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GEM

Global Entrepreneurship Monitor

Women's Entrepreneurship 2016/2017 Report

BABSON Universidad del Desarrollo KEF Tecnológico de Monterrey UNIRAZAK UNIVERSITI TUN ABDUL RAZAK SMITH COLLEGE

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Global Entrepreneurship Monitor 2016/2017 Report on Women's Entrepreneurship

GLOBAL ENTREPRENEURSHIP RESEARCH ASSOCIATION

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Thank you to the GEM National Teams
Seventy-four economies are profiled in this report: 65 that participated in the 2016 GEM cycle, and nine that participated in 2015, but not in 2016.

Thank you to Martha Lanning for her editing work.

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Executive Summary

In 2016, an estimated 163 million women were starting or running new businesses in 74 economies around the world. In addition, an estimated 111 million were running established businesses. This not only shows the impact of women entrepreneurs across the globe, but highlights their contributions to the growth and well-being of their societies. Women entrepreneurs provide incomes for their families, employment for their communities, and products and services that bring new value to the world around them. This Global Entrepreneurship Monitor (GEM) Women's Report offers an in-depth view of women who start and run businesses around the world.

GEM has gained widespread recognition as the most authoritative longitudinal study of entrepreneurship in the world. It achieves this distinction through collaborative work by a consortium of national teams consisting of academic researchers from around the world. Each national team oversees an annual survey of at least 2,000 working-age adults (ages 18 to 64). Starting with just 10 developed economies in 1999, the project has grown to involve more than 100 economies over 18 annual cycles.

GEM is uniquely positioned to examine women's entrepreneurship, given its focus on people who start businesses, whether they operate informal businesses or formally registered businesses. In addition to assessing rates of participation over different phases of the entrepreneurship process, this research measures characteristics of entrepreneurs, their motivations for starting businesses, current and potential impact on their societies, and attitudes of the broader society about this activity.

Seventy-four economies are profiled in this report: 65 that participated in the 2016 GEM cycle, and nine that participated in 2015 but not in 2016. Therefore, this report covers all economies involved in GEM since the last report, which was based on the 2013 and 2014 cycles. These economies are grouped into five levels of economic development and six geographic regions: East and South Asia and Pacific, Europe and Central Asia, Latin America and the Caribbean, Middle East and North Africa, North America, and Sub-Saharan Africa.

This report provides a broadly global and comprehensively detailed foundation for guiding future research, policy decision-making, and design of initiatives and programs to enhance awareness about women's entrepreneurship. The report brings a greater understanding of women's entrepreneurship to a diverse audience of researchers, policy makers, educators and practitioners. Its ultimate aim is to foster recognition of the value women entrepreneurs bring to society, and to generate improvements in conditions that encourage and support their aspirations.

EXECUTIVE SUMMARY

KEY FINDINGS

Entrepreneurship Activity

Total Entrepreneurial Activity (TEA)

- Among 63 economies (out of 74) featured in this report and the previous one issued two years ago, overall female TEA rates have increased by 10% and the gender gap (ratio of women to men participating in entrepreneurship) has narrowed by 5%. This continues the positive trend revealed among 61 economies in the previous report, which showed an average increase in female TEA rates of 7% and a narrowing of the gender gap by 6% over the prior two-year period.
- The 74 economies examined in this report show substantial differences in women's TEA rates, ranging from 3% in Germany, Jordan, Italy and France to 37% in Senegal. In five of the economies, women participate at equal or higher levels than men. These high-parity economies come from two regions: Asia (Indonesia, the Philippines and Vietnam) and Latin America (Mexico and Brazil). None of these economies is at the innovation-driven stage of development, where on average women start at 60% the rate of men. The gender gap is greatest in Jordan, an efficiency-driven economy, where female entrepreneurship rates are about one-fourth the male level.
- Across all development levels, women exhibit, on average, a 20% or greater likelihood of citing necessity motives compared to men. However, opportunity motives account for the majority of entrepreneurs. Even in factor-driven economies, there are over one and a half times as many opportunity as necessity entrepreneurs. This is even more pronounced in the innovation-driven group, where women are over three and a half times more likely to cite opportunity motives than necessity motives.

Entrepreneurial Intentions

- Across the 63 economies participating in this and the previous report, entrepreneurial intentions increased among women by 16% from 2014 to 2016. However, the gender gap is slightly narrower for entrepreneurial intentions than for TEA. This suggests that women's intentions are closer to those of men compared to TEA. While not all intentions do translate into action, the implication is that more women than men may drop off in the transition between phases.

Established Business Ownership

- Across the 63 economies, established business rates increased by 8% on average and the gender ratio improved by 9%. As with TEA, when economic development increases, established business activity among women declines and the gender gap increases. However, while greater demand for entrepreneurship exists in developing economies than in developed economies, comparatively fewer enterprises transition to a mature stage. Conversely, innovation-driven economies exhibit less demand for entrepreneurship, but entrepreneurs who start are more likely to launch sustainable businesses, and/or the environment enables sustainability.
- Established business ownership among women is lowest in MENA. This region reports the widest gender gap, where women run established businesses at one-third the rate of men. Latin America also exhibits a wide gender gap, which contrasts with a relatively narrow gender gap in TEA. The opposite effect may be seen in North America, which reports the narrowest regional gender gap in established business activity, despite showing a wide gap relative to men in TEA rates.
- In three Southeast Asian countries—Thailand, Vietnam and Indonesia—established business ownership rates among women are equal to or higher than TEA rates. Additionally, the number of established business owners among women is equal to or greater than that of men.

Business Discontinuance

- Relative to TEA, the highest level of exits per entrepreneur is in the factor-efficiency transition stage, where there are four exits for every 10 women starting or running a new business. This declines to a little over two exits for every 10 female entrepreneurs in innovation-driven economies.
- The female discontinuance rate exceeds that of males at the first three levels of economic development, although only by about 10%. Women are less likely than men to start businesses, which means that, despite a smaller pool of businesses, there are more exits for women. Few women in innovation-driven economies have exited businesses, and at only two-thirds the rate of men.
- From a regional perspective, discontinuance is highest in sub-Saharan Africa, followed by Latin America. This is related to the fact that more women start businesses in these regions. These women often struggle with unprofitability, and slightly more often than men. Sub-Saharan Africa also displays the highest level of finance issues associated with closing a business, compared to other regions.

Entrepreneur Characteristics

Age

- The highest participation in entrepreneurship among women can be seen in 25-34 and 35-44 year olds. This is true, on average, across the development levels and regional groups. It is also the case among men. In general, the relationship between the genders with respect to entrepreneurship rates holds throughout the age groups, when viewing averages by development level and geographic region.

Education

- On average, TEA rates decline with development level, while the proportion of entrepreneurs with a college level of education or higher increases. To some extent, this reflects the general population. A small proportion of female entrepreneurs (14%) in the factor-driven stage have at least a college degree, while the majority (61%) in the innovation-driven stage have this level of education.
- Parity with male entrepreneurs in education levels increases with economic development. In the factor-driven stage, women entrepreneurs are about two-thirds as likely as men to have a post-secondary degree or higher. In the efficiency-driven levels of economic development and above, women entrepreneurs are as likely as men, or more likely than men, to have at least a post-secondary education.
- North America shows the highest education rates among women entrepreneurs, with 84% having earned a post-secondary education or more. Europe has on average 22% more highly educated women than men entrepreneurs.

Impact

Self-Employment

- Across the entire sample, 10% of women entrepreneurs operated businesses alone with no intention to add employees in the next five years. In more than three-fourths of the sample economies, women were as likely as, or more likely than, men to have self-employment businesses. Europe shows the highest frequency of one-person female business activity, whereas North America, with two advanced economies, has the lowest. In the Netherlands, half of women entrepreneurs were operating alone, nearly two and a half times the frequency of men in this country.

Growth Expectations

- Across all regions, the lowest average female growth expectations are found in Latin America (17% of TEA). There are many entrepreneurs in this region, but proportionately few expect to grow their businesses. There is a wide gender gap with growth expectations among females barely reaching 60% of the male level. Although sub-Saharan Africa also has a wide gender gap on this indicator (55% of the male level), average growth expectations are higher (22% of TEA) than in Latin America. Together with the highest regional average TEA rate, these growth expectations translate to substantial employment by entrepreneurs in this region.
- The MENA region reports highest average growth expectations among women at 37% and highest gender parity. Female growth expectations are just under 80% of the male rate. Over half of women entrepreneurs in the UAE, Qatar and Tunisia expect to hire six or more employees in the next five years; women in Saudi Arabia and Morocco are more likely than men to have these ambitions.

Innovation

- Innovation levels increase with economic development. Innovation-driven economies exhibit a substantial jump above other development levels in this indicator. Overall, innovation is the indicator with the greatest female-to-male gender ratio; across all 74 economies, women entrepreneurs have a 5% greater likelihood of innovativeness than men.
- The highest level of innovation occurs in North America, where 38% of women report having innovative products and services. In sub-Saharan Africa, only 18% of women state their offerings are innovative. Yet both regions, as well as Europe, show gender parity.
- Among entrepreneurs in MENA, women report high innovation levels and are 60% more likely than men to state their offerings are innovative. Seven of the 10 countries in this region report higher innovation levels among female entrepreneurs than among male entrepreneurs.

EXECUTIVE SUMMARY

Internationalization

- The level of international sales varies dramatically. It is zero or less than 1% in three Latin American countries (Brazil, Guatemala, and Ecuador) and three Asian countries (Malaysia, Thailand and Vietnam). However, more than three-fourths of women entrepreneurs in the UAE and over half of women in Saudi Arabia report international sales.
- In innovation-driven economies, more than one-fifth of women entrepreneurs report 25% or more of sales go to customers outside their economies. This is four times the level of the factor-driven group.
- Regionally, only 6% of sub-Saharan African women entrepreneurs are internationally oriented, somewhat more than half the level of men. In MENA, 29% of women entrepreneurs are considered international, and at a higher rate than men.

Industry

- Wholesale/retail trade accounts for about 60% of female entrepreneurial activity among the first three development levels. By comparison, at the highest level of development, among innovation-driven economies, only one-third of women entrepreneurs compete in this sector. This is fairly consistent with male participation in this sector; across the entire sample, women entrepreneurs are just 16% more likely to be starting wholesale/retail businesses.
- Over half of women entrepreneurs in the innovation-driven group are in government, health, education and social services. Women dominate this business category relative to men at all development levels. On average across the entire sample, they are more than twice as likely as men to be starting in this sector.
- Women entrepreneurs are less likely to be seen in the Information and Communications Technology (ICT) sector. Overall, fewer than 2% are starting business here, little more than one-fourth the proportion of men on average.

Attitudes and Affiliations

Opportunity Perceptions

- Opportunity perceptions range from 57% of women in factor-driven economies seeing good opportunities around them, down to 39% in the innovation-driven group. The gender gap on this indicator is relatively narrow with opportunity perceptions among women at 90% of male perceptions.

Capability Perceptions

- At the factor-driven stage, 67% believe they have capabilities for starting businesses. This declines to just under 35% among innovation-driven economies. Capability perceptions are widest in innovation-driven economies, just over two-thirds the level reported for men.

Personal Affiliations with Entrepreneurs

- Entrepreneurs are highly visible in the United States, but only 27% of women know one. Europe reports a similar percentage. More than half the women in sub-Saharan Africa personally know an entrepreneur. What appears to stimulate personal connections is simply the presence of entrepreneurs in a community. At lower economic development levels with high TEA rates, more than half of women know an entrepreneur personally. This declines to just above 30% in the innovation-driven group.

Entrepreneurial Investors

- Overall, 4.6% of women in the 74 economies provided finance to entrepreneurs in the past three years, ranging from 1% in Morocco to 16% in Cameroon. Entrepreneurial investment in the innovation-driven economies is slightly more than one-third the level reported in the factor-driven group.
- While male investment rates also decline with economic development level, this decrease is not as steep as for female investors, leaving a wider gender gap with higher levels of development. Overall, women invest in entrepreneurs at less than two-thirds the rate of men.
- About 5% of women in North America, Latin America, MENA and Asia have personally provided funds to entrepreneurs. The other two regions, however, show contrasting results. Only 3.5% of women in Europe have funded entrepreneurs and 9% in sub-Saharan Africa.

IMPLICATIONS

- This report concludes by summarizing the findings within three areas: progress, problems, and paradoxes. The areas of progress include those where the gender gap is closing and where women are leading change in some ways.

The problems reflect the areas where there are still serious deficits and disparities, where the gender gap may still be significant. Paradoxes are those anomalies, results that are somewhat curious or less explainable relative to this discussion. Following are key problems, areas of progress, and paradoxes.

Progress

There has been progress in narrowing the gender gap since the last report, two years ago, for the economies participating in both studies. The TEA rates of women increased by 10%, and the gender gap narrowed by 5%. Similarly, among the 63 economies, featured in this report and the previous one issued two years earlier, opportunity perceptions increased, and the gender gap compared to men also closed slightly. Other areas of progress include a rise in established women's business ownership and increased entrepreneurial intentions. Notably, women entrepreneurs are 5% more likely than men to be innovative in their businesses. The rise in TEA is associated with greater opportunity perceptions and intentions. If these trends continue, the gender gap in start-up activity should continue to shrink in the future.

Problems

Even though there has been progress in several areas, there remain some challenges for women entrepreneurs. These include a greater likelihood of necessity motivation (compared to opportunity) for women entrepreneurs, lower growth expectations, and higher rates of discontinuance than men. These challenges imply that support for new and established businesses, including coaching, access to capital, education and training, and other resources, would be important to help sustain them over time.

Paradoxes

There are several paradoxes in the findings that are more difficult to explain. For instance, as the level of economic development increases, the rate of entrepreneurial participation by women decreases. Similarly, women's perceptions of their capabilities of starting a business are inversely related to level of development: lower in innovation economies and higher in less developed economies. This same trend is observed with education. It may well be that general education is less relevant for building entrepreneurial competencies or for developing confidence in entrepreneurial activities. Rather, entrepreneurship-specific skills may be more relevant for inspiring confidence.

The findings throughout this report provide guidance, not only for thought, but also for action regarding policy and practice.

First, there are the changing perceptions of what it means to be entrepreneurial. As educational and training programs, government policies at a variety of levels, and even the media focus more and more on the development path of the small (while of course, important) sliver of technology-based, equity-funded businesses, we miss recognizing the potential contribution of smaller businesses to individuals, families, and communities.

And second, there remains more than a vestige of the "should" from assuming that women-owned businesses should model those built by men in process and outcomes. While discussions of family and work-life balance may be included in entrepreneurship programs, they are rarely addressed convincingly or compellingly in the design and development of entrepreneurship ecosystems.

The reasons for these two considerations are that the topic is either small business or women. For either or both, using data such as this report provides a more solid foundation for business growth and the creation of both economic and social value around the world.

Introduction

There is no longer a question regarding the role that women play in contributing to global economic development. A Pew Research Center analysis shows that women make up 40% of the workforce in 80 countries.[1] In 2012, *The Economist* projected that nearly 1 billion women will enter the labor force over the next 10 years.[2] In addition, women control more than $20 trillion in annual consumer spending and this figure is expected to rise to nearly $28 trillion in the next five years.[3]

The phenomenon of women's entrepreneurship, both the women business owners and their businesses, is viewed as a potential source of economic and social development. Interest lies largely in what these women do and do not accomplish compared to men and then filters into the "who," "why," "where," and "how" questions that go along with understanding the founding, development, and growth of the businesses. We know from this and previous Global Entrepreneurship Monitor Women's Reports that, in most places of the world, the number of women starting and running new businesses is growing. We also know that there are many different types of women creating a variety of businesses. For example, some women are motivated by necessity—starting a business when there are no other options for them to support their families. Other women are motivated by opportunity—where they perceive opportunities in the market even though other workforce options may exist, and finally some are motivated by a combination of necessity and opportunity. However, there is also wide variety in women's participation in different types of entrepreneurship—self-employed or partnerships—as well as broad variation by industry, age, education level, and growth aspirations. In other words, there is no single profile of the woman entrepreneur, and women entrepreneurs should not be viewed as the same or treated as one population.

We also know that women's entrepreneurship can mean quite different things in different places, contexts, and geographies. More specifically, contextual factors such as physical place, politics, religion, and culture strongly influence women's entrepreneurial choices and behaviors. And finally, we know that women in different places in the world have different entrepreneurial experiences regarding their access to opportunities and markets and resources, particularly those relating to capital.

At the same time, the benefits of women starting and owning businesses are well documented. The *World Employment and Social Outlook: Trends 2015* report (sponsored by the International Labor Organization) notes that even though gender gaps persist in the labor market and that women still suffer from greater unemployment and lower earnings, there are significant benefits to encouraging and supporting women's entrepreneurship.[4] In addition, the World Bank shows that women entrepreneurs contribute substantially to economic growth and poverty reduction even though they are limited by lack of capital and social constraints. Women entrepreneurs are more likely to contribute to their children's education, health and nutrition compared to male entrepreneurs.[5] Similarly, an analysis of the Goldman Sachs *10,000 Women* initiative shows that women entrepreneurs from 43 countries participating in this program mentored other women in their communities in entrepreneurship.[6] The Brookings Institute notes that entrepreneurship may be the only way to support women who live in extreme poverty world-wide, in that through entrepreneurship, women gain incomes, advocate for their own independence, and take on a more active societal role.

Within this context, every two years, the Global Entrepreneurship Monitor (GEM) team conducts a special analysis of women entrepreneurs around the world. GEM is the largest and longest active research collaboration exploring questions about entrepreneurship. The research is conducted by a consortium of teams of academic researchers from countries around the world. The teams use a shared methodology to ensure the comparability of the data, allowing the combined work of all to present this global picture.

Since 1999, GEM has collected data about entrepreneurship in more than 100 economies. This report alone represents an estimated 163 million women who were starting or running new businesses in 74 economies. The scale and longevity of the GEM project informs continued research, as well as guiding policy, programs, and practice.

GEM covers a great deal of geography, spanning all continents (except Antarctica) and most of their regions. GEM also recognizes the critical importance of considering levels of development for each participating economy and uses a classification system drawn from the World Economic Forum in its annual *Global Competitiveness Report*, while now recognizing the transition stages as countries develop from one level to the next.

- Factor-driven: recognized as early stages of economic development, usually marked by a largely rural population working primarily in sectors of agriculture and the extraction of natural resources. Population migration from rural to more urban areas drives change in economic activities.
- Factor–efficiency transition: describes economies in transition from factor to efficiency-driven.
- Efficiency-driven: reflects changes in increased participation in industrial sectors, including economies of scale leading to advances in productivity. Also includes the development of financial institutions.

[1] http://www.pewresearch.org/fact-tank/2017/03/07/in-many-countries-at-least-four-in-ten-in-the-labor-force-are-women/

[2] https://www.economist.com/news/economic-and-financial-indicators/21564857

[3] https://hbr.org/2009/09/the-female-economy

[4] *World Employment and Social Outlook: Trends 2015. International Labour Organization*, Geneva, Switzerland.

[5] http://web.worldbank.org

[6] *Investing in the Power of Women: Progress Report on the Goldman Sachs 10,000 Women Initiative.* Developed by Babson College, Wellesley, MA.

- Efficiency–innovation transition: describes economies in transition from efficiency to innovation-driven.
- Innovation-driven: describes mature economies, with a distinct shift to more service-based business as well as industrial sectors based on knowledge intensity and innovation.[7]

Table 1 shows the economies participating in this report, with geographic region and economic development level designations.

TABLE 1
Economies Featured in the 2016/2017 GEM Women's Report

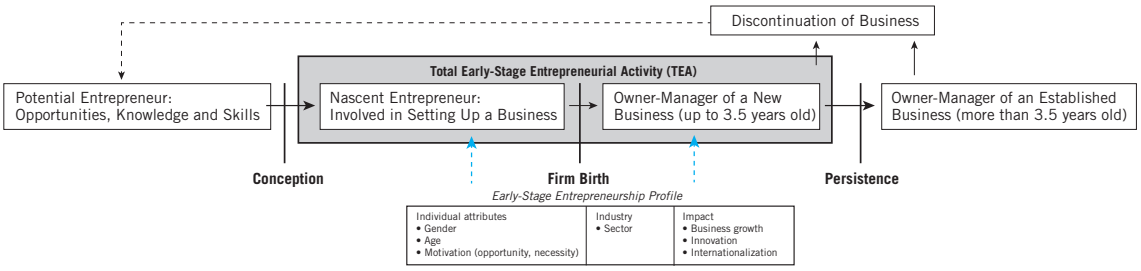
	Factor-Driven	Factor-Efficiency Transition	Efficiency-Driven	Efficiency-Innovation Transition	Innovation-Driven	
East and South Asia and Pacific	India*	Philippines* Vietnam*	China* Indonesia* Thailand*	Malaysia*	Australia* Hong Kong Korea, Rep.* Taiwan, China*	
Europe and Central Asia			Bulgaria Georgia* Macedonia, FYR*	Croatia* Hungary* Kazakhstan* Latvia* Poland* Romania* Russian Federation* Turkey*	Austria* Belgium* Cyprus Estonia* Finland* France* Germany* Greece* Ireland* Italy*	Luxembourg* Netherlands* Norway* Portugal* Slovak Republic* Slovenia* Spain* Sweden* Switzerland* United Kingdom*
Latin America and the Caribbean			Belize* Colombia* Ecuador* El Salvador* Guatemala* Jamaica* Peru*	Argentina* Barbados* Brazil* Chile* Mexico* Panama* Uruguay*	Puerto Rico*	
Middle East and North Africa		Iran, Islamic Rep.* Saudi Arabia	Egypt, Arab Rep. Jordan Morocco Tunisia	Lebanon	Israel* Qatar* United Arab Emirates	
North America					Canada* United States*	
Sub-Saharan Africa	Burkina Faso* Cameroon* Senegal	Botswana*				

*Also featured in the 2014 GEM Women's Report, and included in assessments of changes in GEM indicators.

[7] http://reports.weforum.org/global-competitiveness-report-2014-2015/methodology/

INTRODUCTION

FIGURE 1
The Entrepreneurship Process and GEM Measures



The annual surveys collected by the GEM research teams focus on entrepreneurship broadly explored. Figure 1 illustrates the entrepreneurship process and the range of GEM indicators.

GEM's multi-phase measures of entrepreneurship include the following:

Potential entrepreneurs: those who see opportunities in their environments, have the capabilities to start businesses, and are undeterred by fear of failure.

Intentional entrepreneurs: those who intend to start a business in the future (in the next three years).

Nascent entrepreneurs: those who have taken steps to start a new business but have not yet paid salaries or wages for more than three months.

New entrepreneurs: those who are running new businesses that have been in operation for between 3 months and 42 months.

Established business owners: those who are running a mature business, in operation for more than 42 months.

Discontinued entrepreneurs: those who, for whatever reason, have exited from running a business in the past year.

GEM also provides information on age and education demographics of the entrepreneurs, along with their motivations for starting their business. The businesses owned by these women are considered regarding their industry choice, growth expectations, innovation, and their participation in international markets.

The analyses in this report include the following:

- Comparisons across individual economies, economic development levels, and geographic regions on phases of entrepreneurship, entrepreneurial motives, demographics, impact characteristics (growth potential, innovation, international sales, industry), societal attitudes, and entrepreneurial investors.
- Examination of the gender gap between women and men on each indicator.
- Changes in participation rates across phases, entrepreneurial motives, and societal attitudes for 63 economies featured in both this current report and the previous biennial report (see Table 1 for those economies demarcated with an asterisk).

Past reports have considered the importance and benefits of women's entrepreneurship globally, and, in particular, examined the gender gap and its implications across economies and regions. Because GEM is the only multi-country survey of individuals and their attitudes, previous reports have shown where there are differences among groups of women by level of development, and across attitudes and other dimensions.

This report concludes with progress, problems, and paradoxes. The areas of progress include those findings that show where the gender gap is closing and where women are leading change in some ways. The problems reflect the areas where there are still serious deficits and disparities, where the gender gap may still be significant. Paradoxes are those anomalies, results that are somewhat curious or less explainable relative to this discussion.

In addition, this 2017 GEM report on women business owners adds a new consideration—that of women as entrepreneurial investors. Access to capital is generally presented as a challenge for all entrepreneurs. However, it is viewed as an even higher hurdle for women entrepreneurs, and higher yet for women in economies at different levels of development and built on various political, religious, and social frameworks. Therefore, the practice of women funding entrepreneurs is an approach that to date has not been investigated and certainly not at the scale of a GEM study. This practice alone is very ripe for consideration for entrepreneurial impact.

The appendix to this report features tables with detailed data on the indicators discussed in this report for each of the 74 economies featured. Additional tables show the changes in indicators and gender ratios for the 63 economies participating in this report and the previous GEM Women's Report.

Cherie Blair Foundation for Women

WOMEN'S ECONOMIC EMPOWERMENT IN LEBANON

Samia, Baysour *Photograph by Tamara Abdul Hadi*

Layla, Beirut *Photograph by Tamara Abdul Hadi*

The Bekaa Valley has been particularly affected by conflict in the region and is experiencing an ongoing influx of refugees from across the Syrian border. The contribution of women entrepreneurs is known to be an important driver for economic growth and stability, yet women in Lebanon face a range of cultural and structural constraints, which restrict their capacity to establish and grow successful businesses.

The project is delivering tailored business training, coaching and incubation support for the women and their businesses, helping their businesses to grow sustainably and achieve scale and resistance to instability. The project is supported by the U.S. Department of State and delivered in partnership with Al Majmoua, the Lebanese Association for Development.

Unique to this project is the delivery of training on business continuity and risk management to equip the women entrepreneurs with the skills and tools they need to sustain their enterprises through times of instability. The project is also providing legal advice to the women entrepreneurs and supporting them to register their businesses as well as their trade names.

Working with key financial institutions to improve women's access to financial services, the project has also designed a mobile application which gives women access to business and legal information and a debt management loan tracking system, via their phones.

This approach is based on the Foundation's Enterprise Development model, which supports women in three phases:

1. Intensive business training
2. Tailored business coaching
3. Business incubation
   (including connection to financial services)

Of the 210 women who joined the project and received initial training, 50 received tailored support, almost 60% of whom went on to access loans to grow their businesses.

Of these 50 women, 26 went on to receive a final phase of support to help incubate their businesses and register their trademarks – an important first step towards formalization. In total, 46 new jobs have been created by the women involved in this project.

Chapter 1

Total Entrepreneurial Activity (TEA) and Motivation

TOTAL ENTREPRENEURIAL ACTIVITY RATES

Total Entrepreneurial Activity (TEA) represents the percentage of the adult working-age population (18-64 years old) who are either nascent or new entrepreneurs. Nascent entrepreneurs are currently in the process of starting a business and have not paid salaries or wages for more than three months. Those in the new phase of activity are running a business older than three months but not older than 42 months. Combined, these two phases represent TEA, the percentage of adults who are starting or running new businesses.

The map in Figure 2 shows the level of participation of women in entrepreneurship across the 74 economies featured in this report. The highest levels are seen in Latin America, Southeast Asia, sub-Saharan Africa and Canada.

FIGURE 2
World Map Showing Levels of Female Entrepreneurship across 74 Economies, GEM 2015-2016

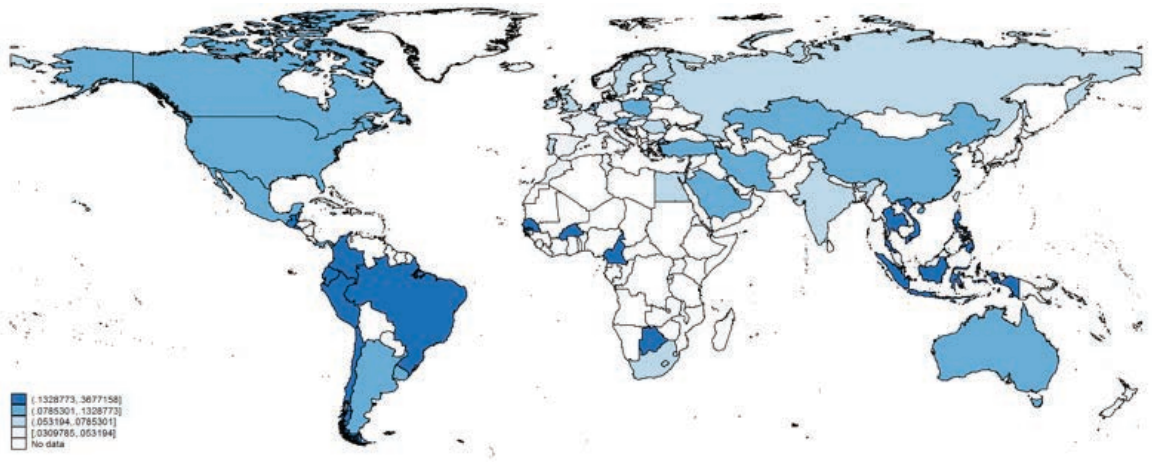


Figure 3 shows TEA rates for women and men in each of the 74 economies, grouped into three economic development levels. Factor-driven and efficiency-driven groups each contain economies in transition from these phases into the next. This figure shows gender gaps and activity levels among women.

TEA exhibits higher average rates and greater variation at lower levels of economic development. This variation is demonstrated in the factor-driven group, for example in Senegal where more than one out of every three women is starting a business, and in India where only one out of 13 is doing so.

Twenty-one economies of the 74 in the sample show low TEA rates and gender gaps of half or less than half the level of men; these span a broad range of economic development levels. Jordan, an efficiency-driven economy, shows a female TEA rate of 3%, which is about one-fourth the male level. In the innovation-driven group, women in Germany also start businesses at a level of 3%, which is half the male level.

These low rates and wide gender gaps (as seen in Figure 4) demonstrate how overall entrepreneurship rates may be diminished by low female participation. Initiatives targeting entrepreneurship in general may not benefit women, reducing their effectiveness. This suggests the importance of uncovering root causes underlying low entrepreneurship rates. Contextual factors play an important role in stimulating or deterring women entrepreneurs: for instance, expectations for women's role in business and family, religious beliefs and the availability of child care.

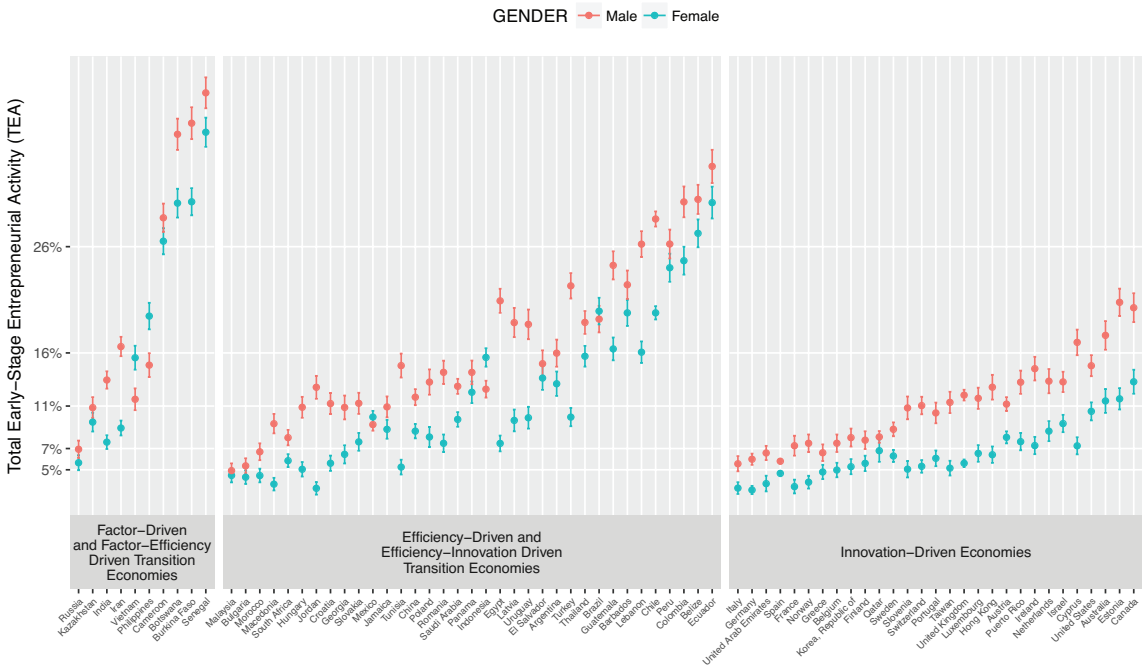


FIGURE 3
Total Entrepreneurial Activity Rates by Gender, Grouped into Three Economic Development Levels, GEM 2015-2016

While a gender gap persists in many regions of the world, there are five economies in the sample where women participate at levels equal to or higher than those of men. These high-parity economies are located in two regions: Asia (Indonesia, the Philippines and Vietnam) and Latin America (Mexico and Brazil).[8] The highest ratio of female-to-male entrepreneurship is seen in Vietnam, where women are one-third more likely to start a business than men. None of these economies is at the innovation-driven stage of development, where on average women start at 60% the rate of men.

Figure 4 shows a plot of female versus male TEA rates. As this graph illustrates, only the five aforementioned economies fall above the line indicating a 1:1 female-to-male TEA ratio. Most others fall below this line, with some falling below the 1:2 ratio line, where women start businesses at half or less than half the level of men.

As Figure 5 shows, sub-Saharan Africa and Latin America exhibit the highest average female TEA rates. These regions show high gender parity with women starting business on average at more than 80% the level of men.

Asia shows levels of gender parity similar to those in the aforementioned regions, but much lower female TEA rates. Asia has some low-parity economies where women start businesses at half or less than half the rate of men (Taiwan and Hong Kong). This is more than balanced by economies where women are one-fourth to one-third more likely to participate in entrepreneurship compared to men (Vietnam, the Philippines, and Indonesia). What is most unusual about this region is that the economies span all development levels from factor-driven to innovation-driven. Economies at higher levels of economic development occupy the lower end of entrepreneurship rates in this region. While it is not unusual for developed economies to show lower rates, this point explains the lower overall regional average in Asia.

Europe and MENA show both low rates and low parity. On average, women start businesses at less than 60% the rate of men. In addition, there are no economies where women start at equal or higher rates than men. On the other hand, 40% or more of the economies in each region have rates at half or lower than half those of men.

Interestingly, differences in rates and gender participation span the range of development levels in Europe, although economies in this region tend toward upper levels of development. In the MENA region, largest gender gaps occur in middle-stage, efficiency-driven economies (Jordan, Tunisia and Egypt). Relatively narrow gender gaps are seen on either side of the development spectrum, where in Qatar (innovation-driven) and Saudi Arabia (factor-efficiency transition stage) women start businesses at over three-fourths the level of men.

[8] For the sake of brevity, Asia will refer to East and South Asia and Pacific, Europe will refer to Europe and Central Asia, Latin America will refer to Latin America and the Caribbean, and MENA will refer to Middle East and North Africa.

