in the labor market.

Access to credit for non-gender specific SMEs in developing countries

- **European Bank for Reconstruction and Development (EBRD):** Since it was established in 1991, the EBRD has provided more than €14 billion in support to MSMEs in 19 developing countries in Central Asia and Eastern Europe. Support has been provided through credit lines, equity funds, technical assistance and microfinance.
- **Inter-American Development Bank (IDB):** The IDB supports SMEs in the Latin American and Caribbean region through the Inter-American Investment Corporation (IIC), a member of the IDB group focused on private-sector development and, in particular, SMEs. Since its inception in 1984, the IIC has approved almost 800 direct loans to SMEs and financial intermediaries in the region, representing a total of \$4.8 billion, with an additional \$2.8 billion deployed through co-financing and syndication.

²² Using latest information from publicly available sources.

- **USAID Development Credit Authority (DCA):** Established in 1999, the USAID DCA provides partial credit guarantees to financial institutions in developing countries to encourage lending to under-served but creditworthy borrowers. SMEs are a focus of the DCA and have accounted for about one third of the more than \$3 billion in credit enabled through the initiative. Defaults have been less than 2% of overall credit extended to SMEs since inception of the program.
- **IFC – SME Banking:** The IFC has been a leader in improving access to credit for SMEs worldwide by providing loans, revolving credit lines and other facilities to financial institutions that transact with SMEs. The IFC also provides technical assistance to financial institutions serving SMEs.
- **Asian Development Bank (AsDB):** The AsDB promotes SMEs by providing assistance for entrepreneurs, and through direct and indirect financing. It also seeks to improve the business environment for SMEs through high-level reforms. In January 2014, the AsDB announced plans to join Standard Chartered to fund supply-chain financing for SMEs with an \$800 million commitment. AsDB and Standard Chartered will share the risk for the loans.
- **African Development Bank (AfDB):** The AfDB promotes SMEs by providing assistance for entrepreneurs and through direct and indirect financing. It also seeks to improve the business environment for SMEs by such things as improving infrastructure. Two prominent programs focused on access to finance for SMEs run by the AfDB are highlighted below:
 - **African Guarantee Fund (AGF) for SMEs:** AGF provides partial credit guarantees to financial institutions to encourage them to lend to SMEs in Africa. Support is also provided to financial institutions to help them improve their ability to appraise and manage SME portfolios, as well as to SMEs themselves. AGF was established in 2012 and is currently funded by the AfDB and the governments of Denmark and Spain. The fund is currently \$50 million and is expected to reach around \$500 million over the next 3-5 years. With this capital, AGF is expected to enable \$2 billion of loans to 10,000 African SMEs. It will also provide capacity development assistance.
 - **AfDB – Africa SME Program:** Approved in July 2013, the Africa SME Program is a four-year initiative aimed at promoting SMEs in Africa. The program, which is to be funded with \$125 million, will provide lines of credit to participating financial institutions to lend to SMEs. An additional \$4 million, provided by the Fund for African Private Sector Assistance, is available for technical assistance to financial institutions and their SME clients.

Access to credit for women-owned SMEs in developing countries

- **IFC – Banking on Women:** Through its Banking on Women program, the IFC partners with global, regional, and local financial institutions experienced in SME lending to expand their loan portfolios to women-owned SMEs in developing countries. In late 2013, the program issued the first bonds to be sold to retail and institutional investors, aimed at improving access to credit for female entrepreneurs. The IFC also provides training for financial institutions on how to reach more women entrepreneurs, as well as for women entrepreneurs themselves on business planning, financial literacy and how to apply for credit. Since inception, the initiative has supported more than \$700 million in investments to women-owned SMEs in developing countries.

