



A SURVEY ON WOMEN'S ENTREPRENEURSHIP AND INNOVATION





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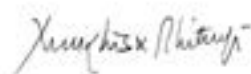
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PREFACE

In the past decade, many studies have produced information about how innovation affects entrepreneurship and small business development. However, very few studies have introduced gender influences on entrepreneurship.

The findings of this report clearly show that female entrepreneurs face the same challenges male entrepreneurs face. However, women entrepreneurs must face additional challenges, including a lack of visibility and access to support networks, and cultural acceptance. For example, due to their difficulty in dealing with the life puzzle originated by the need of taking care of family and business at the same time, women entrepreneurs are less experienced in handling external business contacts for innovation. However, such difficulties have also enabled women to embrace the opportunities provided by information and communications technologies (ICTs) to create marketing channels, collect customer information and improve efficiencies in their business processes. ICTs—when available and affordable—play a major role in allowing women entrepreneurs to stay ahead of competition, leading to small firms' success stories, such as those included in this survey.

Ultimately, this survey aims to start a dialogue with policymakers about how to support increased innovation in women-owned firms in both developing and developed economies. It aims to generate gender-aware policies and concrete improvements in programmes targeting women empowerment.



Mukhisa Kituyi
Secretary-General of UNCTAD

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GLOSSARY OF TERMS/ACRONYMS

Term/Acronym Definition

GEM	Global Entrepreneurship Monitor
ICT	information and communications technology
ILO/OIT	International Labour Organization/Organisation Internationale du Travail
Innovation	As defined by OECD and Eurostat in the Oslo Manual, “innovation” is used and defined broadly in this report. Definition of the term goes well beyond an R&D-fostered invention and includes improvements and new methods related to products, processes, marketing or organizations.
IP	intellectual property
MFI	microfinance institution
OECD/OCDE	Organization for Economic Cooperation and Development/Organisation de Coopération et de Développement Économique
R&D	research and development
SET	science, engineering and technology
SME	small and medium-sized enterprise
STEM	science, technology, engineering and mathematics
STI	science, technology and innovation
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNIFEM	United Nations Development Fund for Women

EXECUTIVE SUMMARY

Despite developments made in gender equality, many gaps remain between males and females in realms such as education, employment and entrepreneurship. Beyond being a basic human right, women empowerment and gender equality is also a way to generate broad productivity gains. From a development perspective, empowering women and granting them equal rights in areas such as entrepreneurship and innovation has also positive spillover effects on key development outcomes, such as pro-poor growth and the achievement of the Millennium Development Goals (MDGs).

Women entrepreneurship is a growing field around the world. It is on the agenda of most international development agencies and multilateral organizations and is a focus of many foundations and civil society organizations. However, women remain substantially under-represented as entrepreneurs, even in countries where women's participation in the labour market has been constantly increasing. Moreover, several knowledge gaps remain on the obstacles hindering women's role in the promotion of sustainable development and economic growth through the creation of high growth, innovative enterprises.

The objective of this report is to fill in part of this gap. Its results cannot be generalized, but provide interesting and thought-provoking insights on drivers and obstacles to entrepreneurship and innovation from a gender perspective. In particular, this research project conducted a field survey with the aim to:

- Investigate the drivers of entrepreneurship and innovation according to gender in both developed and developing economies;
- Examine impediments to entrepreneurship and innovation and analyse whether these impediments vary by gender and development context;
- Provide recommendations for policy in the area of women entrepreneurship, fostering a greater level of innovation in women-owned enterprises.

A focus group comprising a sample of 456 males and females high-growth entrepreneurs has been surveyed in three developing countries (Brazil, Jordan and Uganda) and three developed countries (Sweden, Switzerland, the United States). This study has uncovered a number of important findings, confirmed some commonly held beliefs, and questioned other assumptions. The findings and conclusions are grouped into three main topics: entrepreneurial motivations and drivers of innovation, innovative practices and barriers to innovation. The survey questionnaire specified that innovation encompasses innovative practices not only in products and processes, but also in organizational behaviours and in marketing. It referred to any method or product that is new to the firm (not necessarily to the rest of the world).

Given these sampling criteria, the results of this research cannot be generalized to include the full small business population in each country. However, within the study's parameters, this analysis suggests some important gender differences that can be compared to other research findings. In particular, this study provides evidence that the drivers of entrepreneurship and innovation among growth-oriented women-owned firms are sometimes different from those owned by men. Surveys reflect that women's entrepreneurial motivations, more often than men's, stem from a desire to fulfil a dream, realize a passion or seek greater independence. Men, on the contrary, are more often driven by the desire to bring a new good or service to the market or to significantly improve upon an existing product or service. The drivers of innovation for women and men entrepreneurs also differ. Women entrepreneurs, more often than men, innovate to address a social need in their communities.

Despite the different motivations, the surveyed female business owners had the same approach to innovation as their male counterparts. However, women entrepreneurs tended to focus their innovation efforts on business organization rather than on products and processes, more so than their male counterparts. They were also more likely to have cohesive and collaborative management structures.

- According to the survey, there were important differences between developed and developing countries in how innovation is put into practice:
- According to women and men entrepreneurs in developing countries, their approach to innovation is more vision-led rather than market-led. This may be due to a lack of market information or to a limited access to such information;
- Women and men entrepreneurs in developing countries are less comfortable with risk due to fewer external support systems, role models or local culture;
- Women and men entrepreneurs in developing countries believe that the lack of capacity-building (such as training and technical assistance centres) hampers the growth of enterprises;
- Women and men entrepreneurs in least developed countries have less access to the Internet and ICT, hence hindering innovation.

Several gender differences also emerged from the responses of the entrepreneurs on how innovation is put into practice, regardless of whether they came from developed or developing countries. First, women were more likely than men to seek business training and educational opportunities. Second, females seemed to be more active than their male counterparts in using ICT tools including social media networking to market products and services. These tools include Facebook, Twitter, LinkedIn and other technology-enabled business networking instruments. Third, fewer women business owners obtained patents compared with men business owners.

The survey displayed few barriers to innovation. However, several key external barriers were detected, which seemed to prevent women entrepreneurs from expanding their business. These include:

- Insufficient access to capital;
- Limited access to new markets;
- Limited access to ICTs;
- Cultural constraints;
- Lack of capacity-building.

Limited access to capital is integral to an innovative firm trying to bring new or improved goods or services to the market. Most women business owners surveyed report that limited access to capital was one of the key challenges they faced when they first launched their businesses, and it is still is the top obstacle they face when continuing to innovate and grow their businesses. Limited access to new markets is another key factor in growth-oriented innovation. There is often a gap between the number of women and the number of men included in international trade missions.

While nearly all women business owners use computers for business, limited access to the Internet in least developed countries have resulted in far fewer creation of web pages for women-owned enterprises. These business owners also have limited access to social media networks, hindering growth of customers. Women business owners who are focused on growing their enterprises have a strong appetite for introducing new ICT tools. Improving basic access to information and communications technologies in developing countries can help enhance innovation and entrepreneurial creativity.

Innovation-focused women business owners often do not have mentors or role models. Social and cultural constraints to women's entrepreneurship and innovation are waning for women business owners in developing countries. However, several challenges make it difficult for women to engage in an entrepreneurial activity independently from the development context, such as the problem of dealing with the life puzzle, i.e. taking care of family and business at the same time.

Finally, the lack of capacity-building—in the form of growth-oriented or technology-focused training and technical assistance—is a constraint. Women in all six countries surveyed had received general business

education, but far fewer had attended specialized education programmes including financial management, marketing or technology-focused skill building. Development assistance provided by governments and donor agencies should include specialized and innovation-focused business education and training programmes to combat the lack of capacity-building.

Overall, the findings of this study clearly show that in most cases high-growth women entrepreneurs face similar challenges as men entrepreneurs. However, the women entrepreneurs interviewed made specific suggestions aimed at mainstreaming gender in entrepreneurship and innovation policies in three topical policy areas. These are:

- Fostering innovation through training and investment by financing innovation, introducing more growth-oriented, innovation-focused training and creating special programmes for social enterprises;
- Promoting access to new markets and ICTs by providing more market access assistance and increasing access to the Internet;
- Introducing mechanisms for women's empowerment by increasing cultural acceptance, highlighting female role models and raising public awareness.

Policymakers, educators and key stakeholders could consider undertaking actions to address the needs and constraints identified in this survey.

INTRODUCTION

UNCTAD's research on women's entrepreneurship and innovation highlights that there is little fact-based information about perspectives and practices in regards to innovation in women-owned businesses. A better understanding of women entrepreneurship's success factors, its distinctive features and constraints remains a priority. So far, there has been too little analysis of how policies and programmes may facilitate women entrepreneurship and of how policies need to be differentiated to better address the different needs of men and women entrepreneurs. Moreover, innovation studies have frequently focused on male dominated high-tech industries, while it is widely acknowledged that traditional and service-related industries where women are more prominent may also be innovative.

To tackle these issues, UNCTAD has carried out a comparative survey of innovation in women- and men-owned firms. In this study, the definition of innovation extends beyond products and processes and includes organizational behaviours and marketing, as well as any innovative practice new to an already-existing firm. The data that this report draws upon was gathered by means of coordinated surveys conducted relatively concurrently in six countries: three developed economies (Sweden, Switzerland, the United States), two developing economies (Brazil and Jordan), and one least developed economy (Uganda). These six countries, therefore, represent a variety of geographic regions, sizes and cultures, and differing levels of economic development. Entrepreneurs responded to a variety of questions about their:

- Entrepreneurial motivations;
- Strategies for growth;
- Networks and support systems;
- Barriers to growth;
- Views on innovation;
- Innovative practices;

Views on what can be done from a policy and programmatic point of view to spur greater innovation among enterprises in their country.

The survey presents a similar number of growth-oriented business owners of firms in each country with comparable levels of experience, firm revenues, and employees. The sector coverage boasted the largest possible variety of industries. Additionally, the survey targeted owners of growth-oriented and innovative firms, which were preferably in their post start-up or early growth phase. The data were collected through a variety of methods: online, telephone, and face-to-face interviews. A quantitative survey and qualitative interviews were conducted in each country: 50 quantitative interviews among owner-managed small businesses – 25 among women-owned firms and 25 among men-owned firms – and up to 10 qualitative case study interviews among women and men respondents. The following sample selection criteria were employed:

- Formally registered businesses;
- Have been in business for at least three years (though not necessarily formally registered for all three years);
- Independent firms, not a subsidiary of any other business or a cooperative;
- In a variety of productive sectors;
- Employ one or more full-time employees in addition to the owner;
- Generate between the equivalent of \$10,000 and \$10,000,000 in revenues;
- Owned by one or more persons;
- To be considered woman-owned, a majority of the ownership stake of the firm shall be held by women.

As such, the entrepreneurs interviewed in the sample are not representative of all entrepreneurs. Further, the sample selection process was an iterative one, using business association lists and recommendations gathered during the interview process. The resulting pool of eligible businesses and the final pool of respondents, represent larger, more established and most likely somewhat more innovative businesses

than the average business population in each country. The following is a summary of the number of completed survey interviews in each country:

Number of quantitative interviews			
Country	Women	Men	Total
Brazil	26	26	52
Jordan	25	25	50
Sweden	29	25	54
Switzerland	25	25	50
Uganda	25	25	50
United States	127	69	196

Given these sampling criteria, the results of this research cannot be generalized to include the full small business population in each country. However, within

the study's parameters, this analysis suggests some important gender differences that can be compared to other research findings.

The findings of this research have been grouped into three sections:

- Entrepreneurial motivations and drivers of innovation;
- Innovative practices;
- Barriers to innovation.

Each section focuses on women business owners, but comparisons are made with any differences that may exist between women and men. The study takes into account the differences among women in different countries or economic and cultural contexts. Interviews with individual CEOs and country leaders are also included in the report.

KEY FINDINGS OF THE QUANTITATIVE SURVEY

Entrepreneurial motivations and drivers of innovation

Despite developments made in gender equality, many gaps remain between male and females in realms such as education, employment and entrepreneurship. Beyond being a basic human right, women empowerment and gender equality is also a way to apply “smart economics”, in that can generate broad productivity gains.¹ Empowering women and granting them equal rights in areas such as entrepreneurship and innovation has also positive spillover effects on other development outcomes, such as pro-poor growth and the achievement of the Millennium Development Goals (MDGs).²

Over the past two decades, academic research, programme evaluations and technical assistance projects have shed more light on women entrepreneurship. While many gaps in knowledge remain, it is known that women entrepreneurs constitute approximately one fourth to one third of the world’s formal sector. However, women are less likely than men to develop small firms into larger enterprises. Moreover, according to the Global Entrepreneurship Monitor, more women than men start businesses out of necessity and not to take advantage of market opportunity. This may heavily affect their growth orientation.³

This study targets innovative and growth-oriented businesses. It focuses therefore on a subgroup that usually has not started business out of necessity or lack of alternatives, but to pursue business opportunities. The following sections explain the survey’s key findings regarding different entrepreneurial motivations and drivers of innovation and highlight eventual gender

differences and discrepancies between developed and developing countries.

Entrepreneurial motivations

When asked about their primary purpose for starting their businesses, the survey respondents reported a variety of motivations, most of which are based on market opportunity rather than necessity. However, most of the women business owners interviewed stated that their motivations for starting enterprises included fulfilling a dream, realizing a passion or gaining independence. These findings are congruent with women’s entrepreneurship research conducted internationally by the Centre for Women’s Business Research.⁴

Men are somewhat more likely than women to report an innovation-related motivation for starting their enterprise. The most popular responses to the question of why they started their businesses were “to fill a need I saw in the marketplace for an improvement in an existing product/service” and “to fill a need I saw in the marketplace for an entirely new product/service”. The percentage of men who started their firms with the intention of improving upon an existing product or service is as follows: 72 per cent (Uganda) 58 per cent (Sweden), 48 per cent (Switzerland), 45 per cent (United States). 56 per cent of Brazilian men started their firms to develop and sell an entirely new product or service rather than improve upon an existing product or service.

The desire to make innovative contributions to their communities is also high for women business owners. A majority of women in all six countries said either that “my firm was started with the express purpose of making a significant improvement to an existing product or service” or that “my firm was started with the express purpose of developing and selling an entirely new product or service in my market or community”. This result does not vary significantly by stage of development of each country (see figure 1).

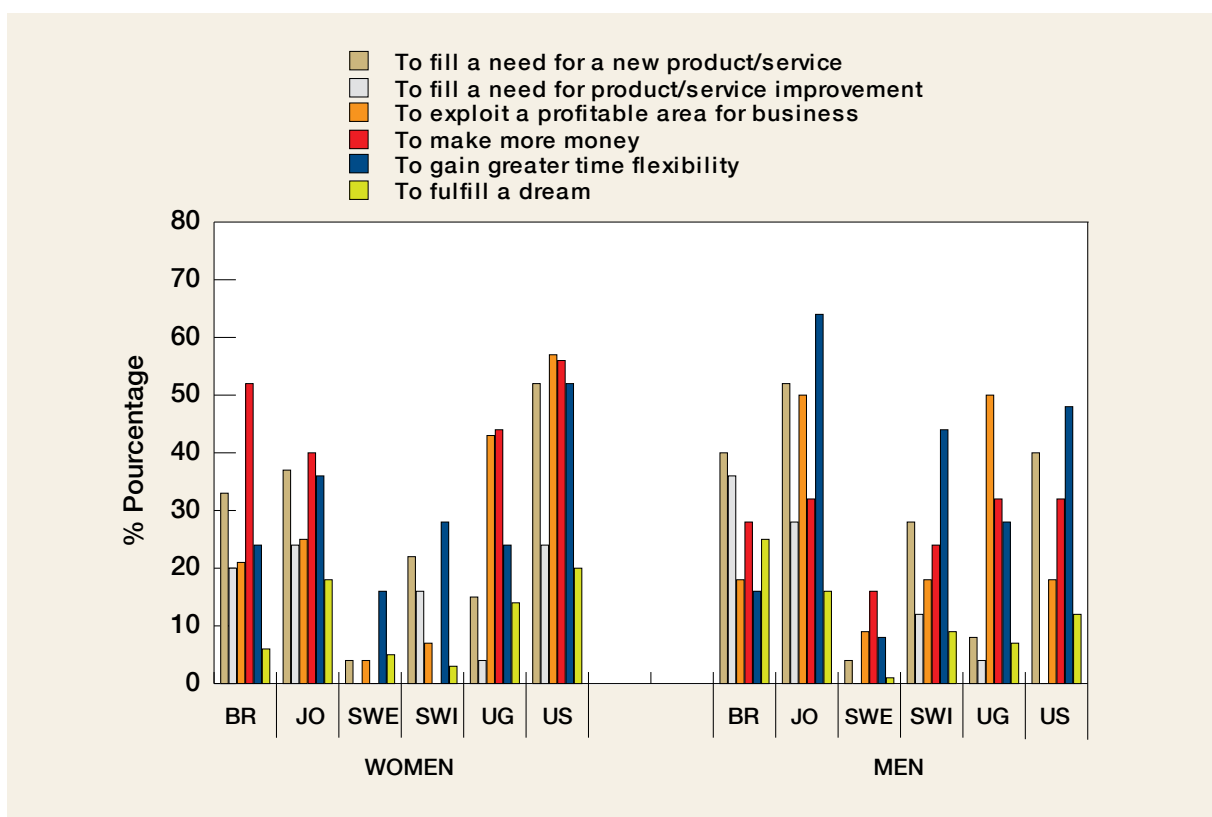
¹ According to the World Bank, eliminating barriers that prevent women employment for example reduces the productivity gap between male and female workers by one third to one half and increases output per worker by 3 to 25 per cent across a range of countries (World Development Report, 2012).