FIGURE 4
Plot of Female vs Male Total Entrepreneurial Activity Rates, GEM 2015-2016

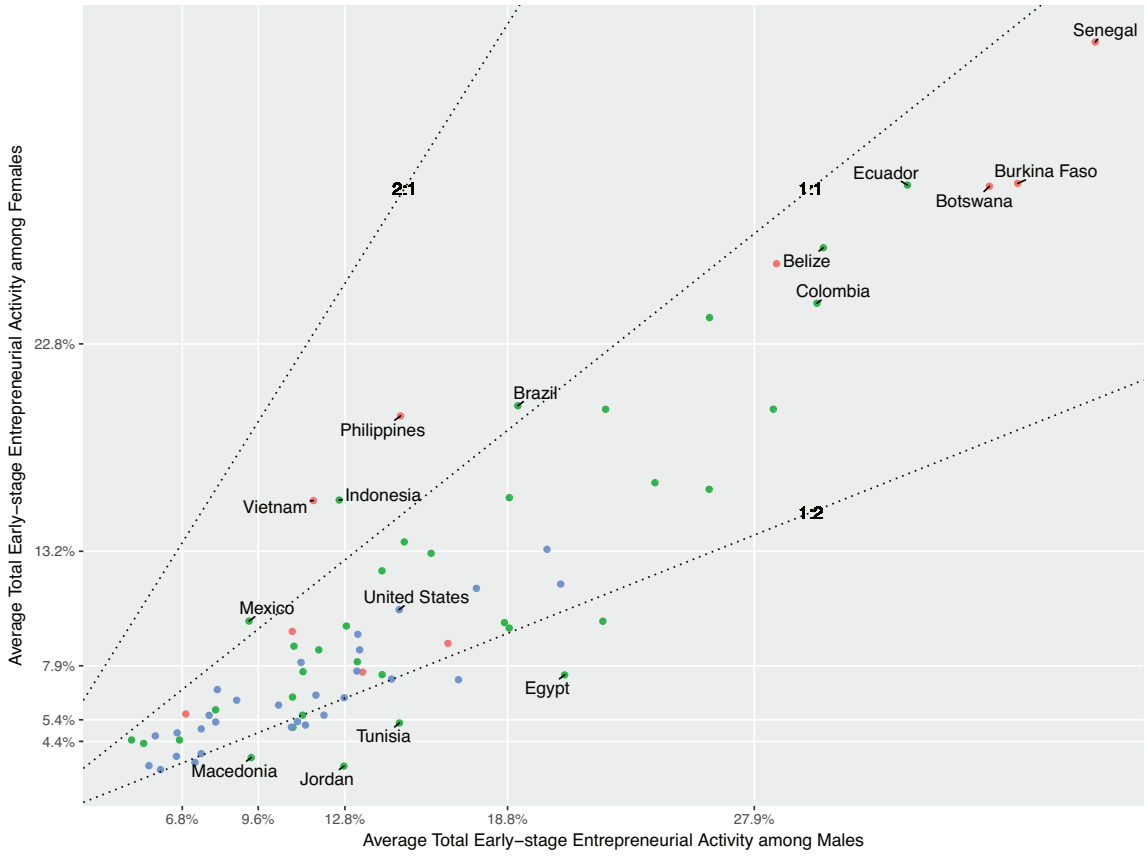
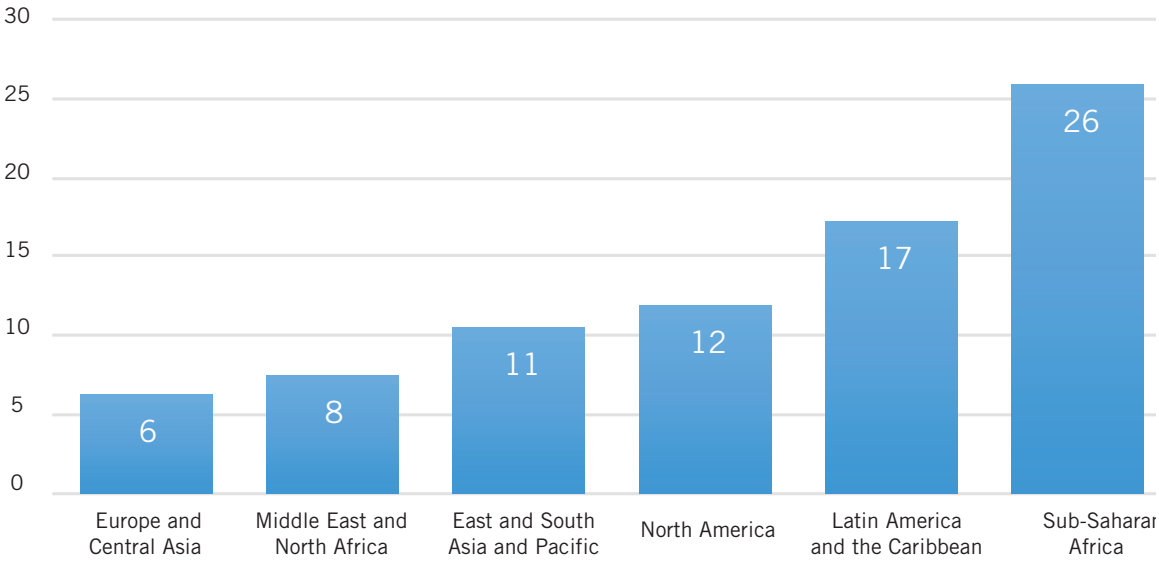


FIGURE 5
Regional Averages for Female Total Entrepreneurial Activity (in % of Female Population Aged 18 to 64), GEM 2015-2016



GOVERNMENT SIZE AND WOMEN'S FREEDOM

Estrin and Mickiewicz (2011) examined data from GEM and other sources for 55 countries. They studied women and men involved in startups and those involved in startups expecting to create 10 or more jobs. They found that in countries with large government size (ratio of government expense to GDP), women are less likely to start businesses and less likely to start high aspiration businesses (expecting to hire 10 or more employees in five years). Their interpretation is that, where there are fewer government-provided services, such as those involving education and health, women will be more compelled to seek income sources. Alternatively, where there are high levels of government services and high taxes, women might more often take on domestic responsibilities.

They also found that where women's freedom of movement away from home is restricted, both male and female rates are lower, demonstrating negative effects on all entrepreneurship activity from gender-related constraints. Additionally, women are less likely than men to start high aspiration businesses (expecting to hire 10 or more employees in five years). This shows that although few women start businesses in these contexts, those who do are likely to have businesses with low growth potential, further depressing the impact of entrepreneurship in these societies.

Estrin, Saul and Mickiewicz, Tomasz. (2011). Institutions and female entrepreneurship. *Small Business Economics*. 37, 397-415.

CHANGES IN TOTAL ENTREPRENEURIAL ACTIVITY

Sixty-three economies participated in both this report and the latest biennial GEM Women's Report.[9] On average across all of these economies, female TEA rates increased by 10%, and the gender gap narrowed by 5%. Latin America and sub-Saharan Africa showed little change in both indicators. These regions already have high rates of entrepreneurship. With most still developing economically, they may have reached a peak in rates of entrepreneurship which, with further development, might start to diminish as work options increase.

North America saw advances in both female TEA and the gender ratio, but this was mainly due to improvements in Canada. Europe exhibited an increase of more than 6% in female TEA rates with a slight edge upward in the gender ratio.

MENA and Asia reported a decrease of 8% and 9%, respectively. In Asia, the gender ratio remained the same, indicating that male rates were equally affected in this decline. In MENA, however, a large decrease in male TEA rates narrowed the gender gap. Whatever the source of these declines, the results show how some changes affect both sexes while others appear gender-specific.

NECESSITY-DRIVEN ENTREPRENEURSHIP

TEA rates typically decline with higher levels of economic development, as does the likelihood that those who start businesses are doing so out of necessity. In factor-driven economies, on average, 35% started out of necessity. In innovation-driven economies, necessity explains only 21% of motives. This suggests that necessity may drive higher TEA rates at lower development levels, while less "need" for entrepreneurship causes fewer people to start in developed economies. However, there are exceptions to this general rule.

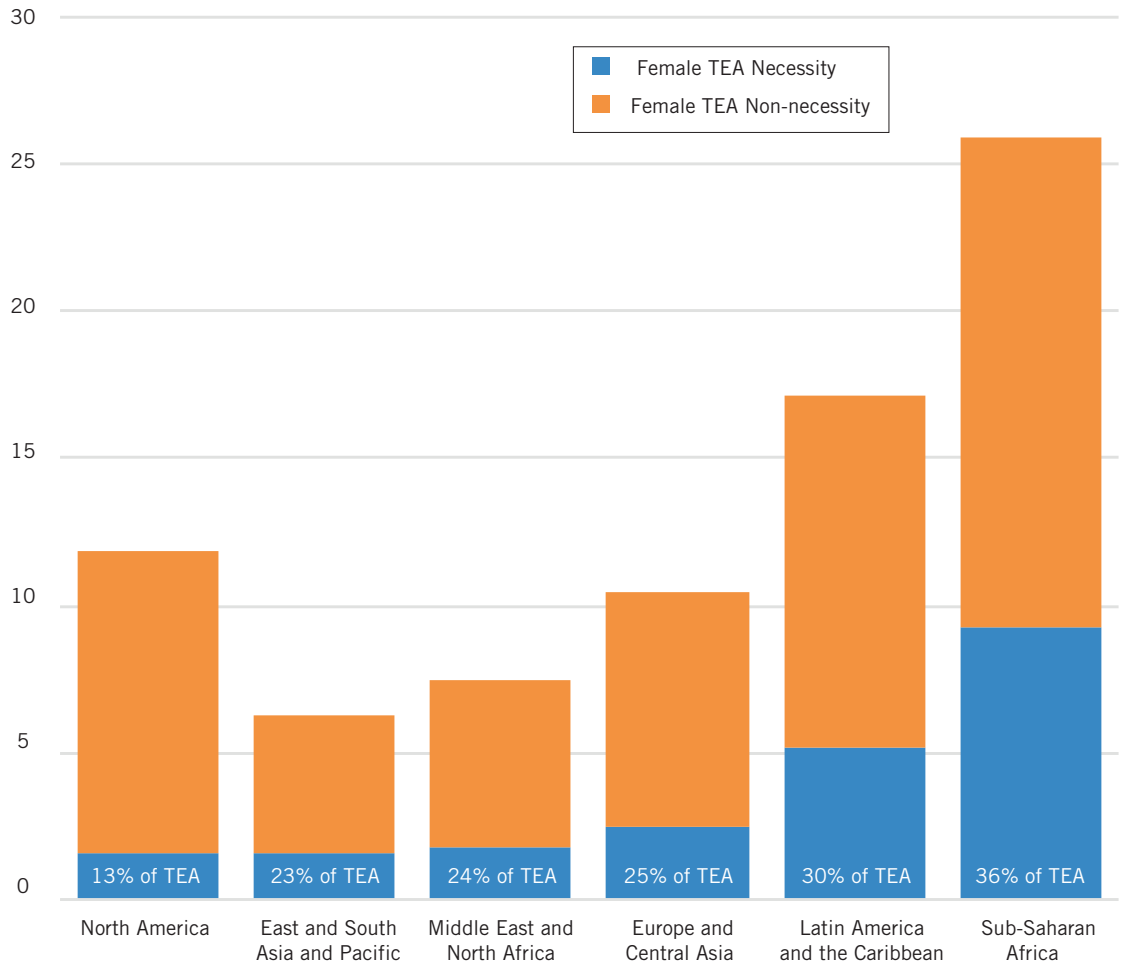
On average, at all development levels, women are 20% more likely than men to cite necessity motives. The converse measure, opportunity motivation, shows a narrow gender gap, particularly for the innovation-driven group. It is important to note that opportunity motives account for the majority of entrepreneurs. Even in factor-driven economies, there are over one and a half times as many opportunity entrepreneurs as necessity entrepreneurs. This is even more pronounced in the innovation-driven group, where women are over three and a half times as likely to cite opportunity motives versus necessity motives. However, it appears that women more often than men feel less compelled to start a business, unless there is a real need.

Differences in necessity motives can be seen across the regions (see Figure 6). Only 13% of female entrepreneurs in North America start out of necessity. In sub-Saharan Africa, 36% cite necessity motives, thereby combining high rates with high necessity. To a lesser extent, Latin America exhibits similar characteristics—high female rates and high necessity motives. Both regions have a narrow gender gap in TEA rates, but women are more than 40% more likely than men to cite necessity motives. It appears that necessity contributes to closing the gender gap.

Europe is notable for having low TEA rates and a wide gender gap, but also relatively high necessity motives for a region with many developed economies. Although women have a relatively low likelihood of starting a business, on average one-fourth of women do so out of necessity, over 30% more often than men. More extreme results are seen in four European countries; over 40% of women entrepreneurs started out of necessity in Croatia, the Slovakia, Georgia and the Netherlands, the latter showing over five times the necessity level of men.

[9] For Israel, Korea and Macedonia, 2013 data were used in place of 2014; for Barbados, Belgium, Botswana, Norway, the Philippines, Tunisia and Vietnam, 2015 data were used in place of 2016. For simplicity in discussion, 2016 will denote the most recent year, and 2014 will denote the earlier year.

FIGURE 6
Necessity and Opportunity Driven Total Entrepreneurial Activity Around the World in % of Female Population Aged 18 to 64



Exceptions to this general pattern in Europe occur in Italy and three Nordic countries—Sweden, Finland, and Norway. Necessity accounts for motives of less than 10% of female entrepreneurs. Women in Sweden and Italy are only about 40% as likely as men to be motivated by necessity.

Female necessity motives in East and South Asia and Pacific, as well as in MENA, are just below those of Europe and Central Asia. However, both regions exhibit no substantial gender gap, indicating that necessity motives prevail for both genders.

North America shows the lowest necessity motives, only 13% with similar numbers in the United States and Canada. These countries also exhibit gender parity on this measure. Of those who start businesses, women are proportionately as likely as men to identify necessity motives.

Returning to the notion that, on average, high TEA rates in lower development levels are accompanied by high necessity, both confirming and contradictory evidence may be seen in the sample. For instance, a general lack of necessity is accompanied by low TEA rates in Italy, Norway and Malaysia. Few women start businesses, and few women feel a need to. On the other hand, few women start businesses in Jordan, Macedonia, and the UAE. When they do, it's highly likely they were motivated out of necessity (around 38% are necessity-motivated in these economies).

The story above tells us that in the first group of countries, women generally do not start businesses, but when they do, it's not because they need to. The second group also hardly ever starts, but when they do, it's often due to necessity. This may indicate constraints in the second group—women start businesses when they are pushed to do so, but are not otherwise able or inclined to do so.

At the other end of the TEA scale are countries where women are starting at high rates and often need to. Examples are Senegal, Burkina Faso, Botswana, and Cameroon. Entrepreneurship provides an option for women in these countries when there are few better income-generating alternatives. In contrast, there are high entrepreneurship rates in Belize, Colombia and Peru, even though there appears to be little need-based motivation, suggesting that women see opportunities for entrepreneurship and jump in because they choose to, rather than being pushed by necessity.

CHANGES IN NECESSITY-BASED ENTREPRENEURSHIP

Although necessity motives can differ or fluctuate for a number of reasons, there is a general trend toward lower necessity motives as development levels rise. Among the 63 economies featured in this and the previous report, greatest reductions in female necessity motives from 2014 to 2016 occurred in efficiency-driven and efficiency-innovation transition economies. In these stages, improved business conditions and job options accompany development. Innovation-driven economies, as the most economically advanced group, displayed a smaller decline in female necessity motives; these economies already exhibit low levels on this indicator and are likely levelling off with smaller changes over time.

On the other end of the development scale, factor-driven and factor-efficiency transition economies showed slight increases in average necessity motives among women entrepreneurs. Along with high female TEA levels at these development stages, these increases suggest that women are still starting business quite often because they need a source of income and have no better job options.

Regions with the highest TEA rates, sub-Saharan Africa and Latin America, saw little change in the percentage of female necessity-based entrepreneurs. In sub-Saharan Africa, female necessity rates are high: More than one-third of women starting businesses do so out of necessity. However, the proportion of male necessity motives increased from 2014 to 2016. While women entrepreneurs still exhibit higher necessity motives than men entrepreneurs, the gender ratio dropped from 60% more necessity motives among women than men to 40% more in 2016. Latin America reported a similar gender ratio in 2016, little changed from 2014.

Asia, MENA and North America exhibited declines in female necessity motives and the gender ratio. In Europe, despite a decline in female necessity motives, the gender ratio increased because these motives declined faster for male entrepreneurs. This means that necessity motives among women entrepreneurs in Europe still outnumber those among men.

The S Factory

Start-Up Chile is a public accelerator launched in 2010 by the Chilean Ministry of Economy and the Production Development Corporation (CORFO) with the objective of creating an entrepreneurial innovation hub in South America and to alter its inhabitants' mindset.

Start-Up Chile has been widely recognized as one of the top accelerator programs in the world, and in 2015 the World Economic Forum commended Chile as "the most innovative country for early stage entrepreneurs." Fifty one percent of 1,309 companies have survived and 39% remained in Chile employing 1,562 people.

The idea for The S Factory came about because of the lack of representation of women in Start-Up Chile's other early stage program – Seed. In 2015, 85% of the startups were led by men and 15% by women. Concerned with making acceleration programming equally available to both the male and female populations, Start-Up Chile launched The S Factory in 2015 as a pre-acceleration diversity program for female led founders who have less experience.

The premise of the program is to build confidence and provide a supportive environment for female founders who are still at the idea stage, or have an early stage minimum viable product. Programming was designed taking into consideration the female founder as opposed to the venture, in contrast to those who participate in Start-Up Chile, whose ventures are at a more developed stage. All participants whether in the Seed or The S Factory program should have an interest in Latin American Markets.

Participants are chosen based on their aptitude to lead, work together and their ambition. They are selected via a crowdsourcing platform which includes staff, alumni, industry experts and mentors as judges and the program strives for global representation.

Thus far, there have been four full Generations (cohorts) with a total of 85 start-ups. 20 to 30 participants are chosen for each cohort which runs for four months. No equity is taken and the women are provided a grant of $10.000.000 Chilean pesos (around $15,000 USD) to cover their living and business expenses. Open acceleration and experimentation are encouraged

and teams are required to take risks and provide support to one another. Program offerings focus on building capacity and educating women in areas where they are lacking.

The S Factory participants have access to the Start-Up Academy programming including weekly discussions and workshops.

Angela Braren winner Generation 1 and Patricia Hansen Acceleration Director Start-Up Chile

At the end of The S Factory program, participants pitch their ventures to staff and external judges and the top performing women are invited back to pitch to other founders, media and other participants in the entrepreneurial ecosystem. As finalists, they receive national and international media attention, prizes and the possibility of extending their term and an additional $5.000.000 Chilean Pesos ($7,500 USD) of free equity funding.

Another requirement of The S Factory is giving back, thus participants are required to also engage in social impact projects which address underrepresented communities in technology and entrepreneurship. The S Factory female founders also have access to important Start-Up Chile networks including the Mentors Network, Investors Club, local and international corporate partners, and an alumni network of more than 4,000 entrepreneurs.

As of The S Factory Generation 5 (2017), 25% of the selected Start-Up Chile Seed ventures were headed by females, and 40% of this is explained by the participation of former The S Factory participants.

Generation 1 and S Factory female founders with co-founders

Chapter 2

Demographics of Entrepreneurs

AGE

The highest participation in entrepreneurship among both women and men peaks in the 25-34 age range, closely followed by the 35-44 age range. This is true across development levels and regional groups. Notably, the highest rates for women are in the primary child-bearing years (25-44). The relationship between genders and entrepreneurship rates holds throughout the age groups, with slightly wider gaps at ages where rates are highest. The greatest variation across age groups occurs within the regions.

The average female TEA participation rate by age cohort is shown in Figure 7 (with Estonia, Thailand, the Philippines and Slovakia highlighted). In Asia, the Philippines and Thailand show an interesting age pattern highlighted in this figure. Female entrepreneurship rates are similar in the two youngest age groups. Beyond that, however, rates continue to edge upward over the next two age groups in the Philippines but fall off dramatically in Thailand. Rates are therefore highest among those age 25-34 in Thailand, but at their highest level among ages 35-44 and 45-54 in the Philippines.

Similar variations in age patterns occur in Europe. In Greece and Slovakia, female TEA rates climb to their highest level among adults age 45-54. In Poland, Turkey, Kazakhstan and Estonia, female entrepreneurship levels peak among women age 24-34, falling off beyond this young age.

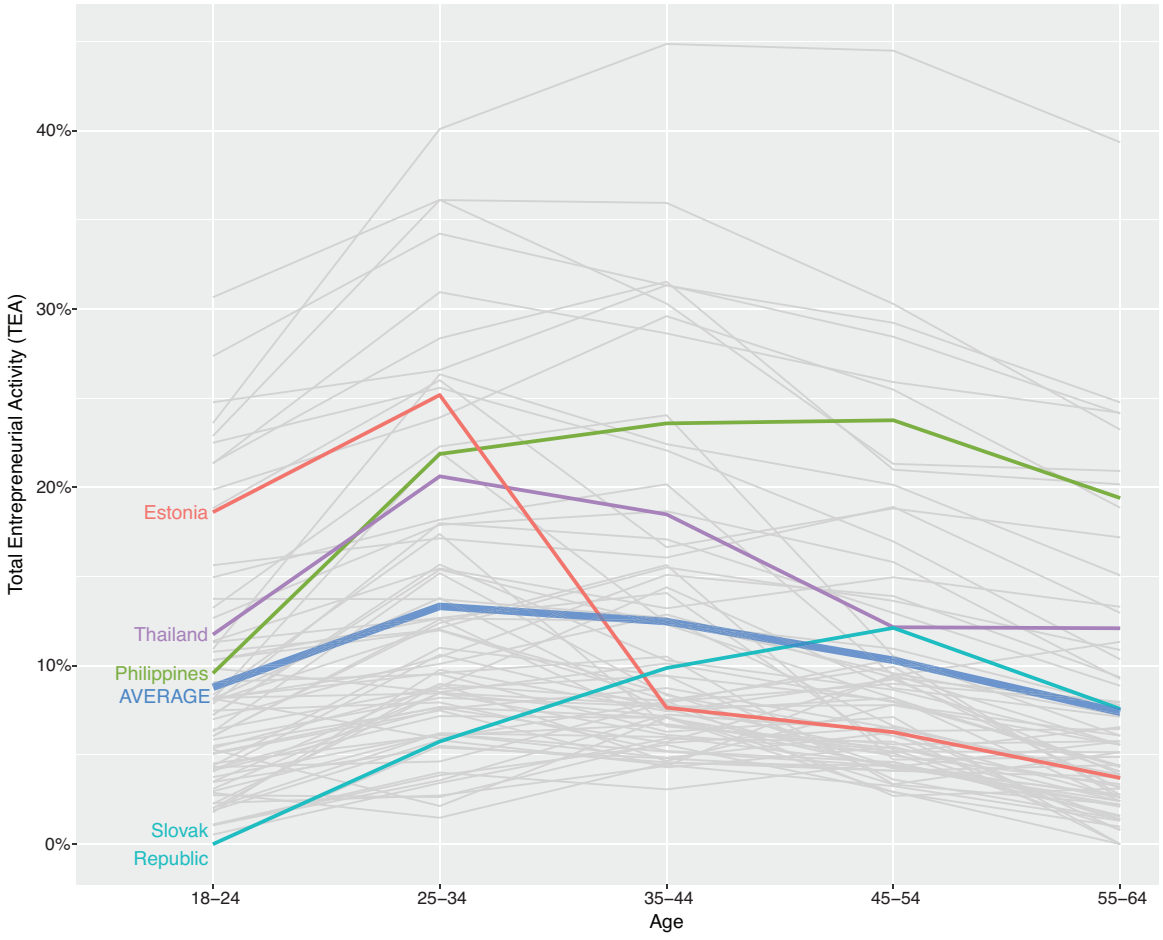


FIGURE 7
Female Participation in Total Entrepreneurial Activity by Age (Highlighting the Philippines, Thailand, Slovakia and Estonia), GEM 2015-2016

In Latin America, Argentina and Brazil report substantial activity among young women age 25-34, followed by a drop to less than two-thirds that level after age 34. Peru and Belize also exhibit high rates among women age 25-34, but climb by about 20% among women age 35-44 before gradually tapering off.

In MENA, age patterns vary among economies at different development levels. In Egypt, Iran and Saudi Arabia, entrepreneurship is highest among young females age 25-34. In two wealthy economies in this region, Israel and the UAE, the next group, age 35-44, exhibits the highest levels.

In sub-Saharan Africa, South Africa's low overall female entrepreneurship rate is explained by the relative lack of participation among the two youngest age groups—those 18-24 and those 25-34. The highest female rates in South Africa occur among those 45-54, showing entrepreneurship undertaken primarily in late career stage. Male rates are consistent from ages 18 to 54, resulting in greater gender gaps in younger age groups. In other countries from this region, young women, particularly those age 25-34, start businesses often. In Senegal, female entrepreneurship rates climb even higher among those age 35-44 and 45-54. It is possible that access to child care and strong societal role expectations for women to be family caretakers explain variations at different life stages.

THE EFFECT OF WOMEN'S POLITICAL EMPOWERMENT AND RULE OF LAW ON WOMEN'S ENTREPRENEURSHIP RATES

Goltz et al. (2015) drew on GEM and World Bank data for 53 countries to examine the effect of women's political empowerment and rule of law on the rate of female nascent entrepreneurship. Political empowerment was represented as the proportion of seats held by women in national parliament. Rule of law measured the strength of enforcement of laws and regulations that have an influence on the private sector, including business startup activity. This includes the extent to which there exists confidence in the courts and police, and in the enforcement of contracts and property rights.

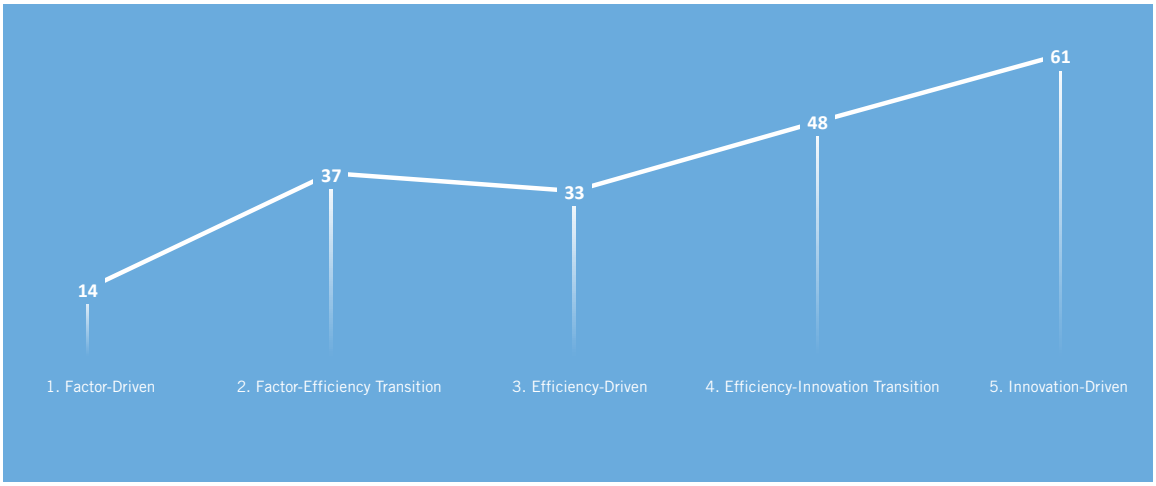
The results showed that women's nascent activity was positively associated with political empowerment and rule of law. The authors explain that women in political positions ranging from local to national levels can remove cultural and institutional barriers to entrepreneurship, and can advance policies that promote women's participation and achievement in the economy. Rule of law provides a legal and regulatory structure to protect business activities of women, particularly important when the informal culture tends to work against these endeavors. Rule of law also showed a moderating effect on the relationship between political empowerment and nascent entrepreneurship rates, suggesting that women who are empowered to enter entrepreneurship can be confident that their business activities will be protected.

Goltz, Sonia, Buche, Mari W., and Pathak, Saurav. (2015). Political Empowerment, Rule of Law, and Women's Entry into Entrepreneurship. *Journal of Small Business Management*. 53(3), 605-626.

EDUCATION

Entrepreneurship may be an attractive work option for women lacking high education levels. On the other hand, while those with college degrees and above have more career possibilities, they may nonetheless see opportunities they want to pursue or they may have a preference for starting and running their own businesses.

FIGURE 8
Percentage of Female Entrepreneurs with Post-Secondary Degree or Higher by Economic Development Level, GEM 2015-2016



Education levels among female entrepreneurs tend to increase with economic development, as Figure 8 shows. To some extent, this reflects the general population. In factor-driven economies, 14% of women entrepreneurs have a post-secondary degree or higher, but in innovation-driven economies it is 61%.

There is an interesting association between levels of educational attainment and TEA rates among women at different development levels. In both factor-driven and factor-efficiency transition economies, there is a negative relationship between education and entrepreneurship rates among women: Entrepreneurs are less likely to have a post-secondary or higher level of education compared to non-entrepreneurs. This suggests that, at these early stages of economic development, entrepreneurship provides an important income-generating option for women with lower levels of education. However, at the efficiency-driven through innovation-driven levels of economic development, entrepreneurship rates are higher among women with post-secondary education and above. For these highly educated women, entrepreneurship may therefore represent an attractive work alternative.

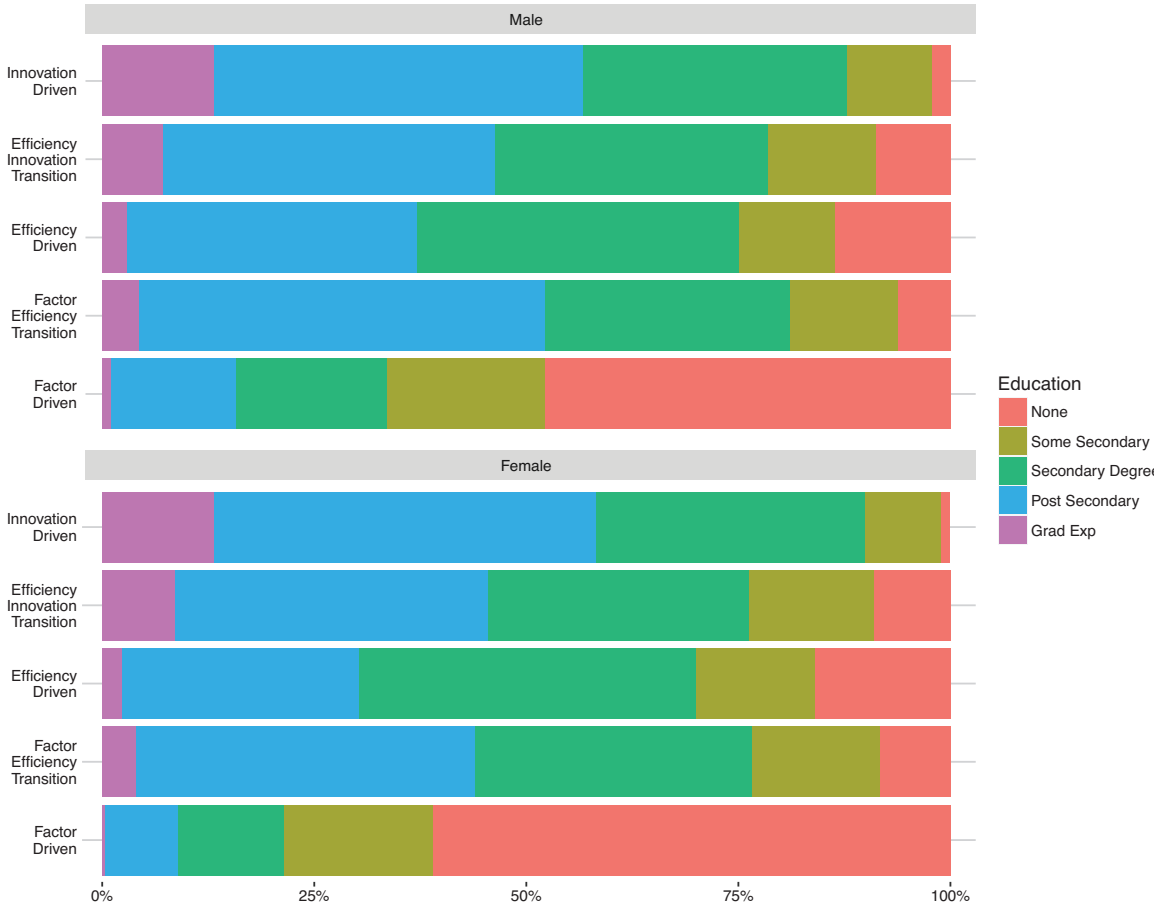


FIGURE 9
Educational Attainment of Male and Female Entrepreneurs by Economic Development Level, GEM 2015-2016

Parity with male entrepreneurs increases with economic development. In the factor-driven stage, women entrepreneurs are about two-thirds as likely as males to have a post-secondary degree or higher. In the efficiency-innovation driven and innovation-driven economic development stages, women entrepreneurs are as likely as men, or more likely, to have reached post-secondary or higher (see Figure 9).

Across regions, higher education levels are less prevalent among sub-Saharan African female entrepreneurs than elsewhere (see Figure 10). Only 2% to 3% of female entrepreneurs in Burkina Faso and Senegal have a secondary education level or higher, and the highest levels on this indicator reach only 26% in Botswana and South Africa. This is the only region where there is a gender gap, with women entrepreneurs averaging just over two-thirds the level of higher education of men entrepreneurs. The other regions report female higher education levels close to, or greater than, those of males.

In most Latin American and Caribbean economies, under one-third of women entrepreneurs have post-secondary or higher education levels, as low as 4% and 6% in Guatemala and Brazil respectively.

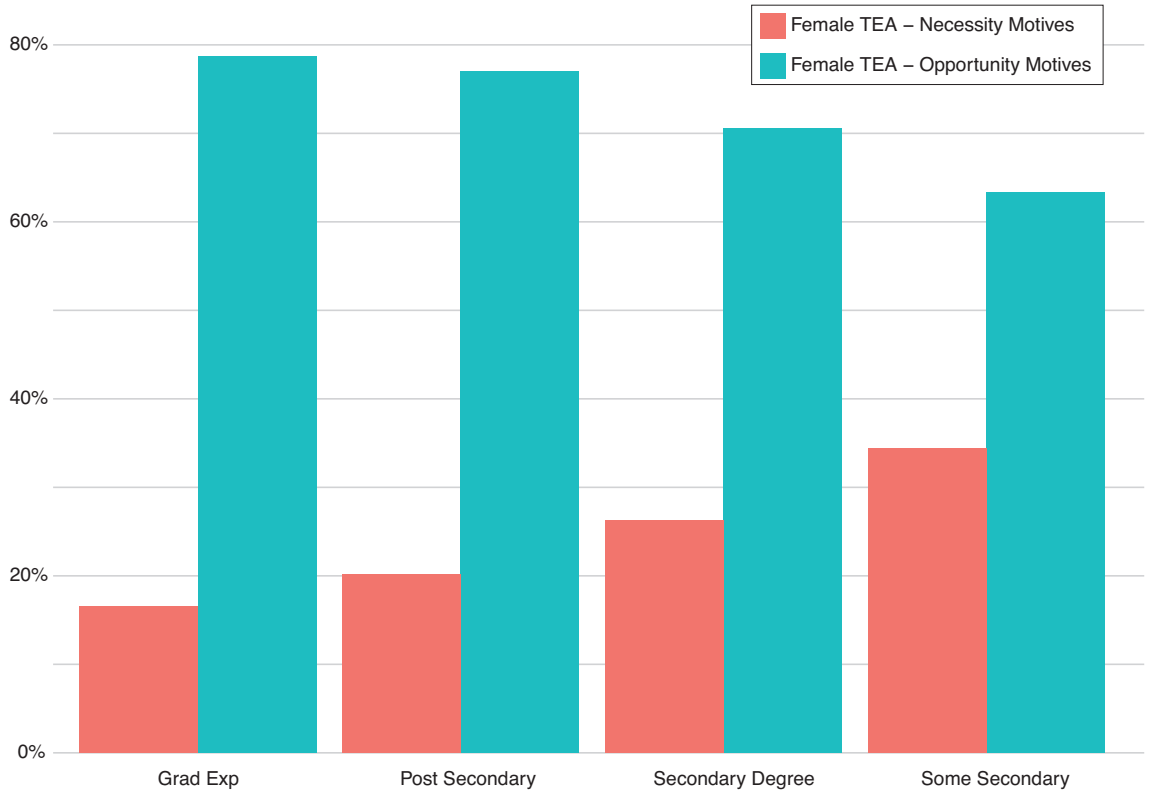
North America shows the highest education rates among women entrepreneurs, with 84% having completed post-secondary education or higher. Europe is notable for averaging 22% more highly educated women entrepreneurs than men entrepreneurs. Ireland, Cyprus, France and Russia all report over three-fourths of female entrepreneurs have post-secondary education or beyond.