- **African Development Bank (AfDB) – African Women in Business Initiative (AWIB):** The AWIB initiative aims to promote female entrepreneurs, in particular those owning SMEs, through better access to finance. It does this by establishing more gender-equitable business environments, providing assistance to help women grow their businesses and developing financial products suited to women. The initiative also promotes networking opportunities and financial education for women.
- **African Development Bank (AfDB) and International Labour Organisation (ILO) – Growth Oriented Women Entrepreneurs (GOWE):** GOWE is an initiative run by the AfDB and the ILO to facilitate access to finance for female entrepreneurs in Africa. It recently concluded a credit guarantee program to reduce collateral requirement and bank risk, which was supported by training for local business development service providers to reach women more effectively. It continues to offer business mentorship to women entrepreneurs.
- **European Bank for Reconstruction and Development (EBRD) – Women in Business:** WiB seeks to support female entrepreneurs through business training, mentoring and improving access to finance.
- **Global Banking Alliance for Women (GBA):** GBA is a group of 39 institutions focused on providing education, training and mentoring, as well as access to capital and markets to women entrepreneurs. It also seeks to provide a better understanding of the female market to partnering institutions. GBA currently operates in 135 countries.
- **Inter-American Development Bank (IDB) - Women Entrepreneurship Banking (WeB):** The WeB initiative aims to provide incentives for financial institutions in Latin America to lend to women-owned SMEs. It offers two types of incentives: 1) \$5 million for technical assistance and training on effective lending models for women-owned SMEs; and 2) up to \$50 million in credit lines, partial credit guarantees and risk-sharing mechanisms to improve access to credit for women-owned SMEs.
- **Oxfam Enterprise Development Program:** Through the Enterprise Development Program, Oxfam provides loans, grants and bank guarantees, as well as business training, to SMEs in developing countries. The program focuses on women in the agriculture industry. Since launch in 2008, the initiative has supported 17 enterprises in 15 countries. The program is seeking to raise around £5 million.
- **Coca Cola Company – 5by20 Women’s Economic Empowerment initiative:** Announced in 2010, the initiative aims to assist 5 million women in Coca-Cola’s supply chain to start and expand small businesses by 2020. The Coca Cola Company will provide business training, financial services, mentoring and networking opportunities. By the end of 2012, about 300,000 women had been assisted through the initiative. The Coca Cola Company has partnered with the IFC to develop a \$100 million, three-year initiative to provide access to finance for female entrepreneurs in Europe, Asia and Africa.

■ **Microfinance:**

- **Overall:** Women have been at the center of microfinance, with many leading microfinance institutions focused on serving women. Women currently represent the vast majority of borrowers from prominent microfinance institutions, such as Grameen Bank (over 95%), ASA (around 90%) and ACCION (around 75%).
- **Women’s World Banking (WWB):** WWB works with 39 microfinance institutions, focused on women, from 28 countries to develop financial products designed for women. It has a loan portfolio of approximately \$7 billion and serves 14 million female clients.

Box 6: Goldman Sachs 10,000 Women

Launched in 2008, Goldman Sachs 10,000 Women is a five-year, \$100 million initiative that aims to provide business and management education, mentoring and networking opportunities to 10,000 under-served female entrepreneurs in developing countries. Funded by Goldman Sachs and the Goldman Sachs Foundation, the program is offered through a global network of nearly 90 academic and non-profit partners.

The initiative was developed based on research by Goldman Sachs, the World Bank and other sources that suggested that investing in the education and empowerment of women is one of the most effective means to promote long-term economic growth. In addition to creating a larger and more productive workforce, educating women leads to healthier and better educated future generations as women reinvest earnings in the well-being of their families and communities.

The program targeted under-served female entrepreneurs in developing countries. Admission was highly competitive with a global acceptance rate below 20%. Participants from more than 40 countries owned businesses with annual sales ranging from \$12,000 to more than \$2 million at program inception. They had an average of five years of business experience across 15 sectors (concentrated in “traditional” female sectors such as education, home and personal services, food and beverages, and textiles and clothing). By the end of 2013, the initiative had enrolled its 10,000th woman.

The Goldman Sachs Foundation partnered with local academic institutions and more than 30 leading global businesses schools to develop bespoke five-week to six-month curricula to include education in such topics as accounting, strategy and marketing. Education was provided in collaboration with partner institutions around the world, to ensure relevance to the markets in which the women operate and the development of local capacity. The provision of mentoring and networking opportunities was an integral part of the initiative, and support to participants is provided post-graduation.