² OECD (2012), Women in Business: Policies to Support Women’s Entrepreneurship Development in the MENA Region.

³ Global Entrepreneurship Monitor (2011), The Global Entrepreneurship Monitor Global Report.

⁴ International Centre for Research on Women, (2009) Innovation for Women’s Empowerment and Gender Equality, <http://www.icrw.org>.

Figure 1. Business Start-up Motivation among Women and Men Entrepreneurs



Box 1. Fostering innovation for product development: The case of Vanessa Vilela Araujo, founder and CEO of Kape – coffee-based cosmetics, Brazil



Vanessa Vilela Araujo founded Kapeh in 2007: “I wanted to launch something innovative. So, I made the discovery of coffee benefits for the skin. I believe that this product provided something unique”. Ms. Araujo’s greatest challenge was to adjust her products for export. In Minas Gerais, the region where Kapeh Cosméticos operates, the vast majority of coffee farms belong to smallholders that have specialized in organic and certified coffee. Compliance with organic and certification requirements has helped farmers gain market access and may bring additional non-market benefits. In order to combat export challenges, Vanessa studied foreign countries’ sanitation legislation, adapted the

components of her products and learned consumers’ preferences in each country. “Social responsibility and quality of products are the pillars of my company”, she affirms.

Vanessa received extensive international publicity after being nominated for the Empretec Women in Business Award in 2010. Receiving the award motivated her to market Kapeh beyond Brazil’s borders. She acquired a “UTZ Certified Good Inside” certification for her innovative cosmetics. UTZ Certified Good Inside is one of the world’s largest certification programmes for agricultural products such coffee,

tea, and cocoa. UTZ certified products are traceable throughout their value chains, and producers follow a code of conduct that require them to apply sustainable farming and business practices. The label, used as a certification mark, signals that a company's products meet specific standards. An important requirement for certification marks is that the entity which applies for registration is considered "competent to certify" the products concerned. Vanessa received certifications needed to export to Portugal and the Netherlands, and aims to export her products to the entire European Union. Her vision is "to make Kapeh a company with global presence and a reference in terms of innovation and quality in the cosmetics field". Her efforts have been rewarded so far.

In addition to receiving the Empretec Women in Business Award, Kapeh won the National Innovation Award from Brazil's Confederation of Industry (CNI), the Competitive Brazil Movement (MBC), and the Brazilian Ministry of Science, Technology and Innovation in August 2011. Her product improvements and professional marketing strategies have substantially raised demand for Kapeh products—so much so that the firm doubled both sales revenues and net income in 2010. Kapeh, which started with 1 employee in 2007, has a staff of 10 today and employs more than 150 farmers and harvesters. The production of organic products in Brazil began in 2006, with 12 companies in the organic food sector exporting to 6 countries. Today, 74 Brazilian companies in 14 States ship items from cosmetics, textiles and processed food to more than 10 countries, including the United States, Japan, Germany and France.

Drivers of innovation

The survey asked women and men business owners to state their definition of "innovation", related to their behaviour once their business was established. Interviewers had to remind entrepreneurs about the broader meaning of innovation (as defined by the Oslo Manual).⁵ Those surveyed were given nine characteristics from which they could choose as many as they felt defined the term. The responses across all countries among women and men overwhelmingly agreed on three defining characteristics of innovation:

- *Introducing or developing new products or services*, which drew the highest share;
- *Exploiting opportunities provided by new knowledge and ideas* that are not fully commercialized by existing firms, which garnered the second- or third-place mentions;
- *Investing in new technologies or processes*, which garnered the top responses among women and men in Brazil, and second place in Jordan, but was not selected as highly in the other countries.

Most respondents agreed that the primary source of innovative drive comes from the entrepreneur herself or himself. Between one third and one half of all respondents say that their own personal motivation, along with that of other leaders in their company, drives

their business's innovative activities. Women and men responded differently when asked about their second most important driver for innovation. Fulfilling a social need is the second top factor among women business owners surveyed in all countries (See figure 2). It is the second or third most important concern among men business owners in Jordan, Switzerland, the United States and Uganda. However, it is not a main factor for men business owners in Brazil and Sweden. This finding underscores the critical role that innovation plays in addressing social issues in both developed and developing economies and is also congruent with the GEM studies on women entrepreneurship, which found business goals of women to be broader than those of men and include elements of righting a wrong or improving livelihood in their communities.⁶

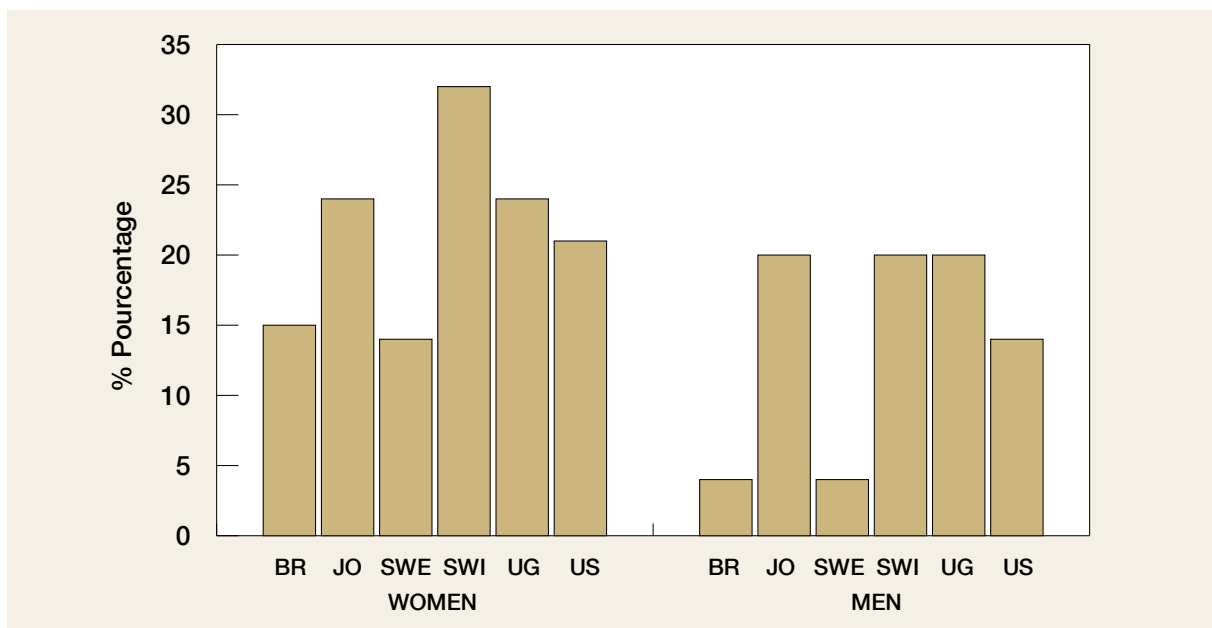
When asked to specify whether innovation was a response to an external or to an internal motivation, survey respondents clearly identified with two motivating factors above all others:

- **Market-led innovation:** in line with customer's need; the entrepreneur is always in touch with his or her customers, anticipates their needs and responds quickly;
- **Vision-led innovation:** in line with a personal vision; the entrepreneur wants to inspire people to change in the direction he or she wants to lead.

⁵ <http://www.oecd.org/scienceinnovationinsciencetechnologyandindustry/2367580.pdf>.

⁶ See International Centre for Research on Women (2009), *Innovation for Women's Empowerment and Gender Equality*, <http://www.icrw.org>

Figure 2 Social Need sa Top Driver for Innovation

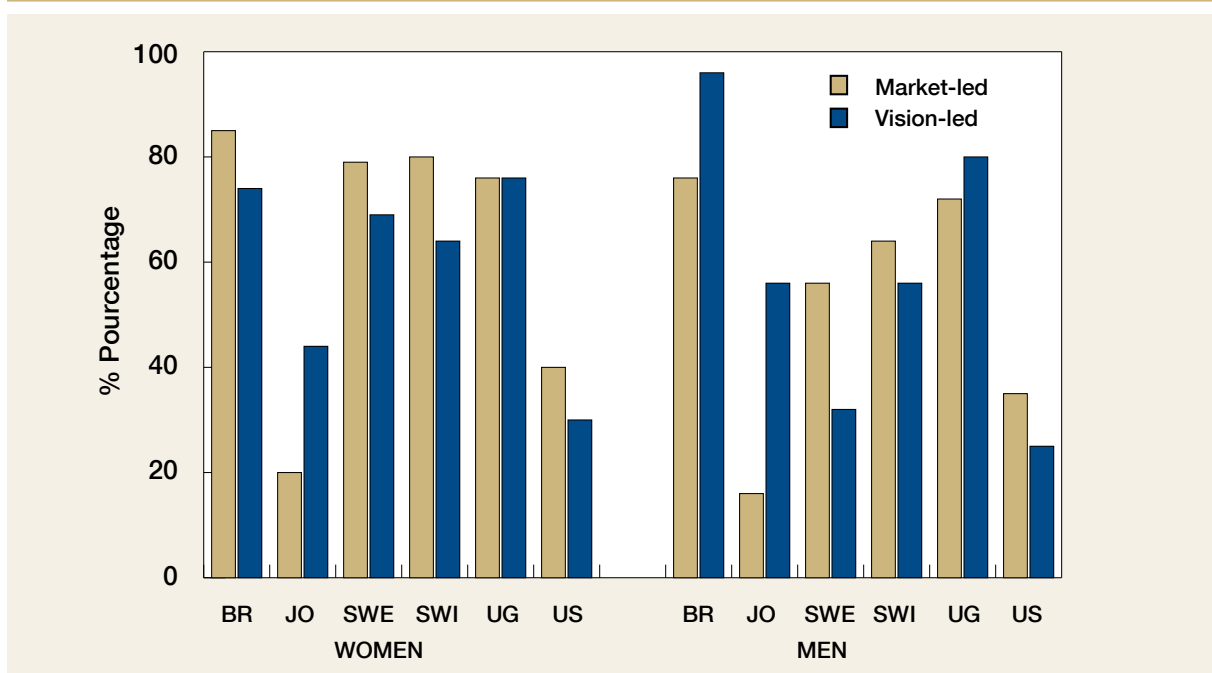


Business owners in developed economies identified market opportunities, whereas inner vision fuels innovation in developing economies (see figure 3). There were no great gender differences in how business owners identified with these two motivating factors. Business owners regardless of gender in Sweden, Switzerland and the United States identified most highly with market-led innovation. In developing countries,

business owners identified more closely with vision-led innovation. This confirms the findings of a report released by the Centre for Innovation and Humanity, highlighting that innovative firms in developing countries would benefit from information and support structures to make market opportunities more visible.⁷

⁷ A newly formed think tank, the Centre for Innovation and Humanity, focuses on the rising interest in ethical innovation.

Figure 3 Market-led Factors Vs. Vision-led Factors as Drivers of Innovation



Innovative practices in women-owned enterprises

The literature review carried out by UNCTAD prior to the field study highlighted that there is a gap between the number of women and men entering and advancing in science, technology, engineering, and mathematics (STEM) professions. Furthermore, there is a significant gender gap in the spin-out of university-based technologies into entrepreneurial start-up companies—an important source of new, innovative enterprises. However, the overall findings of the survey interestingly reveal that, whether driven by their own aspirations or by seeing a need in the marketplace, once they manage to launch their own enterprises, women entrepreneurs put their innovative ideas into practice as much as men entrepreneurs, and their modalities do not differ too much from those of men.

Bringing innovations to the market place

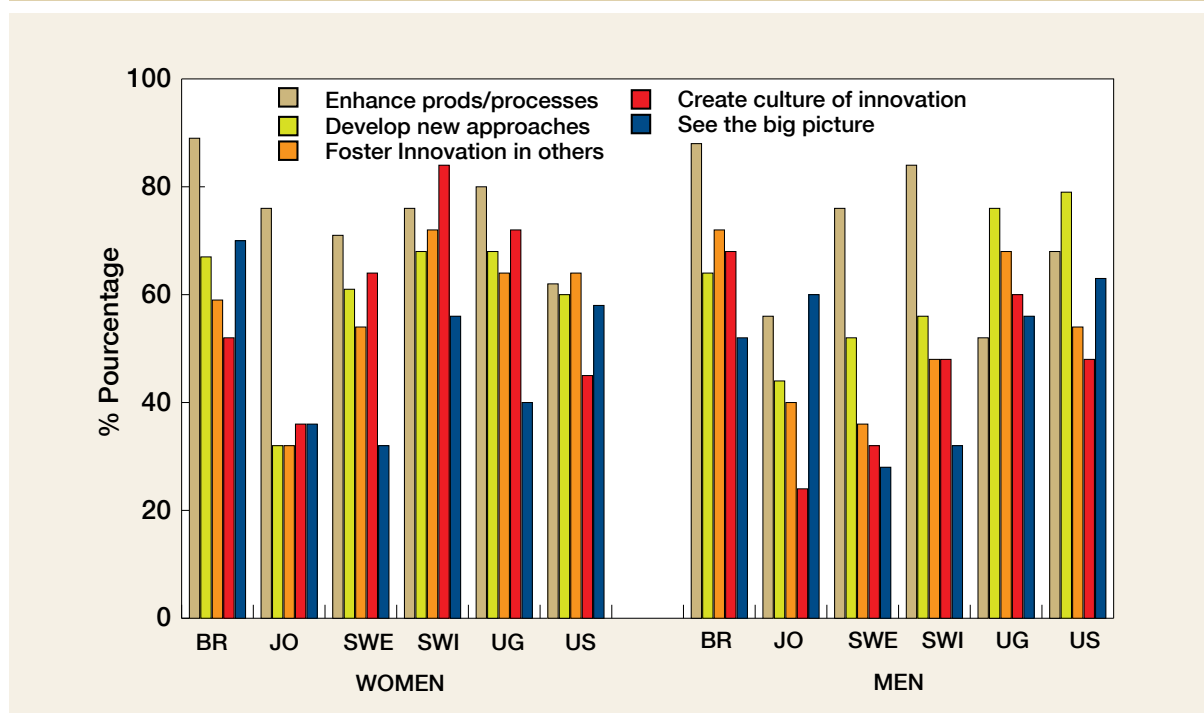
Surveyed business owners responded to whether they were implementing any of the four main tenets of innovation in their business outputs:

- New or significantly improved products or services;

- New or significantly improved production or delivery processes;
- New business or marketing practices.