East and South Asia and Pacific show an economic development level split. Lower development levels report fewer women entrepreneurs with higher education compared to innovation-driven economies. Only Australia has more than three-fourths of women entrepreneurs with higher education. MENA exhibits a similar divide; less than 8% of women entrepreneurs in Jordan have a higher education, while more than three-fourths report this level in Israel and Qatar.

As Figure 11 shows, opportunity motives among women entrepreneurs increase with level of education, and necessity motives decrease. Among women entrepreneurs who have received some secondary education but have not graduated with a secondary (high school) degree, 35% started their businesses because they had no other option for work. For those who have continued studies beyond an undergraduate (Bachelor) degree, only 18% state this motive. This reveals that entrepreneurship offers a work option for those with little education and few employment possibilities, as well as a career choice for highly educated women.

FIGURE 10
Female TEA Levels by Region, Showing Proportions with Post-Secondary Degrees and Higher, vs Lower Education Levels (in % of Female Population Aged 18 to 64), GEM 2015–2016

FIGURE 11
Percentage of Opportunity and Necessity Motives among Female Entrepreneurs by Education Level, for Those with Secondary Education and above, GEM 2015-2016



PROFILE OF WOMEN ENTREPRENEURS BY STAGE OF ECONOMIC DEVELOPMENT

The boxes below indicate the impact of gender, age and educational attainment on the odds of reporting entrepreneurial activity at three stages of economic development.

Factor-Driven and Factor-to-Efficiency-Driven Economies
Gender: Women are 21% less likely than men to start a business.
Age: Those 25-34 and 35-44 are more likely to report entrepreneurial activity than those 18-24.
Education: TEA participation decreases at every level of educational attainment compared to women with no education.
Capability: Women with positive perceptions of their skill are more likely to start a new business.

Efficiency-Driven and Efficiency-to-Innovation-Driven Economies
Gender: Women are 30% less likely to than men to start a business
Age: Those 25-34 and 35-44 are more likely to report entrepreneurial activity than those 18-24.
Education: Women with post-secondary education and higher are more likely to start a new business than women with no education.
Capability: Women with positive perceptions of their skill are more likely to start a new business.

Difference: The likelihood of women reporting entrepreneurial activity changes with respect to education: higher levels of education have a positive impact on women's TEA.

Innovation-Driven Economies
Gender: Women are 41% less likely than men to start a business.
Age: Those 25-34, 35-44, and 45-54 are more likely to report entrepreneurial activity than those 18-24.
Education: Women who have attained a secondary degree or higher are more likely to start a new business than women with no education.
Capability: Women with positive perceptions of their skill are more likely to start a new business.

Difference: Compared to earlier development levels, the gender gap is significantly larger, and entrepreneurial activity is more prevalent among older women and those with high educational attainment.

In summary, women are less likely than men to start a business, and the entrepreneurial gender gap increases with higher stages of economic development. Women who believe they are capable of starting a business have greater odds of reporting entrepreneurial activity, regardless of the stage of economic development, while age and education have a variable impact. For example, in an innovation-driven economy, the odds of women starting a new business increase at ages 25-34, 35-44 and 45-54, while in a factor-driven economy entrepreneurship peaks at 25-34 followed closely by 35-44. Additionally, women in efficiency – and innovation-driven economies with higher levels of educational attainment (secondary degree and above) have greater odds of becoming entrepreneurs.

Coca-Cola 5by20 Sari-Sari Store Training and Access to Resources Program

The Coca-Cola Company's 5by20 initiative is dedicated to empowering 5 million women entrepreneurs across the company's global value chain by 2020. The initiative is supported by local Coca-Cola teams around the world who assess their communities to develop programs that would best help the women entrepreneurs who live and work there.

In the Philippines, there are 1.2 million small retailers which are known as sari-sari stores. Primarily women-owned outlets, they are found on nearly every street and are a point-of-sale channel for Coca-Cola products. These female retail entrepreneurs face barriers to operating and growing their businesses due to a lack of business knowledge; inability to access business resources, such as additional capital and store assets; and access to peer mentors.

The Coca-Cola 5by20 Sari-Sari Store Training and Access to Resources (STAR) Program was piloted in 2011 and began scaling in 2013. The Program aims to empower women owners of small neighborhood stores to increase their household income and improve their quality of life. Developed by the Technical Education and Skills Development Authority (TESDA), the International Labour Organization (ILO) and Coca-Cola University, the STAR program is focused on capacity building.

The STAR program focuses on the economic empowerment of women with stores located near or inside their homes, which allows them to balance their household responsibilities and at the same time earn additional income for the family. The curriculum consists of business skills training in a classroom setting over 12-weeks on four modules: Practicing Business Professionalism and Gender Sensitivity; Business Planning; Business Management; and Access to Resources. Upon graduation, many women continue to receive support, including access to resources such as microfinance, merchandising and peer mentoring.

STAR training in Manila, Philippines, The Coca-Cola Company

The STAR program is delivered through a Golden Triangle partnership with the Philippine Government through the Technical Education and Skills Development Authority (TESDA); non-government microfinance institutions, such as Alalay sa Kaunlaran, Negros Women for Tomorrow Foundation and First Community Cooperative; and various local women organizations.

As of Dec. 31, 2016, cumulatively 71,011 women have been enabled through the STAR Program. The program's ambitious target is to reach 200,000 women retailers throughout the Philippines by 2020, and similar programs are being developed and best practices shared in other ASEAN countries of Indonesia and Malaysia.

Chapter 3

Phases of the Entrepreneurial Process

Although the business start-up phase attracts attention, the entire business process is important to study because it signals the extent to which there is participation at all phases. This includes a population base willing to start, essentially supplying the entrepreneurship pipeline, as well as those who have sustained their business start-ups to maturity. Rates and reasons for discontinuance provide indications on the turnover in entrepreneurship and possible constraints.

ENTREPRENEURIAL INTENTIONS

Like TEA, entrepreneurial intentions are highest at the factor-driven stage and decline with greater levels of economic development. What is different about intentions among women, however, is that the gender gap is slightly narrower for intentions than it is for TEA. This suggests that women are more likely to have intentions compared to men, than they are likely to start a business compared to men. Although not all intentions translate into action, the implication is that more women than men may be dropping off in the transition between phases.

Over half of women in sub-Saharan Africa state they intend to start a business in three years, twice the percentage of those actually starting (see Figure 12). A similar ratio exists in Europe, while Asia and Latin America show slightly higher and lower ratios respectively. A higher level of intentions relative to startup activity may signal women simply expressing intentions but not following through on them. This could be due to constraints such as undue regulations or bureaucracy relating to starting and running a business, a lack of infrastructure or technology necessary for conducting business activity, and even cultural and social norms that limit the desirability of and support for entrepreneurial efforts.

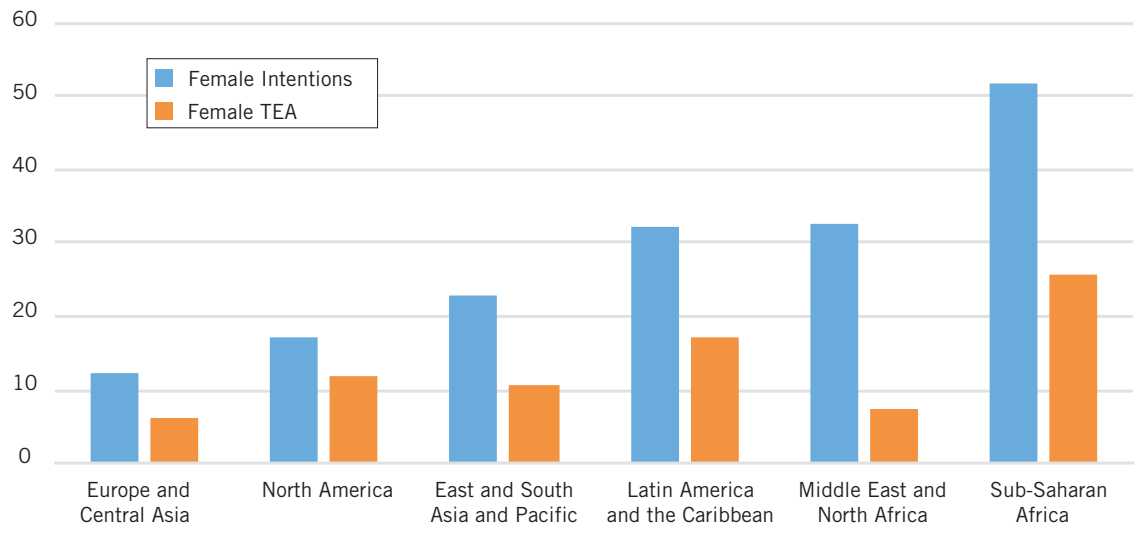


FIGURE 12 Entrepreneurial Intentions vs Total Entrepreneurial Activity Rate by Region (in % of Female Population Aged 18 to 64), GEM 2015-2016

On the other hand, there may be a time lag where a change in intentions is not yet reflected in a change in TEA. For this reason, a two-year time lag was examined to determine the relationship between the percentage of women stating they intended to start a business sometime in the next three years and actual start-up activity two years later.

TIME LAGS: INTENTIONS TO TOTAL ENTREPRENEURIAL ACTIVITY

Sixty-three economies participated in multiple recent GEM cycles; most were in both the 2016 and 2014 GEM surveys.[11] Overall, there were 2.2 times as many women expressing intentions as there were starting or running new businesses in 2016. In 2014, this ratio was 2.1, as was the time-lagged comparison (ratio of intentions in 2014 to TEA in 2016).

[11] For Israel, Korea and Macedonia, 2013 data were used for 2014; for Barbados, Belgium, Botswana, Norway, the Philippines, Tunisia, and Vietnam, 2015 data were used for 2016. For simplicity of discussion, 2016 will denote the most recent year, and 2014 will denote the earlier year.

In four economies, Greece, Malaysia, Panama, and Slovakia, intentions were higher in 2014 than in 2016, resulting in a higher lagged ratio compared to the same-year ratio in 2016. While more women in these countries were thinking about starting in 2014, thoughts of starting diminished in 2016.

In Belize, Burkina Faso, Canada, El Salvador, India, and Poland, intentions and TEA increased from 2014 to 2016, leaving a lower lagged ratio resulting from fewer intentions in 2014. In Belize, Canada, and Poland, an accompanying decline in necessity-driven motives signals greater optimism about entrepreneurship in 2016. In El Salvador, India, and Burkina Faso, an increase in necessity motives suggests that the higher levels of entrepreneurship in 2016 are due to more people entering out of a need for income when there are no better work choices.

For the remaining economies not identified above, there was little difference between the lagged and 2016 ratios. In countries such as those identified above, shifts in conditions or attitudes may have influenced the relationship between women wanting to start and then actually acting on their intentions later. Most economies (53 out of 63) had similar lagged and concurrent ratios. This signals persistent conditions that either enable or limit carrying out of intentions.

The highest ratio of intentions to start-ups was observed in eight economies: Iran, Qatar, and Tunisia in MENA; France and Macedonia in Europe; Taiwan and Korea in Asia; and Jamaica in Latin America. In 2016, there was a greater than 4:1 ratio of intentions to TEA in these economies. In other words, for every woman actually starting a business, more than four intended to start during the next three years. The lagged ratio varied more, but was greater than twice the level of intentions to starts, for each of these eight economies. This suggests some constraints where entrepreneurial enthusiasm does not translate to action.

In three European economies, more women started in 2016 than intended to start: Russia, the Netherlands, and Norway. The time lag showed a one-to-one or lower ratio between earlier expressions of intentions and actual starts. It could be the case that in these countries, women started close to the time they began thinking about it. They are serious about their intentions, and otherwise do not express them if they are not positioned to take action. It may also reflect an ease of getting started.

CHANGES IN INTENTIONS

Across the 63 economies participating in this and the previous report, entrepreneurial intentions increased among women by 16% from 2014 to 2016. The gender ratio, however, remained virtually the same. In all regions, average intentions improved, and in North America by as much as 30%, although this was mostly due to increases in Canada. Asia also saw a large change with an 18% increase in intentions among females. Increases in both these regions contributed to narrowing the gender gap, indicating that women were not only more likely to express intentions, but more likely than men. Europe and MENA did not report much change in intentions. In Europe, the gender gap widened slightly.

ESTABLISHED BUSINESS ACTIVITY

GEM data show that as economic development increases, established business activity among women declines and the gender gap in this indicator increases. With fewer businesses being started at higher levels of development, fewer businesses exist to transition to the mature phase. Additionally, if fewer women relative to men are starting businesses in advanced economies, this same gap will likely occur among established business owners. However, while certain conditions affect all businesses regardless of gender of the entrepreneur, some conditions may affect businesses based on gender.

Figure 13 shows that established business ownership among women is lowest in MENA. This region also reports the widest gender gap; women run established businesses at one-third the rate of men. In this region, the highest female established business ownership rate is 14% in Lebanon, slightly more than half the level of men. In the UAE and Qatar, less than 1% of women are established business owners, and this is less than 20% of the male rate.

North America and Latin America both report the same rate for female established business ownership. What is unusual about this result is that Latin America has a 45% higher female TEA rate than North America. This indicates that while many women are starting businesses in Latin America, relatively few sustain their businesses into maturity.

Latin America exhibits a narrow gender gap in TEA rates, and this gap widens with established business ownership. This suggests that women are nearly as likely as men to start businesses, but less likely to sustain them. North America reports the narrowest regional gender gap in established business activity, despite a wide gap compared to men in TEA rates. Women are less likely than men to start businesses, but are closer to the male level with regard to running mature businesses.

The highest regional female established business ownership levels appear in Asia and sub-Saharan Africa. In sub-Saharan Africa, this can be seen as a result of high start-up levels, although established business activity is less than half the TEA level. In Asia, TEA and established business rates are essentially the same. In Thailand, Vietnam and Indonesia, established business ownership rates among women are equal to or higher than TEA rates. Additionally, there are equal or greater

proportions of established business owners among women than among men. Asia, like most regions, has some economies with low female rates and wide gender gaps, but Thailand, Vietnam and Indonesia contribute to favorable results overall.

Examination of female TEA versus established business rates reveals some interesting regional patterns. Europe and Asia have high levels of established business ownership relative to TEA. Both regions show average ratios of 1.3 and 1.1 entrepreneurs per established business owners respectively, suggesting conditions or customs where entrepreneurship is low (in the case of Europe) or moderate (in the case of Asia) but where women reach maturity with their businesses and keep them running.

Three regions have economies with substantially more women entrepreneurs relative to business owners: Latin America, sub-Saharan Africa and MENA. On average, 2.3 or 2.4 women start a business for every one running a mature business. In Latin America and sub-Saharan Africa, there are many women entrepreneurs, but few sustained businesses. In MENA, start-up rates are low, and mature business ownership is even lower.

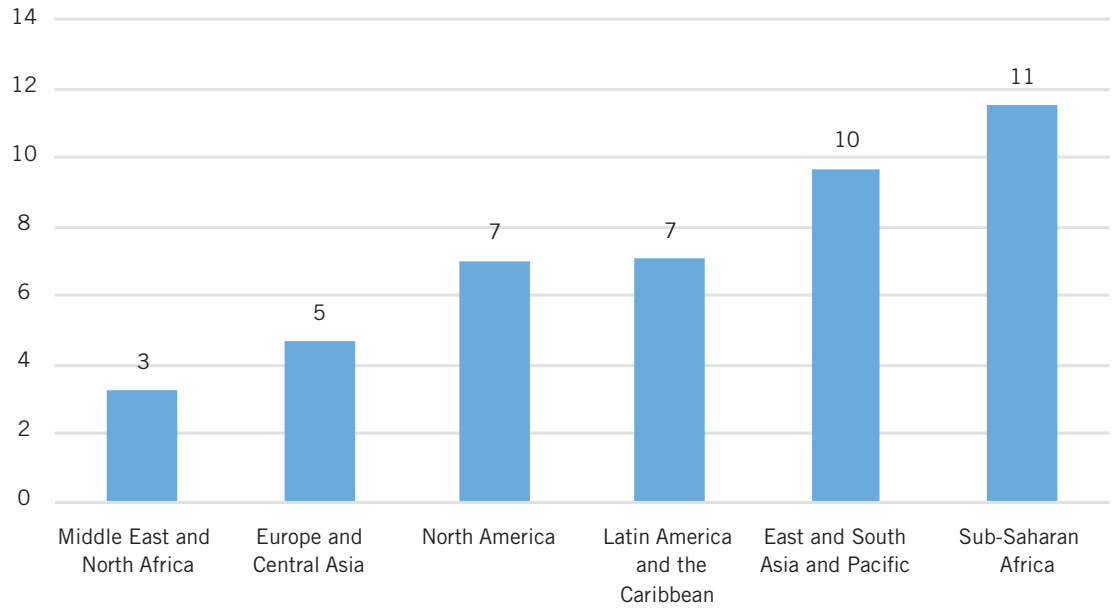


FIGURE 13
Regional Averages for Female Established Business Ownership Rates (in % of Female Population Aged 18 to 64), GEM 2015-2016

CHANGES IN ESTABLISHED BUSINESS ACTIVITY

Across the 63 economies included in this report and the previous biennial report, established business rates increased by an average 8%, and the gender ratio improved by 9%. Female rates on this indicator jumped by 33% in sub-Saharan Africa, yet this was accompanied by a 21% decline in the gender ratio. Although the latter statistic reflects an even greater level of increase in male established business activity, it is nonetheless a positive development that more women are running mature businesses in this region.

The Middle East saw a 19% decrease in female established business rates, and Asia reported an 8% decline. These had small effects on the gender ratio, however, based on the fact that male established business rates also declined in these regions. North America posted increases in established business activity and improvements in the gender ratio, resulting in the narrowest regional gender gap. Latin America and Europe saw little change in established business activity, although the gender ratio improved in Latin America, but did not change in Europe.

BUSINESS DISCONTINUANCE

Entrepreneurs exit businesses for a variety of reasons. The business may not be profitable, or it may be unable to secure needed financing. The entrepreneur may sell the business, retire, leave to pursue another opportunity, or exit for personal reasons. Not all reasons are negative, demonstrating that business discontinuance is not necessarily bad or equated with failure. Additionally, if avoiding failure were of prime importance in a society, there would be little entrepreneurship. Fortunately, there are optimistic entrepreneurs and those willing to take risks, and, ideally, societies that accept both. In order to have entrepreneurship, the prospect of failure must be accepted.

This leads to the notion that there needs to be a balance between too little and too much business exit activity. A dynamic entrepreneurial society does not suppress entrepreneurship because of the threat of failure, but at the same time it is not plagued with excessive business exits, which may be distressing for entrepreneurs and disruptive to customers and other value network participants.

Perhaps unsurprisingly, business exits are more common at earlier economic development stages. There is a larger pool of businesses that could possibly be discontinued. Similarly, as reported previously, established business activity relative to TEA is lower in earlier stages of economic development. Conditions in the environment may make it difficult to sustain a business. Start-up activity may be unusually high in a society because people need to generate their own incomes, or because they jump too readily into this activity without the ability or inclination to sustain it. Relative to TEA, the highest level of exits per entrepreneur is in the factor-efficiency transitional stage, where four exits occur for every 10 women starting or running a new business. This declines to a little over two exits for every 10 female entrepreneurs in innovation-driven economies.

The business discontinuance rate among women exceeds that of men at the first three levels of development, although only by about 10%. Given that women are less likely than men to start businesses, this means that, despite a smaller pool of businesses, there are more exits for women. Few women in innovation-driven economies have exited businesses, and at only two-thirds the rate of men.

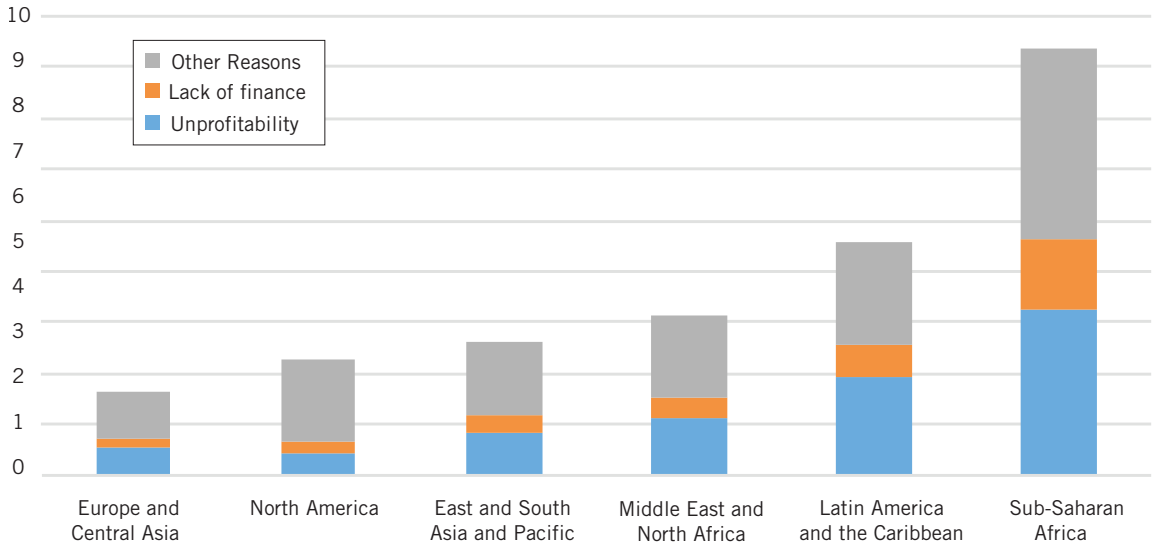
In middle-stage, efficiency-driven economies, women exiting are most likely to cite unprofitability as a reason for discontinuing. This could be due to a variety of reasons: Some types of businesses are more difficult to sustain than others, a highly competitive environment, factors that suppress profits like taxes and labor costs, entrepreneurs less willing to continue with unprofitable businesses, and so forth.

Lack of profits affects discontinuance among women more than men at the efficiency-driven stage, where women are one-third more likely than men to exit for this reason. Women in innovation-driven economies are a little less likely to exit due to unprofitability. Other development levels show about equal propensity for men and women to exit due to unprofitability.

Finance problems account for 22% of female business exits at the factor-efficiency-driven transition stage, the highest level among the economic development phases. Exits due to this reason were lower in the efficiency-innovation-driven stage, but women were 28% more likely than men to state they exited because they could not obtain the funding they needed for their businesses. Finance issues are less often the reason for discontinuing businesses in innovation-driven economies, where women are about equally likely, or less likely, than men to have exited for this reason.

From a regional perspective, discontinuance is highest in sub-Saharan Africa, followed by Latin America, as shown in Figure 14. This is related to the fact that more women start businesses in these regions. But it appears that these women often struggle with unprofitability, and slightly more often than men. Sub-Saharan Africa also cites the highest level of finance issues associated with closing a business, compared to other regions. Together, lack of profits or finance issues explain 56% of exits in both regions.

FIGURE 14
Percentage of the Female Population Discontinuing a Business in the Past Year by Region, Showing Reasons for Discontinuation (in % of Female Population Aged 18 to 64), GEM 2015-2016



Region	Unprofitability (% TEA)	Lack of Finance (% TEA)	Other reasons (% TEA)
Europe and Central Asia	33	10	57
North America	19	9	72
East and South Asia and Pacific	31	13	55
Middle East and North Africa	36	13	51
Latin America and the Caribbean	42	14	44
Sub-Saharan Africa	39	17	44

WOMEN^{X}

Business training, Lagos, 2016 *source: Women^{x} Nigeria*

Business training class in Karachi, 2015 *source: Women^{x} Pakistan*

Women^{X}, a multiregional women's entrepreneurship program, was developed by the World Bank with the support of several internal, senior management champions. The program was launched in Pakistan and Nigeria in 2014 and offers a suite of services to women entrepreneurs. Participants are taught core business skills, such as accounting, marketing, operations and HR management, and basics of legal affairs, in combination with opportunities to network among peers and broader business communities; soft skills training like communication and negotiation skills are also provided. Local business schools are key delivery partners in both countries (in Pakistan, local partners work with Enclude Solutions to deliver the program).

The programs in Nigeria and Pakistan are similar, though customized to make the material relevant for the participants. For example, local case studies, including cases based on participants, were written soon after launching. Localization and peer-to-peer networking was crucial to the program's success in Pakistan and Nigeria.

In Karachi, Pakistan, the program was housed in the Institute of Business Administration's Aman Center for Entrepreneurial Development (CED) and services were delivered by a combination of partners, including CED. The business education portion of Women^{X} won the United States Association for Small Business Administration and Entrepreneurship's prize for best Specialty Entrepreneurship Program. Additional services, including one-on-one mentoring and custom business advice was provided to a subset of high-performing participants.

In Nigeria, Women^{X} launched the program in Lagos and Abuja where the Pan-Atlantic University's Enterprise Development Center (EDC) led its delivery. The country program also incorporated online tools to deliver part of the business skills and mentoring services, providing an important avenue for potential scaling up. All participants received business advisory services from in-house consultants while one-on-one mentoring was provided to a subset of participants.

Women^{X} aims to equip program graduates for productivity and revenue increases, job creation (especially for other women), stronger support networks, and a healthier appetite for risk taking and leveraging growth opportunities. Early evaluations have identified positive changes in business practices and strong peer networking effects. An impact evaluation of the Pakistan program is forthcoming.

Women^{X} also engages in a public discourse strategy to highlight the achievements and potential contributions of women's entrepreneurship. It's important to make the public aware that women are good leaders, run successful businesses, and play an important role in society.

Almost 400 women in Pakistan (including Karachi, Lahore, Peshawar and smaller districts across Punjab) have taken part in Women^{X} and in Nigeria over 500 women have benefitted from the program. The program concluded in Nigeria in 2016 and is ongoing in Pakistan (in Lahore and Faisalabad) till 2018.

Chapter 4

Impact of Entrepreneurs

Women entrepreneurs create value for their societies in many different ways. When they self-employ, they create a source of income for themselves and their families, often involving other value network participants who benefit from their work. Those who endeavor to grow and employ others create jobs in their communities and beyond. Innovative entrepreneurs bring new solutions to market, with new sources of value that have not been offered by competing options. In venturing beyond their national borders, internationalizing entrepreneurs contribute to their economy's global competitiveness. Finally, women entrepreneurs play critical roles in a diverse mix of industries.

SELF-EMPLOYMENT

An entrepreneur creating a job for herself but not for others, and with no hiring intentions, may be viewed unfavorably by those who look to entrepreneurship as a source of job creation. As with men, women may be constrained or dissuaded from hiring workers, or they may lack capabilities or preferences for growing an employer business. When this happens, their societies lose an opportunity for employing their workforce, and they may also miss out on other benefits from the pursuit of larger, high-growth ventures.

There is more to consider, however, in terms of the impact on society from self-employed entrepreneurs. Viewed as a whole, these individuals are creating jobs, albeit for themselves. To the extent this form of entrepreneurship reflects work preferences and perhaps work-life balance, there is a contribution to societal well-being. There can be network effects that extend income generation beyond themselves to those in their value-creating network. Women may be running these businesses while employed elsewhere. Self-employed businesses can provide flexibility in allowing one to work when and where it is most convenient, engage in part-time work, and perhaps pursue shorter-term opportunities such as working on specific projects or filling in temporary employment gaps.

In 14 of the economies studied, no women entrepreneurs indicated that they were self-employed and intended to remain so.[12] These examples span nearly all regions and development levels. This is not a gender phenomenon, as there were also no men entrepreneurs running purely self-employer businesses except in two countries: less than 5% of men entrepreneurs in Kazakhstan and Uruguay said they had self-employer businesses.

In Thailand, Brazil and three wealthy European countries (the Netherlands, Norway, France), more than one-fourth of women entrepreneurs were starting self-employment ventures. In the Netherlands, half of women entrepreneurs were operating alone, nearly two and a half times the frequency of men. In over three-fourths of the economies in the sample, women were as likely as, or more likely than, men to have self-employment businesses.

It appears that there are more geographic rather than economic development level explanations for solo entrepreneurship among women. Similar levels of self-employment entrepreneurship may be seen in the factor through efficiency development levels, with a slight downward dip in the efficiency-to-innovation transition group. The increased level reported in the innovation-driven group average is primarily due to high presence in many European countries. As Figure 15 shows, Europe has the highest prevalence of one-person female business activity, whereas North America, containing two advanced economies, has the lowest.

[12] Kazakhstan, Uruguay, Barbados, Belize, Croatia, Indonesia, Jamaica, Republic of Korea, Mexico, Saudi Arabia, South Africa, Tunisia, Turkey, United Arab Emirates.

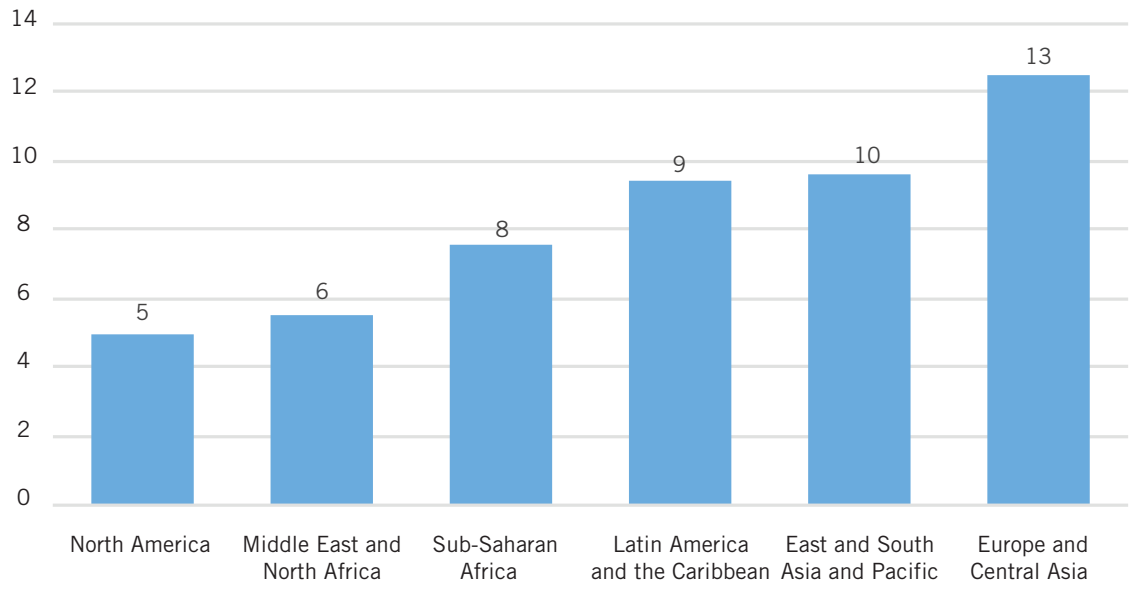


FIGURE 15
Percentage of Female Entrepreneurs Who Are Self-Employed and Do Not Expect to Hire Any Employee in the Next Five Years, GEM 2015-2016

GROWTH EXPECTATIONS

Entrepreneurs may seek a certain level of growth because of the types of businesses they start, their personal ambitions and preferences, and conditions in their environment. For example, such conditions may include market demand, competition, availability of skilled labor, labor laws, other regulations, and so on. The higher the level of economic development, the more often women entrepreneurs report the desire to grow their businesses, projecting six or more hires in the next five years. Factor-driven economies, on average, show low levels on this indicator. The next development phase, factor-efficiency transition economies, exhibits a level close to that of more developed phases.

In comparison to entrepreneurship rates, the gender gap is wider with respect to the proportion of entrepreneurs seeking growth. In factor-driven economies, fewer than six women entrepreneurs versus 10 men entrepreneurs are seeking growth by hiring six or more employees. Efficiency-transition economies show the narrowest gender gap with just under three-fourths of women reporting these expectations compared to men; the remaining development levels average around two-thirds.

Across regions, the lowest average female growth expectations are found in Latin America (Figure 16). Although there are many entrepreneurs in this region, proportionately few expect to grow their businesses. Latin America also exhibits a wide gender gap, with female growth expectations barely reaching 60% of the male level. Colombia reports the highest female growth expectations at 35%, while less than 2% of female entrepreneurs in Brazil have these ambitions, and at less than 20% of the male level.

Interestingly, although sub-Saharan Africa also has a wide gender gap, average growth expectations are higher than in Latin America. Together with the highest regional average TEA rate, this translates to substantial employment by entrepreneurs in this region. There may be good opportunities to grow businesses here, as well as available labor and few constraints on hiring. Compared to Latin America, sub-Saharan African countries show greater consistency in results ranging from 15% (Burkina Faso) to 29% (Botswana).

WORK-FAMILY POLICIES AND THE ENTREPRENEURSHIP GENDER GAP

Thebaud (2015) analyzed data from GEM and other sources in 24 high-income countries, finding wider gender gaps in entrepreneurship and established business ownership rates where supportive work-family contexts made available: (1) government-paid leave for mothers, (2) government investment in childcare, and (3) part-time work. In these contexts, women were also less likely to pursue entrepreneurship because they lacked better employment options.

Among entrepreneurs, however, narrower gender gaps were found in quality measures of entrepreneurship when these work-family practices were present. This included size of their ventures, intentions to grow their businesses, innovativeness of their products or services, and the extent to which they used new technology.

This indicates that a supportive work-family environment reduces participation in entrepreneurship among women more than among men, likely because it makes work as an employee more attractive. But women who do choose entrepreneurship are proportionately as likely as men to have larger ventures, intentions to grow, innovative offerings, and the latest technology. With greater societal support, women therefore have more choices for work preferences. To the extent they endeavor to start businesses, these will likely exhibit greater quality and impact, benefiting their societies as well as themselves and their stakeholders.

Thebaud, Sarah. (2015). Business as Plan B: Institutional Foundations of Gender Inequality in Entrepreneurship across 24 Industrialized Countries. *Administrative Science Quarterly*. 60(4), 671-711.

The MENA region reports highest average female growth expectations at 37% and highest gender parity, where women with growth expectations are just under 80% of the male rate. Although Jordan, like Brazil, has less than 2% of female entrepreneurs projecting growth expectations—combined with a gender gap of less than 10% of the male rate—most economies in this region report high female growth expectations with some very high gender ratios. Over half of women entrepreneurs in the UAE, Qatar and Tunisia expect to hire six or more employees in the next five years. Moreover, women in Saudi Arabia and Morocco are more likely than men to have these ambitions. Growth and hiring ambitions combined with low overall entrepreneurship rates suggest that few women enter entrepreneurship in this region, but those who do have high ambitions.