VIII: Bibliography

- Ardic O., Mylenko N., Saltane V. (2011) 'Small and Medium Enterprises: A Cross-Country Analysis with a New Data Set', World Bank
- Ayyagari, M., Beck, T., Demirgüç-Kunt A. (2003) 'Small and Medium Enterprises Across the Globe: A New Database', World Bank
- Ayyagari M., Demirgüç-Kunt A., Maksimovic V. (2011) 'Small vs. Young Firms Across the World: Contribution to Employment, Job Creation, and Growth', World Bank
- Ayyagari M., Demirgüç-Kunt A., Maksimovic V. (2012) 'Financing of Firms in Developing Countries: Lessons from Research', World Bank
- Beck, T., Demirgüç-Kunt A. (2006) 'Small and Medium-Size Enterprises: Access to Finance as a Growth Constraint', World Bank
- Beck T., Demirgüç-Kunt A., Levine R. (2005) 'SMEs, Growth, and Poverty', National Bureau of Economic Research
- Bellucci A., Borisov A., Zazzaro A. (2009) 'Does Gender Matter in Bank-Firm Relationships? Evidence from Small Business Lending', Money & Finance Research Group
- Briggs, M., Mayer, T., Pick A. (2010) 'Credit and Economic Recovery: Demystifying Phoenix Miracles', available at SSRN
- Causer P., Park N. (2009) 'Women in Business', Office for National Statistics, Government of the United Kingdom
- Chavis, L., Klapper, L., Love, I. (2010) 'International Differences in Entrepreneurial Finance', Enterprise Surveys, World Bank Group
- Cho Y., Honorati M. (2013) 'Entrepreneurship Programs in Developing Countries: A Meta Regression Analysis', Human Development Network, Social Protection and Labor Unit, World Bank
- Dalberg Global Development Advisors (2011) 'Report on Support to SMEs in Developing Countries through Financial Intermediaries'
- Demirgüç-Kunt A., Klapper L. (2012) 'Measuring Financial Inclusion: The Global Findex Database', World Bank (database)
- D'Espallier B., Guérin I., Mersland R. (2009) 'Women and Repayment in Microfinance'
- Dinh H., Mavridis D, Nguyen H. (2010) 'The Binding Constraint on Firms' Growth in Developing Countries', World Bank Policy Research Working Paper 5485.
- Economist Intelligence Unit (2012) 'Women's Economic Opportunity 2012' (database)
- Economist Intelligence Unit (2012) 'Women's Economic Opportunity 2012: A Global Index and Ranking from the Economist Intelligence Unit'
- Economist Intelligence Unit (2013) 'Women's Entrepreneurial Venture Scope 2013'
- Edinburgh Group (2012) 'Growing the Global Economy through SMEs'
- European Central Bank (2013) 'Survey on the Access to Finance of Small and Medium-Sized Enterprises in the Euro Area'
- Global Entrepreneurship and Development Institute (2013) 'The Gender Global Entrepreneurship and Development Index'
- Global Partnership for Financial Inclusion (GPII) and International Finance Corporation (2011) 'Strengthening Access to Finance for Women-Owned SMEs in Developing Countries'

- International Finance Corporation (2014) 'Women, Business and the Law 2014: Removing Restrictions to Enhance Gender Equality'
- International Finance Corporation (2013a) 'Access to Credit Among Micro, Small, And Medium Enterprises'
- International Finance Corporation (2013b) 'Banking on Women: Changing the Face of the Global Economy'
- International Finance Corporation (2013c) 'Closing the Credit Gap for Formal and Informal Micro, Small, and Medium Enterprises'
- International Finance Corporation (2013d) 'IFC Jobs Study: Assessing Private Sector Contributions to Job Creation and Poverty Reduction'
- International Finance Corporation (2013e) 'IFC Launches First Bond Supporting Women Entrepreneurs in Emerging Markets'
- International Finance Corporation (2013f) 'International Finance Corporation Enterprise Finance Gap Database' (database)
- International Finance Corporation (2013g) 'Small and Medium Enterprise Finance: New Findings, Trends and G-20/Global Partnership for Financial Inclusion Progress'
- International Finance Corporation (2012a) 'Women, Business and the Law: Removing barriers to economic inclusion'
- International Finance Corporation (2012b) 'Women and Business'
- International Finance Corporation (2010) 'The SME Banking Knowledge Guide'
- International Monetary Fund (2013) 'Financial Access Survey' (database)
- Japan Ministry of Economy (2010) 'Report on Female Entrepreneurs'
- Kelley D., Brush C., Greene P., and Litovsky Y. (2012) 'Global Entrepreneurship Monitor 2012 Women's Report', Global Entrepreneurship Monitor
- Lawson S. (2008) 'Women Hold Up Half the Sky', Goldman Sachs Economic Research
- Lawson S., Gilman, D. (2009) 'The Power of the Purse: Gender Equality and Middle-Class Spending', Goldman Sachs Global Markets Institute
- Lee, N. (2013) 'Growth in Women's Businesses: The Role of Finance', Consultative Group to Assist the Poor and Inter-American Development Bank
- Leo B. (2011) 'New SME Financial Access Initiatives: Private Foundations' Path to Donor Partnerships', Centre for Global Development
- Matsui, K., Suzuki, H., Suwabe, T., Ushio, Y., Nakata, M., Iwao, Y. (2005) 'Womonomics', Goldman Sachs Global Strategy Research
- Organisation for Economic Co-operation and Development (2013) 'Financing SMEs and Entrepreneurs 2013: An OECD Scoreboard'
- Organisation for Economic Co-operation and Development (2009) 'The Impact of the Global Crisis on SME and Entrepreneurship Financing and Policy Responses'
- Powers J., Magnoni B. (2010) 'A Business to Call Her Own: Identifying, Analyzing and Overcoming Constraints to Women's Small Businesses in Latin America and the Caribbean', Multilateral Investment Group
- Queenan, J., Allen, J., Behringer, C. (2013) 'The Global Push to Unlock the Potential of Women Entrepreneurs: Investing in women boosts prosperity, benefiting their families and communities', The Bridgespan Group