A good number of women in all the countries surveyed managed to translate innovation plans into action (see figure 4). Overall, there are no significant gender differences when implementing innovation among the firms surveyed. Females are just as likely as males to focus on the “how” of innovation (processes in marketing, product services delivery) as well as the “what” (the new or innovative product or service). Nearly all the women surveyed are offering new or significantly improved products or services. Some 89 per cent of women in Brazil, 76 per cent in Switzerland, 76 per cent in Sweden, 80 per cent in Uganda and 76 per cent in Jordan and the United States say that they have implemented a product or service innovation. Implementing new or improved delivery, marketing or business systems is also in practice but is less prevalent. A majority of women business owners in Brazil are implementing process innovations. A majority of women entrepreneurs in the United States are engaged in new marketing or business practices, and 60 per cent of women in Uganda are implementing new marketing processes. Less than half of women business owners in Jordan, Switzerland and Sweden are implementing a process-related innovation.

Figure 4 Reasons for Putting Innovative Plans into Action



Use of technology and information and communications technologies

How businesses use and leverage technology is another way to assess innovative business practices. Both women and men business owners surveyed have established a strong technology baseline. Sixty per cent of business owners in Jordan have created websites for their businesses compared with 90 per cent to 100 per cent in Brazil, Sweden, Switzerland and the United States. Just under half of business owners in Uganda have created webpages supporting their enterprises. The results indicate that access to ICTs can be more problematic in developing countries.

While our analysis of ICT usage indicates differences according to stage of development, it also uncovered gender differences. Women in five of six countries are more likely to use social media accounts like Facebook and Twitter for business marketing and communications than men (see figure 5). In Brazil, 81 per cent of women compared with 52 per cent of men are on social media networks. This is followed, respectively by 74 per cent and 55 per cent by women and men in the United States; 66 per cent and 20 per cent in Sweden, and 40 per cent and 28 per cent in Jordan. The gap between women and men who use

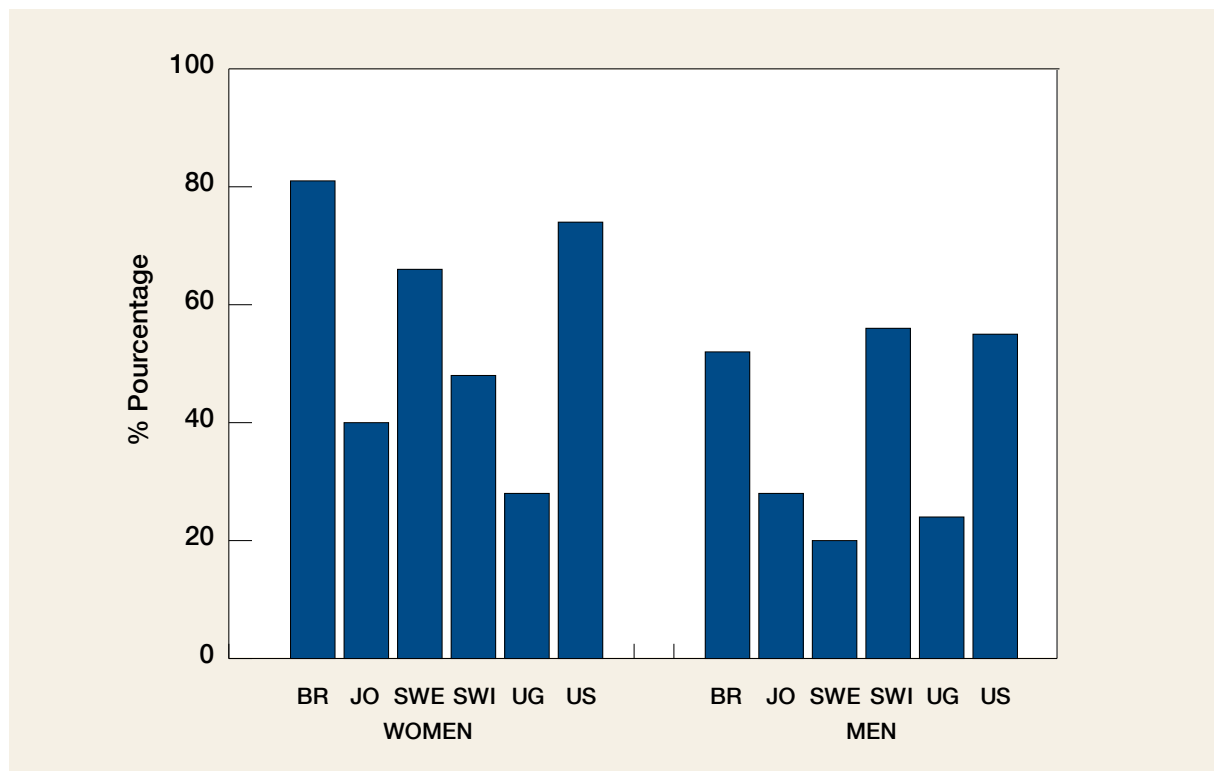
social media tools is widest in Sweden. In Uganda, the difference is less pronounced with 28 per cent of women compared with 24 per cent of men who use social media networks. Only in Switzerland do men business owners use social media more than women do for business. In general, the lower percentage of business owners who employ social media in Jordan and Uganda possibly indicates that there is a lower level of ICT connectivity in the two countries compared with the other four countries studied.

Risk tolerance

Comfort with uncertainty and managing risk is a very important foundation for pursuing and employing innovation. The respondents of our survey indicate that they are comfortable with a certain amount of risk and uncertainty in their business. To investigate this issue, respondents were asked if they considered themselves to be risk-takers, and were given five responses to choose from in descending order of risk tolerance:

- Risk-tolerant responses: 1) Yes, I enjoy taking risks, even if the chance of success is not measurable; 2) Yes, but I only take moderate and measurable risks;

Figure 5 Use of Social Media Networking for Business



Box 2. Fostering innovation through IT: The case of Raghda Kurdi, founder of Advanced Pharmaceutical Services, Jordan


A law passed in Jordan in 2001, allowing the establishment of chain pharmacies, changed the market for individually owned retail pharmacies and increased competition, making it more difficult for small outlets to survive. Advanced Pharmaceutical Services provides small businesses with economies of scale. Through Advanced Pharmaceutical Services, small businesses can negotiate as a group with suppliers, insurance companies and the Jordanian Pharmaceutical Association, thereby keeping prices competitive. The company also provides small pharmacies with sophisticated pharmacy management software, accounting and tax services, joint recruitment and training services, and the management of insurance claims.

In this respect, Raghda says: “Our business is unique in the market in terms of its services. Our products are a brand that unifies participating pharmacies in a way that they all appear to the customer as a strong group that provides professional customer service and meets their needs. We offer the individually owned pharmacies a solution whereby the pharmacists can still own and run their pharmacies, yet they benefit from brand support as well as from our services and goods”. Of her Empretec training, Raghda says, “I benefited a lot. Although I had experience, I was very reluctant to start something new on my own”. Following her completion of the course, she devised a business plan and asked retail pharmacies to buy shares in her firm.

The company started with 300 shares, then grew to 400,000 shares and now stands at 800,000 shares. A significant challenge Raghda has faced is to successfully persuade participating pharmacies to obtain comprehensive certifications and to operate as a group in accordance with rules and regulations. Between 2008 and 2010, the firm’s workforce grew from 10 to 24 employees, half of whom are women. “We offer training programmes for all employees, including women. We have special training programmes for female pharmacists and assistant pharmacists who are returning after parental leave. These programmes prepare the women to resume work in pharmacies.” Goals for the company are to double sales over the next two years and to increase the number of participating pharmacies from 70 to 140. Within the next two years, the firm also hopes to establish a system by which all its pharmacies can complete their orders online.

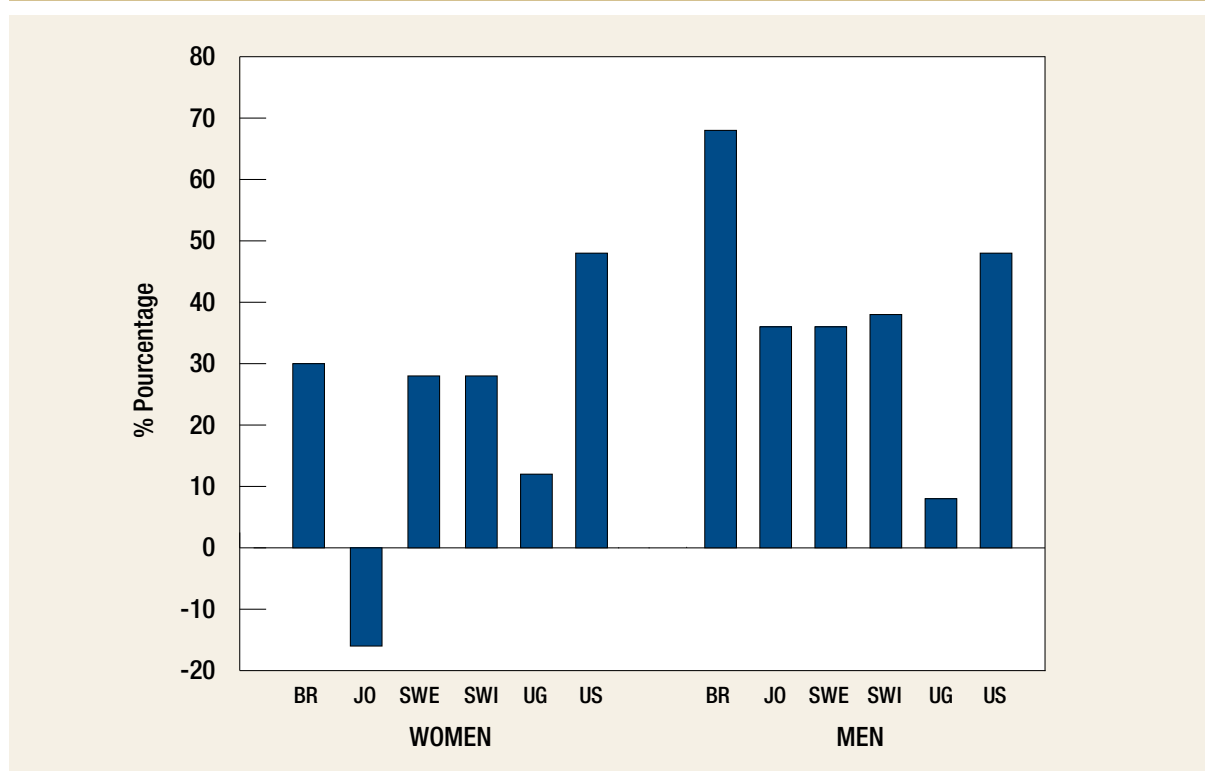
www.pharmaserve-jo.com

- Risk-adverse responses: 3) Yes, but I always make careful calculations and prepare all possible back-ups to minimize the risks; 4) No, I hesitate taking risks; 5) No, I only do things I am 100 per cent objectively sure will succeed.

A majority of the business owners surveyed place themselves in the risk-tolerant category: ranging from 36 per cent (women in Jordan) to 84 per cent (men in Brazil). Just about one quarter of owners say they are risk-adverse (see figure 6). Business owners in the United States are the most tolerant of risk. Respondents in Sweden and Switzerland are more moderate in their approach to risk, with women somewhat less tolerant of risk. Women entrepreneurs in Brazil assess

themselves as moderately risk-tolerant, while the men business owners surveyed in Brazil are the most risk-tolerant of the sample surveyed. Business owners in Jordan and Uganda – both developing countries – are less risk-tolerant overall than of those interviewed in the other four countries. In addition to having social constraints, reasons cited for lower risk tolerance include lack of external support, of role models and of a cultural history of innovative businesses. While there is no gender difference in risk tolerance in Uganda, Jordanian women entrepreneurs are less tolerant of risk than are Jordanian men, who fall into the “moderately tolerant” group. Moreover, women entrepreneurs in Jordan are the least risk-tolerant among all surveyed countries.

Figure 6 Percentage of Risk-Tolerant Entrepreneurs Minus Percentage of Entrepreneurs Who are Risk-Averse



Intellectual property protection

A hallmark of business innovation is learning about how to legally protect intellectual property. This includes trademarking corporate brands and patenting new devices or processes. The survey finds that most women business owners across countries protect their intellectual property through actions such as attending informational seminars on how to register a trademark domestically and internationally and on how to secure patents, and so forth. In general, women entrepreneurs outpace men's intellectual property protection (IPP) efforts in Switzerland, but are behind in Uganda and the United States (see figure 7). While women business owners in Brazil are found to be the most active in protecting their intellectual property, their counterparts in Uganda are the least active in this area among the surveyed countries. The state of domestic legal frameworks and the particular industry of the business influence these results.

More specifically, 96 per cent of women business owners surveyed in Brazil, 88 per cent in Jordan and 76 per cent in Switzerland have taken one or more actions to protect intellectual property. Far fewer women business owners, however, have obtained patents: 32 per cent in Switzerland, 26 per cent in

Brazil, 17 per cent in Sweden, 8 per cent in Jordan, 5 per cent in the United States and none among those surveyed in Uganda. Some 19 per cent of women business owners in the United States, 17 per cent in Brazil, 16 per cent in Switzerland, 14 per cent in Sweden and 0 per cent in Jordan and Uganda use licensing to protect intellectual property. Lack of awareness and enforcement prevent Ugandan women business owners from employing IPP. When administering the questionnaire, the interviewers frequently had to explain the concept to the respondents. In comparison, 50 per cent of men business owners surveyed in the United States took action to protect their intellectual property, followed by 48 per cent in Sweden and 40 per cent in Uganda. The most common actions taken are registering or trademarking their business brands domestically or internationally and attending a class or training seminar on the principles of IPP.

Research and development

Another indicator of innovation in SMEs is the extent to which research and development (R&D) is employed by the firm. According to the survey, the share of revenue reinvested by women entrepreneurs into R&D ranges from 15 per cent in Sweden, to 19 per cent in Brazil, 23 per cent in Jordan, 36 per cent in the United

Figure 7 Business Owners who Have Undertaken Actions to Protect Their Intellectual Property