Europe and Asia show a mix of low-growth-oriented economies, with less than 10% growth orientation among women entrepreneurs, and high-growth-oriented economies where more than half of women entrepreneurs indicate they have high-growth ambitions. Notably, low growth economies in Asia fall in earlier phases of economic development, while innovation-driven economies report higher growth orientation. This accords with the general assumption that higher levels of development are associated with less entrepreneurship, but proportionately more of the growth-oriented type.

In Europe, innovation-driven economies report lowest growth expectations, and highest growth orientation occurs in efficiency-innovation transition economies. There may be constraints on growth in Europe, such as labor regulations or costs, or enabling factors such as technology that allow women to work as smaller business owners within a broader value network. Different cultural practices such as preference for work at home may also affect this indicator. For low-growth-oriented countries such as France, Greece, and Germany, the gender gap is wide, with growth expectations less than half the male level (as low as 22% in France). This suggests factors that affect women differently from men.

ENTREPRENEURSHIP AND WORLD DEVELOPMENT INDICATORS

Analyses of GEM data with World Development Indicators in 53 economies show that women are less likely to be entrepreneurs in economies where they make up a higher proportion of the labor force and they are not discriminated against in the hiring process. Where women have good job options, they may prefer work as employees. While fewer women start businesses in these economies, those who do are less likely to say they are innovative, suggesting that in economies where women account for a higher share of the labor force, entrepreneurship is rare and left to those with me-too opportunities.

It may appear counterintuitive that high female unemployment is associated with low female entrepreneurship. It would seem to be the case that women turn to entrepreneurship when there are few jobs in society. However, women in economies with high employment levels may keep a job if they have one. If they do not have a job, they may rely on unemployment benefits if these are offered, or tighten household budgets or rely on others for income to get by. It is likely that conditions are not promising where unemployment is high. Potential customers have less discretionary income and are less likely to spend scarce funds on novel concepts; investors and suppliers may be cautious, particularly with respect to new ventures; and entrepreneurship may seem a risky prospect. All this may deter women.

Economies with high levels of female unemployment have high levels of women who are established business owners (Figure 16). While women may hesitate to get started in unfavorable conditions, mature business activity appears a popular source of income in these economies. This activity also seems to be supported by financial empowerment; in economies where women typically have accounts at financial institutions, there is a high likelihood of established business ownership. Although economies with female financial empowerment do not have more female entrepreneurs than other economies, women who do start businesses are more likely to state that their products or services are innovative. These innovative women thrive in economies where women are able to do the same jobs as men.

In summary, entrepreneurship provides job options, but most women prefer work as employees. Unemployment may dissuade startup activity, when it might otherwise offer a source of income for women. In such cases, perceived risks may outweigh the benefits. However, mature business ownership may provide a stable job in conditions of high unemployment and where women are financially empowered. Financial empowerment and freedom to do the same jobs as men may be important factors in stimulating and supporting innovative women entrepreneurs.

Source of data: GEM and World Development Indicators (http://data.worldbank.org/data-catalog/world-development-indicators)

FIGURE 16
Total Female Entrepreneurial Activity Levels Indicating Percentage Who Plan to Hire More than Six Employees by Region (in % of Female Population aged 18 to 64), GEM 2015-2016

CHAPTER 4

INNOVATION

GEM represents innovation as exhibiting newness to customers, with offerings generally not available from the competition. Innovation may be based on unique features or other novel elements, and it may be influenced by a variety of factors: the level of competition, offerings of competing businesses, availability of the latest technologies and knowledge, expectations of customers, and so forth. It is also judged from the perspective of entrepreneurs—what they regard as novel and unique. What is considered innovative in one country or region may be commonplace in another.

Innovation levels increase with economic development, as innovation-driven economies exhibit a substantial jump from other development levels. This likely reflects the presence of investments in advanced knowledge, higher education levels, legal institutions that protect ideas, and sophisticated customers willing to try new things.

What is most interesting about the results on innovation is the level of gender parity. Among entrepreneurs in MENA, women not only report high innovation levels, but they are 60% more likely than men to state that their offerings are innovative. This figure is influenced by Saudi Arabia, which reported over four times the level of innovation among women compared to that among men. Nevertheless, seven of the 10 countries in this region report higher innovation levels among female entrepreneurs than those among male entrepreneurs (Egypt, Israel, Jordan, Lebanon, Morocco, Qatar and Saudi Arabia). In Lebanon, 63% of women entrepreneurs state they are introducing innovations with their businesses, higher than the male level. The MENA region also demonstrates the highest regional levels and gender parity in growth orientation. This highlights the impact of women entrepreneurs in this region.

The highest regional innovation level occurs in North America, where 38% of women report having innovative products and services (Figure 17). By contrast, in sub-Saharan Africa, 18% of women state their offerings are innovative. Yet both regions, as well as Europe, show gender parity. Overall, innovation represents the indicator with the greatest female-to-male gender ratio; across all 74 economies women entrepreneurs have a 5% greater likelihood of innovativeness than men.

FIGURE 17
Total Entrepreneurial Activity Levels Indicating Innovation Proportion by Region (in % of Female Population aged 18 to 64), GEM 2015-2016

INTERNATIONALIZATION

Entrepreneurs may operate ventures internationally because they believe their opportunities are globally relevant and they have the ambition to sell into markets beyond their home countries. A business environment may stimulate these ambitions, perhaps because a domestic market is too small or crowded with competition. Infrastructure and other factors—regulatory, geographic or cultural—may enable or encourage entrepreneurs to sell outside their national borders.

The level of international sales varies dramatically, spanning from zero or less than 1% in three Latin American countries (Brazil, Guatemala, and Ecuador) and three Asian countries (Malaysia, Thailand, and Vietnam) to over three-fourths of women entrepreneurs in the UAE and over half in Saudi Arabia.

Although high variation in internationalization occurs at each development level, results suggest lower levels at earlier development phases and higher levels in the innovation-driven group. On average, more than one-fifth of women entrepreneurs in innovation-driven economies state that 25% or more of sales are to customers outside their economies (Figure 18). This is four times more than in factor-driven economies. Higher levels of economic development are often accompanied by technology, infrastructure, and resources that facilitate trade, as well as an enabling regulatory environment. This creates opportunities for entrepreneurs who face challenges operating in small or highly competitive internal markets with products or services that are considered novel and unique in other cultures.

There are also indications of geographic patterns in the data. Only 6% of sub-Saharan African women entrepreneurs are internationally-oriented, somewhat more than half the level of men. In MENA, 29% of women entrepreneurs are considered international and at a higher rate than men. Regional trade may be common practice in some areas. Common culture and language may facilitate this, as well as trade policies like those established by the European Union. North America's high average is due to Canada, where 32% of women entrepreneurs list at least 25% of sales to international markets. This contrasts with the United States at 9%.

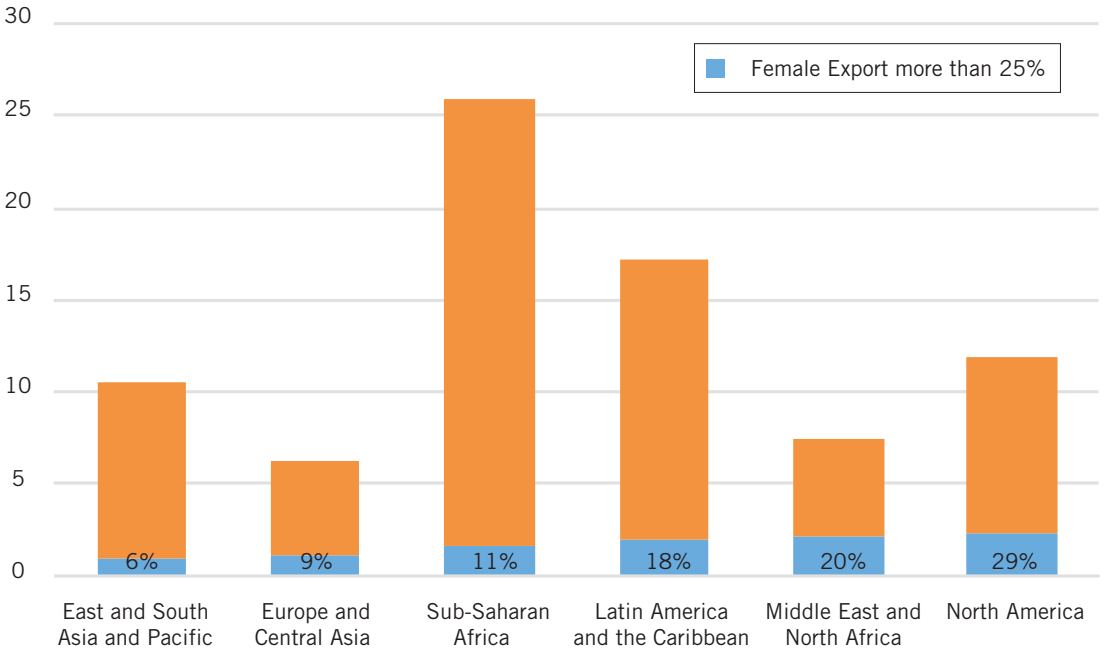


FIGURE 18
Total Female Entrepreneurial Activity Levels Indicating Percentage with Sales of 25% or More to International Customers by Region (in % of Female Population aged 18 to 64), GEM 2015-2016

CHAPTER 4

INDUSTRY

Industry participation shows notable differences across economic development groups. Wholesale/retail trade accounts for about 60% of female entrepreneurial activity among the first three development levels. By comparison, among innovation-driven economies only one-third of women entrepreneurs compete in this sector. This pattern is fairly consistent with men entrepreneurs. Across the entire sample, women entrepreneurs are just 16% more likely than men to be starting wholesale/retail businesses.

Conversely, more than half of innovation-driven women entrepreneurs, on average, are in services. This sector accounts for less than one-fourth of women entrepreneurs in factor-driven, efficiency-driven, and factor-to-efficiency-transition phases. This illustrates a shift from primarily low barrier-to-entry trading businesses to those typically dependent on human capital as economic development progresses.

A further breakdown of the service sector shows that half of women entrepreneurs in the innovation-driven group are in government, health, education and social services. Women entrepreneurs dominate this business category compared to men at all development levels. On average across the entire sample, women are two and one-fourth times more likely than men to be starting in this sector.

Women entrepreneurs are less likely to be seen in the information and communications technology (ICT) sector. Overall, fewer than 2% are starting ICT businesses. There is slightly more female participation in the innovation-driven group (2.4%) compared to earlier development levels, but the gender gap is large across these wealthy economies, with female participation little more than one-fourth that of males on average.

At a regional level, North America stands out for high female participation in ICT, mostly due to Canada, which reports greatest female activity in this sector across the entire sample. North America also exhibits a high level of female entrepreneurship in services, but more in finance/professional/administrative and consumer areas as shown in Figure 19.

North America and Europe have relatively low participation among women entrepreneurs in wholesale/retail, at half or less than the levels reported in sub-Saharan Africa, Latin America and Asia. The only sizable reporting of female activity in this sector is in Bulgaria, where 64% of female entrepreneurs have these types of businesses. Half of the European economies have one-fourth or fewer women entrepreneurs starting wholesale/retail businesses.

Europe, like North America, reports high participation in service industries. This sector accounts for just under three-fourths of women entrepreneurs in Switzerland and the Netherlands. Within the service sector, government/health/education and social services are particularly popular. In Switzerland, nearly half of women entrepreneurs are starting these types of businesses, over eight times the level of men.

In sub-Saharan Africa, more than 85% of businesses on average are in agriculture/mining, manufacturing/transportation or wholesale/retail. Few women start service businesses and even fewer start in ICT. MENA drops to an even lower number of ICT starts among women; Iran and Israel report less than 2% of female entrepreneurs in ICT, with male entrepreneurs exhibiting four to six times this level. Tunisia has slightly higher levels with women on par with men, but other MENA countries show no female ICT activity.

For the remaining sectors, MENA is about average, with interesting exceptions. Two innovation-driven economies in this region, Qatar and the UAE, exhibit high levels of wholesale/retail starts among women, accounting for more than two-thirds of female entrepreneurship in these countries. Another unusual result appears in the high levels of manufacturing/transportation activity in Iran and Morocco, where one-fourth or more of women entrepreneurs are starting these types of businesses.

Wholesale/retail dominates female entrepreneurship in Latin America and Asia, with this sector accounting for just under two-thirds of women entrepreneurs on average. In contrast, Latin America shows low participation in agriculture/mining among women, only 30% the level reported by men. Argentina and Panama are notable for having close to 5% of women entrepreneurs in ICT, higher levels than reported among men entrepreneurs. Brazil exhibits high activity in government, education, health, and social services, with over 30% of women entrepreneurs starting these kinds of businesses, almost five times more than men.

Asia reports high levels of wholesale/retail activity among women entrepreneurs, countered by low levels in agriculture/mining and manufacturing/transportation businesses. Australia is unique with high levels in these latter two sectors, together accounting for 23% of female entrepreneurs. More than half of female entrepreneurs start service businesses in Australia, about evenly split between the two sub-categories, with 22% in wholesale/retail. This contrasts with the Philippines, where 87% of women start wholesale/retail businesses and few compete in other sectors.

In summary, most participation among female entrepreneurs is in wholesale/retail, but this sector attracts men as well. Gender gaps are widest in ICT, where women compete at one-third the level of men on average, and in government/health/education and social services, where women compete two and one-fourth times more than men.

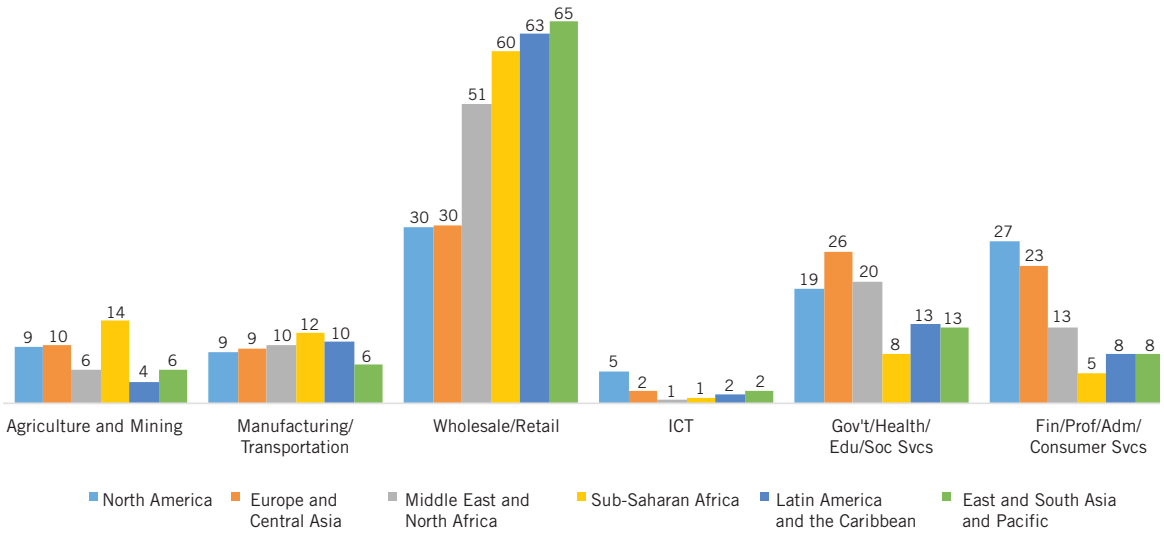


FIGURE 19
Percent of Female Entrepreneurs in Each Industry by Region, GEM 2015-2016

ACORNS– Accelerating the Creation of Rural Nascent Start-Ups

ACORNS, developed by Paula Fitzsimons and her team at Fitzsimons Consulting, was created in response to the Department of Agriculture, Food and the Marine's desire to support early stage women-owned businesses in rural Ireland. ACORNS was modelled after the successful Going for Growth program where the philosophy of *entrepreneurs supporting entrepreneurs* has helped over 500 female entrepreneurs to develop and grow their business.

ACORNS identified voluntary Lead Entrepreneurs from the Going for Growth community whose direct experience was in starting and successfully growing businesses in rural Ireland.

The program begins in October with a residential developmental forum – *Establishing Good Foundations* – where participants meet each other, their ACORN Lead Entrepreneur, and their round table group. The participants then meet with their Lead Entrepreneur and their groups of eight peers in separate roundtables during November, December, January and February. These sessions last about three hours and explore themes such as strategy, marketing/sales, finance and implementation. In April, at the end of the cycle, a second residential forum – *SMART Planning – the Road Map Ahead* – is held.

Following the pilot's success, Fitzsimons Consulting was awarded a second contract for the further development of the pilot participants and to implement ACORNS 2.

Caitriona Considine (ACORNS 2 participant), Moher Cottage, overlooking the Cliffs of Moher in Co Clare

ACORNS Pilot participants Breda English Hayes, Partner MOET Accountants and Valerie Murphy, Valerie's Breast Care

Forty-four entrepreneurs completed the pilot programme (92%) from September 2015 to April 2016. Forty three of this group (98%) elected to avail themselves of further development support offered by ACORNS through to April 2017. Over the 15 months of their involvement their combined sales increased by 103% to €4million; 25% of the participants generated export sales; and employment increased to 107 (+35%). Participants also reported that their confidence and motivation had grown and their networks improved.

The number of participants on ACORNS 2 was increased to 57. Fifty five participants (96%) successfully completed the cycle, which ended April 2017. At the completion, 47 of the businesses were trading, including nine that had started to generate sales for the first time. Among those trading, there was a reported 21% increase in sales over the six-month period. Eight participants were already exporting before the start of the program, three more have since started to export. Seventeen participants expect to be exporting by the end of 2017.

Plans are already underway for the further development of the pilot and ACORNS 2 participants and to recruit another group of early stage female entrepreneurs into ACORNS 3, which will get underway in the autumn of 2017. This innovative program, which is focused on rural Ireland, continues to be funded under the CEDRA Rural Innovation and Development Fund (CEDRA – Commission for the Economic Development of Rural Areas) through the Department of Agriculture, Food and the Marine.

For more details of the program, the voluntary Lead Entrepreneurs and the participants, please see www.acorns.ie.

Chapter 5

Entrepreneurial Attitudes and Affiliations

Societal attitudes can be a marker of potential entrepreneurs in society, as well as a signal of the encouragement and support these individuals receive. Attitudes include how people regard their surroundings (whether they believe there are good opportunities around them), how they perceive themselves (whether they think they have the ability to start a business), and the extent to which those who perceive opportunities are undeterred by fear of failure. GEM also tracks affiliations with entrepreneurs, the extent to which people know one personally. Generally, these attitudes and affiliations are highest at the earliest economic development stages, consistent with rates of participation in this activity.

OPPORTUNITY PERCEPTIONS

Opportunity perceptions range from 57% of women in factor-driven economies believing there are good opportunities around them, down to 39% holding these beliefs in innovation-driven economies. The gender gap on this indicator is relatively narrow; on average, opportunity perceptions among women are at 90% of male perceptions.

Europe reports the lowest opportunity perceptions among regions, consistent with its low average TEA rates (see Figure 20). In Russia and six countries located primarily in the southern part of this region (Greece, Bulgaria, Slovakia, Slovenia, Croatia and Spain), fewer than 25% of women perceive opportunities to start a business. High levels come from Northern Europe, where over half of women in Sweden, Norway, Estonia and Finland believe there are good opportunities for starting businesses.

North America reports the highest regional average for opportunity perceptions, slightly higher than in sub-Saharan Africa, where entrepreneurship rates are more than twice as high. Sub-Saharan Africa's average, however, is reduced by low opportunity perceptions in South Africa, which are reported at less than half the level of the average of other countries in this region, and consistent with low TEA rates in this country.

Among the 63 economies participating in this report and the last biennial GEM Women's Report, opportunity perceptions increased by 11% in Europe. North America and Asia showed similar increases in this indicator, while Asia and MENA also displayed narrowing gender gaps. Interestingly, the regions with traditionally high TEA rates, sub-Saharan Africa and Latin America, exhibited declines in these perceptions and a slight decrease in the gender ratio.

CAPABILITY PERCEPTIONS

Compared to opportunity perceptions, capability perceptions display much greater differences across development levels, and with an interesting twist. While 67% of those at the factor-driven stage believe they have capabilities for starting businesses, this figure declines to just under 35% among innovation-driven economies. This runs in contrast with education levels among entrepreneurs, which are highest in the most developed economies. (Among women entrepreneurs in innovation-driven economies, 84% have at least a college degree.)

The gender gap in capability perception widens with economic development level: Capability perception by women in innovation-driven economies is just over two-thirds the level reported by men. This also runs counter to education, where economic development results in greater education levels among women than among men.

This poses a conundrum, particularly in the innovation-driven group: Most women do not think they are capable of starting a business, but those who do start one are likely to have a college or greater level of education. It suggests that higher education does little to prepare women or instill confidence in their business-creation abilities.

Additionally, the typical business a woman has in mind may be one for which she feels little prepared. Women entrepreneurs in wealthier economies are less prevalent than those in less developed economies, but they are more likely to start knowledge and service intensive businesses with higher levels of growth ambitions, innovation and international sales. In less developed economies, entrepreneurship is frequent and, as will be discussed later, more than half of women personally know an entrepreneur. Also, over three-fourths of women entrepreneurs in factor-driven economies start wholesale/retail or agriculture/mining businesses. The notion of entrepreneurship may be more common and realistic for women at these earlier development levels, and this can influence their perceptions about their abilities to start a business.

Capability perceptions are highest in sub-Saharan Africa and Latin America, and these regions also report the highest gender ratio. This is consistent with actual entrepreneurial activity rates in these regions, indicating the importance of having people with entrepreneurial capabilities and confidence in a society. Europe reports both the lowest capability perceptions and the greatest gender divide, with women exhibiting 30% lower values than men. In Norway, Italy and Belgium, less than 25% of women think they have the ability to start a business. For Norway, this contrasts with high opportunity perceptions among women (66%); this country's low TEA rate may reflect that despite seeing opportunities, women do not think they have entrepreneurial abilities.

In the 63 economies from this and the previous report, capability perceptions increased slightly in North America and sub-Saharan Africa; but the gender ratio did not change. While it is a positive finding that women are gaining confidence in their capabilities, the gain in these perceptions seem slow-moving.

SOCIETAL SUPPORT FOR WOMEN ENTREPRENEURS

Baughn et al. (2006) studied the relationship between the female proportion of entrepreneurship and both general societal support and gender-specific support for entrepreneurship in 41 countries, drawing on data from GEM and other sources. They found that the proportion of entrepreneurs who are female increases with greater societal support for entrepreneurship in general (whether or not it is respected as a good career and whether or not entrepreneurs are competent, have high status and receive media attention). They concluded that overall respect and admiration for entrepreneurship in a society may have a more encouraging effect on women than on men.

Gender equality, measured with indicators that include compensation, occupational segregation and labor force participation, did not lead to greater proportions of female entrepreneurs, but it did predict gender-specific societal norms (the extent to which entrepreneurship is acceptable and encouraged for women). These gender-specific norms were connected to higher proportions of female entrepreneurs. This suggests that gender equality may have broader effects on a society, including influence on entrepreneurship-specific norms, but that the norms are more important in female startup activity.

Baughn, C. Christopher; Chua, Bee-Leng; and Neupert, Kent E. (2006). The Normative Context for Women's Participation in Entrepreneurship: A Multicountry Study. *Entrepreneurship: Theory & Practice*. 30(5), 687-708.

FEAR OF FAILURE

Fear of failure can result from trepidation about the legal, economic, social and psychic ramifications of business failure. This report presents fear of failure as its inverse, to run in the same direction as the other attitudes (Figure 20). Women may need steady incomes to support themselves and their families, and the uncertainty of entrepreneurship may dissuade them from this path. Moreover, if they have other choices for work, this can pose an opportunity cost associated with foregoing work as an employee to start a business that could possibly fail. In less developed economies, on the other hand, there may be fewer other income-generating options, and failing may mean picking oneself up and doing something else.

More than three-fourths of women in sub-Saharan Africa would not be deterred from starting a business by the prospect of failing. Conversely, fewer women in Europe, Asia and MENA share these sentiments; about 57% on average would move forward in the face of failure in these three regions. However, among those economies participating in both the current and previous women's reports, Europe shows an increase of 10% in this measure, and Latin America displays a 9% increase, indicating movement in a positive direction. MENA exhibited a decline of 11% in this indicator, accompanied by a widening gender gap. North America, although displaying an average level of failure tolerance and only a small change from 2014, saw its gender gap nearly close.

PERSONAL AFFILIATIONS WITH ENTREPRENEURS

Entrepreneurs are celebrated in the media. Yet at least in the United States, they are overwhelmingly male, often young and Caucasian, not people to whom most women can relate. These media role models do not necessarily translate to personal relationships with entrepreneurs. What appears to stimulate connection is simply the presence of entrepreneurs in one's community. In economies with lower development levels, when there are high TEA rates, more than 50% of women know an entrepreneur personally. This declines to just over 30% in the innovation-driven group.

Despite high visibility of entrepreneurs in American society, only 27% of women in the United States know one, bringing the North American average to 30%. A similar percentage is reported in Europe; for both regions, this represents 80% of the level reported by men. In contrast, over half the women in sub-Saharan Africa personally know an entrepreneur, and this is 88% of the male level. Interestingly, the highest and lowest percentages on this indicator at the economy level are found in MENA, where 12% of women in Egypt know an entrepreneur versus 68% in Saudi Arabia.

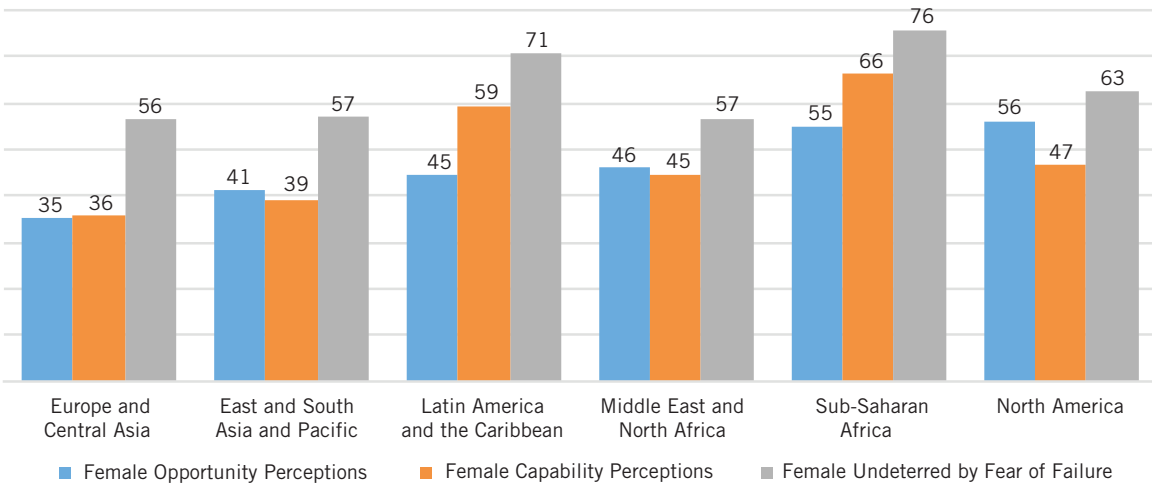


FIGURE 20
Societal Perceptions about Entrepreneurship among Women by Region in % of Female Population aged 18 to 64, GEM 2015-2016

Goldman Sachs *10,000 Women*

Ciiru, FunKidz Limited, Kenya

Ayo, No Leftovers, Nigeria

The Goldman Sachs *10,000 Women* initiative was launched in 2008 as an effort to foster economic growth by providing women entrepreneurs around the world with business education, mentoring and networking, and access to capital. The initiative has reached women from across 56 countries through a network of 100 academic, nonprofit, and bank partners. Having achieved its initial goal of providing 10,000 women entrepreneurs with business education, *10,000 Women* expanded its efforts to address one of the most significant barriers faced by women entrepreneurs around the world – access to capital to grow their businesses.

According to the World Bank Group's International Finance Corporation (IFC), it is estimated that roughly 70 percent of women-owned, small-and-medium sized businesses are not adequately served by financial institutions. These circumstances have resulted in an estimated $285 billion credit gap.

In 2014, in partnership with International Finance Corporation, *10,000 Women* launched the first ever global finance facility dedicated to women to enable up to 100,000 women entrepreneurs with to access the capital. This public-private partnership has catalyzed new investments from both the public and private sectors, including the Overseas Private Investment Corporation, FMO, a Dutch development bank, AP2, a Swedish pension fund, and Swedfund, the Swedish development finance institution. To date, the Facility has committed nearly $850 million to banks in 18 emerging markets that will enable more than 50,000 women entrepreneurs to access capital.

Participants in the program are having an impact in their communities and are committed to giving back. 90 percent of the surveyed graduates mentor other women, 58 percent increase their workforce, averaging 3.5 employees, and 69 percent experience an increase in revenue.

Chapter 6

Entrepreneurial Investors

Personal investment in entrepreneurship is critical to enabling it to thrive. As the *GEM 2015 Global Entrepreneurial Finance Report* shows, direct investment in entrepreneurship plays a large role worldwide across all regions and development levels. For example, 12% of people in Africa and 11% in North America have provided funding to entrepreneurs.[13] Women investors contribute to the entrepreneurial ecosystem in their societies by providing finance to entrepreneurs. They can play distinct roles as funders, supporting particular types of opportunities or entrepreneurs, and providing advice and mentorship.

Questions in the GEM survey relating to investments in entrepreneurs include whether the respondent has invested in any entrepreneurs in the past three years, the total amount invested in these entrepreneurs, and the respondent's relationship to the most recent entrepreneur invested in.

ENTREPRENEURIAL INVESTMENT RATES

Overall, 4.6% of women in the 74 economies provided finance to entrepreneurs in the past three years. This ranges from 1% in Morocco to 16% in Cameroon. Interesting, but perhaps not surprising, these rates decline with economic development level. Entrepreneurial investment in innovation-driven economies is a little more than one third the level reported in factor-driven economies (3.6% vs. 10.3%).

The lower frequency of entrepreneurial investments in advanced economies may be due to the availability of capital from formal institutional sources, and to regulations that formalize as well as regulate and protect these sources. This formal finance sector provides a funding source for entrepreneurs and also a source of returns for holders of capital.

According to the GEM finance report, 95% of entrepreneurs self-finance their businesses, and this accounts for an average 66% of their startup funding. Entrepreneurs in wealthier economies may have more of their own sources to get started and less need to obtain capital from others. They may even go from their own money to formal sources without passing through a stage tapping other people's money.

While male investment rates also decline with economic development level, this decrease is not as steep as for female investors, resulting in a wider gender gap at higher levels of development. Overall, women invest in entrepreneurs at less than two-thirds the rate of men. Could this be due to higher male incomes and therefore more discretionary capital, males having greater access to investment opportunities, and cultures that encourage more financial risk-taking among men? A number of explanations may influence this gap.

Also consistent across most regions is the prevalence of investing by women. About 5% of women in North America, Latin America, MENA and Asia have personally provided funds to entrepreneurs. In Latin America, low rates of investing in Brazil and Puerto Rico (just over 1%) are counterbalanced by high rates in Chile and Belize (around 10%). In MENA, Morocco's 1% rate contrasts with Iran's 9%.

The other two regions, however, show contrasting results. Less than 4% of women in Europe invest in entrepreneurs, and in sub-Saharan Africa 9% have funded entrepreneurs. Given that Europe has low entrepreneurship rates, it makes sense that there are fewer investment opportunities of this sort. While over half of the economies in this region show female investment levels at 3% or less, the highest levels reach just over 6% in Kazakhstan, Macedonia and Austria. In sub-Saharan Africa, there are high rates of entrepreneurship and a lack of formal funding sources for those in need. Only 1% of women are investors in South Africa, but other countries reporting in this region range from near 8% in Botswana to 16% in Cameroon.

From a regional viewpoint, the gender gap is consistent across all regions except Asia, with women investing in entrepreneurs at around 60% the level of men. In Asia, however, women are over 80% as likely to invest in entrepreneurs on average. In Vietnam, investing by women is high and greater than by men. Indonesia, on the other hand, has few investors of either gender. Although investing rates among women vary substantially, from 2% in Indonesia to 11% in Vietnam, the genders invest similarly in these economies.

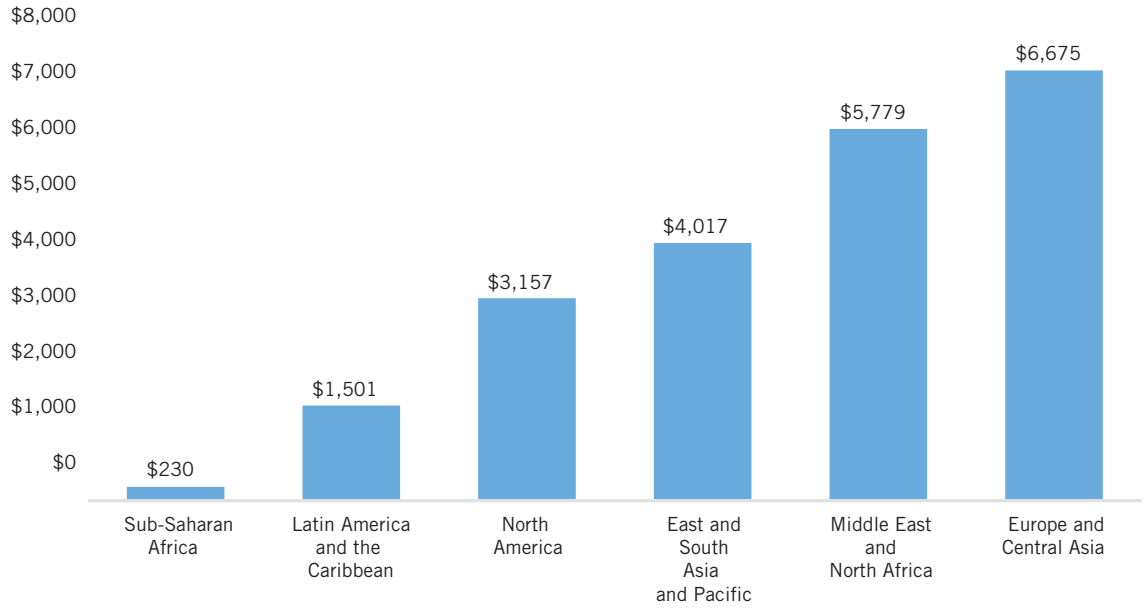
[13] Daniels, Caroline, Herrington, Mike, and Kew, Penny. (2016). *Global Entrepreneurship Monitor Special Topic Report: Entrepreneurial Finance.* Global Entrepreneurship Research Association: London.

MEDIAN INVESTMENT AMOUNTS

In factor-driven economies, women invest on average just over $155 in capital, more than half the level of men ($298). Financial support for entrepreneurs takes a different tack in the factor-driven world, with more investors each committing small amounts. While people at this development level do not have the resources of those in innovation-driven economies, they have willingness and opportunities to support entrepreneurs in their societies.

While women in innovation-driven economies have a low likelihood of investing in entrepreneurs, those who do invest appear to commit substantial amounts, just over $8,500 USD on average, fairly close to the level of funding men provide (just over $10,000). This suggests a selectivity of sorts, where few women invest in entrepreneurs but appear willing to commit resources to do so. They may invest large amounts or across multiple opportunities.