- Sabarwal S., Sinha N., Buvinic M. (2010) 'How Do Women Weather Economic Shocks? A Review of the Evidence', World Bank
- Schiff H., Fries R., Chambers T. (2013) 'Beyond the Threshold: Investing in Women led Small & Growing Businesses', Value for Women
- Scott-Gall, H., Manohar, S. (2013) 'Fortnightly Thoughts. Women's Work: Driving the Economy', Goldman Sachs Global Investment Research
- Scott - Jackson W., Kariem B., Porteous A., Harb A. (2010) 'Maximising Women's participation in the GCC workforce', Oxford Strategic Consulting
- Shinozaki, S. (2012) 'A New Regime of SME Finance in Emerging Asia: Empowering Growth-Oriented SMEs to Build Resilient National Economies', Asian Development Bank
- Stein P., Goland T., Schiff R. (2010) 'Two Trillion and Counting', International Finance Corporation and McKinsey & Company
- Stein P., Ardic O., Hommes M. (2013) 'Closing the Credit Gap for Formal and Informal Micro, Small, and Medium Enterprises', International Finance Corporation
- Van der Schans, D. (2012) 'SME Access to External Finance', Department for Business Innovation & Skills, Government of the United Kingdom
- Vital Voices Global Partnership, MENA Businesswomen's Network, and International Finance Corporation (2013) 'Ready for Growth: Solutions to Increase Access to Finance for Women-Owned Businesses in the Middle East and North Africa'
- Women's World Banking (2009) 'Women's World Banking White Paper on Providing Women Access to Financial Services in Response to Proposals by the G-20 Financial Inclusion Expert Group', Excerpt from the G-20 Leaders' Statement, Pittsburgh Summit
- World Bank (2013) 'World Development Report 2013: Jobs'
- World Bank (2012) 'World Development Report 2012: Gender Equality and Development'
- Xavier S., Kelley D., Kew J., Herrington M., Vorderwülbecke A. (2012) 'Global Entrepreneurship Monitor: 2012 Global Report', Global Entrepreneurship Monitor

Disclosures

This report has been prepared by the Global Markets Institute, the public policy research unit of the Global Investment Research Division of The Goldman Sachs Group, Inc. ("Goldman Sachs"), with the assistance of Goldman Sachs Asset Management ("GSAM"). As public policy research, this report, while in preparation, was discussed with and reviewed by persons outside of the Global Investment Research Division, and parts of the paper were written by employees of GSAM.

While this report may discuss implications of legislative, regulatory and economic policy developments for industry sectors, it does not attempt to distinguish among the prospects or performance of, or provide analysis of, individual companies and does not recommend any individual security or an investment in any individual company and should not be relied upon in making investment decisions with respect to individual companies or securities. Views and opinions expressed in the report do not constitute a recommendation to buy, sell, or hold any security and should not be construed as investment advice.

Distributing entities

This research is disseminated in Australia by Goldman Sachs Australia Pty Ltd (ABN 21 006 797 897); in Brazil by Goldman Sachs do Brasil Corretora de Títulos e Valores Mobiliários S.A. ; in Canada by Goldman, Sachs & Co. regarding Canadian equities and by Goldman, Sachs & Co. (all other research); in Hong Kong by Goldman Sachs (Asia) L.L.C.; in India by Goldman Sachs (India) Securities Private Ltd.; in Japan by Goldman Sachs Japan Co., Ltd.; in the Republic of Korea by Goldman Sachs (Asia) L.L.C., Seoul Branch; in New Zealand by Goldman Sachs New Zealand Limited; in Russia by OOO Goldman Sachs; in Singapore by Goldman Sachs (Singapore) Pte. (Company Number: 198602165W); and in the United States of America by Goldman, Sachs & Co. Goldman Sachs International has approved this research in connection with its distribution in the United Kingdom and European Union.

European Union: Goldman Sachs International, authorized and regulated by the Financial Services Authority, has approved this research in connection with its distribution in the European Union and United Kingdom; Goldman Sachs AG and Goldman Sachs International Zweigniederlassung Frankfurt, regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht, may also distribute research in Germany.

General disclosures in addition to specific disclosures required by certain jurisdictions

Goldman Sachs conducts a global full-service, integrated investment banking, investment management and brokerage business. It has investment banking and other business relationships with governments and companies around the world, and publishes equity, fixed income, commodities and economic research about, and with implications for, those governments and companies that may be inconsistent with the views expressed in this report. In addition, its trading and investment businesses and asset management operations may take positions and make decisions without regard to the views expressed in this report.

© 2014 Goldman Sachs.

No part of this material may be (i) copied, photocopied or duplicated in any form by any means or (ii) redistributed without the prior written consent of The Goldman Sachs Group, Inc.