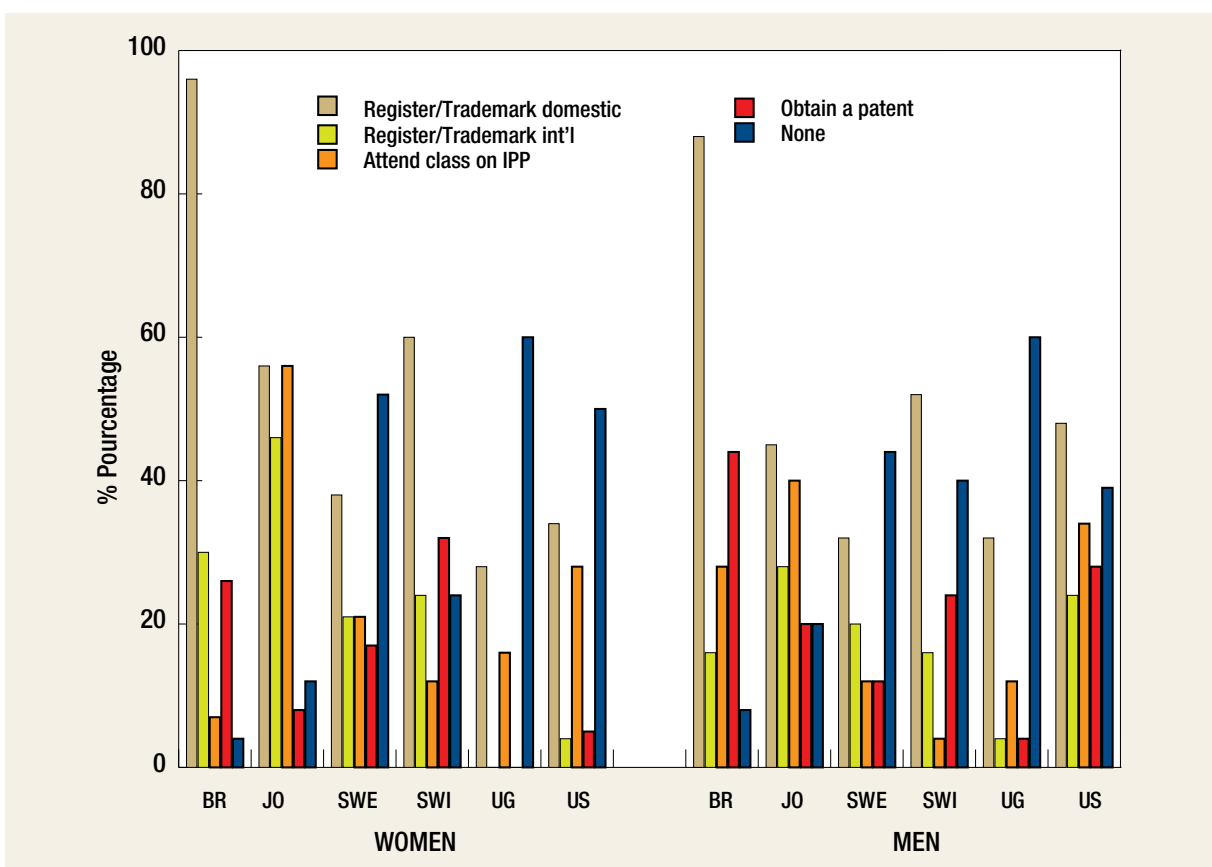


Figure 8 Commitment to R&D Activities

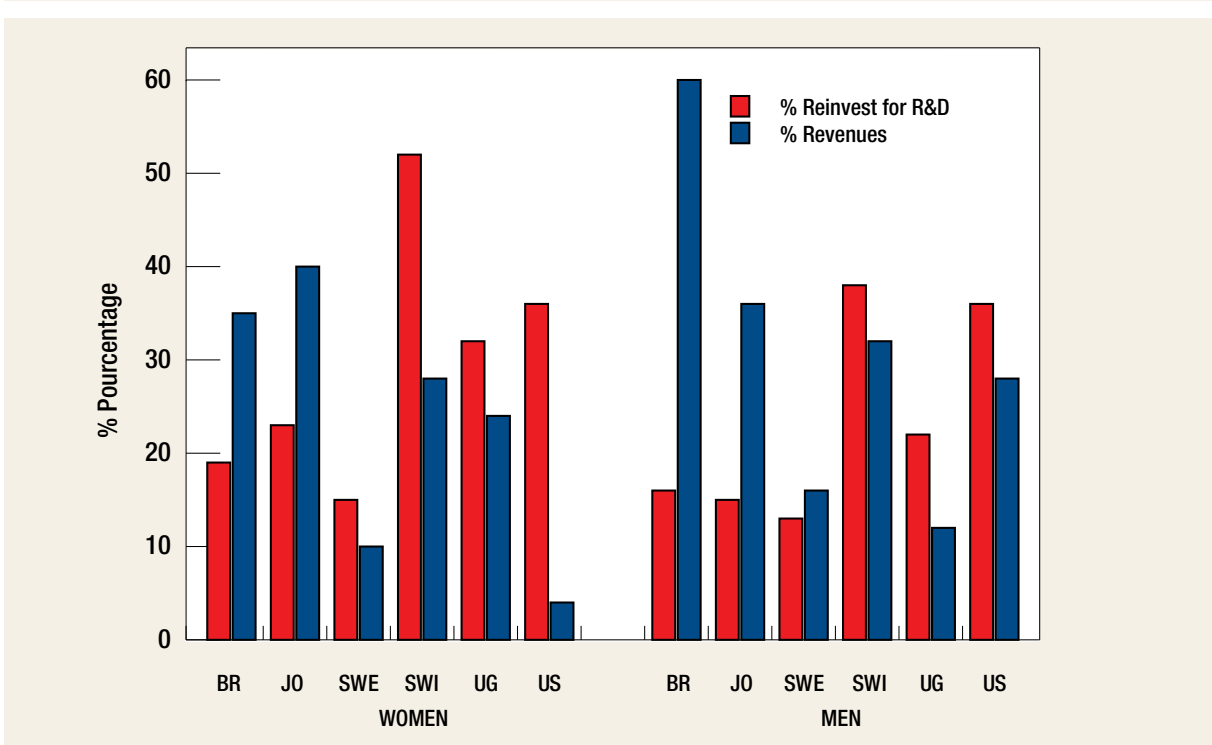
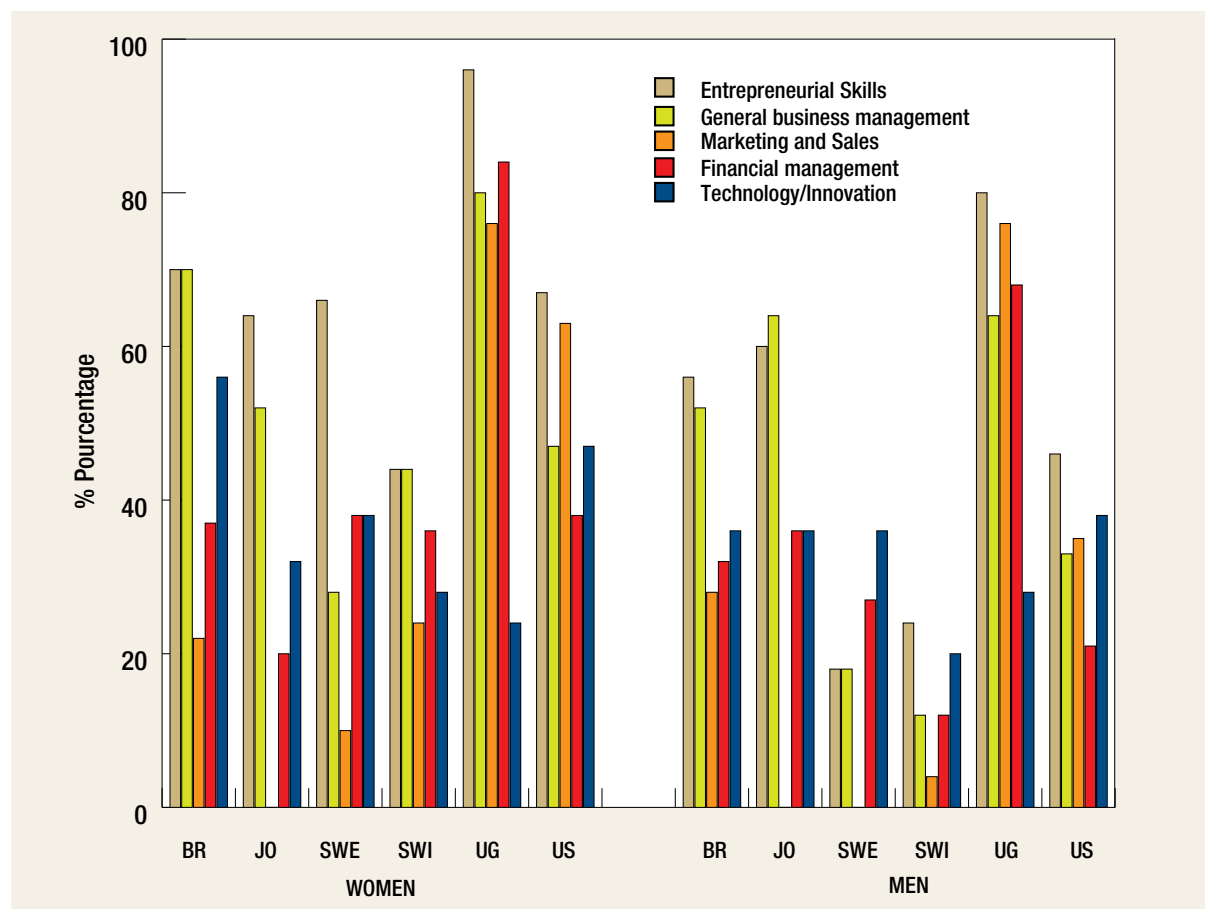


Figure 9 Entrepreneurs who Have Sought to Increase Business, Managerial Skills Trough Educational Programmes



States and 52 per cent in Switzerland (see figure 8). However, the survey indicates that most women-owned firms do not have formal R&D departments. More specifically, only 4 per cent of women-owned firms in the United States, 10 per cent in Sweden, 24 per cent in Uganda, 28 per cent in Switzerland, 35 per cent in Brazil and 40 per cent in Jordan have formal R&D departments. There is no major difference in the level of investment in R&D according to the development stage of the economy. On the contrary, there appear to be gender differences, as men leaders of high-growth enterprises are more likely to reinvest revenues into R&D than women leaders of enterprises of a similar size.

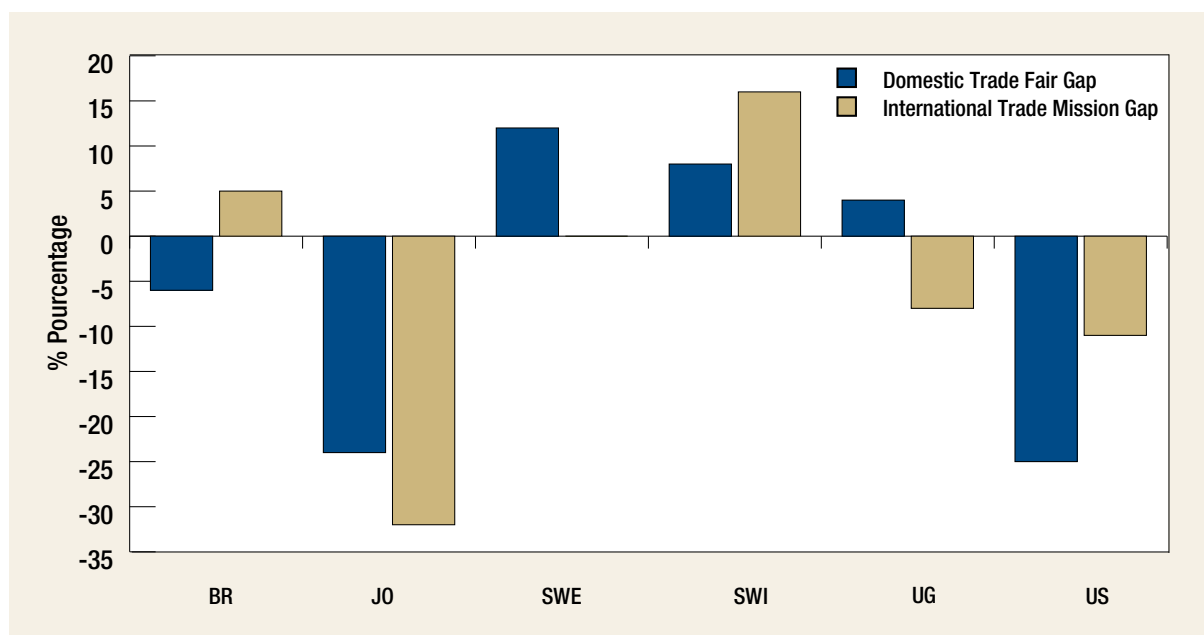
Training and education

Most of the women business owners surveyed have attended training in entrepreneurial skills or general business management skills. However, they did not attend specialized courses in financial management or technology/innovation topics. Most women surveyed

stated that the growth trajectory of their firms could be significantly enhanced by specialized training. The survey revealed that the level of educational background of the business owners is congruous with the level of innovation. Switzerland has the highest level of innovation by women entrepreneurs (mainly in three areas: creating a culture of innovation, fostering innovation in others and developing new approaches), as well as the highest percentage of female entrepreneurs with post-graduate degrees (masters, doctorate and so forth). Switzerland ranks above average with regard to innovation according to GEM 2010 and as the most innovative European country in the Innovation Union Scoreboard. Overall, GEM research also shows that women value business education and technical assistance programmes more than men.⁸ The chart below (see figure 9) shows the extent to which the women business owners surveyed have participated in educational programmes since they started their businesses.

⁸ GEM, Global Entrepreneurship Monitor, 2010

Figure 10 Percentage of Women Minus Percentage of Men Who Participated in Fairs and Trade Missions



Participation in trade fairs

Domestic trade fairs and international trade missions create opportunities for market connections and new business ideas.⁹ Between one quarter and three quarters of the women surveyed have attended a trade fair in their own country, but far fewer (from 5–44 per cent) have attended an international trade mission. Participation in market connection activities is highest in Sweden (76 per cent domestic, 41 per cent international) and Brazil (74 per cent domestic, 37 per cent international), followed by Switzerland (52 per cent domestic, 44 per cent international), Uganda (48 per cent domestic, 16 per cent international), the United States (32 per cent domestic, 5 per cent international) and Jordan (28 per cent domestic, 20 per cent international). Gender gaps are graphically represented in figure 10. A positive number illustrates that a higher share of women than men have participated in a domestic trade fair or international trade mission in that country. A negative number represents a lower share of women than men participating. Women in Jordan and the United States attend less trade fairs and trade missions than men. However, Switzerland

displays an opposite result, where women have attended more fairs and trade missions than men.

The characteristics of industry sectors can explain the low involvement of female entrepreneurs in trade fairs, trade missions compared with their male colleagues in Jordan and the United States. In Jordan, 72 per cent of men-owned companies are in manufacturing, compared with 4 per cent of women-owned companies. The majority of women-owned companies are engaged in the arts and entertainment industries, human health and social works sectors, professional and scientific activities, education and other services. These businesses tend to sell their products or services locally. Similarly, women in the United States are more likely to start firms in the retail and service industries and play a lesser role in the construction, manufacturing, wholesale trade and manufacturing industries.

⁹ A recent World Bank enterprise survey (Seker, 2009) indicates that firm performance and innovation are higher among firms that are engaged in international trade. In addition, the firms engaged in two-way trade (exporting and importing) are more innovative than export-only firms.

Barriers to innovation for women-owned firms

Forces holding women and men back from achieving their entrepreneurial dreams can be both internal and external. The survey reports few internal barriers to innovation. However, it acknowledges that there are several key external barriers. Primary among them is the difficulty of accessing capital. Others include the difficulty of accessing skilled human resources and support networks, having cultural constraints, lacking a supportive legal and policy framework and having difficulties managing time due to family commitments.

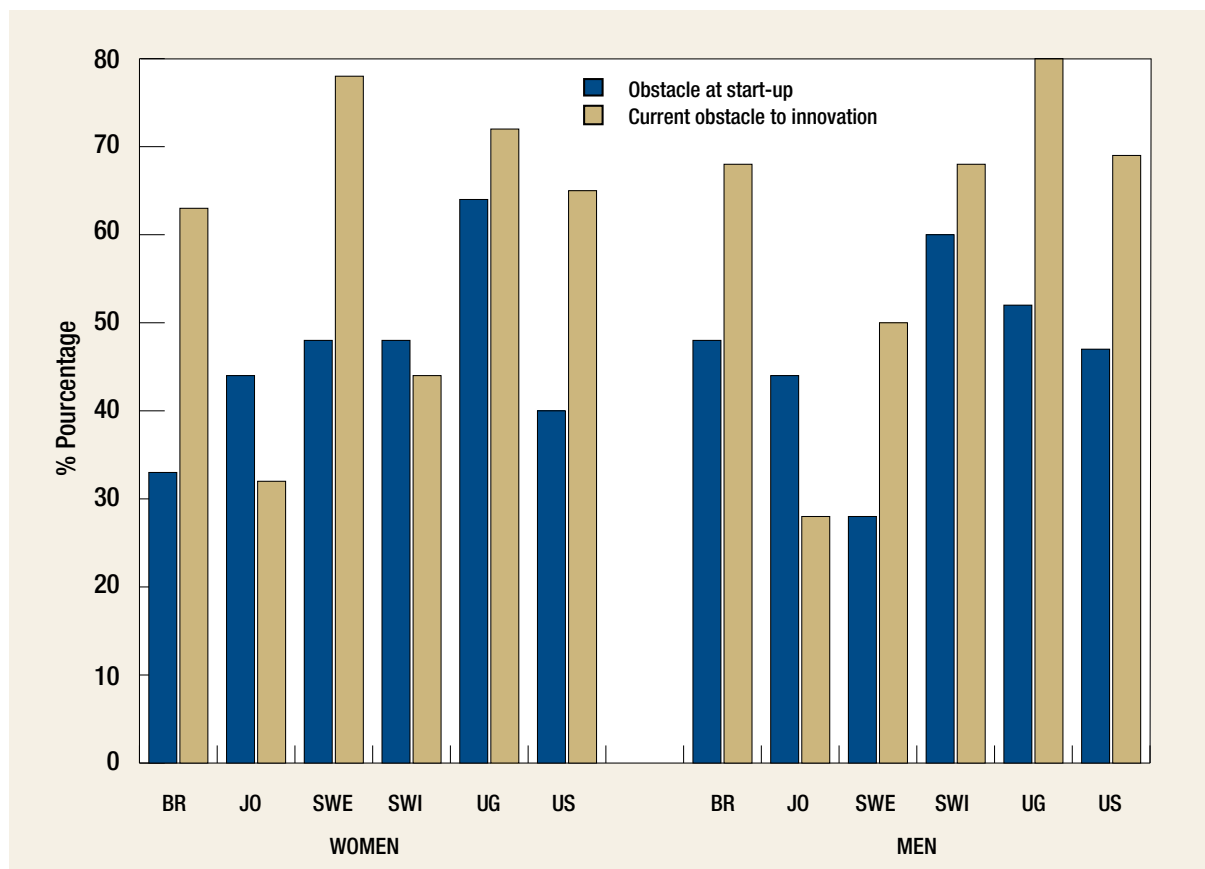
Access to finance

Receiving access to finance was one of the primary challenges entrepreneurs faced when they first started their business. It is also the key obstacle to business growth and innovation today. As financing is important to business growth, a lack of financing not only impedes business growth in general, but innovation in particular. Some 78 per cent of women surveyed in Sweden,

72 per cent in Uganda, 65 per cent in the United States and 63 per cent in Brazil mentioned that obtaining financing is a greater challenge today than when they first launched their businesses (see figure 11). In Jordan and Switzerland, this is not the case. Nearly half the women surveyed consider that obtaining finance was greater challenge at the launch of their business than today, and cite the relatively small size of their respective countries as the main impediment to innovation today. In the United States, Sweden, Brazil and Uganda, lack of financing tops other current obstacles to innovation (the relatively small size of their firms, limited access to supportive resources and networks, and management and human resources issues) among most business owners surveyed.