FIGURE 21
Median Level of Funds Invested by Female Entrepreneurs to Start a Business by Region (in US Dollars), GEM 2015-2016



Like the factor-driven average, sub-Saharan Africa stands out for its small investment size (Figure 21). Female investors in Burkina Faso, for example, contribute $68 to entrepreneurs on average. In most Latin American countries, women invest less than a thousand dollars, but the regional average is boosted by female investments over $12,000 in the small country of Belize.

Europe has the highest regional level of investment by women. There are few women investors in general, but they invest high amounts in entrepreneurship; six countries report median investment levels over $10,000. The MENA region has a few countries that influence the average median level for the region. Women in Qatar report investing a median level of over $27,000, and in Saudi Arabia, the median investment is over $10,000.

Asia is unusual with respect to the degree of variation exhibited within the region. Several economies show high investment, including a median level of nearly $13,000 in Hong Kong and over $9,000 in Taiwan; but other economies show a median level of less than $400 (Republic of Korea, India, Indonesia, and the Philippines).

INVESTOR RELATIONSHIP TO ENTREPRENEUR

Women are more likely to invest in a relative than men; on average across the entire sample, 63% of female investors provided funding to an entrepreneur who was a close family member or other relative. This is nearly 40% more often than male investors.

Sub-Saharan Africa and Latin America showed slightly higher propensities for investing in relatives. Very high levels of family investing exist in Brazil, where 91% of female investors funded relatives, and in Burkina Faso, which reported 84% on this indicator.

Friends and neighbors also attract funding from female investors. On average, across the entire sample, 20% of women investors cited this relationship with entrepreneurs. However, this indicator amounted to only 64% of the male level. The MENA region, on average, was less likely than others to report female funding of friends or neighbors. In Israel, women investors rarely funded friends or neighbors, and at only one-sixth the level reported by men.

Asia exhibited a slightly higher average for female investors funding friends and neighbors. Almost half of female investors in Hong Kong said they funded entrepreneurs who were friends or neighbors. Interestingly, in Taiwan, women investors were much more likely to fund friends and neighbors than they were to fund relatives.

On average, few women investors funded work colleagues or strangers with good business ideas, and at only a little more than three-fourths the level of men investors. A seemingly higher regional average for funding work colleagues in MENA is due to unusually high levels in the UAE and Morocco; 46% of female investors in the UAE and 29% in Morocco cited this relationship with entrepreneurs they funded, the highest levels in the sample. In contrast, no female investors in Israel said they funded work colleagues, and less than 4% did in four other countries in this region.

There was generally no obvious pattern relative to economic development in relationships between female investors and entrepreneurs they funded. However, innovation-driven economies differed from other development levels on funding strangers with a good business idea, exhibiting about three times the frequency of other development levels. Both sub-Saharan Africa and Latin America showed low levels on this indicator, with half the countries in each region containing either no female investors or just 1% with this relationship.

Europe and North America reported 8% of female investors funding strangers with good ideas (Figure 22). Europe marked seven countries where female investors did not cite this relationship with entrepreneurs they funded. But in Finland, France and Norway, over 20% of female investors funded entrepreneurs because they had good business ideas.

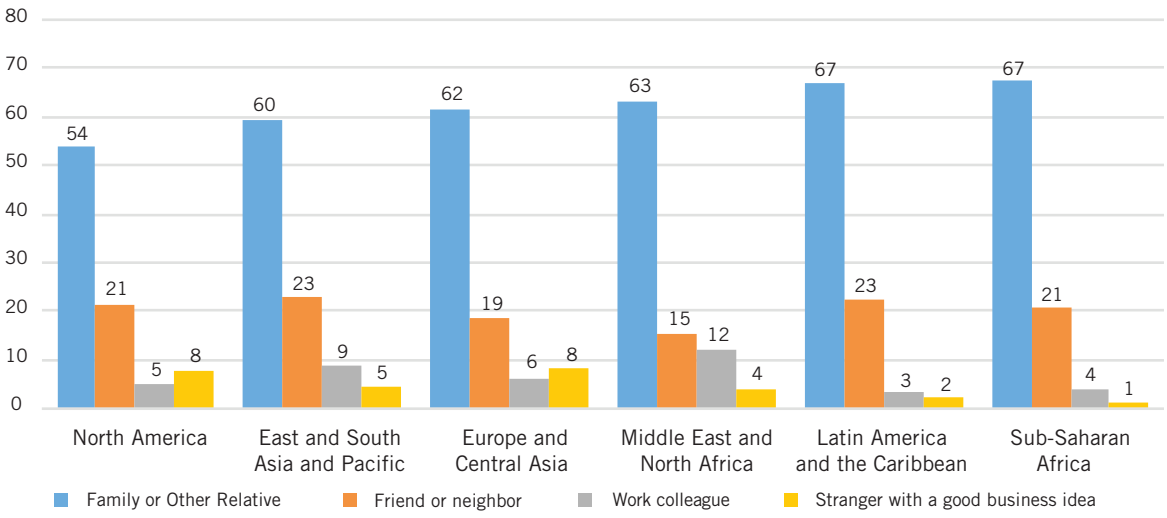


FIGURE 22
Percentage of Female Investors Showing Relationship to Entrepreneurs They Fund (in % of Female Investors), GEM 2015-2016

Lebanese League for Women in Business

Founded in Beruit in 2006, the Lebanese League for Women in Business (LLWB) empowers women in business and supports its membership through business and economic development and advocacy programs. This socio-economic, apolitical and non-religious organization has been providing women with business creation assistance, access to growth opportunities and funding, capacity building and networking opportunities, and professional and career advice. LLWB services include training on topics such as business plan writing, digital marketing strategy, board membership and leadership as well as assistance with legal support, peer coaching and mentoring and connecting to angel investors. 60 percent of LLWB's members are entrepreneurs.

LLWB works closely with international organizations to facilitate their support. Important European collaborators include the German Global Partners Project, an organization that supports women entrepreneurs with training and mentorship in exchange for LLWB's guidance in working with different partners in the MENA region, and PUM, a Dutch network of senior experts providing one-on-one counseling. Many LLWB entrepreneurs have joined and graduated from the Washington D.C. based Vital Voices program that facilitates exposure to international networks, and have competed in the Cartier Women's Initiative Awards competition. Academic institution partners include Arab University and American University in Beirut (Learn, Impact Grow initiative). With Ecole Superieure des Affaires the collaboration supports rural women entrepreneurs.

Entrepreneur Layla El-Zein addressing the new Northern LLWB Chapter LLWB North Launch Event

In 2017, LLWB Northern and Bekaa Chapters were launched in Tripoli, funded by Mercy Corps, in partnership with the Tripoli Entrepreneurs Club attracting participants from Lebanon's northern region. For summer 2017, the Lebanese Women's Angel Fund will be launched, the first of its kind in Lebanon.

Thus far, LLWB has reached 1,800 women.

Conclusions and Implications

Progress, Problems, and Paradoxes

This report concludes with a consideration of the progress, problems, and paradoxes of women's entrepreneurship that emerge from the analysis in this report. Areas of progress include those where the gender gap is closing and where women are leading change in some ways. The problems reflect the areas where there are still serious deficits and disparities, where the gender gap may still be significant. Paradoxes are those anomalies or seeming contradictions, results that are somewhat curious or less explainable relative to this discussion. For each section, we highlight the problems, progress and paradoxes relevant to women's entrepreneurship world-wide.

PROGRESS

In terms of TEA rate, women entrepreneurs have generally made progress in narrowing the gender gap. Among the 63 economies featured in this report and the previous one issued two years ago, overall female TEA rates have increased by 10% and the gender gap (ratio of women to men participating in entrepreneurship) has narrowed by 5%. This continues the upward trend revealed in the previous report, which showed an average increase in female TEA rates of 7% and a narrowing of the gender gap by 6% over the prior two-year period.

Across the 63 economies included in both this and the previous women's report, we see some progress in opportunity perceptions, with increases of nearly 10% in Europe, North America, and Asia. Opportunity perceptions range from 57% of women in factor-driven economies seeing good opportunities around them, down to 39% in the innovation-driven group. The gender gap in this indicator is relatively narrow with opportunity perceptions among women at 90% of male perceptions.

Progress was also noted in terms of women's ownership of established businesses. Across the 63 economies, established business rates increased by 8% on average, and the gender ratio improved by 9%. However, as with TEA, when economic development increases, established business activity among women declines and the gender gap increases.

One contribution to narrowing the gender gap can be seen in the measure of entrepreneurial intentions. Across the 63 economies covered in this and the previous report, entrepreneurial intentions increased among women by 16% from 2014 to 2016.

Another area of progress for women entrepreneurs is the likelihood of innovativeness. Overall, innovation is the indicator with the greatest female-to-male gender ratio; across all 74 economies, women entrepreneurs have a 5% greater likelihood than men entrepreneurs to report that they are innovative.

And finally, we consider the attention increasingly paid to the role of women as investors to be a part of progress. While the amounts are relatively small and the participation rate is quite varied, it suggests a stronger resource foundation from which business owners may be able to build.

PROBLEMS

Areas of challenge certainly remain. While opportunity motives remain dominant for women and men entrepreneurs at all levels of economic development, women are 20% or more likely to indicate necessity motives than men.

The findings also suggest pipeline issues, seeing a disconnect in some areas between the number of women who report intentions to start a business and the number of women who actually do start a business. And for those who do start, growth expectations for women entrepreneurs remains a problem in that there is still a significant gender gap for those who intend to grow as well as how much they would like to grow.

The rate of business discontinuance also remains a challenge for women entrepreneurs. The female discontinuance rate exceeds that of males across all levels of economic development.

While the discussion of women as entrepreneurial investors indicates progress, it is also important to recognize the significant gap in women's participation as investors worldwide as well as the amounts with which they invest.

CONCLUSIONS AND IMPLICATIONS

PARADOXES

There are facts that are just difficult to explain. As the level of economic development increases, the rate of entrepreneurial participation by women decreases. We've posited in the past that this phenomenon could be related to more workforce choices; however, many countries with innovative levels of economic development have had challenges in job development and retention over the past decade that would suggest an increased need for entrepreneurial behaviors.

Women's perceptions about their capabilities are also somewhat paradoxical. In the factor-driven economies, 67% believe they have capabilities for starting businesses, but this belief declines to just under 35% among women in innovation-driven economies. Despite reporting lower capabilities perceptions, however, women in innovation economies are often highly educated. One explanation may lie in differences in perceptions of what it takes to be an entrepreneur.

Relatedly, there are interesting challenges in the area of education. For women entrepreneurs, TEA rates decline as economic development levels rise. At the same time, the proportion of women entrepreneurs with a college level of education or higher increases with economic development level. It seems that entrepreneurs in the factor economies are likely less educated while the business owners in the innovation economies have higher education levels.

Investing behaviors are also difficult to explain. Rates of investing decline as level of economic development rises, although this decrease is not as steep for female investors. One explanation lies in the growth of the formal financial system with the level of economic development. Yet we often hear about the formal financial system not fitting entrepreneurs.

IMPLICATIONS

The findings throughout this report provide the basis not only for thought, but also for action regarding policy and practice.

First, the rise in the TEA rates and slight closing of the gender gap is good news. It is likely that this rise is associated with greater opportunity perceptions and higher intentions to start a business. If these trends continue, the gender gap may continue to shrink. On the other hand, the finding that more women are motivated by necessity than by opportunity continues to be a problem. From a policy standpoint, entrepreneurial start-up programs that focus on opportunity identification and creation may not be as relevant as helping women better understand how they might transfer skills or resources from household management activities when they have no other choice but to seek self-employment. Specifically, there is evidence that household management skills and resources can facilitate business start-up and growth.[14]

Second, the paradox of lower start-up rates in more educated economies is important to consider. It may well be that general education is less relevant for building entrepreneurial competencies or for developing confidence in entrepreneurial activities among women. Instead, specific entrepreneurial skills or programming, such as women-only accelerators or programs may be more relevant for inspiring confidence. Examples such as the WINLAB at Babson College,[15] and the programs featured in this report demonstrate that role models, milestone planning and focused programming develop confidence and grow businesses of women entrepreneurs.[16]

Third, the finding that women have lower growth expectations and higher rates of discontinuance imply that women face challenges in sustaining their businesses. Recent research shows that there is a significant disparity in women's access to financing, especially growth capital. To this end, programs, training, and coaching—including capital and access to other resources—are important to help new and established businesses persist and grow over time. However, training women entrepreneurs needs to be supplemented with demand-side programming, where bankers, investors, and other resource providers need to examine the extent to which stereotypes or biases are applied in funding decisions or whether policies such as credit scoring or collateral requirements affect women unfairly.

Fourth, there are the changing perceptions of what it means to be entrepreneurial. As educational and training programs, government policies at a variety of levels, and even the media focus more and more on the development path of the small (while of course, important) sliver of technology-based, equity-funded businesses, we miss recognizing the potential contribution of smaller businesses to individuals, families, and communities. As shown in this report, women entrepreneurs are more different than similar in terms of personal demographics, attitudes, and businesses. Training programs should be more tailored and customized rather than generic.

Finally, there remains more than a vestige of the "should" from assuming that women-owned businesses should model those built by men in process and outcomes. While discussions of family and work-life balance may be included in entrepreneurial programs, they are not addressed convincingly or compellingly in the design and development of entrepreneurial ecosystems.

The reasons for these two considerations may be attributed to the fact that the topic is small business or that the topic is women. For either or both, using data such as this report provides a more solid foundation for business growth and the creation of both economic and social value around the world.

[14] Alsos, G., Carter, S. & Ljunggren. 2014. Kinship and business: How entrepreneurial households facilitate business growth. *Entrepreneurship and Regional Development*. 26:1-2. 97-122.

[15] WiNLAB, Women Innovating Now LAB http://www.babson.edu/Academics/centers/cwel/educational-programs/win-lab/Pages/home.aspx

[16] Brush, C. & Greene, P. 2017. *Closing the Gender Gap in Entrepreneurship: A New Perspective on Policies and Practices*. Report commissioned by the Organization for Economic Cooperation and Development (OECD); Paris: France

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GERA AND GEM

The Global Entrepreneurship Research Association (GERA) is, for formal constitutional and regulatory purposes, the umbrella organization that hosts the GEM project. GERA is an association formed of Babson College, London Business School and representatives of the Association of GEM national teams.

The GEM program is a major initiative aimed at describing and analyzing entrepreneurial processes within a wide range of countries. The program has three main objectives:

- To measure differences in the level of entrepreneurial activity between countries
- To uncover factors leading to appropriate levels of entrepreneurship
- To suggest policies that may enhance the national level of entrepreneurial activity

New developments—and all global, national and special topic reports—may be found at www.gemconsortium.org.

BABSON COLLEGE

Babson College is a founding institution and lead sponsor of the Global Entrepreneurship Monitor (GEM). Located in Wellesley, Massachusetts, USA, Babson is recognized internationally as a leader in entrepreneurial management education. U.S. News and World Report has ranked Babson #1 in entrepreneurship education for 18 years in a row.

Babson grants B.S. degrees through its innovative undergraduate program, and offers MBA and M.S. degrees through its F. W. Olin Graduate School of Business. The School of Executive Education offers executive development programs to experienced managers worldwide. Babson's student body is globally diverse, hailing from 45 U.S. states and 57 economies (non-U.S. students comprise more than 20% of undergraduates and 40% of full-time MBA students). Students can choose from over 100 entrepreneurship courses offered each year, taught by 17 tenure or tenure-track faculty, all with entrepreneurship experience, 7 faculty from other divisions around the college, and highly accomplished business leaders serving as adjunct faculty.

Entrepreneurial Thought and Action (ETA) is at the center of the Babson experience, where students are taught to experiment with their ideas in real-life, learning and adapting these as they leverage who and what they know to create valuable opportunities. "Entrepreneurship of All Kinds" emphasizes that entrepreneurship is crucial and applicable to organizations of all types and sizes, whether a new launched independent start-up, a multigenerational family business, a social venture, or an established organization. Through an emphasis on Social, Environmental, Economic Responsibility, and Sustainability (SEERS), students learn that economic and social value creation are not mutually exclusive, but integral to each other.

For more information, visit www.babson.edu.

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Since its founding in 1871, Smith College has educated women of promise for lives of distinction. One of the largest women's colleges in the United States and the first to offer an accredited engineering program, Smith links the power of the liberal arts to excellence in research and scholarship, developing engaged global citizens and leaders for society's contemporary challenges. Smith educates women to understand the complexity of human history and the variety of the world's cultures through engagement with social, political, aesthetic and scientific issues.

Smith College's Jill Ker Conway Innovation and Entrepreneurship Center is an intellectual hub that challenges students, faculty and staff to develop innovative solutions to pressing problems. A catalyst for the acceleration of innovation and entrepreneurial activity at Smith, the Center provides students with tools and experiences to become business leaders, entrepreneurs and innovators. Similarly, the Center provides faculty and staff with resources to facilitate innovative and entrepreneurial activity. The Center hosts and facilitates a slate of programs and activities focused on creative thinking, problem solving and interdisciplinary teamwork.

With a mission of supporting and educating the next generation of innovators, Smith's Conway Center is built on three core pillars: innovation, entrepreneurial spirit and financial education. The Center's work is driven by students' demand: Smith students want to be constructive in the world. The Conway Innovation and Entrepreneurship Center gives them the tools and confidence to do so.

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UNIVERSIDAD DEL DESARROLLO

True to the spirit and enterprising drive of its founders, the Universidad del Desarrollo is today one of the prestigious universities in Chile. The project started 25 years ago in Concepción, a southern city of Chile with 100 business administration students. Twenty five years later, the facts speak for themselves. Its rapid growth has become an expression of the university's main facet: entrepreneurship. The UDD MBA program is rated one of the best in South America and also leader in entrepreneurship education, according to America Economia magazine, an achievement that once again represents the "entrepreneurial" seal that is embedded in the spirit of the University. Today the University has more than 13,521 undergraduates, 3.023 postgraduates and over 11.752 graduates from 26 careers that cover all areas of human knowledge. UDD also has 15 research centers in many disciplines. One of this research centers, the Entrepreneurship Institute of the School of Business and Economics coordinates the GEM Chile project and is one of the most important research centers in South America dedicated to entrepreneurship studies.

For more information visit www.udd.cl

KOREA ENTREPRENEURSHIP FOUNDATION

The Korea Entrepreneurship Foundation is a non-profit organization established in 2010 with funding from Korean venture entrepreneurs and the Small and Medium Business Administration of Korea in order to foster entrepreneurship among the young generation.

The primary goal of KEF is nurturing and discovering young entrepreneurs by training talented students and people, so that it finally aims to contribute to the decent entrepreneurship culture in Korea.

To achieve it, KEF has been developing and offering several entrepreneurship education programs to as many people as possible. The teachers engaged in primary school to tertiary education are one of the important players in unleashing entrepreneurship when it comes to their impact to young people, therefore, KEF has developed a series of programs for them so that they can play as the capable facilitators in the entrepreneurship ecosystem. There are also a lot of direct programs for young people based on their ages, which contains case study, theory, game tools and activity. For those who have a special background, such as women trying to back on their career track, a North Korean defector in South Korea and a discharged soldier, KEF offers appropriate programs, coordinating with several organizations from public and private sector.

To build a decent and sustainable entrepreneurship ecosystem, KEF devoted its resources to research and global network too. With the Korea Institution of Startup and Entrepreneurship Development (KISED) we have participated in the Global Entrepreneurship Monitor (GEM) since 2014. In February 2017 KEF became a Sponsoring Institution for GEM. A research project, titled Entrepreneurship Trend Report in Korea, is regarded as credible statistics to understand the status of entrepreneurship of Korea. In addition to it, the widespread network resources are the KEF's pride and it enables the programs colorful and abundant. The partnership with both a public and a private sector allows KEF to maintain the balanced perspectives, and a wide range of overseas partnership contributes to develop global programs for the young generation in Korea.

Above these there are other programs such as Group of Mentors, Startup Competition and Consulting for schools. Basis on five core values – Passion, Challenge, Social Responsibility, Creativity and Innovation – KEF pursues entrepreneurial people, community, and country.

UNIVERSITI TUN ABDUL RAZAK (UNIRAZAK)

Universiti Tun Abdul Razak (UNIRAZAK) was established on 18 December 1997 as one of the first private universities in Malaysia. The University was named after Malaysia's second Prime Minister, the late YAB Tun Abdul Razak bin Dato' Hussein, and was officially launched on 21 December 1998 by Tun Abdul Razak's eldest son, YAB Dato' Seri Mohd Najib bin Tun Abdul Razak, current Prime Minister of Malaysia. UNIRAZAK recognized the imperative for Malaysia's future entrepreneurs to equip themselves with the proper tools and expertise to survive and flourish in today's modern competitive economic climate.

Thus UNIRAZAK founded The Bank Rakyat School of Business and Entrepreneurship (BRSBE) a unique school, dedicated to providing quality education in entrepreneurial and business leadership in Malaysia. BRSBE was formed with the view that entrepreneurial activity is one of the pillars of a strong and vibrant economy. Although big business is extremely vital for economic health and prosperity, a strong cadre of SMIs and SMEs is also essential to ensure a diverse economy and to provide the required support to big business companies and the community. In fact, the dramatic economic development in Asia over the past two decades highlights the importance of understanding entrepreneurship in the region. In this regard UNIRAZAK through BRSBE is ideally poised to play both a national and regional role in developing entrepreneurship and meeting challenges unique to Asia.

For more information visit www.unirazak.edu.my

TECNOLÓGICO DE MONTERREY

Tecnológico de Monterrey was founded in 1943, as a private nonprofit institution, thanks to the vision and commitment of Don Eugenio Garza Sada and a group of entrepreneurs.

We educate leaders with entrepreneurial spirit, committed to ethics and citizenships, and who are internationally competitive.

We are a multi-campus university institution with international presence with a leading-edge educational model TEC21 with the purpose of transforming lives and solving the challenges of the 21st century. We have 31 campuses distributed throughout the diverse regions of Mexico with around 90,000 students. There are 19 international sites and liaison offices in 12 countries and more than 250,000 alumni in Mexico and around the world.

We have been awarded institution-wide national and international accreditations for our high school, undergraduate and graduate academic programs. In 2013, we became the first university in Latin America to acquire QS 5-Star rating, positioning us among the 38 universities worldwide with this distinction, according to the British ranking agency Quacquarelli Symonds (QS). We conduct scientific and technological applied research in strategic areas to meet the nation's social, economic and environmental demands.

The Eugenio Garza Lagüera Entrepreneurship Institute promotes entrepreneurship and innovation-based culture in all the students, communities and regions throughout academic entrepreneurship programs and a network of business incubators (high impact, basic and social incubators), business accelerators, technology parks network, centers for entrepreneurial families, venture capital development activities, and Enlace E+E Mentor Network.

The entrepreneurship initiatives contribute to the generation of jobs and to strengthening the national economy and social development by means of knowledge transfer to create, develop and grow companies. We act in favor of a more inclusive, caring society with ethical values.

For more information visit www.itesm.mx

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Monica Dean is the administrative director of The Jill Ker Conway Innovation and Entrepreneurship Center at Smith College. Previously she was the administrative director of the Lawrence N. Field Programs and Center for Entrepreneurship at Baruch College, City University of New York. Prior to Baruch, Ms. Dean was a senior vice president at the Initiative for a Competitive Inner City, a national not-for-profit organization founded by Harvard Business School Professor Michael E. Porter, and an associate with Booz, Allen & Hamilton. She holds an M.B.A. from the University of California at Berkeley and a B.S. in civil engineering from Howard University.

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René Heavlow is program director of The Jill Ker Conway Innovation and Entrepreneurship Center and formerly director of the Center for Women and Financial Independence. She is currently working with Dr. Mahdavi on an article focused on women's financial competence, confidence and behavior. Ms. Heavlow received her M.A. in sociology from the University of Arizona where she was awarded a Peter Likins Graduate Research Fellowship for her work exploring the sociology of finance, at the intersection of law, policy, and gender. She developed a course on race, gender and money, and co-taught multiple sections of urban sociology.

Appendix: Tables

TABLE A1
Total Entrepreneurial Activity and Motivations: Female Rates and Female/Male Ratios, for the Adult Population in 74 Economies, Grouped by Region and Development Level, GEM 2015/2016

Development Level		Economy	Female TEA	Ratio F/M TEA	FEMALE TEA Necessity (% of TEA females)	Ratio F/M Necessity	FEMALE TEA Opportunity (% of TEA females)	Ratio F/M Opportunity
Region	East and South Asia and Pacific							
1. Factor-Driven		India	7.6	0.6	33.1	0.9	61.6	1.0
2. Factor-Efficiency Transition		Philippines	19.5	1.3	29.8	1.5	69.3	0.9
2. Factor-Efficiency Transition		Vietnam	15.5	1.3	43.8	1.5	56.3	0.8
3. Efficiency-Driven		China	8.6	0.7	30.3	1.2	68.4	0.9
3. Efficiency-Driven		Indonesia	15.6	1.2	12.5	0.7	85.3	1.1
3. Efficiency-Driven		Thailand	15.7	0.8	23.1	1.4	73.5	0.9
4. Efficiency-Innovation Transition		Malaysia	4.5	0.9	11.1	0.5	88.9	1.1
5. Innovation-Driven		Australia	11.5	0.7	21.5	1.6	72.3	0.8
5. Innovation-Driven		Hong Kong	6.5	0.5	11.4	0.6	85.1	1.1
5. Innovation-Driven		Korea, Rep.	5.3	0.7	23.1	0.9	74.9	1.0
5. Innovation-Driven		Taiwan, China	5.2	0.5	17.2	0.7	80.9	1.1
	East and South Asia and Pacific	Region Average	10.5	0.8	23.3	1.1	74.2	1.0
Region	Europe and Central Asia							
3. Efficiency-Driven		Bulgaria	4.3	0.8	30.2	1.0	69.8	1.0
3. Efficiency-Driven		Georgia	6.5	0.6	55.4	1.1	44.6	0.9
3. Efficiency-Driven		Macedonia, FYR	3.7	0.4	38.2	1.0	55.5	1.0
4. Efficiency-Innovation Transition		Croatia	5.6	0.5	40.3	1.6	55.5	0.8
4. Efficiency-Innovation Transition		Hungary	5.0	0.5	21.5	1.1	74.5	0.9
4. Efficiency-Innovation Transition		Kazakhstan	9.5	0.9	28.3	1.3	66.5	0.9
4. Efficiency-Innovation Transition		Latvia	9.6	0.5	16.2	1.3	81.3	1.0
4. Efficiency-Innovation Transition		Poland	8.1	0.6	31.8	1.4	66.7	0.9
4. Efficiency-Innovation Transition		Romania	7.5	0.5	26.4	0.9	72.4	1.1
4. Efficiency-Innovation Transition		Russian Federation	5.7	0.8	31.7	1.1	63.1	0.9
4. Efficiency-Innovation Transition		Turkey	10.0	0.4	22.5	1.5	72.9	1.0
5. Innovation-Driven		Austria	8.1	0.7	18.8	1.4	76.5	0.9
5. Innovation-Driven		Belgium	5.0	0.7	37.5	1.8	44.6	0.6
5. Innovation-Driven		Cyprus	7.3	0.4	28.3	1.3	70.5	0.9
5. Innovation-Driven		Estonia	11.7	0.6	17.5	1.0	80.7	1.0
5. Innovation-Driven		Finland	5.6	0.7	6.9	0.9	84.2	1.0
5. Innovation-Driven		France	3.4	0.5	11.7	1.1	88.3	1.0
5. Innovation-Driven		Germany	3.1	0.5	21.9	1.0	77.6	1.0
5. Innovation-Driven		Greece	4.8	0.7	37.4	1.2	60.7	0.9
5. Innovation-Driven		Ireland	7.3	0.5	17.5	1.2	82.5	1.0
5. Innovation-Driven		Italy	3.3	0.6	5.9	0.4	91.3	1.1
5. Innovation-Driven		Luxembourg	6.5	0.6	11.7	1.1	84.7	1.0
5. Innovation-Driven		Netherlands	8.6	0.6	41.7	5.4	55.9	0.6
5. Innovation-Driven		Norway	3.8	0.5	9.5	0.9	86.3	1.1
5. Innovation-Driven		Portugal	6.1	0.6	29.9	2.0	67.5	0.8
5. Innovation-Driven		Slovak Republic	7.6	0.7	47.4	1.3	47.4	0.8
5. Innovation-Driven		Slovenia	5.1	0.5	29.4	1.6	70.6	0.9
5. Innovation-Driven		Spain	4.7	0.8	25.1	0.9	70.7	1.0

Development Level		Economy	Female TEA	Ratio F/M TEA	FEMALE TEA Necessity (% of TEA females)	Ratio F/M Necessity	FEMALE TEA Opportunity (% of TEA females)	Ratio F/M Opportunity
5. Innovation-Driven		Sweden	6.3	0.7	2.3	0.4	86.7	1.0
5. Innovation-Driven		Switzerland	5.3	0.5	18.3	1.5	80.1	1.0
5. Innovation-Driven		United Kingdom	5.6	0.5	14.1	1.1	80.6	1.0
	Europe and Central Asia	**Region Average**	**6.3**	**0.6**	**25.0**	**1.3**	**71.3**	**0.9**
Region	Latin America and the Caribbean							
3. Efficiency-Driven		Belize	27.3	0.9	8.6	1.1	87.3	1.0
3. Efficiency-Driven		Colombia	24.7	0.8	17.1	1.8	81.7	0.9
3. Efficiency-Driven		Ecuador	30.2	0.9	30.6	1.2	61.9	0.9
3. Efficiency-Driven		El Salvador	13.6	0.9	43.6	1.5	56.4	0.8
3. Efficiency-Driven		Guatemala	16.4	0.7	45.1	1.4	54.4	0.8
3. Efficiency-Driven		Jamaica	8.8	0.8	47.8	1.1	45.6	1.0
3. Efficiency-Driven		Peru	24.0	0.9	13.2	1.1	82.6	1.0
4. Efficiency-Innovation Transition		Argentina	13.1	0.8	40.1	1.7	58.3	0.8
4. Efficiency-Innovation Transition		Barbados	19.8	0.9	19.5	1.7	76.7	0.9
4. Efficiency-Innovation Transition		Brazil	19.9	1.0	47.7	1.3	51.9	0.8
4. Efficiency-Innovation Transition		Chile	19.8	0.7	28.4	1.5	70.2	0.9
4. Efficiency-Innovation Transition		Mexico	10.0	1.1	19.1	1.1	79.0	1.0
4. Efficiency-Innovation Transition		Panama	12.3	0.9	21.1	2.2	76.6	0.9
4. Efficiency-Innovation Transition		Uruguay	9.9	0.5	35.3	1.5	63.5	0.8
5. Innovation-Driven		Puerto Rico	7.7	0.6	31.9	1.1	68.1	1.0
	Latin America and the Caribbean	**Region Average**	**17.2**	**0.8**	**29.9**	**1.4**	**67.6**	**0.9**
Region	Middle East and North Africa							
2. Factor-Efficiency Transition		Iran, Islamic Rep.	8.9	0.5	29.0	0.8	66.8	1.1
2. Factor-Efficiency Transition		Saudi Arabia	9.7	0.8	5.9	0.7	94.1	1.0
3. Efficiency-Driven		Egypt, Arab Rep.	7.5	0.4	26.7	0.8	63.1	1.0
3. Efficiency-Driven		Jordan	3.3	0.3	36.8	1.5	56.2	0.8
3. Efficiency-Driven		Morocco	4.5	0.7	25.4	0.9	74.6	1.0
3. Efficiency-Driven		Tunisia	5.3	0.4	21.1	1.2	75.1	0.9
4. Efficiency-Innovation Transition		Lebanon	16.1	0.6	37.2	0.9	59.8	1.1
5. Innovation-Driven		Israel	9.4	0.7	12.5	0.7	86.5	1.1
5. Innovation-Driven		Qatar	6.8	0.8	5.6	0.5	94.4	1.2
5. Innovation-Driven		United Arab Emirates	3.7	0.6	38.5	1.4	59.4	1.0
	Middle East and North Africa	**Region Average**	**7.5**	**0.6**	**23.9**	**1.0**	**73.0**	**1.0**
Region	North America							
5. Innovation-Driven		Canada	13.3	0.7	14.2	1.0	81.5	1.0
5. Innovation-Driven		United States	10.5	0.7	12.0	1.1	86.9	1.0
	North America	Region Average	11.9	0.7	13.1	1.0	84.2	1.0
Region	Sub-Saharan Africa							
1. Factor-Driven		Burkina Faso	30.2	0.8	35.2	1.4	63.3	0.9
1. Factor-Driven		Cameroon	26.5	0.9	36.2	1.3	57.0	0.9
1. Factor-Driven		Senegal	36.8	0.9	36.2	2.0	62.9	0.8
2. Factor-Efficiency Transition		Botswana	30.1	0.8	44.0	1.6	54.3	0.8
3. Efficiency-Driven		South Africa	5.9	0.7	27.1	1.3	71.6	0.9
	Sub-Saharan Africa	Region Average	25.9	0.8	35.7	1.5	61.8	0.9

TABLE A2
Intentions, Established Business Activity, Discontinuance and Discontinuance Reasons: Female Rates and Female/Male Ratios, for the Adult Population in 74 Economies, Grouped by Region and Development Level, GEM 2015/2016

Development Level	Region	Economy	Entrepreneurial Intentions Female	Ratio F/M Intentions	Female Established Business Activity
Region	East and South Asia and Pacific				
1. Factor-Driven		India	16.7	0.7	3.4
2. Factor-Efficiency Transition		Philippines	46.9	1.1	6.1
2. Factor-Efficiency Transition		Vietnam	25.8	1.0	22.6
3. Efficiency-Driven		China	23.1	0.8	6.4
3. Efficiency-Driven		Indonesia	28.0	0.9	15.3
3. Efficiency-Driven		Thailand	23.1	1.0	27.5
4. Efficiency-Innovation Transition		Malaysia	6.3	1.0	2.4
5. Innovation-Driven		Australia	13.0	0.7	8.1
5. Innovation-Driven		Hong Kong	16.3	0.7	3.6
5. Innovation-Driven		Korea, Rep.	27.7	1.0	5.6
5. Innovation-Driven		Taiwan, China	24.7	0.8	5.2
		Region Average	**22.9**	**0.9**	**9.7**
Region	Europe and Central Asia				
3. Efficiency-Driven		Bulgaria	6.0	0.5	4.6
3. Efficiency-Driven		Georgia	11.8	0.6	6.6
3. Efficiency-Driven		Macedonia, FYR	22.2	0.7	5.4
4. Efficiency-Innovation Transition		Croatia	18.3	0.7	2.6
4. Efficiency-Innovation Transition		Hungary	14.6	0.7	4.1
4. Efficiency-Innovation Transition		Kazakhstan	21.5	0.8	2.6
4. Efficiency-Innovation Transition		Latvia	20.0	0.8	6.9
4. Efficiency-Innovation Transition		Poland	19.4	0.7	4.9
4. Efficiency-Innovation Transition		Romania	25.1	0.7	5.7
4. Efficiency-Innovation Transition		Russian Federation	3.9	0.6	4.6
4. Efficiency-Innovation Transition		Turkey	28.1	0.6	5.3
5. Innovation-Driven		Austria	10.9	0.7	5.9
5. Innovation-Driven		Belgium	9.4	0.6	1.6
5. Innovation-Driven		Cyprus	15.9	0.6	5.4
5. Innovation-Driven		Estonia	16.4	0.6	5.7
5. Innovation-Driven		Finland	9.5	0.7	5.1
5. Innovation-Driven		France	14.7	0.7	2.9
5. Innovation-Driven		Germany	5.5	0.5	4.4
5. Innovation-Driven		Greece	5.1	0.4	10.8
5. Innovation-Driven		Ireland	10.0	0.4	3.0
5. Innovation-Driven		Italy	7.6	0.5	2.6
5. Innovation-Driven		Luxembourg	13.3	0.6	2.3
5. Innovation-Driven		Netherlands	6.6	0.4	5.0
5. Innovation-Driven		Norway	3.6	0.4	3.4
5. Innovation-Driven		Portugal	12.4	0.6	4.2

Ratio F/M EB	Female Business Discontinuation	Ratio F/M Discontinuation	Female Percent Discontinued because of unprofitability	Ratio F/M Discontinued Unprofitability	Female Percent Discontinued because of lack of finance	Ratio F/M Discontinued Finance
0.6	1.5	0.8	17.9	1.1	5.4	0.7
0.7	11.2	2.0	22.3	1.7	32.8	0.8
1.4	2.3	1.0	21.2	0.9	27.3	0.9
0.8	2.0	0.7	46.8	1.4	13.6	0.3
1.0	2.0	1.1	37.0	2.1	17.2	0.7
1.0	3.6	1.2	45.2	1.6	11.4	1.1
0.4	1.1	0.6	38.5	1.2	7.4	—
0.6	1.8	0.6	4.6	0.2	4.6	1.2
0.4	1.6	0.5	46.0	1.0	5.4	0.7
0.8	0.2	0.1	60.2	1.1	20.1	1.7
0.5	1.4	0.6	6.2	0.3	0.0	0.0
0.7	**2.6**	**0.8**	**31.4**	**1.2**	**13.2**	**0.8**
0.6	1.3	0.9	69.2	2.8	0.0	0.0
0.6	2.9	0.9	47.4	1.2	21.7	0.9
0.6	1.4	0.7	26.1	0.9	17.0	0.9
0.4	3.7	1.2	24.7	1.0	10.2	0.7
0.6	1.2	0.7	28.5	1.4	20.0	0.9
1.1	1.8	0.7	34.8	0.6	4.8	0.8
0.6	1.3	0.3	39.9	1.1	5.3	0.7
0.5	1.8	0.4	13.0	0.5	17.4	3.0
0.6	2.3	0.8	42.5	0.8	13.4	1.5
0.8	1.7	1.3	38.0	1.4	7.7	1.0
0.4	2.4	0.5	20.6	0.9	28.1	1.5
0.5	1.6	0.6	20.1	0.8	9.5	0.9
0.3	0.6	0.4	25.0	1.0	5.8	—
0.5	2.2	0.6	41.6	0.8	17.1	1.0
0.6	2.5	0.8	37.4	1.0	6.0	0.9
0.5	1.2	1.0	4.6	0.1	0.0	0.0
0.5	1.0	0.5	8.5	0.2	28.4	2.1
0.5	0.8	0.5	11.5	1.0	5.6	3.7
0.6	3.5	0.9	72.7	1.0	11.0	0.7
0.5	1.0	0.4	34.4	1.3	5.0	0.4
0.3	0.5	0.4	12.7	0.3	18.7	1.1
0.6	2.1	0.9	36.1	1.5	13.5	0.8
0.3	2.3	1.2	30.7	0.6	2.0	1.7
0.3	0.8	0.5	9.4	0.4	7.7	0.5
0.4	0.8	0.5	58.4	1.3	19.4	1.5

TABLE A2 (continued)
Intentions, Established Business Activity, Discontinuance and Discontinuance Reasons: Female Rates and Female/Male Ratios, for the Adult Population in 74 Economies, Grouped by Region and Development Level, GEM 2015/2016

Development Level	Region	Economy	Entrepreneurial Intentions Female	Ratio F/M Intentions	Female Established Business Activity
5. Innovation-Driven		Slovak Republic	10.9	0.7	4.0
5. Innovation-Driven		Slovenia	9.7	0.5	3.6
5. Innovation-Driven		Spain	5.7	0.9	5.1
5. Innovation-Driven		Sweden	7.8	0.6	3.0
5. Innovation-Driven		Switzerland	8.5	0.6	9.4
5. Innovation-Driven		United Kingdom	8.6	0.6	4.1
	Europe and Central Asia	**Region Average**	**12.4**	**0.6**	**4.7**
Region	Latin America and the Caribbean				
3. Efficiency-Driven		Belize	50.5	1.0	5.2
3. Efficiency-Driven		Colombia	49.4	0.9	6.1
3. Efficiency-Driven		Ecuador	38.6	0.8	13.5
3. Efficiency-Driven		El Salvador	31.5	0.9	11.1
3. Efficiency-Driven		Guatemala	35.1	0.8	8.4
3. Efficiency-Driven		Jamaica	38.3	0.9	7.8
3. Efficiency-Driven		Peru	47.2	0.9	3.3
4. Efficiency-Innovation Transition		Argentina	25.7	0.8	4.5
4. Efficiency-Innovation Transition		Barbados	24.8	1.0	9.3
4. Efficiency-Innovation Transition		Brazil	27.2	0.9	14.3
4. Efficiency-Innovation Transition		Chile	43.0	0.8	6.0
4. Efficiency-Innovation Transition		Mexico	15.0	0.9	6.5
4. Efficiency-Innovation Transition		Panama	13.0	1.0	3.2
4. Efficiency-Innovation Transition		Uruguay	25.7	0.8	4.9
5. Innovation-Driven		Puerto Rico	19.1	0.6	1.6
Region	**Latin America and the Caribbean**	**Region Average**	**32.3**	**0.9**	**7.0**
Region	Middle East and North Africa				
2. Factor-Efficiency Transition		Iran, Islamic Rep.	41.5	0.8	4.0
2. Factor-Efficiency Transition		Saudi Arabia	27.9	1.2	1.6
3. Efficiency-Driven		Egypt, Arab Rep.	59.3	0.8	1.8
3. Efficiency-Driven		Jordan	13.7	0.5	1.0
3. Efficiency-Driven		Morocco	34.3	0.9	3.0
3. Efficiency-Driven		Tunisia	29.9	0.8	3.5
4. Efficiency-Innovation Transition		Lebanon	39.7	0.8	13.6
5. Innovation-Driven		Israel	22.2	0.8	2.8
5. Innovation-Driven		Qatar	33.5	0.8	0.6
5. Innovation-Driven		United Arab Emirates	23.4	0.4	0.3
	Middle East and North Africa	**Region Average**	**32.5**	**0.8**	**3.2**
Region	North America				
5. Innovation-Driven		Canada	19.7	0.9	6.4
5. Innovation-Driven		United States	14.9	0.8	7.6
	North America	**Region Average**	**17.3**	**0.8**	**7.0**
Region	Sub-Saharan Africa				
1. Factor-Driven		Burkina Faso	69.0	0.9	25.0
1. Factor-Driven		Cameroon	41.9	0.9	13.3
1. Factor-Driven		Senegal	73.2	1.0	14.7
2. Factor-Efficiency Transition		Botswana	65.4	1.0	3.2
3. Efficiency-Driven		South Africa	10.2	0.7	1.2
	Sub-Saharan Africa	**Region Average**	**51.9**	**0.9**	**11.5**

Ratio F/M EB	Female Business Discontinuation	Ratio F/M Discontinuation	Female Percent Discontinued because of unprofitability	Ratio F/M Discontinued Unprofitability	Female Percent Discontinued because of lack of finance	Ratio F/M Discontinued Finance
0.5	2.3	0.6	45.2	1.2	9.7	0.9
0.4	0.7	0.4	56.3	1.8	0.0	0.0
0.7	1.1	0.9	52.0	1.2	8.5	1.2
0.5	1.7	0.7	21.2	0.9	0.0	0.0
0.7	1.1	0.8	20.9	0.7	0.0	0.0
0.5	0.9	0.4	26.2	1.4	3.6	0.3
0.5	**1.6**	**0.7**	**32.6**	**1.0**	**10.2**	**1.0**
1.0	9.4	1.2	19.2	1.0	27.5	0.8
0.5	4.6	0.8	41.4	2.3	14.6	0.7
0.9	8.4	1.4	37.8	1.4	14.3	1.5
0.9	5.8	1.3	41.3	1.1	6.5	0.6
0.9	2.7	1.2	42.1	1.2	8.9	0.5
0.9	5.2	1.8	58.7	1.0	11.1	1.0
0.4	5.5	1.4	31.6	0.8	6.9	—
0.4	3.3	0.6	66.3	1.5	5.5	0.5
0.5	3.5	1.1	28.4	0.8	30.5	1.5
0.7	4.7	1.7	62.2	0.9	13.2	1.5
0.6	4.4	0.8	32.8	1.1	22.4	1.6
0.7	2.5	1.1	34.7	1.3	18.8	0.6
0.6	2.5	1.2	51.9	0.9	11.1	1.2
0.5	3.7	0.6	43.4	1.0	7.5	1.4
0.9	2.2	1.1	34.8	0.7	8.5	—
0.7	**4.6**	**1.2**	**41.8**	**1.1**	**13.8**	**1.0**
0.2	2.9	0.4	30.1	0.5	14.9	1.2
0.6	3.6	1.0	11.4	0.3	17.0	0.9
0.2	6.5	0.8	42.9	0.8	8.8	0.6
0.2	3.5	0.8	60.9	1.2	12.8	0.7
0.2	2.1	0.6	46.2	0.8	19.9	1.1
0.5	2.9	0.8	23.4	0.9	32.3	1.5
0.5	3.1	0.5	30.1	0.6	9.0	2.0
0.5	3.2	1.0	48.3	1.6	1.4	0.1
0.2	2.1	0.7	30.0	1.1	16.4	1.0
0.1	1.3	1.0	34.1	0.8	1.9	0.1
0.3	**3.1**	**0.8**	**35.7**	**0.9**	**13.4**	**0.9**
0.9	2.9	0.8	19.0	0.9	13.0	1.5
0.7	1.6	0.6	19.1	0.9	5.7	0.8
0.8	**2.2**	**0.7**	**19.0**	**0.9**	**9.4**	**1.1**
0.8	5.3	0.7	39.0	1.1	10.8	0.5
0.8	8.0	1.1	27.5	1.1	17.4	2.1
0.6	10.0	1.8	34.4	0.9	17.0	1.3
0.5	13.3	1.2	45.7	1.2	19.5	0.9
0.3	5.2	1.5	47.4	1.5	19.7	0.6
0.6	**8.4**	**1.2**	**38.8**	**1.1**	**16.9**	**1.1**

TABLE A3
Percentage of TEA: Self-Employment, 6+ Growth Expectations, Innovation, Export: Female Rates and Female/Male Ratios, for the Adult Population in 74 Economies, Grouped by Region and Development Level, GEM 2015/2016

Development Level		Economy	Female Share of self-employed w zero growth out of TEA	F/M Share of self-employed w zero growth out of TEA
Region	**East and South Asia and Pacific**			
1. Factor-Driven		India	6.0	0.45
2. Factor-Efficiency Transition		Philippines	8.8	1.14
2. Factor-Efficiency Transition		Vietnam	20.6	1.23
3. Efficiency-Driven		China	1.5	1.12
3. Efficiency-Driven		Indonesia	0.0	*
3. Efficiency-Driven		Thailand	41.3	1.20
4. Efficiency-Innovation Transition		Malaysia	4.6	0.71
5. Innovation-Driven		Australia	10.1	1.12
5. Innovation-Driven		Hong Kong	5.0	3.67
5. Innovation-Driven		Korea, Rep.	0.0	*
5. Innovation-Driven		Taiwan, China	7.8	1.00
	East and South Asia and Pacific	**Region Average**	**9.6**	**1.3**
Region	Europe and Central Asia			
3. Efficiency-Driven		Bulgaria	11.6	*
3. Efficiency-Driven		Georgia	15.0	1.34
3. Efficiency-Driven		Macedonia, FYR	3.5	*
4. Efficiency-Innovation Transition		Croatia	0.0	*
4. Efficiency-Innovation Transition		Hungary	7.1	1.44
4. Efficiency-Innovation Transition		Kazakhstan	0.0	0.00
4. Efficiency-Innovation Transition		Latvia	7.9	0.72
4. Efficiency-Innovation Transition		Poland	15.2	2.32
4. Efficiency-Innovation Transition		Romania	1.2	0.23
4. Efficiency-Innovation Transition		Russian Federation	6.5	2.13
4. Efficiency-Innovation Transition		Turkey	0.0	*
5. Innovation-Driven		Austria	13.8	1.80
5. Innovation-Driven		Belgium	23.4	1.34
5. Innovation-Driven		Cyprus	5.3	1.43
5. Innovation-Driven		Estonia	5.7	0.81
5. Innovation-Driven		Finland	23.3	0.75
5. Innovation-Driven		France	28.1	3.80
5. Innovation-Driven		Germany	12.0	1.20
5. Innovation-Driven		Greece	11.9	0.74
5. Innovation-Driven		Ireland	5.1	1.06
5. Innovation-Driven		Italy	11.8	0.66
5. Innovation-Driven		Luxembourg	3.2	0.78
5. Innovation-Driven		Netherlands	50.0	2.45
5. Innovation-Driven		Norway	37.4	1.02
5. Innovation-Driven		Portugal	6.2	3.01

Female % expecting to hire 6+ employees in the next 5 years	Ratio F/M 6+ Hiring	Female Innovation	Ratio F/M Innovation	Female Export more than 25%	F/M Export more than 25%
7.2	0.7	26.3	0.9	12.4	1.48
10.0	0.5	26.5	0.7	6.6	0.90
13.9	0.5	13.8	0.7	0.6	0.23
42.8	0.7	22.1	0.7	8.5	1.19
6.8	0.6	17.7	1.0	1.3	2.97
10.4	0.6	15.8	0.9	0.3	0.09
23.6	0.9	2.0	0.4	0.0	*
25.1	0.7	31.9	0.8	10.9	0.63
50.6	0.9	33.4	1.4	38.5	1.01
18.1	0.4	23.2	0.6	6.0	0.25
51.8	0.8	25.2	1.8	14.2	0.63
23.7	**0.7**	**21.6**	**0.9**	**9.0**	**0.9**
20.7	0.6	13.8	0.7	7.5	1.24
34.0	1.0	20.7	1.0	15.2	0.79
19.1	0.4	15.9	1.0	9.1	0.49
44.7	0.9	19.2	0.8	26.5	0.60
23.8	0.4	16.6	0.7	14.2	0.53
58.9	0.9	20.6	1.1	3.7	1.38
48.5	1.2	27.2	0.9	30.3	1.18
27.5	0.6	19.7	0.6	4.9	0.26
49.4	0.9	31.3	1.1	30.3	1.75
40.6	1.0	5.3	0.9	1.4	*
60.5	0.9	28.5	0.9	10.6	0.66
16.0	0.5	34.3	1.0	23.8	0.61
13.5	0.4	43.4	1.2	7.0	0.21
29.0	0.7	37.4	1.0	30.9	1.22
33.0	0.7	36.9	1.1	16.0	0.96
21.8	1.0	30.7	1.1	12.0	0.83
7.9	0.2	24.6	0.6	21.8	1.12
11.0	0.3	26.5	1.1	16.3	0.68
9.5	0.4	30.8	1.5	41.1	1.68
43.3	0.8	42.1	1.1	27.0	1.09
30.9	0.9	35.8	1.7	25.8	0.83
30.0	0.6	53.2	1.3	27.8	0.89
15.5	0.7	43.5	2.1	13.1	1.30
18.5	0.6	8.4	0.5	2.8	0.29
26.2	0.5	13.4	0.5	29.4	0.95

TABLE A3 (continued)
Percentage of TEA: Self-Employment, 6+ Growth Expectations, Innovation, Export: Female Rates and Female/Male Ratios, for the Adult Population in 74 Economies, Grouped by Region and Development Level, GEM 2015/2016

Development Level		Economy	Female Share of self-employed w zero growth out of TEA	F/M Share of self-employed w zero growth out of TEA
5. Innovation-Driven		Slovak Republic	6.6	2.48
5. Innovation-Driven		Slovenia	14.6	1.75
5. Innovation-Driven		Spain	20.4	0.95
5. Innovation-Driven		Sweden	18.6	1.06
5. Innovation-Driven		Switzerland	9.6	0.84
5. Innovation-Driven		United Kingdom	13.3	1.43
	Europe and Central Asia	**Region Average**	**12.5**	**1.4**
	Latin America and the Caribbean			
3. Efficiency-Driven		Belize	0.0	*
3. Efficiency-Driven		Colombia	2.7	2.44
3. Efficiency-Driven		Ecuador	21.0	1.83
3. Efficiency-Driven		El Salvador	14.2	4.94
3. Efficiency-Driven		Guatemala	20.6	4.33
3. Efficiency-Driven		Jamaica	0.0	*
3. Efficiency-Driven		Peru	5.9	1.48
4. Efficiency-Innovation Transition		Argentina	17.1	1.79
4. Efficiency-Innovation Transition		Barbados	0.0	*
4. Efficiency-Innovation Transition		Brazil	38.6	1.30
4. Efficiency-Innovation Transition		Chile	9.7	3.10
4. Efficiency-Innovation Transition		Mexico	0.0	*
4. Efficiency-Innovation Transition		Panama	8.6	0.56
4. Efficiency-Innovation Transition		Uruguay	0.0	0.00
5. Innovation-Driven		Puerto Rico	2.7	3.21
	Latin America and the Caribbean	**Region Average**	**9.4**	**2.3**
	Middle East and North Africa			
2. Factor-Efficiency Transition		Iran, Islamic Rep.	10.1	0.97
2. Factor-Efficiency Transition		Saudi Arabia	0.0	*
3. Efficiency-Driven		Egypt, Arab Rep.	7.5	1.79
3. Efficiency-Driven		Jordan	7.8	*
3. Efficiency-Driven		Morocco	10.8	1.15
3. Efficiency-Driven		Tunisia	0.0	*
4. Efficiency-Innovation Transition		Lebanon	10.9	1.75
5. Innovation-Driven		Israel	6.9	1.27
5. Innovation-Driven		Qatar	1.3	3.70
5. Innovation-Driven		United Arab Emirates	0.0	*
	Middle East and North Africa	**Region Average**	**5.5**	**1.8**
	North America			
5. Innovation-Driven		Canada	4.8	1.10
5. Innovation-Driven		United States	5.2	0.81
	North America	**Region Average**	**5.0**	**0.96**
	Sub-Saharan Africa			
1. Factor-Driven		Burkina Faso	2.8	1.49
1. Factor-Driven		Cameroon	19.3	1.81
1. Factor-Driven		Senegal	7.8	2.19
2. Factor-Efficiency Transition		Botswana	8.2	3.09
3. Efficiency-Driven		South Africa	0.0	*
	Sub-Saharan Africa	Region Average	7.6	2.1

*Ratio could not be calculated because male level is zero.

Female % expecting to hire 6+ employees in the next 5 years	Ratio F/M 6+ Hiring	Female Innovation	Ratio F/M Innovation	Female Export more than 25%	F/M Export more than 25%
28.9	0.6	27.6	1.1	13.7	0.76
31.5	0.7	25.4	0.7	15.8	0.46
13.4	0.7	24.6	1.1	6.8	0.51
13.3	0.6	26.3	0.7	19.4	0.97
29.7	0.8	36.7	1.0	23.5	0.62
25.7	0.6	37.4	1.2	16.5	0.82
28.3	**0.7**	**27.7**	**1.0**	**17.6**	**0.9**
21.9	0.7	46.0	0.9	43.8	0.95
34.9	0.7	15.8	0.9	11.9	0.97
5.0	0.5	14.6	0.8	0.4	0.37
13.3	0.4	13.3	0.8	2.0	0.36
9.6	0.3	39.4	1.0	0.0	*
12.5	1.0	22.2	1.2	20.5	0.93
27.2	0.7	15.4	1.1	6.1	1.43
20.8	0.5	22.6	0.8	6.2	1.70
12.7	0.5	12.2	0.8	6.2	0.52
1.7	0.2	11.3	0.8	0.0	0.00
24.1	0.4	57.4	1.0	11.9	0.84
20.4	0.7	22.8	1.0	7.7	0.62
9.0	1.0	25.0	1.1	20.7	1.23
21.2	0.6	20.0	0.7	12.2	0.94
18.9	0.6	19.5	1.0	19.5	0.93
16.9	**0.6**	**23.8**	**0.9**	**11.3**	**0.8**
32.6	0.7	16.8	0.9	2.2	0.50
42.9	1.1	24.4	4.4	52.4	1.13
42.0	0.8	24.7	1.1	5.7	0.57
1.6	0.1	42.5	2.2	29.7	0.75
26.9	1.3	19.0	1.7	4.9	3.74
50.5	0.8	29.1	0.9	14.6	0.87
12.8	0.8	63.0	1.1	42.8	1.05
30.8	0.7	33.0	1.2	24.3	0.81
53.1	0.7	34.0	1.7	34.4	1.28
71.8	0.9	22.5	0.8	75.7	1.08
36.5	**0.8**	**30.9**	**1.6**	**28.7**	**1.2**
21.7	0.6	35.9	0.8	31.6	0.84
37.4	0.8	40.4	1.2	8.6	0.77
29.6	**0.7**	**38.2**	**1.0**	**20.1**	**0.80**
15.4	0.5	23.9	1.1	3.8	0.74
19.3	0.6	13.4	0.7	3.6	0.48
22.1	0.6	7.9	0.9	2.5	0.66
29.3	0.6	16.3	0.7	3.0	0.33
21.6	0.5	26.7	1.5	17.5	0.55
21.5	0.6	17.6	1.0	6.1	0.55

TABLE A4
Percentage of TEA in Industry Sectors: Female Rates and Female/Male Ratios, for the Adult Population in 74 Economies, Grouped by Region and Development Level, GEM 2015/2016

Development Level		Economy	Female Agriculture and Mining	F/M Agriculture and Mining	Female Manufacturing and Transportation	F/M Manufacturing and Transportation
Region	East and South Asia and Pacific					
1. Factor-Driven		India	2%	0.69	11.6%	1.52
2. Factor-Efficiency Transition		Philippines	5.2%	0.37	2.9%	0.97
2. Factor-Efficiency Transition		Vietnam	8.9%	1.25	8.9%	0.63
3. Efficiency-Driven		China	8%	0.51	2.5%	0.44
3. Efficiency-Driven		Indonesia	0%	0.09	2.1%	1.16
3. Efficiency-Driven		Thailand	9%	0.59	4.5%	0.62
4. Efficiency-Innovation Transition		Malaysia	4%	0.22	9.3%	1.45
5. Innovation-Driven		Australia	14.0%	0.73	9.9%	1.13
5. Innovation-Driven		Hong Kong	4%	0.65	3.5%	0.34
5. Innovation-Driven		Korea, Rep.	2%	0.79	4.1%	0.16
5. Innovation-Driven		Taiwan, China	4%	0.44	11.8%	0.62
	East and South Asia and Pacific	**Region Average**	**5.6%**	**0.58**	**6.5%**	**0.82**
Region	Europe and Central Asia					
3. Efficiency-Driven		Bulgaria	2%	0.23	9.4%	0.51
3. Efficiency-Driven		Georgia	30%	0.67	14.8%	0.80
3. Efficiency-Driven		Macedonia, FYR	15%	0.55	14.0%	0.74
4. Efficiency-Innovation Transition		Turkey	20%	0.82	10.4%	0.61
4. Efficiency-Innovation Transition		Hungary	8%	0.34	10.4%	0.64
4. Efficiency-Innovation Transition		Romania	20%	0.52	9.0%	1.04
4. Efficiency-Innovation Transition		Latvia	21%	0.65	18.2%	1.31
4. Efficiency-Innovation Transition		Kazakhstan	6%	0.39	9.0%	0.74
4. Efficiency-Innovation Transition		Croatia	20%	1.06	18.5%	0.85
4. Efficiency-Innovation Transition		Poland	13%	0.72	4.7%	0.35
4. Efficiency-Innovation Transition		Russian Federation	3%	0.09	13.0%	0.57
5. Innovation-Driven		Estonia	7%	0.35	17.0%	1.09
5. Innovation-Driven		Italy	30%	2.04	11.4%	0.70
5. Innovation-Driven		Greece	11%	1.22	6.9%	0.69
5. Innovation-Driven		Sweden	14%	1.40	6.0%	0.82
5. Innovation-Driven		Portugal	9%	0.49	6.9%	0.41
5. Innovation-Driven		Norway	6%	0.34	6.8%	0.62
5. Innovation-Driven		United Kingdom	3%	0.25	3.1%	0.27
5. Innovation-Driven		France	4%	0.16	8.3%	0.64
5. Innovation-Driven		Spain	9%	1.25	5.0%	0.36
5. Innovation-Driven		Slovenia	5%	0.41	10.3%	0.46
5. Innovation-Driven		Austria	5%	0.64	9.3%	0.95
5. Innovation-Driven		Finland	10%	0.40	5.3%	0.41
5. Innovation-Driven		Belgium	6%	0.59	14.3%	1.35
5. Innovation-Driven		Ireland	3%	0.19	7.8%	1.07
5. Innovation-Driven		Germany	3%	0.32	12.3%	1.15
5. Innovation-Driven		Slovak Republic	6%	0.30	7.2%	0.52
5. Innovation-Driven		Cyprus	3%	0.28	4.1%	0.32
5. Innovation-Driven		Luxembourg	3%	0.28	7.5%	1.15
5. Innovation-Driven		Switzerland	9%	0.90	4.8%	0.57
5. Innovation-Driven		Netherlands	0%	0.01	1.3%	0.12
	Europe and Central Asia	**Region Average**	**9.8%**	**0.58**	**9.3%**	**0.70**

Female Wholesale/ Retail	F/M Wholesale/ Retail	Female ICT	F/M ICT	Female Gov't/Health/ Education/Social Svcs.	F/M Gov't/Social Svcs.	Female Fin/Prof/Adm/ Consumer Svcs	F/M Fin/Prof/Adm/ Consumer Svcs
64.0%	0.86	0.4%	0.21	13.5%	1.96	8.1%	1.52
86.8%	1.13	0.9%	0.55	2.5%	0.72	1.8%	1.58
75.3%	1.15	0.0%	0.00	5.7%	1.29	1.3%	0.24
65.7%	1.19	3.0%	1.22	12.5%	1.45	8.8%	0.67
84.4%	1.08	4.4%	0.79	6.7%	2.24	2.1%	0.24
71.9%	1.18	0.8%	0.70	7.3%	1.48	6.5%	0.61
64.0%	0.95	2.3%	*	17.8%	*	2.3%	0.32
22.4%	0.66	2.3%	0.18	24.8%	3.76	26.6%	1.40
59.6%	1.26	3.5%	0.62	19.2%	2.82	9.8%	0.42
58.4%	1.51	2.1%	0.19	16.6%	2.09	16.7%	1.25
58.9%	1.13	2.0%	0.47	15.5%	8.69	7.9%	0.56
64.7%	**1.10**	**2.0%**	*	**12.9%**	*	**0.08**	**0.80**
64.2%	1.26	0.0%	0.00	9.5%	1.54	14.6%	1.19
31.8%	1.31	0.0%	0.00	20.1%	15.93	3.3%	0.60
42.9%	1.37	2.2%	0.40	20.8%	2.26	4.9%	0.66
41.8%	1.14	0.0%	0.00	12.0%	1.14	15.7%	1.91
36.8%	1.53	3.9%	0.70	13.7%	2.43	26.9%	1.10
35.3%	1.27	6.7%	1.52	14.3%	2.25	14.5%	1.04
24.2%	0.77	0.0%	0.00	20.0%	3.77	16.7%	1.28
55.8%	1.18	0.4%	*	21.8%	2.31	7.2%	0.44
17.3%	0.73	1.2%	0.15	27.2%	2.57	15.7%	0.93
17.2%	0.69	1.6%	0.15	28.1%	3.66	35.9%	1.38
37.1%	1.31	0.0%	0.00	35.0%	3.85	12.0%	2.43
15.03%	0.68	3.4%	0.46	15.1%	2.38	41.9%	1.56
15.9%	0.53	0.0%	0.00	17.4%	3.67	25.4%	0.91
42.2%	0.82	0.0%	0.00	21.5%	2.56	18.6%	1.02
17.2%	0.99	1.2%	0.07	22.2%	1.30	39.7%	1.22
43.7%	1.48	2.3%	0.29	22.8%	2.18	15.3%	0.92
21.5%	2.08	3.0%	0.26	23.1%	1.92	39.3%	1.08
35.2%	1.36	5.5%	0.54	23.5%	3.36	29.4%	0.92
32.3%	2.39	0.0%	0.00	24.3%	2.48	31.0%	0.99
36.2%	1.05	2.7%	0.38	24.5%	2.16	23.1%	0.87
24.7%	1.35	5.4%	0.73	24.8%	1.46	30.2%	1.26
24.2%	1.26	5.6%	0.44	27.4%	2.18	28.4%	0.75
23.8%	1.25	1.8%	0.16	28.9%	3.80	29.8%	1.29
19.9%	0.77	2.9%	0.15	29.9%	1.95	27.5%	1.40
29.7%	0.87	4.4%	0.68	32.4%	2.62	23.0%	0.91
24.1%	1.30	4.2%	0.37	32.6%	1.20	23.6%	1.06
20.3%	0.81	1.4%	0.39	34.8%	1.98	30.4%	1.49
37.5%	0.88	1.3%	0.21	35.3%	4.03	19.2%	0.94
24.8%	1.10	2.9%	0.22	37.6%	3.09	24.4%	0.68
11.8%	0.50	0.0%	0.00	44.7%	3.74	30.0%	0.86
25.1%	1.02	1.6%	0.42	47.8%	8.24	24.0%	0.81
30.0%	**1.13**	**2.1%**	*	**25.6%**	**3.16**	**0.23**	**1.09**

TABLE A4 (continued)
Percentage of TEA in Industry Sectors: Female Rates and Female/Male Ratios, for the Adult Population in 74 Economies, Grouped by Region and Development Level, GEM 2015/2016

Development Level		Economy	Female Agriculture and Mining	F/M Agriculture and Mining	Female Manufacturing and Transportation	F/M Manufacturing and Transportation
Region	**Latin America and the Caribbean**					
3. Efficiency-Driven		Belize	3%	0.58	9.4%	0.85
3. Efficiency-Driven		Colombia	0%	0.31	13.2%	0.74
3. Efficiency-Driven		Ecuador	5%	0.56	6.4%	0.59
3. Efficiency-Driven		El Salvador	2%	0.23	4.2%	0.37
3. Efficiency-Driven		Guatemala	0%	0.00	6.3%	0.50
3. Efficiency-Driven		Jamaica	19%	0.87	1.1%	0.10
3. Efficiency-Driven		Peru	5%	0.37	12.8%	0.96
4. Efficiency-Innovation Transition		Argentina	2%	0.33	14.1%	0.96
4. Efficiency-Innovation Transition		Barbados	2%	0.08	14.9%	1.41
4. Efficiency-Innovation Transition		Brazil	0%	0.00	15.3%	1.26
4. Efficiency-Innovation Transition		Chile	3%	0.26	12.0%	0.99
4. Efficiency-Innovation Transition		Mexico	0%	0.00	13.3%	1.17
4. Efficiency-Innovation Transition		Panama	10%	0.49	4.8%	0.24
4. Efficiency-Innovation Transition		Uruguay	4%	0.45	14.7%	1.57
5. Innovation-Driven		Puerto Rico	0%	0.00	12.5%	0.86
	Latin America and the Caribbean	**Region Average**	**3.7%**	**0.30**	**10.3%**	**0.84**
Region	**Middle East and North Africa**					
2. Factor-Efficiency Transition		Iran, Islamic Rep.	6%	0.43	28.1%	1.61
2. Factor-Efficiency Transition		Saudi Arabia	1%	0.18	4.3%	1.96
3. Efficiency-Driven		Egypt, Arab Rep.	7%	0.33	13.1%	0.64
3. Efficiency-Driven		Jordan	8%	0.90	7.7%	0.51
3. Efficiency-Driven		Morocco	0%	0.00	24.9%	1.20
3. Efficiency-Driven		Tunisia	29%	0.77	8.0%	0.68
4. Efficiency-Innovation Transition		Lebanon	2%	0.20	4.8%	0.61
5. Innovation-Driven		Israel	1%	0.26	6.7%	1.09
5. Innovation-Driven		Qatar	0%	0.00	0.0%	0.00
5. Innovation-Driven		United Arab Emirates	5%	0.41	0.0%	0.00
	Middle East and North Africa	**Region Average**	**5.8%**	**0.35**	**9.8%**	**0.83**
Region	North America					
5. Innovation-Driven		Canada	8%	0.72	7.4%	1.04
5. Innovation-Driven		United States	11%	1.01	10.1%	0.86
	North America	Region Average	9.5%	0.86	8.7%	0.95
Region	Sub-Saharan Africa					
1. Factor-Driven		Burkina Faso	18%	0.50	11.6%	1.22
1. Factor-Driven		Cameroon	24%	0.69	14.6%	1.02
1. Factor-Driven		Senegal	12%	0.36	3.6%	0.20
2. Factor-Efficiency Transition		Botswana	14%	0.47	5.4%	0.48
3. Efficiency-Driven		South Africa	2%	0.14	24.4%	2.99
	Sub-Saharan Africa	Region Average	14.1%	0.43	11.9%	1.18

*Ratio could not be calculated because male level is zero.