The field research carried out in the six countries revealed that, in Sweden, there is still a high level of discrimination in the labour market, which affects pay levels for women. On average, women's pay was 16 per cent lower than men's over the past few years. Accordingly, when women start their business, they probably have fewer resources saved for it. In Jordan,

Figure 11 Entrepreneurs Citing Lack of Financing an Impediment to Growth and Innovation



several women stated that financial resources were key to their innovation practices. They also stated that their gender placed them at a disadvantage when requesting financial aid or loans from commercial banks. In Switzerland, the availability of personal savings might explain in part the relatively low rating of

finance as an obstacle to innovation today, compared with the other countries. However, Swiss female entrepreneurs believe that the set-up of special loan or investment funds would spur innovation and indicated that policies supporting these should be a priority for the government.

Box 3. Overcoming obstacles to entrepreneurship and innovation: the case of Beatrice A. Byaruhanga, founder of Lira Integrated School, Uganda



Beatrice A. Byaruhanga is the founder and director of Lira Integrated School, which provides primary and secondary education for Uganda's youth. Beatrice had to struggle to obtain funding to realize her dream of providing quality education, particularly for girls. Using the little savings she earned from teaching and from a side job selling lunches to students, she started the school in 2000. It was a challenge to be taken seriously as an entrepreneur in her hometown, since she was expected to get married rather than to start her own business. The first major challenge she faced was to win the right to inherit her father's land as a site for the school. According to Ugandan traditions, her father's land was considered the clan's; many family members turned against her

when she claimed the property. Her father, however, believed in his daughter and her plans, and supported her. Another key challenge was her ability to obtain a loan, since she had no collateral. Because she had fought for her right to her father's land, Beatrice was able to convince a local bank of her potential, and she received a loan. As part of her prize for winning the 2010 Empretec Women in Business Award she embarked on a tour to the United States and had the chance to visit several schools and present her business plan to directors and students in Washington State. Following her study tour, several universities provided equipment and training to Lira Integrated School. Later, Beatrice was appointed a member of the 2010 Think Tank of the World Entrepreneurship Forum of the EM Lyon business school. Along with six others, Beatrice won the Ugandan Women of Courage Award from the United States Government in 2011. Today, Lira Integrated School has more than 1,500 students and a staff of 100. Beatrice also obtained enough financing to open a university in Lira, which offers training in entrepreneurship.

However, Beatrice's achievement is not the rule. According to the International Finance Corporation, women in Uganda own about 39 per cent of businesses with registered premises, but they only receive 9 per cent of commercial credit. To tackle the main obstacles related to financing businesses, the private bank DFCU launched the Women in Business Programme in 2007 in cooperation with the International Finance Corporation and the Uganda Women Entrepreneur's Association Ltd. The programme lends to women entrepreneurs with a special focus on SMEs without requiring land as collateral. The programme also offers advisory services such as training from which 350 women have benefited since 2007.

Access to human resources and support networks

Finding and keeping good employees is another key challenge for growth-oriented business owners. It is also a critical issue for women in Jordan and Uganda, where almost all the entrepreneurs spoke about the importance of developing their staff, and the difficulty of recruiting highly qualified employees who

can operate as a resource and driver of innovation. Human resources hurdles are less relevant for women business owners in Sweden, Brazil, Switzerland or the United States relative to other issues (such as access to new markets and the cost of utilities and premises).

The results of this survey also show that the lack of access to support networks is an impediment to innovation (see figure 12). They reveal that women tend

to start companies with a smaller network and find it more difficult to access information. They also meet other business owners and interact with government much less than men. The lack of supportive resources (such as market information and government policies and programmes) came in third in importance overall – second to funding and size. The lack of supportive resources is most keenly felt in the developing economies of Jordan and Uganda – where the women surveyed there ranked it second in importance behind financing (Uganda) and size (Jordan).

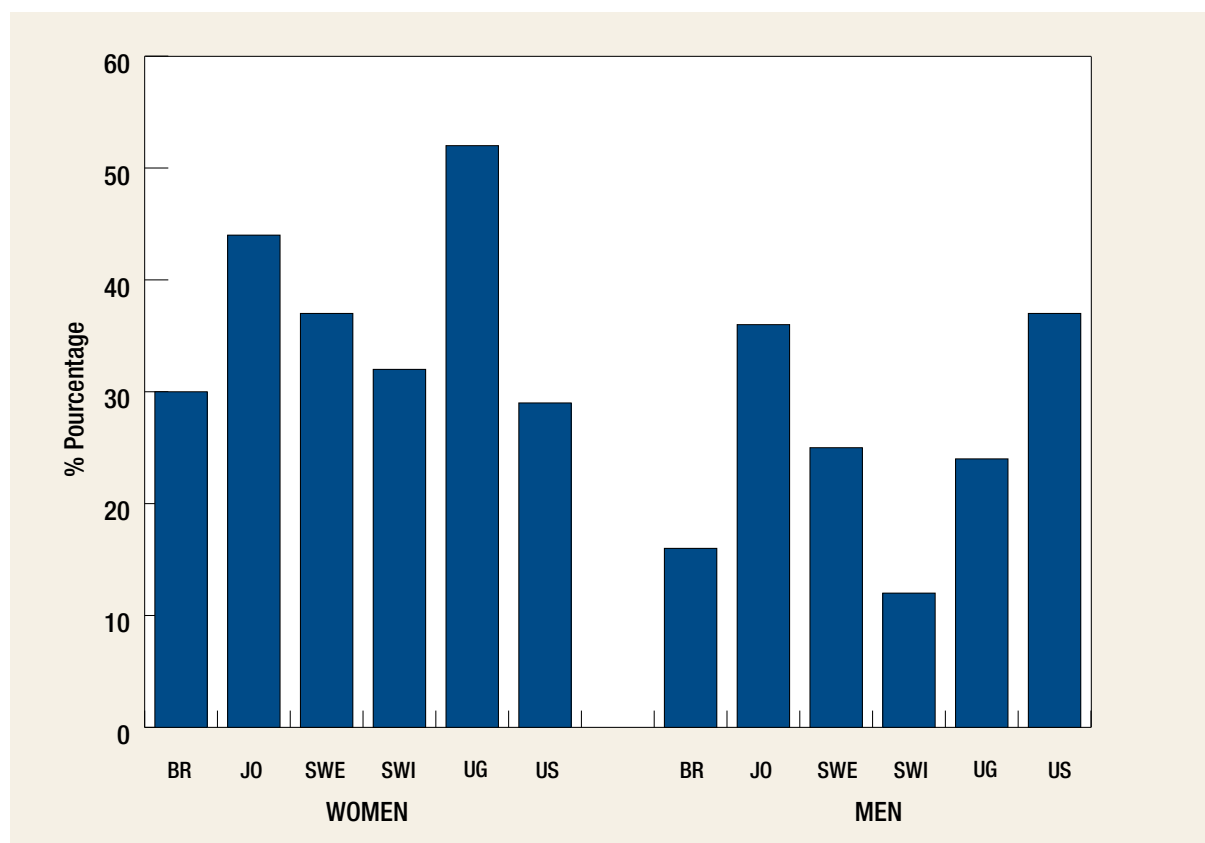
More specifically, just over half (52 per cent) of women in Uganda say that limited access to supportive resources is impeding innovation, while 44 per cent of women in Jordan are finding lack of support an impediment. Lower shares of women in Sweden (37 per cent), Switzerland (32 per cent), Brazil (30 per cent), and the United States (29 per cent) find the lack of supportive resources to be a hindrance to innovation. The fact that, on average, many more women than men business owners - in both developed and developing countries - find the lack of supportive resources a hindrance to innovation

shows that increasing the availability and visibility of business support and guidance, especially targeted toward growth-oriented, innovative firms, would be an investment worth making.

Credibility and culture

Many women confront broader cultural constraints as they seek to start and grow their enterprises. These constraints were found to be a definite obstacle for women entrepreneurship and innovation in both developed and developing countries' economies included in this study (see figure 13). The survey indicates that cultural constraints are the most restrictive for women in Jordan. About 28 per cent of the women business owners surveyed in Jordan report that gaining credibility and trust from others was an important issue when they first launched their enterprise, and they say that "dealing with social and cultural issues/being taken seriously as a business owner" is an important issue that they continue to face. While just 12 per cent found that gaining credibility and trust from others was a challenge when they first started, the issue of dealing with social and cultural issues and being taken

Figure 12 Entrepreneurs Citing Lack of Access to Supportive resources an Impediment to Innovation



seriously is much greater now that they are growing an established business enterprise.

The business enabling environment

Business laws and regulations provide guideposts for business owners and can be especially important to innovative firms that have intellectual property to protect. Without the rule of law, innovative firms can find it very difficult to do business internationally or even domestically. Stability of rule of law is an important issue for business owners in Jordan, Uganda and Brazil – much more than in the other three countries in our study. The World Bank's most recent Doing Business survey ranks Jordan 96th, Uganda 123rd and Brazil 126th of 183 countries in ease of doing business. In the same ranking, the United States is 4th, Sweden is 14th and Switzerland is 26th. These rankings refer to the level of conduciveness of the nation's regulatory environment to starting and operating a local firm.

According to Doing Business, Brazil is one of the most difficult countries to start a business because of bureaucracy, tributes and access to capital. The Brazilian Government has made significant advances in making government and private capital loans to small companies, but interest rates are still high, keeping the growth pace of companies slow. The survey also highlighted that Brazil is one of the countries

where it is more difficult to start a business because of the amount of time and cost needed to register a business. Survey respondents suggested that the Government should diminish the amount of ineffective or unnecessary procedures to make establishing and running a business easier. Additionally, from a gender perspective, it should be considered that the legal system in Brazil discriminated against women until 1988; they received legal protection to manage their own assets only in 2003.

When asked to rate the importance of 12 key issues to their business overall, only women business owners in Uganda and Jordan describe business laws as a very important issue, rating it above 4 (4.1 and 4.3, respectively) on a 5-point scale of importance. While they rate it with a lower importance than access to capital or access to information about new markets, it remains an important issue to women in these two developing countries. The findings are similar among men business owners, showing that the views of the effect of laws on their businesses do not differ by gender, but rather by country (See figure 14).

Suggested policy action

Suggested policy actions that garnered the highest levels of support from the greatest number of business owners are as follows:

Figure 13 Entrepreneurs Citing Socio-cultural Issues as Constraints for Enterprise Growth and Development

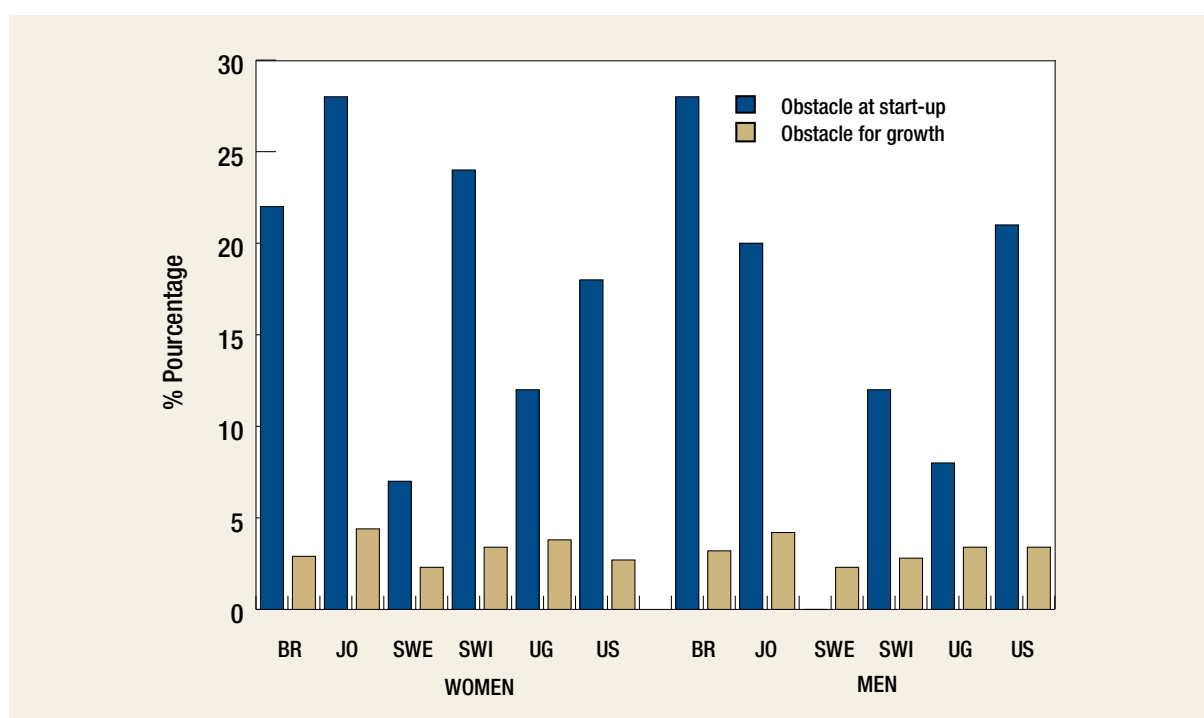


Figure 14 Entrepreneurs Citing Business and Regulations Considered as an Important Issue for Enterprise Growth and Innovation