Female Wholesale/ Retail	F/M Wholesale/ Retail	Female ICT	F/M ICT	Female Gov't/Health/ Education/Social Svcs.	F/M Gov't/Social Svcs.	Female Fin/Prof/Adm/ Consumer Svcs	F/M Fin/Prof/Adm/ Consumer Svcs
60.3%	1.28	0.8%	0.23	14.1%	2.00	12.0%	0.47
66.5%	1.12	2.4%	0.96	9.3%	1.05	8.1%	0.84
75.0%	1.13	1.4%	1.43	6.8%	1.46	5.0%	0.68
88.2%	1.36	0.0%	0.00	4.3%	0.67	1.7%	0.20
81.3%	1.20	0.0%	0.00	12.0%	1.65	0.5%	0.07
73.9%	1.38	2.3%	1.17	3.4%	0.44	0.0%	0.00
67.6%	1.26	0.0%	0.00	4.4%	0.93	10.4%	0.84
51.1%	1.06	4.97%	1.18	18.7%	2.42	9.2%	0.47
52.9%	1.57	2.0%	0.59	21.6%	1.65	6.8%	0.41
50.8%	1.10	0.0%	0.00	30.2%	4.75	3.8%	0.37
57.3%	1.41	1.2%	0.25	10.5%	1.21	15.6%	0.75
63.7%	0.90	2.0%	0.63	17.0%	5.88	3.9%	0.43
52.4%	1.45	4.8%	1.71	19.0%	0.98	9.5%	3.43
46.4%	1.24	1.3%	0.18	10.1%	0.57	23.7%	1.20
51.4%	1.01	0.0%	0.00	20.9%	2.69	15.2%	0.82
62.6%	**1.23**	**1.5%**	**0.56**	**13.5%**	**1.89**	**0.08**	**0.73**
24.3%	0.64	1.47%	0.24	17.1%	2.48	22.5%	1.34
50.6%	0.64	0.0%	*	37.7%	3.22	6.9%	1.79
58.7%	1.24	0.0%	*	17.6%	7.64	3.9%	0.41
52.8%	0.81	0.0%	*	31.8%	6.01	0.0%	0.00
51.6%	0.82	0.0%	0.00	16.0%	1.75	7.5%	6.16
36.6%	1.51	2.5%	1.07	11.8%	1.47	12.1%	0.76
64.4%	0.99	0.0%	0.00	22.1%	2.65	7.2%	0.70
34.0%	1.09	1.6%	0.15	25.3%	1.96	31.3%	0.89
67.2%	1.38	0.0%	0.00	11.6%	3.97	21.2%	0.76
66.7%	1.00	0.0%	*	13.7%	*	14.9%	1.07
50.7%	**1.01**	**0.6%**	*	**20.5%**	*	**0.13**	**1.39**
32.4%	1.03	7.1%	0.58	16.8%	1.37	28.4%	1.09
27.1%	1.48	3.6%	0.32	21.7%	1.76	26.3%	0.74
29.8%	1.26	5.4%	0.45	19.3%	1.57	0.27	0.92
64.5%	1.33	0.0%	*	5.4%	1.61	0.4%	0.19
44.2%	1.31	3.7%	2.87	11.3%	1.07	2.4%	0.45
75.4%	2.17	0.0%	0.00	5.9%	0.66	3.1%	0.66
59.2%	1.64	1.2%	0.26	10.6%	2.08	9.1%	0.74
54.8%	1.16	0.1%	0.02	8.2%	0.93	10.4%	0.59
59.6%	1.52	1.0%	*	8.3%	1.27	0.05	0.53

TABLE A5
Entrepreneurial Attitudes and Affiliations: Female Rates and Female/Male Ratios, for the Adult Population in 74 Economies, Grouped by Region and Development Level, GEM 2015/2016

Development Level		Economy	Opportunity Perceptions Female	Ratio F/M Opportunity Perceptions
Region	East and South Asia and Pacific			
1. Factor-Driven		India	38.0	0.8
2. Factor-Efficiency Transition		Philippines	56.3	1.1
2. Factor-Efficiency Transition		Vietnam	56.1	1.0
3. Efficiency-Driven		China	36.3	0.9
3. Efficiency-Driven		Indonesia	41.7	0.9
3. Efficiency-Driven		Thailand	35.5	0.9
4. Efficiency-Innovation Transition		Malaysia	24.6	0.9
5. Innovation-Driven		Australia	45.8	0.9
5. Innovation-Driven		Hong Kong	57.3	1.0
5. Innovation-Driven		Korea, Rep.	34.7	1.0
5. Innovation-Driven		Taiwan, China	26.2	1.0
	East and South Asia and Pacific	**Region Average**	**41.1**	**0.9**
	Europe and Central Asia			
3. Efficiency-Driven		Bulgaria	18.6	0.8
3. Efficiency-Driven		Georgia	25.3	0.7
3. Efficiency-Driven		Macedonia, FYR	37.7	1.0
4. Efficiency-Innovation Transition		Croatia	22.1	0.8
4. Efficiency-Innovation Transition		Hungary	29.3	1.0
4. Efficiency-Innovation Transition		Kazakhstan	45.0	1.0
4. Efficiency-Innovation Transition		Latvia	35.1	1.2
4. Efficiency-Innovation Transition		Poland	38.7	1.0
4. Efficiency-Innovation Transition		Romania	30.9	0.9
4. Efficiency-Innovation Transition		Russian Federation	18.7	1.1
4. Efficiency-Innovation Transition		Turkey	44.9	0.8
5. Innovation-Driven		Austria	39.7	0.9
5. Innovation-Driven		Belgium	35.3	0.8
5. Innovation-Driven		Cyprus	35.2	1.0
5. Innovation-Driven		Estonia	53.5	1.0
5. Innovation-Driven		Finland	50.8	1.1
5. Innovation-Driven		France	26.6	0.9
5. Innovation-Driven		Germany	33.2	0.8
5. Innovation-Driven		Greece	11.1	0.7
5. Innovation-Driven		Ireland	39.6	0.8
5. Innovation-Driven		Italy	25.1	0.8
5. Innovation-Driven		Luxembourg	45.4	0.8
5. Innovation-Driven		Netherlands	45.5	0.7
5. Innovation-Driven		Norway	66.0	0.9
5. Innovation-Driven		Portugal	25.7	0.8
5. Innovation-Driven		Slovak Republic	20.2	0.8
5. Innovation-Driven		Slovenia	21.3	0.7
5. Innovation-Driven		Spain	23.0	0.8
5. Innovation-Driven		Sweden	75.3	0.9
5. Innovation-Driven		Switzerland	40.6	1.0
5. Innovation-Driven		United Kingdom	37.2	0.8
	Europe and Central Asia	**Region Average**	**35.4**	**0.9**

Capability Perceptions Female	Ratio F/M Capability Perceptions	Undeterred by Fear of Failure Female	Ratio F/M Undeterred by Fear of Failure	Personally Knowing an Entrepreneur Female	Ratio F/M Knowing an Entrepreneur
35.8	0.7	64.3	1.1	25.9	0.6
70.4	1.0	62.7	1.0	45.3	1.0
54.7	0.9	50.7	0.9	64.3	1.0
24.5	0.7	48.3	0.9	48.5	0.9
53.9	1.0	60.8	1.0	63.6	0.9
37.4	0.7	44.5	0.9	29.4	0.8
25.8	0.8	61.4	0.9	33.9	0.9
44.5	0.7	50.0	0.8	34.2	1.0
24.1	0.6	61.5	1.0	37.7	0.9
41.0	0.8	65.2	0.9	34.7	0.8
20.4	0.7	57.6	1.0	34.1	0.9
39.3	**0.8**	**57.0**	**0.9**	**41.1**	**0.9**
34.8	0.8	70.6	0.9	37.8	0.9
32.8	0.6	63.2	0.8	19.6	0.6
45.2	0.7	61.2	0.9	29.3	0.7
44.3	0.8	59.0	0.9	28.1	0.8
30.0	0.6	55.9	1.0	25.2	0.9
46.5	0.9	70.2	1.0	61.2	1.0
44.7	0.8	50.7	0.7	35.4	1.0
53.7	0.8	50.2	0.9	44.1	0.9
37.4	0.7	53.3	0.8	27.5	0.8
25.9	0.8	47.6	0.7	35.0	0.9
44.7	0.7	66.2	0.9	18.0	0.6
40.2	0.7	60.9	0.9	36.7	0.9
24.5	0.6	46.3	0.8	13.5	0.6
42.3	0.7	45.3	0.8	28.8	0.8
38.2	0.8	50.4	0.7	36.9	0.9
33.3	0.9	57.8	0.9	41.0	0.9
29.4	0.7	56.5	0.9	29.4	0.8
30.9	0.7	53.6	0.8	20.0	0.8
35.5	0.7	36.4	0.7	19.3	0.7
34.6	0.6	58.8	1.0	28.4	0.8
23.5	0.6	46.7	0.9	22.9	0.7
30.2	0.6	50.3	0.9	31.8	0.8
27.1	0.5	57.7	0.9	30.2	0.8
21.1	0.5	65.0	1.0	28.5	0.8
36.5	0.8	55.5	0.8	20.9	0.7
37.3	0.7	52.4	0.8	32.9	1.0
45.1	0.8	65.9	1.0	35.7	0.7
43.7	0.9	58.6	0.9	33.0	0.9
26.4	0.6	58.4	1.0	33.8	0.8
32.4	0.6	65.0	0.9	24.9	0.7
39.1	0.7	59.2	0.9	30.0	0.8
35.8	**0.7**	**56.4**	**0.9**	**30.3**	**0.8**

TABLE A5 (continued)
Entrepreneurial Attitudes and Affiliations: Female Rates and Female/Male Ratios, for the Adult Population in 74 Economies, Grouped by Region and Development Level, GEM 2015/2016

Development Level		Economy	Opportunity Perceptions Female	Ratio F/M Opportunity Perceptions
	Latin America and the Caribbean			
3. Efficiency-Driven		Belize	72.1	1.0
3. Efficiency-Driven		Colombia	50.2	1.0
3. Efficiency-Driven		Ecuador	44.9	1.0
3. Efficiency-Driven		El Salvador	35.6	0.8
3. Efficiency-Driven		Guatemala	44.5	0.8
3. Efficiency-Driven		Jamaica	60.7	0.9
3. Efficiency-Driven		Peru	55.8	1.0
4. Efficiency-Innovation Transition		Argentina	43.8	1.0
4. Efficiency-Innovation Transition		Barbados	52.6	0.9
4. Efficiency-Innovation Transition		Brazil	36.4	0.8
4. Efficiency-Innovation Transition		Chile	49.1	1.0
4. Efficiency-Innovation Transition		Mexico	38.4	0.9
4. Efficiency-Innovation Transition		Panama	39.8	0.9
4. Efficiency-Innovation Transition		Uruguay	24.8	0.8
5. Innovation-Driven		Puerto Rico	22.1	0.8
	Latin America and the Caribbean	**Region Average**	**44.7**	**0.9**
	Middle East and North Africa			
2. Factor-Efficiency Transition		Iran, Islamic Rep.	34.0	1.0
2. Factor-Efficiency Transition		Saudi Arabia	75.8	0.9
3. Efficiency-Driven		Egypt, Arab Rep.	47.8	0.8
3. Efficiency-Driven		Jordan	25.6	0.7
3. Efficiency-Driven		Morocco	43.7	0.9
3. Efficiency-Driven		Tunisia	43.5	0.8
4. Efficiency-Innovation Transition		Lebanon	58.9	1.0
5. Innovation-Driven		Israel	52.7	1.0
5. Innovation-Driven		Qatar	47.3	1.0
5. Innovation-Driven		United Arab Emirates	30.3	1.3
	Middle East and North Africa	**Region Average**	**46.0**	**0.9**
	North America			
5. Innovation-Driven		Canada	58.4	1.0
5. Innovation-Driven		United States	53.7	0.9
	North America	**Region Average**	**56.0**	**0.9**
	Sub-Saharan Africa			
1. Factor-Driven		Burkina Faso	58.7	0.9
1. Factor-Driven		Cameroon	62.1	0.9
1. Factor-Driven		Senegal	68.1	0.9
2. Factor-Efficiency Transition		Botswana	55.0	0.9
3. Efficiency-Driven		South Africa	30.3	0.8
	Sub-Saharan Africa	Region Average	54.9	0.9

Capability Perceptions Female	Ratio F/M Capability Perceptions	Undeterred by Fear of Failure Female	Ratio F/M Undeterred by Fear of Failure	Personally Knowing an Entrepreneur Female	Ratio F/M Knowing an Entrepreneur
83.5	1.0	74.6	1.0	56.8	1.0
63.6	0.9	77.4	1.0	44.1	0.8
67.8	0.9	69.4	0.9	34.1	0.8
67.6	0.9	67.9	1.0	35.0	0.7
54.8	0.8	60.6	0.9	28.1	0.7
81.6	1.0	76.0	1.0	44.3	0.9
66.9	0.9	66.6	0.9	46.9	0.9
57.2	0.9	69.1	0.9	28.3	0.8
70.4	0.9	81.9	0.9	31.0	0.8
48.4	0.8	60.1	0.9	39.4	0.9
55.3	0.8	72.3	1.0	37.7	0.9
38.8	0.9	72.0	1.0	47.9	0.9
46.5	0.9	72.3	1.0	47.3	0.8
49.8	0.8	66.6	0.9	27.6	0.8
39.8	0.7	77.4	0.9	17.4	0.7
59.5	**0.9**	**71.0**	**0.9**	**37.7**	**0.8**
50.4	0.7	51.6	0.9	45.6	0.8
62.2	0.8	48.6	0.7	68.1	0.9
33.2	0.6	66.6	0.9	11.7	0.5
35.3	0.6	46.3	0.8	18.3	0.4
44.8	0.7	67.2	1.0	36.9	0.7
52.0	0.8	57.6	0.9	44.6	0.8
57.3	0.7	72.1	0.9	61.9	0.9
32.8	0.7	48.9	0.9	47.1	0.9
36.5	0.7	59.1	0.9	20.2	0.6
42.3	0.7	47.2	1.1	53.5	0.8
44.7	**0.7**	**56.5**	**0.9**	**40.8**	**0.7**
45.4	0.7	61.4	1.0	32.9	0.8
47.7	0.8	63.9	0.9	27.0	0.8
46.6	**0.7**	**62.7**	**1.0**	**29.9**	**0.8**
71.9	0.9	80.1	1.0	60.7	0.8
72.4	0.9	73.9	0.9	55.6	0.9
87.1	1.0	81.9	0.9	61.4	1.0
69.6	0.9	78.3	0.9	44.2	0.8
31.1	0.7	63.4	0.9	29.1	0.9
66.4	0.9	75.5	0.9	50.2	0.9

TABLE A6
Investor Activity, Median Investment Size, Relationship to Investee: Female Rates and Female/Male Ratios, for the Adult Population in 74 Economies, Grouped by Region and Development Level, GEM 2015/2016

Development Level	Region	Economy	Female Invested	F/M Invested
Region	East and South Asia and Pacific			
1. Factor-Driven		India	3.3	0.66
2. Factor-Efficiency Transition		Philippines	4.0	0.81
2. Factor-Efficiency Transition		Vietnam	10.5	1.08
3. Efficiency-Driven		China	12.3	0.86
3. Efficiency-Driven		Indonesia	1.8	0.95
3. Efficiency-Driven		Thailand	2.7	0.85
4. Efficiency-Innovation Transition		Malaysia	1.9	0.90
5. Innovation-Driven		Australia	3.8	0.68
5. Innovation-Driven		Hong Kong	5.4	0.73
5. Innovation-Driven		Korea, Rep.	2.3	0.61
5. Innovation-Driven		Taiwan, China	5.9	0.78
	East and South Asia and Pacific	**Region Average**	**4.9**	**0.81**
Region	**Europe and Central Asia**			
3. Efficiency-Driven		Georgia	3.4	0.62
3. Efficiency-Driven		Macedonia, FYR	6.3	0.72
3. Efficiency-Driven		Bulgaria	2.2	0.56
4. Efficiency-Innovation Transition		Kazakhstan	6.5	1.01
4. Efficiency-Innovation Transition		Hungary	3.9	0.71
4. Efficiency-Innovation Transition		Russian Federation	1.4	0.42
4. Efficiency-Innovation Transition		Croatia	3.4	0.67
4. Efficiency-Innovation Transition		Romania	3.2	0.44
4. Efficiency-Innovation Transition		Poland	2.9	0.54
4. Efficiency-Innovation Transition		Latvia	4.1	0.44
4. Efficiency-Innovation Transition		Turkey	5.1	0.70
5. Innovation-Driven		Estonia	4.3	0.44
5. Innovation-Driven		Sweden	5.0	0.73
5. Innovation-Driven		Belgium	1.1	0.27
5. Innovation-Driven		Ireland	2.1	0.41
5. Innovation-Driven		Finland	2.5	0.58
5. Innovation-Driven		Austria	6.0	0.61
5. Innovation-Driven		Slovak Republic	5.2	0.73
5. Innovation-Driven		Germany	2.6	0.52
5. Innovation-Driven		Spain	3.1	0.94
5. Innovation-Driven		Slovenia	3.2	0.62
5. Innovation-Driven		France	3.3	0.75
5. Innovation-Driven		Netherlands	3.5	0.71
5. Innovation-Driven		Norway	1.4	0.38
5. Innovation-Driven		United Kingdom	1.8	0.41
5. Innovation-Driven		Switzerland	5.3	0.64
5. Innovation-Driven		Cyprus	2.7	0.54
5. Innovation-Driven		Luxembourg	5.0	0.54
5. Innovation-Driven		Portugal	1.5	0.53
5. Innovation-Driven		Greece	3.1	0.79
5. Innovation-Driven		Italy	2.2	0.52
	Europe and Central Asia	**Region Average**	**3.5**	**0.60**

Female Median Investment size	F/M Median investment	Female Family or Other Relative	F/M Family or Other Relative	Female A work colleague	Female A friend or neighbor	Female a good business idea
$298	1.0	38.0	1.8	7.1	16.1	8.8
$221	0.3	75.9	1.0	8.0	14.8	1.3
$2,438	1.0	75.0	1.3	3.7	19.4	1.9
$7,565	1.0	61.5	1.2	5.7	25.7	2.6
$375	1.0	70.4	1.0	10.6	10.0	9.1
$2,278	2.0	70.1	1.3	7.5	22.4	0.0
$1,238	1.7	86.0	0.9	8.5	5.5	0.0
$7,468	0.4	69.1	1.9	6.4	15.8	5.8
$12,887	0.5	50.6	2.5	0.0	47.8	1.6
$78	2.0	32.1	1.5	22.6	31.7	9.0
$9,337	0.6	26.8	1.2	15.0	43.3	11.6
$4,017	**1.0**	**59.6**	**1.4**	**8.6**	**23.0**	**4.7**
$754	0.6	63.5	1.1	3.3	33.2	0.0
$2,182	0.5	68.6	1.0	11.3	17.1	0.0
$2,865	1.0	68.1	1.1	4.5	13.6	4.6
$797	0.7	65.4	1.2	4.1	10.4	4.2
$1,073	0.6	55.4	1.4	2.3	39.1	3.2
$1,538	0.7	67.3	0.9	15.5	12.1	0.0
$2,241	0.5	65.0	1.6	0.0	12.9	7.3
$2,500	0.5	59.4	0.9	3.4	30.7	0.0
$2,561	1.0	65.2	1.1	0.0	17.4	17.4
$3,189	1.0	63.4	1.4	3.1	26.1	4.0
$6,792	2.0	55.6	2.1	15.4	18.2	3.8
$1,121	0.5	65.9	1.5	2.3	24.8	4.9
$1,789	0.5	45.9	2.5	4.8	18.1	14.2
$2,220	0.4	51.3	1.4	24.2	18.8	5.7
$2,241	0.2	56.7	1.8	9.3	13.2	10.4
$2,241	0.7	48.4	1.3	22.9	8.3	20.4
$3,362	0.6	45.4	1.5	5.6	22.0	17.0
$3,922	0.4	71.4	1.3	0.0	20.4	8.2
$5,603	0.5	57.8	2.3	1.6	23.1	15.5
$5,603	0.6	67.2	1.3	3.8	23.8	2.4
$5,603	1.4	79.0	2.2	4.5	12.3	0.0
$5,603	0.5	34.2	1.0	12.2	28.7	20.9
$5,603	1.0	85.2	1.3	1.6	7.6	5.6
$6,320	0.3	60.6	1.9	12.8	4.9	21.7
$6,878	0.7	52.5	1.5	0.0	27.5	16.4
$10,257	0.5	43.1	1.2	9.5	26.8	15.2
$11,206	1.0	91.5	1.7	0.0	8.5	0.0
$11,206	1.0	44.6	1.6	5.1	23.8	10.7
$22,411	4.0	44.3	0.9	0.0	16.1	10.4
$22,411	1.3	93.3	1.2	0.0	6.7	0.0
$44,822	2.0	76.0	2.0	0.0	15.0	9.0
$6,675	**0.9**	**61.7**	**1.5**	**5.9**	**18.7**	**8.2**

TABLE A6 (continued)
Investor Activity, Median Investment Size, Relationship to Investee: Female Rates and Female/Male Ratios, for the Adult Population in 74 Economies, Grouped by Region and Development Level, GEM 2015/2016

Development Level	Region	Economy	Female Invested	F/M Invested
	Latin America and the Caribbean			
3. Efficiency-Driven		Belize	9.7	0.83
3. Efficiency-Driven		Colombia	7.9	0.75
3. Efficiency-Driven		Ecuador	3.2	0.52
3. Efficiency-Driven		El Salvador	4.8	0.65
3. Efficiency-Driven		Guatemala	2.9	0.43
3. Efficiency-Driven		Jamaica	5.6	0.73
3. Efficiency-Driven		Peru	3.1	0.48
4. Efficiency-Innovation Transition		Argentina	3.6	0.42
4. Efficiency-Innovation Transition		Barbados	4.0	0.52
4. Efficiency-Innovation Transition		Brazil	1.2	0.87
4. Efficiency-Innovation Transition		Chile	10.5	0.54
4. Efficiency-Innovation Transition		Mexico	5.8	0.75
4. Efficiency-Innovation Transition		Panama	4.0	0.57
4. Efficiency-Innovation Transition		Uruguay	5.2	0.70
5. Innovation-Driven		Puerto Rico	1.5	0.51
	Latin America and the Caribbean	**Region Average**	**4.9**	**0.62**
	Middle East and North Africa			
2. Factor-Efficiency Transition		Iran, Islamic Rep.	8.9	0.65
2. Factor-Efficiency Transition		Saudi Arabia	7.5	0.64
3. Efficiency-Driven		Egypt, Arab Rep.	5.6	0.66
3. Efficiency-Driven		Jordan	4.4	0.55
3. Efficiency-Driven		Morocco	1.0	0.43
3. Efficiency-Driven		Tunisia	5.0	0.47
4. Efficiency-Innovation Transition		Lebanon	4.2	0.74
5. Innovation-Driven		Israel	2.7	0.45
5. Innovation-Driven		Qatar	5.4	0.75
5. Innovation-Driven		United Arab Emirates	4.6	0.97
	Middle East and North Africa	**Region Average**	**4.9**	**0.63**
	North America			
5. Innovation-Driven		Canada	5.4	0.53
5. Innovation-Driven		United States	5.1	0.73
	North America	**Region Average**	**5.2**	**0.63**
	Sub-Saharan Africa			
1. Factor-Driven		Burkina Faso	8.9	0.52
1. Factor-Driven		Cameroon	15.9	0.94
1. Factor-Driven		Senegal	12.9	0.73
2. Factor-Efficiency Transition		Botswana	7.8	0.59
3. Efficiency-Driven		South Africa	1.1	0.38
	Sub-Saharan Africa	**Region Average**	**9.3**	**0.63**

Female Median Investment size	F/M Median investment	Female Family or Other Relative	F/M Family or Other Relative	Female A work colleague	Female A friend or neighbor	Female a good business idea
$12,460	1.0	71.6	1.2	2.4	20.3	3.9
$673	0.9	72.5	1.1	2.9	12.9	1.9
$800	0.8	66.7	1.0	0.0	30.0	0.0
$300	0.6	62.0	1.2	8.8	24.2	0.0
$525	1.0	58.7	1.4	3.0	35.4	2.9
$239	1.5	52.6	1.6	1.8	35.1	0.0
$904	0.8	67.3	1.1	3.9	17.3	1.3
$691	0.3	66.2	1.4	0.0	23.2	7.2
$1,000	0.8	65.5	1.9	2.6	29.5	2.5
$893	0.6	91.0	1.0	0.0	9.0	0.0
$1,494	0.5	69.7	1.3	5.7	23.9	0.3
$380	0.7	78.8	1.1	2.6	6.5	1.6
$500	0.5	64.3	1.1	0.0	26.2	0.0
$164	1.0	68.1	1.4	4.4	14.0	6.8
$1,500	1.5	47.3	1.0	13.0	32.9	6.8
$1,501	**0.8**	**66.8**	**1.3**	**3.4**	**22.7**	**2.3**
$1,500	1.0	57.4	1.4	12.5	20.6	5.2
$10,665	1.0	71.5	1.0	13.0	12.8	2.7
$1,014	0.8	67.5	1.8	3.9	19.8	7.5
$1,411	0.5	75.6	1.2	3.1	10.2	7.6
$2,055	2.0	30.8	1.0	28.8	40.4	0.0
$1,026	0.4	65.5	1.1	8.3	16.4	4.0
$1,984	0.4	78.1	1.1	3.2	10.2	0.0
$5,221	0.4	63.1	1.2	0.0	3.4	10.7
$27,467	3.3	79.9	2.5	3.8	11.8	0.0
$5,445	0.5	40.5	1.1	46.5	9.2	0.0
$5,779	**1.0**	**63.0**	**1.3**	**12.3**	**15.5**	**3.8**
$2,315	0.3	49.9	1.2	2.2	18.9	10.3
$4,000	1.3	57.7	2.3	7.6	23.9	5.0
$3,157	**0.8**	**53.8**	**1.8**	**4.9**	**21.4**	**7.6**
$68	0.4	83.5	1.2	0.9	14.0	0.0
$171	0.4	69.7	1.1	4.6	21.0	2.6
$85	0.3	65.5	1.1	1.5	29.5	2.2
$140	0.9	74.0	1.3	2.1	22.8	1.1
$685	2.0	44.5	0.9	10.9	17.5	0.0
$230	**0.8**	**67.5**	**1.1**	**4.0**	**21.0**	**1.2**

TABLE A7

Changes* in Total Entrepreneurial Activity Rates and Necessity Motivations: Female Rates and Female/Male Ratios, for the Adult Population in 63 Economies, Grouped by Region and Development Level, GEM 2013/2014, 2015/2016

Development Level	Region	Economy	2014 Female TEA	2016 Female TEA	% Change Female TEA 2014-2016	2014 Ratio F/M TEA
Region	East and South Asia and Pacific					
1. Factor-Driven		India	4.6	7.6	66%	0.5
2. Factor-Efficiency Transition		Philippines	20.8	19.5	-6%	1.3
2. Factor-Efficiency Transition		Vietnam	15.5	15.5	1%	1.0
3. Efficiency-Driven		China	14.2	8.6	-39%	0.8
3. Efficiency-Driven		Indonesia	15.2	15.6	3%	1.1
3. Efficiency-Driven		Thailand	22.1	15.7	-29%	0.9
4. Efficiency-Innovation Transition		Malaysia	6.8	4.5	-34%	1.3
5. Innovation-Driven		Australia	10.3	11.5	11%	0.6
5. Innovation-Driven		Korea, Rep.	3.9	5.3	37%	0.4
5. Innovation-Driven		Taiwan, China	6.8	5.2	-24%	0.7
	East and South Asia and Pacific	**Average**	**12**	**11**	**-9%**	**0.9**
Region	**Europe and Central Asia**					
3. Efficiency-Driven		Georgia	6.5	6.5	0%	0.8
3. Efficiency-Driven		Macedonia, FYR	3.8	3.7	-5%	0.4
4. Efficiency-Innovation Transition		Croatia	4.7	5.6	18%	0.4
4. Efficiency-Innovation Transition		Hungary	5.3	5.0	-5%	0.4
4. Efficiency-Innovation Transition		Kazakhstan	13.2	9.5	-28%	0.9
4. Efficiency-Innovation Transition		Latvia	10.1	9.6	-4%	0.6
4. Efficiency-Innovation Transition		Poland	6.0	8.1	36%	0.5
4. Efficiency-Innovation Transition		Romania	6.6	7.5	14%	0.4
4. Efficiency-Innovation Transition		Russian Federation	3.7	5.7	53%	0.6
4. Efficiency-Innovation Transition		Turkey	8.6	10.0	16%	0.3
5. Innovation-Driven		Austria	7.1	8.1	14%	0.7
5. Innovation-Driven		Belgium	3.1	5.0	59%	0.4
5. Innovation-Driven		Estonia	7.7	11.7	51%	0.7
5. Innovation-Driven		Finland	4.6	5.6	21%	0.7
5. Innovation-Driven		France	4.0	3.4	-15%	0.6
5. Innovation-Driven		Germany	4.0	3.1	-22%	0.6
5. Innovation-Driven		Greece	5.8	4.8	-17%	0.6
5. Innovation-Driven		Ireland	4.2	7.3	72%	0.5
5. Innovation-Driven		Italy	3.1	3.3	4%	0.6
5. Innovation-Driven		Luxembourg	5.3	6.5	23%	0.6
5. Innovation-Driven		Netherlands	7.3	8.6	19%	0.6
5. Innovation-Driven		Norway	4.0	3.8	-4%	0.5
5. Innovation-Driven		Portugal	8.4	6.1	-27%	0.7
5. Innovation-Driven		Slovak Republic	7.4	7.6	3%	0.5
5. Innovation-Driven		Slovenia	4.3	5.1	19%	0.5
5. Innovation-Driven		Spain	4.6	4.7	2%	0.7

2016 Ratio F/M TEA	% Change Ratio F/M TEA 2014-2016	2014 Female Necessity	2016 Female Necessity	% Change Female Necessity 2014-2016	2014 Ratio F/M Necessity	2016 Ratio F/M Necessity	% Change Ratio F/M Necessity 2014-2016
0.6	5%	29.1	33.1	14%	0.9	0.9	4%
1.3	0%	39.2	29.8	-24%	2.5	1.5	-41%
1.3	31%	30.6	43.8	43%	1.1	1.5	46%
0.7	-13%	38.0	30.3	-20%	1.3	1.2	-3%
1.2	8%	22.5	12.5	-45%	1.2	0.7	-40%
0.8	-8%	18.6	23.1	24%	1.1	1.4	30%
0.9	-32%	20.5	11.1	-46%	1.5	0.5	-64%
0.7	1%	16.8	21.5	28%	0.9	1.6	76%
0.7	65%	34.2	23.1	-32%	0.9	0.9	3%
0.5	-32%	14.9	17.2	16%	1.2	0.7	-43%
0.9	**-1%**	**26**	**25**	**-7%**	**1.3**	**1.1**	**-11%**
0.6	-26%	51.9	55.4	7%	1.1	1.1	1%
0.4	-4%	60.6	38.2	-37%	1.0	1.0	-2%
0.5	19%	47.2	40.3	-15%	1.0	1.6	54%
0.5	18%	42.8	21.5	-50%	1.5	1.1	-24%
0.9	-5%	26.7	28.3	6%	1.0	1.3	22%
0.5	-16%		16.2			1.3	
0.6	28%	38.1	31.8	-17%	1.1	1.4	29%
0.5	29%	30.1	26.4	-12%	1.1	0.9	-12%
0.8	27%	40.9	31.7	-22%	1.1	1.1	-1%
0.4	45%		22.5			1.5	
0.7	6%	10.4	18.8	80%	0.9	1.4	53%
0.7	62%	33.8	37.5	11%	1.2	1.8	56%
0.6	-18%	17.5	17.5	0%	1.3	1.0	-25%
0.7	3%	17.2	6.9	-60%	1.2	0.9	-20%
0.5	-22%	23.6	11.7	-50%	2.1	1.1	-47%
0.5	-15%	26.9	21.9	-19%	1.3	1.0	-22%
0.7	24%	42.9	37.4	-13%	1.4	1.2	-17%
0.5	5%	37.2	17.5	-53%	1.4	1.2	-17%
0.6	7%	8.6	5.9	-31%	0.5	0.4	-19%
0.6	-7%	11.5	11.7	1%	1.0	1.1	11%
0.6	3%	14.2	41.7	195%	0.9	5.4	530%
0.5	-7%	10.0	9.5	-5%		0.9	
0.6	-18%	31.9	29.9	-6%	1.3	2.0	48%
0.7	31%	33.8	47.4	40%	1.1	1.3	27%
0.5	-9%	31.3	29.4	-6%	1.4	1.6	16%
0.8	12%	34.9	25.1	-28%	1.3	0.9	-30%

TABLE A7 (continued)
Changes* in Total Entrepreneurial Activity Rates and Necessity Motivations: Female Rates and Female/Male Ratios, for the Adult Population in 63 Economies, Grouped by Region and Development Level, GEM 2013/2014, 2015/2016

Development Level	Region	Economy	2014 Female TEA	2016 Female TEA	% Change Female TEA 2014-2016	2014 Ratio F/M TEA
5. Innovation-Driven		Sweden	3.8	6.3	67%	0.4
5. Innovation-Driven		Switzerland	7.2	5.3	-26%	1.0
5. Innovation-Driven		United Kingdom	7.5	5.6	-25%	0.5
	Europe and Central Asia	**Average**	**6**	**6**	**6%**	**0.6**
Region	**Latin America and the Caribbean**					
3. Efficiency-Driven		Belize	6.4	27.3	323%	0.8
3. Efficiency-Driven		Colombia	14.6	24.7	69%	0.6
3. Efficiency-Driven		Ecuador	32.2	30.2	-6%	1.0
3. Efficiency-Driven		El Salvador	19.7	13.6	-31%	1.0
3. Efficiency-Driven		Guatemala	16.9	16.4	-3%	0.7
3. Efficiency-Driven		Jamaica	17.3	8.8	-49%	0.8
3. Efficiency-Driven		Peru	28.0	24.0	-14%	0.9
4. Efficiency-Innovation Transition		Argentina	11.2	13.1	17%	0.6
4. Efficiency-Innovation Transition		Barbados	11.2	19.8	76%	0.8
4. Efficiency-Innovation Transition		Brazil	17.4	19.9	14%	1.0
4. Efficiency-Innovation Transition		Chile	23.7	19.8	-16%	0.8
4. Efficiency-Innovation Transition		Mexico	18.3	10.0	-46%	0.9
4. Efficiency-Innovation Transition		Panama	16.1	12.3	-24%	0.9
4. Efficiency-Innovation Transition		Uruguay	13.2	9.9	-25%	0.7
5. Innovation-Driven		Puerto Rico	9.1	7.7	-15%	0.8
	Latin America and the Caribbean	**Average**	**17**	**17**	**1%**	**0.8**
Region	**Middle East and North Africa**					
2. Factor-Efficiency Transition		Iran, Islamic Rep.	10.5	8.9	-15%	0.5
5. Innovation-Driven		Israel	6.5	9.4	43%	0.5
5. Innovation-Driven		Qatar	10.3	6.8	-34%	0.5
	Middle East and North Africa	**Average**	**9**	**8**	**-8%**	**0.5**
Region	**North America**					
5. Innovation-Driven		Canada	9.9	13.3	34%	0.6
5. Innovation-Driven		United States	11.2	10.5	-6%	0.7
	North America	**Average**	11	12	13%	0.6
Region	**Sub-Saharan Africa**					
1. Factor-Driven		Burkina Faso	18.7	30.2	62%	0.7
1. Factor-Driven		Cameroon	34.1	26.5	-22%	0.8
2. Factor-Efficiency Transition		Botswana	30.9	30.1	-3%	0.9
3. Efficiency-Driven		South Africa	6.3	5.9	-7%	0.8

*For Israel, Korea and Macedonia, 2013 data were used in place of 2014; for Barbados, Belgium, Botswana, Norway, the Philippines, Tunisia and Vietnam, 2015 data were used in place of 2016. For simplicity in discussion, 2016 will denote the most recent year, and 2014 will denote the earlier year.