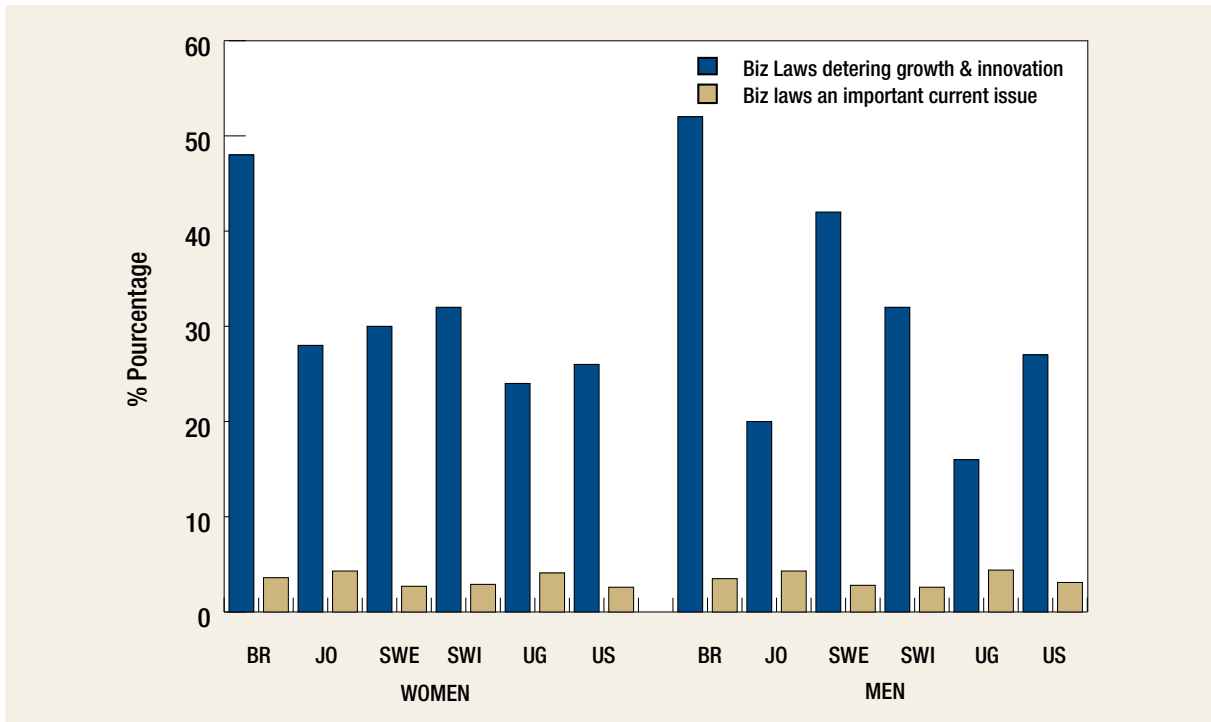
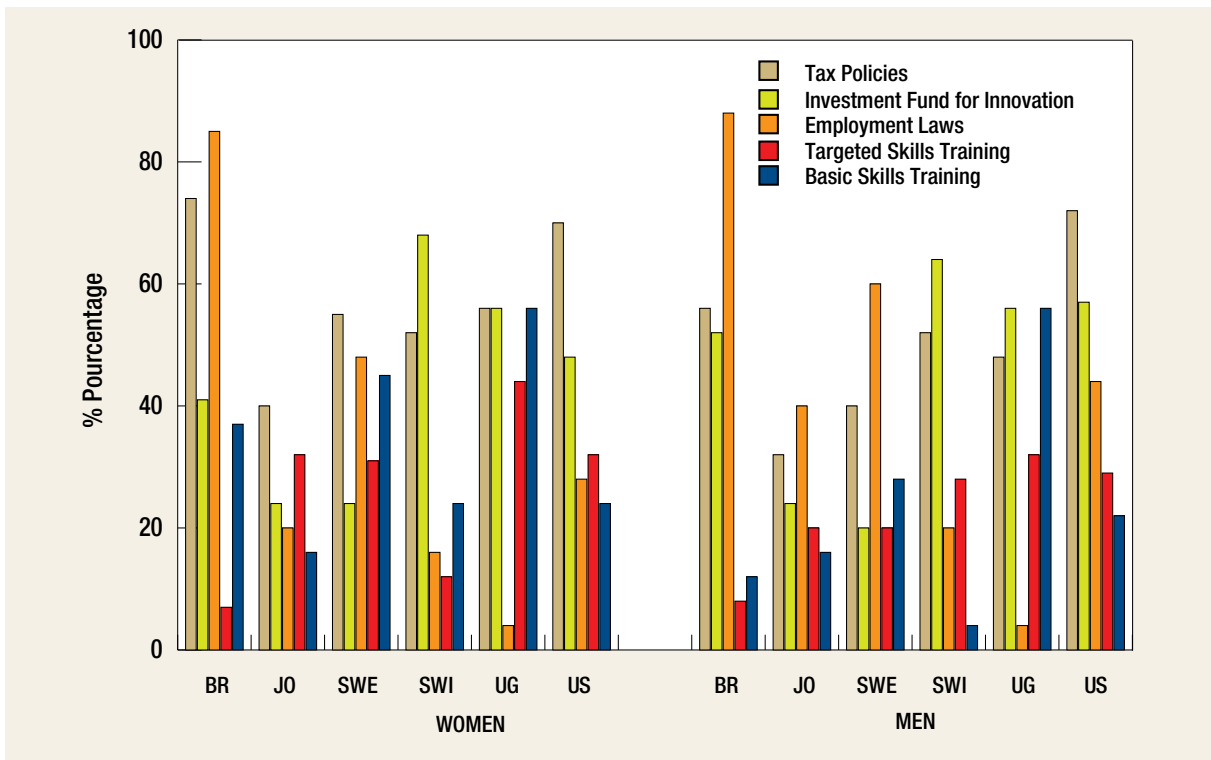


Figure 15 Top Policy Recommendations Business Owners Would Like to See Addressed



- Improving tax regimes to encourage new firm formation and innovation;
- Increasing or establishing loans or investment funds to spur innovation.

The top three policy recommendations business owners would like to see addressed are as follows (see also figure 15):

- Brazil – employment laws, tax reforms and investment in innovation funds;
- Jordan – tax reform, targeted skills training and investment in innovation funds;
- Sweden – tax reform, employment laws and skills training;
- Switzerland – increasing investment in innovation loans or funds, improving tax regimes and improving employment laws;
- Uganda – changing tax regimes, increasing investment in innovation funds and providing training, including specialized skills training for growth-oriented business owners;

- United States – change tax regimes, increase investment in innovation funds and provide specialized skills training to small growth-oriented and innovation-focused firms.

Improving education and training is an important policy recommendation women business owners suggested– especially those in Uganda and Sweden. Some 44 per cent of Ugandan women surveyed, and close to 33 per cent in Jordan, the United States and Sweden suggest that providing targeted skills training to growth-oriented or innovation-focused businesses would significantly improve the environment for SMEs. Women business owners in Uganda and Sweden also feel that basic business skills training would provide an important boost to SMEs in their countries, with 56 per cent of women in Uganda and 45 per cent of women in Sweden making this one of their top three policy suggestions. Just over one third (37 per cent) of women in Brazil also agree, but this issue garners far less support than their call for employment and tax policy reform.

HIGHLIGHTS FROM QUALITATIVE INTERVIEWS

Brazil

Background information

Brazil has seen economic stability and growth over the last 10 years with high entrepreneurship rates at around 15 per cent according to the Global Entrepreneurship Monitor (GEM). The country has 4.1 million registered companies. In the past, most of the entrepreneurship rate was due to necessity entrepreneurship; 70 per cent of all entrepreneurs in 2000 started enterprises due to lack of opportunity. In 2008, opportunity-based entrepreneurship outnumbered necessity-based entrepreneurship, reaching an all-time high of 62 per cent. Firm death rates have also been decreasing. In 2010, the GEM report showed that 51 per cent of entrepreneurs in Brazil are women, which is higher than most other countries in the survey, but closer to the rates of other Latin American countries, showing a regional trend. However, the lower proportion of employed women and the higher level of women in the informal sector suggest that women may be turning to entrepreneurship out of necessity.

Motivation

In Brazil, women are more likely to start a business in a sector that they already know well or they turn an interest into a business. Only one woman entrepreneur interviewed started her business because she saw a new opportunity. Sibylle Muller, civil engineer, saw the potential of an advanced water purification system in Germany and decided that she wanted to bring the system to Brazil. As a result, Acquabrazilis was founded in 2001 and recycles and purifies used water for drinking.

Innovation

Brazilian women entrepreneurs appear to have a broad view of what innovation is in their company, encompassing marketing and organizational innovation beyond innovation in products and processes. They are likely to have implemented a wide range

of organizational innovation including “introducing a new method of production”, “introducing changes in the marketing processes” and “recognizing the value of new, external information, and applying it to commercial ends”. Sofia Esteves, from DMRH (Decision-Making Recursos Humanos,) commented, “Sometimes you don’t have to create something completely from scratch, but look at a way to do something better”. DMRH is over 20 years old and provides specialized HR services to large companies. It has 176 employees and offices in Brazil, Argentina and Mexico. Defining innovation as striving for change and making improvements in her business, Sofia uses ideas for innovation from a wide range of different sources. She encourages employees to come up with new ways of selling, presenting and training. Sofia started with one employee and grew her business through two recessions, expanded to three countries, and retained staff loyalty throughout. DMRH’s clients include big multinational and national companies such as Unilever and Itaú.

Obstacles

All Brazilian women entrepreneurs cited trouble accessing finance as their main obstacle to growth. Women entrepreneurs were also more likely than men to say they had to deal with “social culture or family preoccupations” and that they had faced discrimination at banks, governments and funders. Mariana Falcão Dalla Vecchia, from Mr. Veggy, commented: “Many [customers] do not believe I am an entrepreneur, and due to my age, they think I am a sales representative”. Mariana started her company, Mr. Veggy, in 2004. It provides soy products to restaurants and shops in São Paulo. The company employs five people, and has average annual revenues of \$100,000. It has also been selling niche vegetarian products to large companies such as Mercedes Benz and Editora Abril, as well as to high-end restaurant chains such as Cachoeira Tropical. Everything in the company is innovative from the product concept, management style and processes to the packaging which is biodegradable, and it is constantly being improved.

Support

The field research revealed that in Brazil, women are less self-confident when starting a business and feel that they need to acquire more confidence. The vast majority of women have a role model (81.8 per cent compared with 50 per cent of men). The most popular choice of role model was “an already successful entrepreneur”. Overall, female entrepreneurs are more likely than male entrepreneurs to have family members who are also entrepreneurs. Leticia Achcar from Solum mentioned her husband as her inspiration for becoming an entrepreneur. Solum started in 2007 and produces and sells organic paints made from the natural wide range of colours of Brazilian earth. She sells across Brazil and is currently looking to expand. Letícia's business offers a product completely different than anything was being offered in the market at the time. It focused on using ancient techniques of working with raw earth to develop it for modern use. Her industrial organic paint was a completely new product and environmentally friendly.

Policy recommendations

For all

Brazilian entrepreneurs praised the Government for providing sound macroeconomic structure to encourage entrepreneurs.

Reduce regulation, especially on employment law – Across the board, the entrepreneurs said that employees were their best asset, but rigid employment laws prevented them from hiring more employees. Revamping employment laws would alleviate this problem. Another recommendation was to look closely at the business infrastructure to minimize the amount of time needed to start a business.

- **Create financial incentives** – Creating other financial incentives for companies to grow either through tax incentives or setting up loans or funds for innovation;
- **Provide information service** – Create one source where entrepreneurs can obtain information about where to obtain financial and government support, funding programmes and access to methods they can use to learn more about the business environment;
- **Bring more entrepreneurs to trade fairs** – Provide access to trade fairs for new companies that cannot afford to attend. Try to negoti-

ate lower rates for government-recommended entrepreneurs or provide bursaries.

Other recommendations

- **Educate government and business programme providers** about the difficulties women entrepreneurs face when trying to access networks, government support and funding;
- **Add networking sessions to existing training courses for women** – Business and entrepreneurial skill training is effective. Add sections to these programmes that are focused on networking. Provide information about government programmes and funding, market business training and networking sessions differently to attract more women;
- **Provide role models** – This could be provided through the aforementioned networking sessions. It may also help to increase women's confidence and encourage more women to innovate due to opportunity rather than necessity;
- **Develop sector experts** – Provide services to women who have developed a deep knowledge of their sector, either by working or studying.

Jordan

Background information

More than 90 per cent of all Jordanian businesses are SMEs, which contribute to approximately 50 per cent of Jordan's gross domestic product (GDP) and employ about 60 per cent of the workforce.¹⁰ Most Jordanian SMEs operate in manufacturing, wholesale, trading and retail capacities. Only 3.9 per cent of the total SMEs in Jordan are female-owned. This is extremely low compared with other countries in the region, where women on average account for 25 to 33 per cent of all entrepreneurs.¹¹ Jordan also has one of the lowest employment rates for women among Arab countries, despite a trend toward gender parity in education attainment.¹² Women make up a large

¹⁰ Wamda. <http://www.wamda.com>.

¹¹ The Economic Advancement of Women in Jordan: A Country Gender Assessment. <http://siteresources.worldbank.org/INTMNAREGTOPGENDER/Resources/JordanCGA2005.pdf>.

¹² The Economic Advancement of Women in Jordan: A Country Gender Assessment. <http://siteresources.worldbank.org/INTMNAREGTOPGENDER/Resources/JordanCGA2005.pdf>.

portion of post-secondary education attendees in Jordan: in 1997–1998, women comprised of 66.6 per cent of community college students and 44.7 per cent of the university population.¹³ Women's participation in the economy has not kept up with increased literacy.

Motivation

In Jordan, economic opportunity is the most common reason for innovating. On average, females spend 23 per cent of their revenue on innovation, compared with 15 per cent spent by males. More females have found creative and sustainable ways to help those in need in their communities. Reem Habayeb, owner of a marble and ceramics products workshop called Silsal Ceramics, employs people with disabilities. Reem started Silsal in 1993 and harnessed her creative skills and passion for art to produce innovative ceramic and marble products. The business began as a small workshop with 21 employees, but grew after Reem took part in a variety of ceramics design training courses in different countries. She then expanded the business, trained new employees and increased the range of products available. Reem also cooperated with her competitors to establish an association for marble and ceramic artists. Despite many business failures along the way, Reem has persevered, thanks to support from friends, family and customers.

Innovation

In Jordan, the majority of entrepreneurs interviewed have attempted at least once in the span of their business to present something innovative, new and somewhat risky. However, such risk was based on careful consideration and research. The interviews revealed that entrepreneurs are cautious in their business approach and take risks only when they are moderate and measurable. Furthermore, female entrepreneurs are more inclined towards making careful calculations and having back-up plans to minimize risks. Jordanian female entrepreneurs tend to innovate throughout their organization, including management and marketing. Male entrepreneurs tend to focus innovation on new products and services. Rabha Al-Safdi set up her construction company Al-Bayt Al Methali in 1996. Even though she had no experience in the construction industry, she succeeded due to her innovative approach in the process of building houses. Her business now has more than 30 employees and its annual profit amounts to approximately \$70,000.

¹³ The Office of King Hussein I. <http://www.kinghussein.gov.jo/resources3.html>.

Obstacles

The most common obstacle faced by the businesses surveyed (44 per cent) is lack of “availability of financial resources”. However, follow-up interviews with entrepreneurs point to a disadvantage for female entrepreneurs when requesting financial aid/loans from commercial banks. Therefore, women were generally pushed to seek alternative means for funds such as relying on their families and friends. Doing business in male-dominated industries and competing for loans posed a challenge to Elham Ziadat's enterprise Bloom Dead Sea Life Cosmetics. Despite the growth of her business, most of the banks would not lend her large amounts of money without a male co-signer. Elham Ziadat started Bloom Dead Sea Life Cosmetics in 1993. The company produces hand and body creams, lotions and skincare products from Dead Sea minerals and turns \$50,000 in annual profits. Her success is due to the high quality and innovative formulas used. Elham would like to expand growth in the European market in the near future, but needs to find loans for funding and faces a high level of export taxation.

Support

Most entrepreneurs looked up to their fathers as role models or mentors. Furthermore, Jordan is traditionally a male-dominant society, and the business world is still viewed as a man's field. Both male and female entrepreneurs regard networking and communication – whether within their companies, with other businesses, or with their communities – as an important support for innovation. However, male entrepreneurs are more frequently engaged in meeting other business leaders and talking to local and regional officials about business challenges. Female entrepreneurs, on the other hand, engage more frequently in meeting with employees or senior managers in their companies to discuss issues beyond day-to-day challenges. In general, both males and females entrepreneurs have invested heavily in improving their skills. Several entrepreneurs took courses and attended conferences and seminars in areas relevant to their sectors, as well as general classes in management and marketing and have successfully incorporated them into their businesses. For example, Afifa Joma, owner of Al Wisam clothing, design and tailor shop, established her company in 1991. She immediately travelled to Lebanon to study fashion and design under world-famous designers Elie Saab and Zuhair Murad.

Areas that should be addressed by policymakers	Male	Female	Average
Align tax policies with the encouragement of new business formation and innovative activities	32	40	36
Reduce the amount of time it takes to register and start a new business	32	36	34
Change employment laws to increase business flexibility for hiring and replacing workers	40	20	30
Provide targeted business skills training for growth-oriented or innovative businesses	20	32	26
Set up special loan or investment funds to spur innovation	24	24	24
Reduce the amount of money it takes to register a new business	24	16	20
Establish a special government advisory board or panel for entrepreneurship and innovation	8	28	18
Provide basic business skills training to new and prospective business owners	16	16	16
Promote business ownership in general with more marketing and public awareness efforts	8	16	12
Increase efforts to safeguard intellectual property protection for innovative businesses	4	8	6
Make it easier to register and transfer property ownership	0	8	4
N (base)	25	25	50

Policy recommendations

The most common type of support needed for Jordan entrepreneurs concerns the tax regime, followed by “reducing the amount of time it takes to register and start a new business”. The table below shows the preferences of Jordan entrepreneurs regarding policy changes:

Although the Jordanian market is taking some noteworthy steps towards encouraging entrepreneurship, our research revealed that policymakers need to increase efforts to create an entrepreneur-friendly environment in Jordan. Policymakers should ensure that registration laws and procedures do not deter potential entrepreneurs. Registration laws and procedures should be clear and easy to follow and should also be made available through various sources, including the Internet. Support should be provided through conducting seminars, lectures, or online forums to educate entrepreneurs on company types, registration laws and procedures, and aid them in making the right decisions for their potential businesses. Furthermore, registration fees and capital requirements should be lowered in order to encourage the establishment of more SMEs.

Answers to field interviews stressed the need for reform in fiscal policy. SMEs could be exempt from tax for the

first two years of their establishment. Usually, the first year for most SMEs is spent in finalizing preparations and marketing the company and firms only begin making profits in the second year. Furthermore, tax exemptions can be provided for innovation in specific sector or for job creation. This will encourage entrepreneurs to take risks and venture into new areas, thereby possibly adding value to the economy.

Sweden

Background information

Statistical studies show that most entrepreneurs in Sweden are men. In 2009, 78 per cent of all Swedish SMEs were owned by men, and 22 per cent were owned by women. The number of new enterprises with female management increased from 25 per cent in 1994 to 33 per cent in 2009. We also learned that gender-based choices regarding the labour market also apply to enterprises. The majority of Swedish companies operate in the service sector; however, male entrepreneurs dominate manufacturing, construction, transport and communication, whereas women lead in cleaning, recreation, health care and education. Entrepreneurship and innovation have been a focus

in Swedish public life for a long time. Since 2007 there has been increased concern for women's role in economic development. The Swedish Agency for Economic and Regional Growth (Tillväxtverket) states: "Women's entrepreneurship has gone from being a "non-issue" in the beginning of the 1990s to a top position on the political agenda, both in Sweden and in the European Union. Focus on and the interest in women's entrepreneurship has also increased in the media and various organizations.

Motivation

The driving force for female entrepreneurs in Sweden was passion or willingness to change their present job situation. Entrepreneur Kristina Theander did not feel appreciated at her previous job as project manager for an ICT project. She hired a coach to help her to plan a future as an entrepreneur. Kristina Theander started Middagsfrid in 2007. Her business idea was to offer ready-planned grocery bags with recipes delivered at clients' homes. The business is also environmentally friendly: Middagsfrid's delivery process minimizes the carbon emissions of each family. Currently Middagsfrid AB has 6,000 customers and distributes food in the 70 municipalities of Sweden. In 2010, it started three affiliated companies in Norway, Denmark and Germany. Its annual turnover is \$13 million.

Innovation

Our interview results show that Swedish female entrepreneurs tend to be more focused on introducing or developing new products or services whereas men tend to be more focused on developing new technologies or processes. The entrepreneur's background both in academia, previous work and financial background influence the path the entrepreneur chooses in terms of the innovative level of the company as well as the growth rate and risks. For example, Polarbröd AB, a company owned by Karin Bodin, is more than 100 years old and produces a simple product: round bread baked at high temperatures, but produced, packaged and distributed in an innovative way. Polarbröd is unique not only because of the impressive company history in developing a prosperous business out of a very traditional product, but also for the openness of their young fifth generation CEOs to innovate and create a workplace with a human touch. Today Polarbröd has 400 employees and a turnover of more than \$110 million.

Obstacles

All the women interviewed in this study have experienced financial problems. Growing constantly based on annual revenues, without the help of external investors, has not been an option for many of them, especially if the product or service demanded an investment in infrastructure. This difficulty was experienced by Petra Wadström, owner of Solvatten AB, which produces patented household water treatment units. Petra stated that the obstacles to the growth of her business so far had been financial; a great deal of development and test work had required a huge financial investment, which had been provided by the Swedish Agency for Economic and Regional Growth, Vinnova and Skapa Trust. Petra would have liked to have more funding and encouragement in the very early phase of development of Solvatten. She also said that the Swedish Trade Council should provide more help in solving export issues, e.g. the export tax regime, which in Sweden is high and makes it difficult for small companies to compete internationally. Solvatten currently exports to Kenya, Uganda, India, Ethiopia, Burkina Faso and Mali.

Support

Women entrepreneurs believe that changing mentors would enable them to obtain different opinions and to learn from professionals with different business experience. Liselotte Norén, CEO of the communication, social media and training company Mongara, explained that she had had a number of mentors. She is a member of Företagarna – a business network for SMEs – and of some informal networks, one of which is for women entrepreneurs. The network Liselotte joined has produced results. She obtained legal advice from Företagarna and the open networks, where she was advised by people with special competences. When Liselotte started Mongara in 1992 she had just come back after a long break which she took after she sold her first company. The need for professional training on the use of new marketing methods such as Web 2.0 and social networks was high, and the company took off immediately. It currently employs 25 people. In 2007, Liselotte was appointed ambassador by the Swedish Agency for Economic and Regional Growth (Tillväxtverket), which is the national coordinator for the programme "Promoting women's entrepreneurship".

Policy recommendations

- Research about innovation should include a focus on different industries;
- Primary schools should introduce entrepreneurship education;
- Information on national and regional funds on innovation, including from the European Union, should be made available;
- Social security systems should take into account the needs of small firms in Sweden, particularly small companies (with less than five employees);
- Networking for entrepreneurs and SMEs could be broadened. Entrepreneurs should have easy access to the support that is given by governmental agencies and the European Commission and peer support (business associations, chambers, for example).

Switzerland

Background information

In Switzerland SMEs represent the majority of enterprises and account for 70 per cent of jobs. Entrepreneurial activities are to a large extent located in the service sector. According to the Global Entrepreneurship Monitor 2010, more than 50 per cent of all newly founded enterprises in Switzerland have introduced some kind of innovation, either in terms of product or market novelty. Several studies have also ranked Switzerland as being among to most innovative economies in the world: The Innovation Union Scoreboard of the European Commission sees Switzerland as the most innovative country in the European Union (Pro Inno Europe 2011). As in most high-income countries, opportunity-driven entrepreneurship is dominant. Switzerland also has a high percentage of female entrepreneurs compared with other innovation driven economies (40 per cent). Swiss female entrepreneur tend to operate in the services sector.

Motivation

The majority of Swiss women interviewed stated that they had started their business to realize a dream or because they had seen a need in the market for an entirely new product. Valérie Peyre, the founder of Tekoe, was never able to find a good cup of tea when she was travelling, so she decided to open her own

shop in airports and central stations. Valérie said that she had clearly seen a market need, and since she and her business partner were very passionate about tea, they had started the first Tekoe store in Lausanne in 2004. Today, there are seven Tekoe shops in Switzerland (two in Lausanne, and one each in Geneva, Bern, St. Gallen, Nendaz and Basel). Since its inception, Tekoe has quadrupled its number of employees from 1.5 to almost 10 employees. “The crucial part in a start-up is the cash, because nobody believed in us when we started”, says Valérie. Access to finance was a major obstacle in the beginning. She and her business partner had to finance the start-up with their own savings. Having lived in the United States for several years, Valérie also believes that finding business partners is more difficult in Switzerland, where people often seek security and are not particularly keen to take risks.

Innovation

The majority of Swiss women entrepreneurs interviewed said that the main reason why they introduced an innovation is that they had identified a market need. Danielle Stynes for example, who had worked in the tourism industry before, saw that adventure sports combined with a high level of services did not exist in Switzerland, even though the country offers the perfect environment and infrastructure for it. Therefore, she decided to fill the gap by offering an innovative service, opening her own company, in an area which is usually considered traditional. What Danielle considers to be making her business innovative is the combination of adventure tourism and the high level of service and coordination: She always tries to offer her clients a unique experience not only in regard to the outstanding tourist spots but also in terms of accommodation and food. She is constantly looking for the best resorts, the most authentic cuisine and charming Swiss villages off the beaten track.

Obstacles

The Swiss women entrepreneurs interviewed stated that the lack of financial resources was one of their largest obstacles when starting a business. The findings also show that compared with their male counterparts, women entrepreneurs find it challenging to gain credibility and trust from others and they are concerned about being taken seriously as an entrepreneur. Julia Orsini, for example, said that even though she and her business partner

had presented a complete business plan for their company BioPack, it had not been possible to obtain external funding and they had had to fund the company with their personal savings. The company managed to bridge the difficult start-up phase through close cooperation with the Swiss Federal School of Engineering in Lausanne, whose Science Park provided BioPack with premises and access to an extensive network. BioPack was set up in 2006 in order to provide a bridge between science, practicing doctors and diagnostic centres. It helps scientists who have developed new products to market them and to make them known in the medical community. BioPack also engages in product development when needed. Since its inception, the company's turnover has increased from SwF400,000 to approximately SwF2 million. In her view, she had to make a greater effort than a man to convince people about the quality of her products and services.

Support

Research findings show that four issues seem of particular relevance to women entrepreneurs in Switzerland: role models, networking, mentoring and training. Swiss women entrepreneurs tend to value training highly, they use informal channels to learn by socializing and interacting with others, and have had very positive experiences with mentors. Anja Meyer, from the real estate management agency Smeyers, finds networking important, not only to get attract customers and to acquire knowledge and exchange information on the market but also to help others in the industry. Currently, she serves on various commissions and associations. Anja says that she has often received more attention due to the fact that she is a woman. "Ask for help, be neutral but charming, then you may even have advantages as a woman." Smeyers is a real estate management company that offers services ranging from selling and renting, buying and developing, and marketing and evaluating real estate objects. It has eight employees and three offices, in Zürich, Basel and Luzern.

Policy recommendations

In accordance with the findings of the study, we propose the following policy recommendations:

- The establishment of a special loan or investment fund to spur innovations;

- The establishment of a large network of mentors, particularly ones that support women entrepreneurs' needs;
- Awareness of IPP;
- A simplified taxation system to provide transparent information on taxes owed.

Uganda

Background information

The Global Entrepreneurship Monitor (GEM) index ranks the Uganda one of "the most entrepreneurial economies in the world". For women, the GEM index indicates that a quarter of all working-age Ugandan women (more than two million) are engaged in some kind of entrepreneurial activity. Overall, Ugandan women-owned micro, small and medium enterprises (MSMEs) account for about 30 per cent of the country's GDP. However, as in the case of many other developing countries, such aggregate figures mask considerable internal diversity across regions, sectors and firms.

Motivation

The interviews found that a diverse set of motives for starting a business prevails among Ugandan women entrepreneurs, while male respondents were motivated by financial considerations. Taking a strong personal interest in commercializing products or services that are entirely new to the local Ugandan market stands out as a prevalent rationale for women to have started enterprises. They also stated that they had "dared to do something new and different, even if people are skeptical". None of the interviewees were content simply to maintain their business at its current level. Most of them agreed strongly that innovation and creativity were important tenets for their business. For example, Chamuka Beauty Solutions is a company that specializes in the manufacturing of herbal medicines and beauty products from East African medicinal plants such as moringa, aloe vera and neem. Rose Nabawanuka, the company's founder, originally started the company as a business for small-scale soap production, formally registering it a year later, after having her products certified by the Ugandan Ministry of Health. Rose explains that, in addition to scientific interest, what inspired her to go into business was her desire to make her products available more widely and educate others about the beneficial properties of traditional medicinal plants. Her

ultimate dream is to run a fully fledged pharmaceutical company, employing up to 200 rural women.

Innovation

Highly innovative women entrepreneurs in Uganda (that is, those having implemented three or four major innovations in the past three years) are often driven by the willingness to fulfil a social need. Adeline Rwashana's key innovation is an energy-efficient cooking stove uniquely adapted to the local Ugandan context. She estimates that, compared with standard local open-air stoves, the cooker reduces charcoal usage by about half. She also emphasizes that the device is even safe for children. The company – Rwashana and Associates – also offers a product guarantee-and-returns policy, another innovative practice in the Ugandan market. Adeline emphasizes the importance of networks and exchange with other women business owners to stimulate innovation, “to learn how they have overcome different kinds of obstacles, how they're managing their employees – even though our businesses are different from one another, the managerial and financial aspects are the same. You can't close yourself in a room with the technology and keep quiet in fear of competitors stealing it – you need partnership, you need to interact with all kinds of people”.

Obstacles

Virtually all interviewees regarded access to finance as the single most important obstacle to carrying out innovative activities, with this issue being rated “extremely important” even more frequently by women than men. Several women entrepreneurs said that they had had to assert themselves more than men vis-à-vis their own staff in order to gain acceptance for their strategic vision. Nevertheless, both female and male respondents considered “dealing with socio-cultural issues” to be a minor obstacle – cautioning against simple clichés and generalizations. For example, 25-year-old Judith Ineku is the founder of JB Real Estate Ltd, a young company involved in the construction of low-cost residential and commercial units. She started the business when she was still a student, making her the first young female in the country to become a landlady in a sector often regarded as largely reserved for men. She currently manages seven self-contained units in suburban Kampala, with several more under construction, offering affordable, high-

quality low-cost accommodation. When she started her business, though, she could not rely neither on own assets nor on external finance. She managed to put up her first units without turning to the banks for financing, but identifying an opportunity for an undeveloped plot of land and high-cost savings in local material use (such as on-site brick making) and growing the company organically from there. She has since gained exposure as a success story and is frequently been invited to give her testimony to inspire other young would-be entrepreneurs.

Support

A crucial issue for promoting female-led innovation in Uganda seems to be the promotion of support networks and the creation of awareness about women entrepreneurial role models. The majority of Ugandan women entrepreneurs interviewed sought advice from people who know more than they, often from entrepreneurial mother figures. First-hand interaction with successful women entrepreneurs seems to engender a whole range of further positive effects and increases self-confidence as an important factor in overcoming business failures. For example, Hadijah Nankanjah is the founder of Haddie's Organic Mushrooms Ltd, a young agro-processing firm in the peri-urban area surrounding Kampala. The firm aims to produce high-quality mushroom soup for hotels and supermarkets in Kampala and to provide a stable and ready market for outgrowers in the area. Hadijah said that she was inspired by her mother to start her business. After having got the idea, Hadijah went to learn from an acquaintance who was a large-scale oyster mushroom grower and subsequently returned with a good knowledge of the mushroom cultivation process and even more inspiration. She then acquired a plot of land from her mother in order to start up the company. Hadijah says something that has helped her a lot in her business are training courses run by Uganda's National Agricultural Advisory Board – not just for the information and the courses themselves but also particularly for the contacts with other agribusiness entrepreneurs she has made there. Moreover, Hadijah is part of a very active self-help network of entrepreneurs, originating from a business school alumni association.

Policy recommendations

Given Ugandan women entrepreneurs' emphasis on interpersonal relations, it is clear that gaining access to the right networks is important to their success and

Areas that should be addressed by policymakers	Female	Male	Average
Align tax policies with the encouragement of innovative activities	56	48	52
Provide basic business skills training to new and prospective business owners	56	56	56
Set up special loan or investment funds to spur innovation	56	56	56
Provide targeted skills training for growth-oriented innovative businesses	44	32	38
Establish a special government advisory board for entrepreneurship and innovation	40	48	44

innovation performance. More than half of women-owned businesses state that “limited access to market information, networks, etc.” is one of the biggest barriers to innovation, as opposed to less than a quarter of men who report the same. One way of overcoming such problems might be to join business associations.