2016 Ratio F/M TEA	% Change Ratio F/M TEA 2014-2016	2014 Female Necessity	2016 Female Necessity	% Change Female Necessity 2014-2016	2014 Ratio F/M Necessity	2016 Ratio F/M Necessity	% Change Ratio F/M Necessity 2014-2016
0.7	80%	11.3	2.3	-80%	1.7	0.4	-78%
0.5	-53%	17.7	18.3	3%	1.6	1.5	-7%
0.5	-14%	9.3	14.1	52%	0.6	1.1	72%
0.6	**1%**	**28**	**25**	**-12%**	**1.2**	**1.3**	**11%**
0.9	8%	15.5	8.6	-44%	1.4	1.1	-22%
0.8	28%	39.8	17.1	-57%	1.4	1.8	33%
0.9	-8%	32.6	30.6	-6%	1.2	1.2	-3%
0.9	-11%	33.1	43.6	32%	1.1	1.5	42%
0.7	-2%	44.3	45.1	2%	1.2	1.4	15%
0.8	-1%	39.2	47.8	22%	1.5	1.1	-25%
0.9	-3%	20.2	13.2	-35%	1.6	1.1	-34%
0.8	30%	36.9	40.1	8%	1.7	1.7	2%
0.9	13%	16.7	19.5	17%	1.3	1.7	33%
1.0	1%	36.5	47.7	31%	1.7	1.3	-25%
0.7	-12%	27.1	28.4	5%	2.7	1.5	-45%
1.1	16%	24.6	19.1	-22%	1.2	1.1	-8%
0.9	-3%	29.0	21.1	-27%	1.2	2.2	84%
0.5	-23%	22.2	35.3	59%	2.0	1.5	-26%
0.6	-29%	21.6	31.9	48%	1.1	1.1	-4%
0.8	**-1%**	**29**	**30**	**2%**	**1.5**	**1.4**	**-4%**
0.5	10%	36.4	29.0	-20%	0.9	0.8	-13%
0.7	47%	15.6	12.5	-20%	0.9	0.7	-14%
0.8	57%	15.7	5.6	-64%	0.7	0.5	-28%
0.7	**39%**	**23**	**16**	**-30%**	**0.8**	**0.7**	**-18%**
0.7	7%	19.6	14.2	-28%	1.5	1.0	-34%
0.7	5%	16.0	12.0	-25%	1.4	1.1	-21%
0.7	6%	18	13	-27%	1.4	1.0	-28%
0.8	9%	32.9	35.2	7%	2.6	1.4	-45%
0.9	11%	39.9	36.2	-9%	1.4	1.3	-12%
0.8	-7%	36.2	44.0	21%	1.5	1.6	6%
0.7	-10%	27.7	27.1	-2%	1.0	1.3	34%

TABLE A8

Changes in Intentions and Established Business Activity: Female Rates and Female/Male Ratios, for the Adult Population in 63 Economies, Grouped by Region and Development Level, GEM 2013/2014, 2015/2016*

Development Level		Economy	2014 Female Intentions	2016 Female Intentions	% Change Female Intentions 2014-2016	2014 Ratio F/M Intentions
Region	**East and South Asia and Pacific**					
1. Factor-Driven		India	8.0	16.7	108%	0.7
2. Factor-Efficiency Transition		Philippines	44.4	46.9	6%	0.9
2. Factor-Efficiency Transition		Vietnam	22.5	25.8	15%	1.0
3. Efficiency-Driven		China	18.3	23.1	26%	0.8
3. Efficiency-Driven		Indonesia	28.4	28.0	-1%	0.9
3. Efficiency-Driven		Thailand	19.2	23.1	21%	0.7
4. Efficiency-Innovation Transition		Malaysia	10.6	6.3	-40%	0.8
5. Innovation-Driven		Australia	11.0	13.0	18%	0.8
5. Innovation-Driven		Korea, Rep.	11.3	27.7	144%	0.7
5. Innovation-Driven		Taiwan, China	25.6	24.7	-4%	0.8
	East and South Asia and Pacific	**Average**	**20**	**24**	**18%**	**0.8**
Region	**Europe and Central Asia**					
3. Efficiency-Driven		Georgia	12.6	11.8	-7%	0.6
3. Efficiency-Driven		Macedonia, FYR	27.4	22.2	-19%	0.8
4. Efficiency-Innovation Transition		Croatia	17.7	18.3	3%	0.6
4. Efficiency-Innovation Transition		Hungary	13.7	14.6	6%	0.8
4. Efficiency-Innovation Transition		Kazakhstan	21.1	21.5	2%	0.8
4. Efficiency-Innovation Transition		Latvia	23.5	20.0	-15%	0.8
4. Efficiency-Innovation Transition		Poland	13.3	19.4	46%	0.5
4. Efficiency-Innovation Transition		Romania	26.9	25.1	-7%	0.7
4. Efficiency-Innovation Transition		Russian Federation	5.5	3.9	-28%	0.9
4. Efficiency-Innovation Transition		Turkey	21.8	28.1	29%	0.5
5. Innovation-Driven		Austria	8.6	10.9	28%	0.7
5. Innovation-Driven		Belgium	7.1	9.4	32%	0.4
5. Innovation-Driven		Estonia	7.6	16.4	116%	0.6
5. Innovation-Driven		Finland	7.0	9.5	35%	0.6
5. Innovation-Driven		France	12.9	14.7	14%	0.7
5. Innovation-Driven		Germany	7.2	5.5	-23%	0.8
5. Innovation-Driven		Greece	9.4	5.1	-46%	0.8
5. Innovation-Driven		Ireland	6.2	10.0	61%	0.6
5. Innovation-Driven		Italy	10.7	7.6	-29%	0.7
5. Innovation-Driven		Luxembourg	14.5	13.3	-8%	0.8
5. Innovation-Driven		Netherlands	8.8	6.6	-25%	0.7
5. Innovation-Driven		Norway	3.3	3.6	12%	0.4
5. Innovation-Driven		Portugal	12.5	12.4	-1%	0.5
5. Innovation-Driven		Slovak Republic	14.9	10.9	-27%	0.6
5. Innovation-Driven		Slovenia	9.9	9.7	-2%	0.7
5. Innovation-Driven		Spain	8.0	5.7	-29%	1.0
5. Innovation-Driven		Sweden	7.0	7.8	12%	0.5
5. Innovation-Driven		Switzerland	7.7	8.5	11%	0.8
5. Innovation-Driven		United Kingdom	6.9	8.6	24%	0.6
	Europe and Central Asia	**Average**	**12**	**12**	**2%**	**0.7**
Region	**Latin America and the Caribbean**					
3. Efficiency-Driven		Belize	10.7	50.5	373%	0.9
3. Efficiency-Driven		Colombia	47.0	49.4	5%	0.8
3. Efficiency-Driven		Ecuador	46.1	38.6	-16%	1.0
3. Efficiency-Driven		El Salvador	22.2	31.5	42%	0.9

2016 Ratio F/M Intentions	% Change Female Intentions 2014-2016	2014 Female Established Business Ownership	2016 Female Established Business Ownership	% Change Female Established Business Ownership 2014-2016	2014 Ratio F/M Established Business Ownership	2016Ratio F/M Established Business Ownership	% Change Female Established Business Ownership 2014-2016
0.7	3%	1.3	3.4	153%	0.2	0.6	166%
1.1	12%	6.6	6.1	-7%	1.1	0.7	-36%
1.0	-1%	23.9	22.6	-5%	1.2	1.4	18%
0.8	-6%	10.0	6.4	-36%	0.8	0.8	0%
0.9	4%	11.5	15.3	33%	0.9	1.0	6%
1.0	30%	29.1	27.5	-5%	0.8	1.0	28%
1.0	24%	5.7	2.4	-57%	0.5	0.4	-31%
0.7	-13%	9.0	8.1	-10%	0.8	0.6	-34%
1.0	35%	5.3	5.6	7%	0.4	0.8	80%
0.8	-8%	9.4	5.2	-45%	0.6	0.5	-20%
0.9	**7%**	**11**	**10**	**-8%**	**0.7**	**0.8**	**3%**
0.6	4%	5.6	6.6	18%	0.6	0.6	0%
0.7	-11%	5.0	5.4	9%	0.5	0.6	16%
0.7	10%	2.3	2.6	13%	0.5	0.4	-4%
0.7	-11%	5.0	4.1	-19%	0.5	0.6	28%
0.8	2%	6.3	2.6	-59%	0.7	1.1	55%
0.8	5%	5.6	6.9	23%	0.5	0.6	22%
0.7	35%	4.6	4.9	6%	0.5	0.5	14%
0.7	-2%	5.1	5.7	11%	0.5	0.6	21%
0.6	-30%	3.4	4.6	37%	0.7	0.8	4%
0.6	29%	4.1	5.3	29%	0.2	0.4	61%
0.7	9%	6.9	5.9	-14%	0.5	0.5	-5%
0.6	46%	2.3	1.6	-29%	0.5	0.3	-42%
0.6	8%	4.4	5.7	28%	0.6	0.6	-9%
0.7	4%	4.0	5.1	28%	0.4	0.5	25%
0.7	11%	1.7	2.9	75%	0.4	0.5	29%
0.5	-32%	3.1	4.4	41%	0.4	0.5	5%
0.4	-54%	7.7	10.8	40%	0.4	0.6	45%
0.4	-30%	6.1	3.0	-50%	0.4	0.5	17%
0.5	-30%	2.9	2.6	-9%	0.5	0.3	-35%
0.6	-28%	3.0	2.3	-25%	0.7	0.6	-20%
0.4	-36%	7.1	5.0	-30%	0.6	0.3	-45%
0.4	19%	3.7	3.4	-10%	0.5	0.3	-35%
0.6	25%	5.3	4.2	-22%	0.5	0.4	-24%
0.7	15%	3.9	4.0	3%	0.3	0.5	47%
0.5	-23%	2.8	3.6	30%	0.4	0.4	-11%
0.9	-12%	6.0	5.1	-16%	0.8	0.7	-9%
0.6	14%	4.9	3.0	-38%	0.6	0.5	-14%
0.6	-16%	8.1	9.4	15%	0.8	0.7	-9%
0.6	-4%	4.2	4.1	-3%	0.5	0.5	7%
0.6	**-6%**	**5**	**5**	**0%**	**0.5**	**0.5**	**2%**
1.0	12%	2.6	5.2	102%	0.5	1.0	83%
0.9	3%	3.4	6.1	81%	0.5	0.5	-2%
0.8	-17%	13.8	13.5	-2%	0.6	0.9	40%
0.9	-6%	12.1	11.1	-8%	0.9	0.9	4%

TABLE A8 (continued)
Changes in Intentions and Established Business Activity: Female Rates and Female/Male Ratios, for the Adult Population in 63 Economies, Grouped by Region and Development Level, GEM 2013/2014, 2015/2016*

Development Level		Economy	2014 Female Intentions	2016 Female Intentions	% Change Female Intentions 2014-2016	2014 Ratio F/M Intentions
3. Efficiency-Driven		Guatemala	37.4	35.1	-6%	0.8
3. Efficiency-Driven		Jamaica	32.5	38.3	18%	0.9
3. Efficiency-Driven		Peru	55.3	47.2	-15%	1.0
4. Efficiency-Innovation Transition		Argentina	28.2	25.7	-9%	1.0
4. Efficiency-Innovation Transition		Barbados	15.2	24.8	63%	1.1
4. Efficiency-Innovation Transition		Brazil	20.4	27.2	34%	0.8
4. Efficiency-Innovation Transition		Chile	44.9	43.0	-4%	0.8
4. Efficiency-Innovation Transition		Mexico	20.7	15.0	-27%	0.9
4. Efficiency-Innovation Transition		Panama	27.1	13.0	-52%	1.0
4. Efficiency-Innovation Transition		Uruguay	24.1	25.7	7%	0.7
5. Innovation-Driven		Puerto Rico	18.5	19.1	3%	0.9
	Latin America and the Caribbean	**Average**	**30**	**32**	**8%**	**0.9**
Region	**Middle East and North Africa**					
2. Factor-Efficiency Transition		Iran, Islamic Rep.	22.5	41.5	84%	0.7
5. Innovation-Driven		Israel	21.5	22.2	3%	0.7
5. Innovation-Driven		Qatar	50.7	33.5	-34%	0.9
	Middle East and North Africa	**Average**	**32**	**32**	**3%**	**0.7**
Region	**North America**					
5. Innovation-Driven	North America	Canada	12.6	19.7	57%	0.6
5. Innovation-Driven	North America	United States	14.1	14.9	6%	0.8
	North America	**Average**	**13**	**17**	**30%**	**0.7**
Region	**Sub-Saharan Africa**					
1. Factor-Driven		Burkina Faso	44.1	69.0	56%	0.8
1. Factor-Driven		Cameroon	54.2	41.9	-23%	0.9
2. Factor-Efficiency Transition		Botswana	66.2	65.4	-1%	1.0
3. Efficiency-Driven		South Africa	9.1	10.2	12%	0.6

*For Israel, Korea and Macedonia, 2013 data were used in place of 2014; for Barbados, Belgium, Botswana, Norway, the Philippines, Tunisia and Vietnam, 2015 data were used in place of 2016. For simplicity in discussion, 2016 will denote the most recent year, and 2014 will denote the earlier year.

2016 Ratio F/M Intentions	% Change Female Intentions 2014-2016	2014 Female Established Business Ownership	2016 Female Established Business Ownership	% Change Female Established Business Ownership 2014-2016	2014 Ratio F/M Established Business Ownership	2016Ratio F/M Established Business Ownership	% Change Female Established Business Ownership 2014-2016
0.8	1%	5.8	8.4	45%	0.6	0.9	36%
0.9	2%	12.8	7.8	-39%	0.8	0.9	16%
0.9	-5%	6.2	3.3	-48%	0.5	0.4	-28%
0.8	-15%	5.6	4.5	-20%	0.4	0.4	-10%
1.0	-8%	6.3	9.3	46%	0.8	0.5	-40%
0.9	11%	15.6	14.3	-8%	0.8	0.7	-9%
0.8	-4%	6.8	6.0	-12%	0.6	0.6	-4%
0.9	-1%	4.5	6.5	46%	1.0	0.7	-24%
1.0	-4%	1.7	3.2	87%	0.3	0.6	69%
0.8	9%	5.0	4.9	0%	0.6	0.5	-14%
0.6	-35%	0.6	1.6	165%	0.3	0.9	208%
0.9	**-4%**	**7**	**7**	**3%**	**0.6**	**0.7**	**11%**
0.8	15%	4.1	4.0	-3%	0.2	0.2	-11%
0.8	15%	3.7	2.8	-23%	0.4	0.5	20%
0.8	-14%	1.4	0.6	-55%	0.3	0.2	-42%
0.8	**4%**	**3**	**2**	**-19%**	**0.3**	**0.3**	**-6%**
0.9	46%	7.8	6.4	-18%	0.7	0.9	27%
0.8	9%	5.2	7.6	46%	0.6	0.7	18%
0.8	**25%**	**6**	**7**	**8%**	**0.6**	**0.8**	**23%**
0.9	12%	15.9	25.0	57%	0.8	0.8	-1%
0.9	0%	10.2	13.3	30%	0.8	0.8	-2%
1.0	1%	3.5	3.2	-9%	0.5	0.5	-3%
0.7	12%	2.5	1.2	-51%	0.9	0.3	-64%

TABLE A9

Changes* in Entrepreneurial Attitudes and Affiliations: Female Rates and Female/Male Ratios, for the Adult Population in 63 Economies, Grouped by Region and Development Level, GEM 2013/2014, 2015/2016

Development Level		Economy	2014 Female Opp. Perceptions	2016 Female Opportunity Perceptions	% Change 2014-2016	2014 Ratio F/M Opportunity Perceptions	2016 Ratio F/M Opportunity Perceptions	% Change F/M Opportunity Perceptions 2014-2016
Region	East and South Asia and Pacific							
1. Factor-Driven		India	34.8	38.0	9%	0.8	0.8	-7%
2. Factor-Efficiency Transition		Philippines	46.2	56.3	22%	1.0	1.1	8%
2. Factor-Efficiency Transition		Vietnam	37.3	56.1	51%	0.9	1.0	9%
3. Efficiency-Driven		China	29.9	36.3	21%	0.9	0.9	7%
3. Efficiency-Driven		Indonesia	43.9	41.7	-5%	0.9	0.9	0%
3. Efficiency-Driven		Thailand	42.8	35.5	-17%	0.8	0.9	8%
4. Efficiency-Innovation Transition		Malaysia	41.2	24.6	-40%	0.9	0.9	4%
5. Innovation-Driven		Australia	42.5	45.8	8%	0.9	0.9	0%
5. Innovation-Driven		Korea, Rep.	9.7	34.7	259%	0.6	1.0	55%
5. Innovation-Driven		Taiwan, China	32.6	26.2	-20%	1.0	1.0	3%
		Average	**36**	**40**	**10%**	**0.9**	**0.9**	**7%**
Region	**Europe and Central Asia**							
3. Efficiency-Driven		Georgia	33.3	25.3	-24%	0.8	0.7	-10%
3. Efficiency-Driven		Macedonia, FYR	35.5	37.7	6%	0.9	1.0	6%
4. Efficiency-Innovation Transition		Croatia	17.4	22.1	27%	0.9	0.8	-8%
4. Efficiency-Innovation Transition		Hungary	22.0	29.3	33%	0.9	1.0	7%
4. Efficiency-Innovation Transition		Kazakhstan	26.3	45.0	72%	1.0	1.0	6%
4. Efficiency-Innovation Transition		Latvia	34.8	35.1	1%	1.0	1.2	23%
4. Efficiency-Innovation Transition		Poland	32.9	38.7	17%	1.1	1.0	-14%
4. Efficiency-Innovation Transition		Romania	31.6	30.9	-2%	1.0	0.9	-9%
4. Efficiency-Innovation Transition		Russian Federation	23.7	18.7	-21%	0.8	1.1	37%
4. Efficiency-Innovation Transition		Turkey	34.2	44.9	32%	0.8	0.8	7%
5. Innovation-Driven		Austria	41.8	39.7	-5%	0.9	0.9	0%
5. Innovation-Driven		Belgium	30.5	35.3	16%	0.7	0.8	6%
5. Innovation-Driven		Estonia	49.3	53.5	8%	1.0	1.0	5%
5. Innovation-Driven		Finland	43.3	50.8	17%	1.0	1.1	2%
5. Innovation-Driven		France	28.0	26.6	-5%	1.0	0.9	-11%
5. Innovation-Driven		Germany	33.0	33.2	1%	0.8	0.8	1%
5. Innovation-Driven		Greece	18.0	11.1	-38%	0.8	0.7	-10%
5. Innovation-Driven		Ireland	29.2	39.6	36%	0.8	0.8	1%
5. Innovation-Driven		Italy	23.0	25.1	9%	0.8	0.8	2%
5. Innovation-Driven		Luxembourg	37.3	45.4	22%	0.8	0.8	7%
5. Innovation-Driven		Netherlands	39.2	45.5	16%	0.8	0.7	-5%
5. Innovation-Driven		Norway	58.4	66.0	13%	0.9	0.9	8%
5. Innovation-Driven		Portugal	19.5	25.7	32%	0.7	0.8	4%
5. Innovation-Driven		Slovak Republic	20.6	20.2	-2%	0.8	0.8	1%
5. Innovation-Driven		Slovenia	13.5	21.3	57%	0.6	0.7	13%
5. Innovation-Driven		Spain	19.2	23.0	19%	0.7	0.8	10%
5. Innovation-Driven		Sweden	68.5	75.3	10%	1.0	0.9	-3%
5. Innovation-Driven		Switzerland	40.9	40.6	-1%	0.9	1.0	9%
5. Innovation-Driven		United Kingdom	38.0	37.2	-2%	0.9	0.8	-9%
		Average	**33**	**36**	**11%**	**0.9**	**0.9**	**2%**

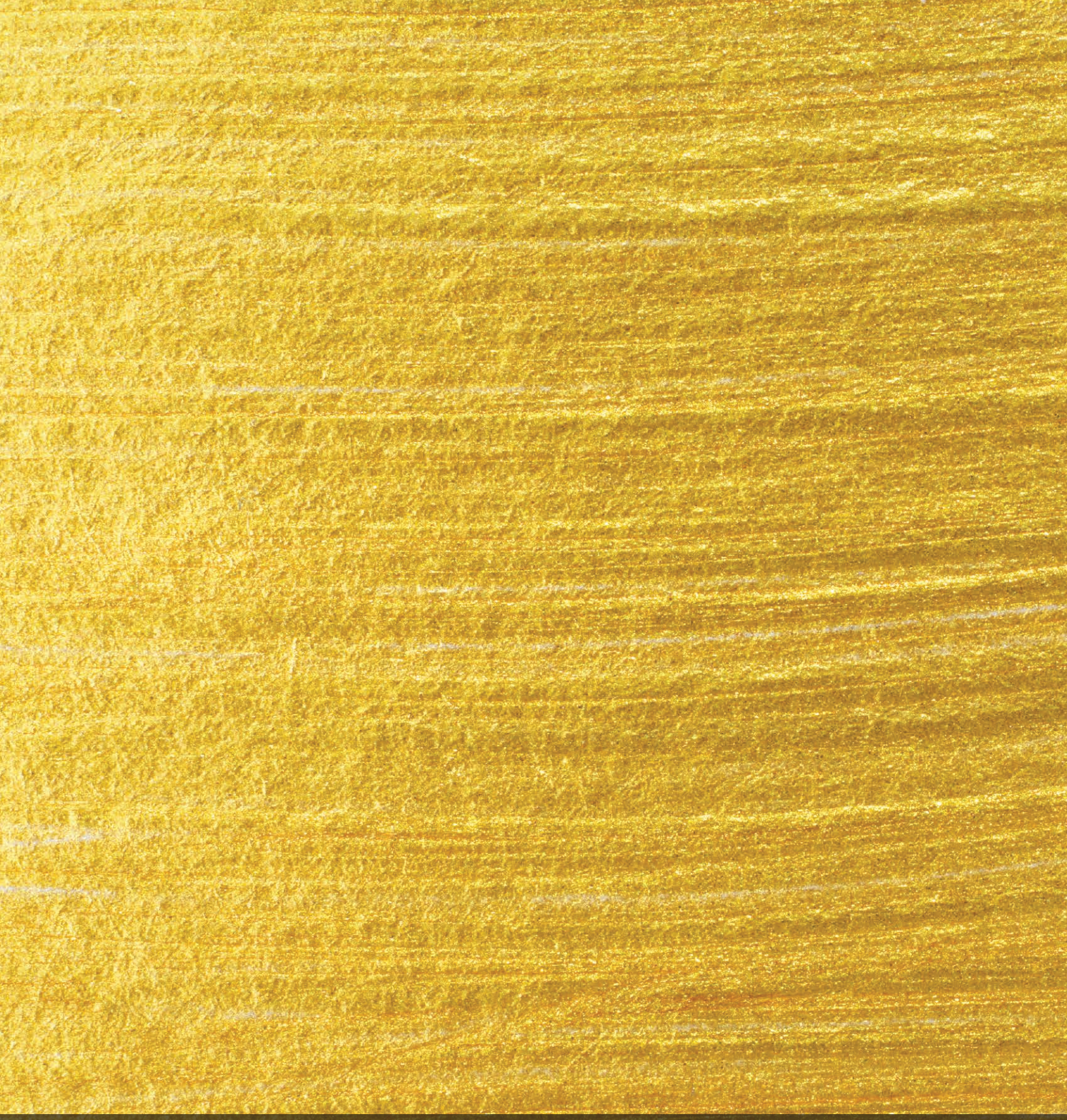
2014 Female Cap. Perceptions	2016 Female Capability Perceptions	% Change Female Capability Perceptions 2014-2016	2014 Ratio F/M Capability Perceptions	2016 Ratio F/M Capability Perceptions	% Change F/M Capability Perceptions 2014-2016	2014 Female Undeterred by Fear of Failure (among those seeing opportunities)	2016 Female Undeterred by Fear of Failure (among those seeing opportunities)	% Change Female Undeterred by Fear of Failure 2014-2016	2014 F/M Ratio Undeterred by Fear of Failure (among those seeing opportunities)	2016 F/M Ratio Undeterred by Fear of Failure (among those seeing opportunities)	% Change F/M Ratio Undeterred by Fear of Failure 2014-2016
30.5	35.8	17%	0.7	0.7	-3%	64.4	64.3	0%	1.0	1.1	5%
65.8	70.4	7%	1.0	1.0	5%	59.7	62.7	5%	1.0	1.0	-2%
58.4	54.7	-6%	1.0	0.9	-8%	44.3	50.7	14%	1.0	0.9	-15%
28.1	24.5	-13%	0.7	0.7	-6%	67.2	48.3	-28%	1.0	0.9	-8%
57.4	53.9	-6%	0.9	1.0	5%	56.6	60.8	7%	1.0	1.0	3%
42.6	37.4	-12%	0.7	0.7	2%	49.2	44.5	-9%	0.8	0.9	3%
34.5	25.8	-25%	0.8	0.8	2%	67.5	61.4	-9%	1.0	0.9	-1%
40.2	44.5	11%	0.8	0.7	-2%	50.2	50.0	0%	0.8	0.8	-4%
18.8	41.0	118%	0.5	0.8	65%	54.9	65.2	19%	1.0	0.9	-7%
23.9	20.4	-15%	0.7	0.7	-4%	55.5	57.6	4%	0.9	1.0	11%
40	**41**	**2%**	**0.8**	**0.8**	**3%**	**57**	**57**	**-1%**	**0.9**	**0.9**	**-2%**
30.5	32.8	8%	0.7	0.6	-5%	62.8	63.2	1%	0.9	0.8	-14%
40.4	45.2	12%	0.7	0.7	3%	57.4	61.2	7%	0.9	0.9	-7%
37.6	44.3	18%	0.7	0.8	14%	51.6	59.0	14%	0.9	0.9	-1%
31.1	30.0	-4%	0.6	0.6	5%	46.9	55.9	19%	0.8	1.0	18%
48.4	46.5	-4%	0.8	0.9	2%	63.5	70.2	11%	0.9	1.0	16%
41.0	44.7	9%	0.7	0.8	9%	52.1	50.7	-3%	0.8	0.7	-11%
39.1	53.7	38%	0.6	0.8	44%	38.0	50.2	32%	0.8	0.9	9%
39.0	37.4	-4%	0.7	0.7	1%	45.2	53.3	18%	0.8	0.8	8%
25.1	25.9	3%	0.8	0.8	2%	56.0	47.6	-15%	0.9	0.7	-17%
43.3	44.7	3%	0.7	0.7	8%	59.2	66.2	12%	0.9	0.9	6%
40.4	40.2	-1%	0.7	0.7	-4%	47.8	60.9	27%	0.7	0.9	28%
22.0	24.5	12%	0.6	0.6	11%	46.5	46.3	0%	0.9	0.8	-3%
35.0	38.2	9%	0.7	0.8	11%	43.4	50.4	16%	0.8	0.7	-1%
30.1	33.3	10%	0.8	0.9	14%	51.1	57.8	13%	0.8	0.9	10%
24.8	29.4	19%	0.5	0.7	27%	53.9	56.5	5%	0.9	0.9	2%
28.7	30.9	8%	0.7	0.7	8%	45.4	53.6	18%	0.7	0.8	16%
40.2	35.5	-12%	0.8	0.7	-7%	25.1	36.4	45%	0.7	0.7	-12%
36.7	34.6	-6%	0.6	0.6	-1%	51.7	58.8	14%	0.8	1.0	17%
28.6	23.5	-18%	0.8	0.6	-28%	37.4	46.7	25%	0.8	0.9	13%
31.1	30.2	-3%	0.7	0.6	-17%	47.5	50.3	6%	0.9	0.9	-6%
33.8	27.1	-20%	0.6	0.5	-21%	57.3	57.7	1%	0.9	0.9	1%
22.8	21.1	-8%	0.6	0.5	-13%	65.2	65.0	0%	0.9	1.0	1%
39.6	36.5	-8%	0.7	0.8	2%	47.6	55.5	17%	0.8	0.8	-1%
42.6	37.3	-12%	0.6	0.7	15%	46.5	52.4	13%	0.8	0.8	4%
39.6	45.1	14%	0.7	0.8	12%	56.8	65.9	16%	0.9	1.0	15%
42.8	43.7	2%	0.8	0.9	10%	49.6	58.6	18%	0.9	0.9	7%
27.7	26.4	-5%	0.6	0.6	-2%	54.0	58.4	8%	0.8	1.0	17%
32.4	32.4	0%	0.6	0.6	-6%	59.7	65.0	9%	0.8	0.9	10%
37.9	39.1	3%	0.7	0.7	0%	61.7	59.2	-4%	1.0	0.9	-12%
35	**36**	**2%**	**0.7**	**0.7**	**3%**	**51**	**56**	**10%**	**0.8**	**0.9**	**3%**

TABLE A9 (continued)
Changes* in Entrepreneurial Attitudes and Affiliations: Female Rates and Female/Male Ratios, for the Adult Population in 63 Economies, Grouped by Region and Development Level, GEM 2013/2014, 2015/2016

Development Level		Economy	2014 Female Opp. Perceptions	2016 Female Opportunity Perceptions	% Change 2014-2016	2014 Ratio F/M Opportunity Perceptions	2016 Ratio F/M Opportunity Perceptions	% Change F/M Opportunity Perceptions 2014-2016
Region	**Latin America and the Caribbean**							
3. Efficiency-Driven		Belize	48.3	72.1	49%	1.0	1.0	6%
3. Efficiency-Driven		Colombia	65.4	50.2	-23%	1.0	1.0	-4%
3. Efficiency-Driven		Ecuador	60.2	44.9	-25%	0.9	1.0	4%
3. Efficiency-Driven		El Salvador	45.3	35.6	-21%	1.0	0.8	-19%
3. Efficiency-Driven		Guatemala	43.5	44.5	2%	0.9	0.8	-8%
3. Efficiency-Driven		Jamaica	50.4	60.7	21%	0.8	0.9	13%
3. Efficiency-Driven		Peru	62.6	55.8	-11%	1.0	1.0	-4%
4. Efficiency-Innovation Transition		Argentina	31.3	43.8	40%	1.0	1.0	2%
4. Efficiency-Innovation Transition		Barbados	37.7	52.6	40%	1.0	0.9	-6%
4. Efficiency-Innovation Transition		Brazil	53.5	36.4	-32%	0.9	0.8	-11%
4. Efficiency-Innovation Transition		Chile	64.6	49.1	-24%	0.9	1.0	2%
4. Efficiency-Innovation Transition		Mexico	46.3	38.4	-17%	0.9	0.9	6%
4. Efficiency-Innovation Transition		Panama	44.2	39.8	-10%	1.0	0.9	-16%
4. Efficiency-Innovation Transition		Uruguay	40.9	24.8	-39%	0.8	0.8	-6%
5. Innovation-Driven		Puerto Rico	24.7	22.1	-11%	1.0	0.8	-20%
	Latin America and the Caribbean	**Average**	**48**	**45**	**-7%**	**0.9**	**0.9**	**-4%**
Region	**Middle East and North Africa**							
2. Factor-Efficiency Transition		Iran, Islamic Rep.	25.8	34.0	32%	0.9	1.0	12%
5. Innovation-Driven		Israel	44.6	52.7	18%	0.9	1.0	5%
5. Innovation-Driven		Qatar	59.3	47.3	-20%	0.9	1.0	7%
	Middle East and North Africa	**Average**	**43**	**45**	**3%**	**0.9**	**1.0**	**8%**
Region	**North America**							
5. Innovation-Driven	North America	Canada	54.3	58.4	8%	1.0	1.0	3%
5. Innovation-Driven	North America	United States	48.7	53.7	10%	0.9	0.9	-4%
	North America	**Average**	**51**	**56**	**9%**	**0.9**	**0.9**	**-1%**
Region	**Sub-Saharan Africa**							
1. Factor-Driven		Burkina Faso	62.3	58.7	-6%	1.0	0.9	-6%
1. Factor-Driven		Cameroon	65.8	62.1	-6%	0.9	0.9	5%
2. Factor-Efficiency Transition		Botswana	55.4	55.0	-1%	0.9	0.9	-3%
3. Efficiency-Driven		South Africa	34.3	30.3	-12%	0.9	0.8	-12%

*For Israel, Korea and Macedonia, 2013 data were used in place of 2014; for Barbados, Belgium, Botswana, Norway, the Philippines, Tunisia and Vietnam, 2015 data were used in place of 2016. For simplicity in discussion, 2016 will denote the most recent year, and 2014 will denote the earlier year.

2014 Female Cap. Perceptions	2016 Female Capability Perceptions	% Change Female Capability Perceptions 2014-2016	2014 Ratio F/M Capability Perceptions	2016 Ratio F/M Capability Perceptions	% Change F/M Capability Perceptions 2014-2016	2014 Female Undeterred by Fear of Failure (among those seeing opportunities)	2016 Female Undeterred by Fear of Failure (among those seeing opportunities)	% Change Female Undeterred by Fear of Failure 2014-2016	2014 F/M Ratio Undeterred by Fear of Failure (among those seeing opportunities)	2016 F/M Ratio Undeterred by Fear of Failure (among those seeing opportunities)	% Change F/M Ratio Undeterred by Fear of Failure 2014-2016
69.9	83.5	19%	1.0	1.0	-5%	62.3	74.6	20%	1.0	1.0	3%
51.3	63.6	24%	0.8	0.9	9%	60.1	77.4	29%	0.8	1.0	14%
70.3	67.8	-4%	0.9	0.9	-3%	59.0	69.4	18%	0.9	0.9	3%
70.3	67.6	-4%	1.0	0.9	-7%	53.9	67.9	26%	0.9	1.0	3%
58.6	54.8	-7%	0.8	0.8	-5%	59.2	60.6	2%	0.9	0.9	-3%
79.1	81.6	3%	0.9	1.0	1%	69.3	76.0	10%	0.9	1.0	12%
66.7	66.9	0%	0.9	0.9	2%	70.3	66.6	-5%	1.0	0.9	-3%
52.6	57.2	9%	0.8	0.9	5%	64.7	69.1	7%	0.9	0.9	-4%
60.4	70.4	16%	0.9	0.9	-3%	73.0	81.9	12%	1.0	0.9	-4%
45.0	48.4	8%	0.8	0.8	0%	55.6	60.1	8%	0.8	0.9	7%
58.7	55.3	-6%	0.8	0.8	0%	65.1	72.3	11%	0.9	1.0	7%
51.7	38.8	-25%	0.9	0.9	-3%	69.7	72.0	3%	1.0	1.0	-4%
53.4	46.5	-13%	1.0	0.9	-3%	85.2	72.3	-15%	0.9	1.0	5%
59.3	49.8	-16%	0.9	0.8	-9%	67.6	66.6	-2%	1.0	0.9	-5%
43.4	39.8	-8%	0.8	0.7	-11%	64.4	77.4	20%	0.9	0.9	4%
59	**59**	**0%**	**0.9**	**0.9**	**-2%**	**65**	**71**	**9%**	**0.9**	**0.9**	**2%**
50.8	50.4	-1%	0.7	0.7	-1%	65.1	51.6	-21%	1.0	0.9	-15%
26.0	32.8	26%	0.5	0.7	22%	44.4	48.9	10%	0.9	0.9	1%
48.2	36.5	-24%	0.7	0.7	-6%	70.3	59.1	-16%	0.9	0.9	-4%
42	**40**	**-4%**	**0.7**	**0.7**	**4%**	**60**	**53**	**-11%**	**0.9**	**0.9**	**-7%**
41.9	45.4	9%	0.7	0.7	-3%	57.7	61.4	6%	0.9	1.0	12%
45.9	47.7	4%	0.8	0.8	2%	64.4	63.9	-1%	0.9	0.9	1%
44	**47**	**6%**	**0.7**	**0.7**	**0%**	**61**	**63**	**3%**	**0.9**	**1.0**	**6%**
64.5	71.9	11%	1.0	0.9	-9%	77.9	80.1	3%	1.0	1.0	-2%
69.5	72.4	4%	0.9	0.9	3%	71.5	73.9	3%	0.9	0.9	0%
62.3	69.6	12%	0.9	0.9	3%	78.4	78.3	0%	1.0	0.9	-2%
32.4	31.1	-4%	0.7	0.7	-8%	32.4	31.1	-4%	0.7	0.7	-8%



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