Joining a business association has a strong positive effect on the innovation performance of women-owned businesses, indicating that these are important channels for Ugandan women entrepreneurs to acquire knowledge, contacts, new ideas and information.

A policy measure for increasing the innovation performance of Uganda’s women entrepreneurs might be to give targeted support to, and encourage the formation of, women entrepreneur business associations. This could be done through a variety of measures, ranging from direct financial support, to giving such associations a seat at the table in government decision-making processes affecting their constituents, to delivering targeted training through such associations. As highlighted above, another worthwhile pursuit for these associations might be the promotion and dissemination of female entrepreneurial role models and setting up mentoring schemes.

United States

Background information

In the United States, new technology-based firms have been a major source of innovation, business development and growth, and new jobs. Women did not participate fully in the first wave of technological entrepreneurship in the 1970s, but often played a supporting role. Today there is a new wave of technology-based entrepreneurship, and women are participating at unprecedented rates. Educational changes and innovations have contributed to the growing number of women seeking careers and

entrepreneurial opportunities in technology-based fields. A second reason for the increase of women entrepreneurs is the growing number of women in technology-based fields who can serve as role models and mentors for those who follow. Funding sources are also beginning to open more to women entrepreneurs in technology-based fields. Much of this progress has been prompted by programmes launched and funded at the state and federal level. Some of these, such as the NSF ADVANCE Programme, specifically target women. Others such as the SBIR and STTR Programmes target technology-based firms.

Motivation

The primary motivation to start a business for women entrepreneurs interviewed in the United States was to fulfil a dream or realize a passion. They were also more likely to cite the need for greater flexibility and control over their time. This finding is witnessed by Alison Sturm, who established her firm, Attention to Detail Home Remodelling, in 2006 after working in the field of market research in both corporate and academic settings. Her motivations included a desire to escape the difficult environment that she encountered in a corporation and a desire to have more control over her life and her working environment. Since launching her company, Alison has focused on setting company goals, putting systems and processes in place and hiring the right people. She also worked toward obtaining the necessary certifications that will enable her to do the types of projects she wants to bid on. Although the company’s revenues have been flat for the last four years due to start-up costs and a tough economy for housing in general, Alison feels that the firm is now poised for healthy growth. She anticipates that revenues will double in the coming year as the housing and employment markets start to recover. The firm currently has 6 full-time employees and a pool of approximately 20 subcontractors who are used for different jobs.

Innovation

The interviews revealed that most women entrepreneurs had implemented a new or significantly improved product or service in the last three years. Women also associated innovation with developing new practices in the areas of marketing or management. Kristen Harris, co-founder of Portfolio Creative in Columbus, Ohio, is an entrepreneur who has developed innovative marketing practices to grow her firm, which provides staffing and recruiting services to meet the creative needs of other firms and organizations. The company acts as an intermediary between creative talent (advertising, communications, writers, designers, marketing professionals, graphic artists) and firms requiring such talent on either a short term or long term basis. Kristen feels that Portfolio Creative's main source of innovation is that it focuses on a specific niche of the staffing industry, i.e. matching creative talent to the creative needs of companies and organizations. The firm does a great deal of marketing through social media and targeted sponsorships and events. Kristen described this as a more "grassroots and hands-on approach", which allows them to be more frugal while also targeting specific groups and individuals they wish to reach. Portfolio Creative's revenues exceed \$4 million per year, and since its launch in 2005, it has placed creative professionals in over 1,000 projects.

Challenges

The three biggest challenges to innovation cited by interviewees was the small size of firms, lack of financial capital to fund innovation and limited access to supportive resources. Kimberly Murphy purchased her business, the Trenton Marketplace IGA, in 2004 after having worked there as a manager for 16 years. The business is an independent grocery store located near Bar Harbor, Maine. The property also has 16 rental units that Kimberly owns and operates. In addition to the grocery store, she owns a gas station adjacent to the store and a satellite convenience store in a nearby town. When she launched her own firm, Kimberly faced a number of challenges, one of which was acquiring the financing to purchase the firm. To meet this challenge, Kimberly worked closely with her bank to develop a lasting partnership. In running a business that sells food, alcohol, tobacco and gasoline, Kimberly faces a number of challenges in the areas of regulation and licensing at both the state and federal levels. Finally, the process of changing over the ownership of the firm from the previous owner

to the new one was a time-consuming and complex process. In 2008 and 2009 she was recognized by IGA as one of a select number of "Five-Star Retailers" nationwide. This is IGA's highest ranking, and it follows being named as a "Four-Star Retailer" for every year from 2004 through 2007.

Support

Interviews revealed that women business owners in the United States are very receptive to the benefits of training programmes and networks as a way to improve skills, make valuable contacts and develop their innovative ideas. Women were more likely than men to join a business association or to attend a training session focused on business or entrepreneurial skills. Women also reported meeting more frequently with other business owners to share ideas and experiences. These findings suggest that women business owners could benefit from programmes focusing on opportunity recognition and development as well as programmes that provide guidance in how to develop ideas into commercial opportunities. Susan St. Germain founded her firm, TransProject LLC, after working in the project transportation business for the previous 25 years. Project transportation companies assist corporations that undertake major projects such as airports, oil and gas installations, windmills, geothermal plants, and the like. When a company is bidding on a project, it contacts a firm such as TransProject to construct a budget for the components of the project. TransProject then plans out the stages of the project and determines the equipment and materials required for each stage as well as the cost. It also arranges to have the materials shipped to the construction site when needed, typically by ship or by truck. In 2009, Susan was nominated for the Woman of the Year Award by the National Association of Professional Women. In 2010 she was nominated for the Woman Business Owner of the Year Award by the Houston Chapter of the National Association of Women Business Owners. Such high-level recognitions were fundamental for Susan to gain confidence and strengthen her motivation even further.

Policy recommendations

In terms of public policy and the role of government, the women and men surveyed were consistent in their priorities:

- Introduce fiscal policies to encourage new business formation and innovative activities;
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- Set up special loans or investment funds to spur innovation;
- Change employment laws to in order to increase business flexibility for hiring and replacing workers.

The interviewees also cited a number of ways in which the government could increase its support of innovation and innovative companies:

- Review and reform laws and regulations that work against the establishment and growth of small firms, including State and local laws and regulations that add to the cost and administrative burden of smaller firms;
 - Provide more loan funds or other types of incentives to help innovative firms launch, develop new products and services, and grow;
 - Provide both general and specific business training.
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KEY POLICY MESSAGES

The findings of this study clearly show that high-growth women entrepreneurs face the same challenges than men entrepreneurs. However, the women entrepreneurs interviewed made specific suggestions aimed at mainstreaming gender in entrepreneurship and innovation policies in three topical policy areas. These are:

- Fostering innovation through training and investment;
- Promoting access to new markets and ICTs;
- Introducing mechanisms for women's empowerment. Stakeholders at the national level could consider these recommendations and undertake actions to address the needs and constraints identified in this survey.

Fostering innovation through training and investment

- **Financing innovation.** One of the top recommendations of the women business owners surveyed is to establish or improve loan or investment funds that are specifically targeted toward innovation and business growth. The following recommendations regarding financial investment in SME innovation include:
 - Establishing a public sector loan or investment fund targeted at women's innovation;
 - Providing incentives for private sector financial institutions to establish their own innovation-focused loan programmes for women, with a focus on specific regions or industry sectors;
 - Considering the launch of women's innovation-focused business plan competitions for established businesses with awards in the form of a grant or loan;
 - Establishing innovation research grants for women with respect to innovations developed in government or university research labs and to be commercialized.

- **Introducing more growth-oriented, innovation-focused training and technical assistance.** While most of the women surveyed have received general entrepreneurial skills training, far fewer have taken classes related to financial management, marketing or technology. IPP-focused education, including more detailed information on the patenting process, would be especially helpful. The following recommendations should be taken into account:
 - Teaching the concepts of innovation in all training programmes that target women entrepreneurs;
 - Considering innovation-focused business exchange programmes for women, within regions, countries and by industry sectors, so that women business owners from a given country can learn from women business owners in similar industries in another region – one of the least acknowledged aspects of innovation is adapting a more common practice in one region for use in a region where the practice or device is not being used;
 - Developing specific growth-oriented and industry-focused training for innovative, high-potential women entrepreneurs – programmes that are longer-term, cohort-based and perhaps industry-focused. This includes rich peer exchanges, mentoring, financial and management training and leadership development
- **Creating special programmes for social enterprises.** Women focus their innovation on addressing community or social needs. This, coupled with the fact that most support for innovation focuses on technological advances in products or processes, points out both a market opportunity and an unfilled need for more support for innovation among social enterprises. Policymakers should especially consider the following recommendations:

- Establishing targeted training and technical assistance for social enterprises – including setting up an office for social sector enterprises and offering focused training and technical assistance programmes for such business enterprises;
- Encouraging the establishment of associations for social enterprises, either within an existing chamber of commerce or a separate organization;
- Raising the visibility of the innovative practices and economic and social benefits of social enterprises through awards, a National Social Enterprise Week, conferences, or trade shows, for example.

Promoting access to new markets and ICTs

- **Providing more market access assistance.**

Women often lack the time or the right connections to identify new markets and expand their business abroad. In particular, less women than men participate in international trade missions. Training programmes should make sure that women have equal and full access to market information and are adequately prepared to take part in trade fairs and business missions. In particular, government agencies and business associations should consider the following recommendations:

- Ensuring that women are adequately represented in all international trade missions;
- Promoting home-grown women's innovation in domestic trade shows, including innovation in small and large firms;
- Investigating opportunities to showcase women's innovation in international conferences, especially those that are industry-specific or regional in nature;
- Creating a special trade development fund for innovative women-owned companies with a large domestic market to begin exporting abroad.
- **Increasing access to the Internet.** Access to the Internet and reliable connectivity are key to stimulating the use of the Web for business purposes and to using ICTs for business purposes. Women entrepreneurs should be en-

couraged to do so through specialized training and access to ICT facilities. In particular, governments and business education providers should:

- Ensure access to broadband Internet and communications technologies, especially in rural areas;
- Embed ICT training in the curricula of business education providers and consider providing computer lab space to their facilities, so that women entrepreneurs without computers can access the Internet from business;
- Implement e-commerce policies that allow the safe and efficient sale of goods and services online by small women-owned businesses.

Introducing mechanisms for women's empowerment

- **Improving the business environment.** Another top recommendation of women business owners is to improve the legal and regulatory environment, in particular tax regimes and employment laws. Specific action could be aimed at:
 - Improving tax payment systems, especially to simplify administration and reduce burdens on business owners. Such improvements could include setting up online payment options, reducing the frequency of tax payments and lowering tax rates in some sectors or circumstances;
 - Making it easier for businesses to hire and allocate workers by amending labour laws with a view to reducing labour-related government fees and payroll taxes;
 - Simplifying licensing and permit systems, reducing the time to receive approval for new construction, R&D or patent applications.
- **Highlighting cultural acceptance,** female role models and raising public awareness. It is often said that if you can see it, you can be it. A more widespread visibility of women business leaders, and a more open discussion of the economic contributions that women are making to the economy, and the benefits of that activity to society, will help to reduce cultural

barriers. However, but it may take some time for these attitudes to change. Some policy and programmatic recommendations in this area include the following:

- Creating and extending programmes of women’s business ambassadors, integrating more innovation-focused presentations – a brigade of successful women business owners who speak about their experiences to school groups and to business owners in training;
 - Adopting changes in social policies to make it easier for more women to start growth-oriented businesses, such as increasing the availability of child care, extending the hours of some government offices to accommodate women’s scheduling or travel difficulties – or even considering mobile business service offices;
 - Initiating awards recognition programmes that showcase successful women in business act as a strong beacon for women who might be considering starting a business but who have no role models. Showcasing innovation and women in less traditional fields will strengthen the desire of women to start growth-oriented, cutting-edge enterprises;
 - Encouraging more women in decision-making roles of the “other side of the table”, meaning that government licensing offices, financial institutions and other business support providers should ensure that they have women in decision-making roles so that they are mirroring the gender composition of their business customers and clients;
 - Coaching women on how to address their concerns to the government and sensitizing policymakers to the motivations and requirements of women entrepreneurs;
 - Helping women entrepreneurs deal with the life puzzle that often undermines their high-growth orientation, as they are overloaded by too many responsibilities;
 - Profiling women entrepreneurs success stories in the news media – not only in business outlets but in broader, general-interest news media;
 - Establishing national awards with cash prizes for innovative business ideas, highlighting unique or successful women-owned innovative companies. As previously mentioned, this will not only raise public awareness in general, it will encourage more women to go into business, and more of those women to consider growth-oriented, innovative ventures;
 - Creating an innovation business ambassador programme where innovative women business owners speak in business training classes, secondary and university classes, or community gatherings. Care should be taken to include women in this programme – both as ambassadors and as members of the audience.
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APPENDIX I

Organizations/Web Sites

<i>Name</i>	<i>URL</i>
Anita Borg Institute for Women and Technology	http://anitaborg.org/
Belgian Portal for Research and Innovation	http://www.research.be/ListURL/list.asp?KeyID=10018&up=518
BeWiSe: Belgian Women in Science	http://bewise.naturalsciences.be/
Commonwealth Secretariat: Gender and Trade	http://www.genderandtrade.org/
Commonwealth Secretariat: Gender publications	http://publications.thecommonwealth.org/gender-33-c.aspx
European Platform of Women Scientists	http://www.epws.org/index.php
Food, Agriculture and Natural Resources Policy Analysis Network	http://www.fanrpan.org/
Global Women Inventor and Innovators Network	http://www.gwiin.com/
Government Innovators Network, Ash Center for Democratic Governance and Innovation, Harvard University	http://www.innovations.harvard.edu/
Helsinki Group on Women and Science	http://ec.europa.eu/research/science-society/index.cfm?
Innovation Ireland: Innovation Task Force	http://www.taoiseach.gov.ie/eng/Innovation_Taskforce/
International Center for Research on Women	http://www.icrw.org/
International Fund for Agricultural Development, Gender work	http://www.ifad.org/gender/index.htm
International Labour Organization: Women's Entrepreneurship Development	http://www.ilo.org/empent/Areasofwork/lang--en/WCMS_093870/index.htm
Kauffman Foundation: Women scientists in innovation	http://www.kauffman.org/advancing-innovation/women-scientists-in-innovation.aspx
National Center for Women and Information Technology	http://www.ncwit.org/
The Next Women: Business Magazine for Female Internet Heroes	http://thenextwomen.com/?s=africa.com
OECD/OCDE: Gender Institutions and Development database	http://www.oecd.org/document/16/0,3343,en_2649_33731_39323280_1_1_1_1,00.html
_____: Research publications on gender by area	http://www.oecd.org/document/59/0,3343,en_21571361_38039199_38172347_1_1_1_1,00.html

Participatory Research and Gender Analysis (PRGA)	http://www.prgaprogram.org/
Rural Poverty Portal: Resources on women resources/tags/gender	http://www.ruralpovertyportal.org/web/guest/topic/
United Nations: United Nations Development Fund for Women (UNIFEM)	http://www.unifem.org/
_____: The World's Women statistical reports	http://unstats.un.org/unsd/demographic/products/indwm/
WikiGender	http://www.wikigender.org/index.php/New_Home
Women of Innovation social networking site (and Girls of Innovation social networking site)	http://womenofinnovation.ning.com/ http://girlsinnovate.ning.com/
World Bank: Gender Action Plan	http://go.worldbank.org/31BG3VTF40
_____: Gender and Development	http://www.worldbank.org/gender
_____: Gender Law Library	http://www.doingbusiness.org/elibrarydata/elibrary.aspx?libID=1
_____: Online bibliography of gender and ICT	http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTGENDER/EXTICTTOOLKIT/0,,contentMDK:20273352~isCURL:Y~menuPK:578394~pagePK:64168445~piPK:64168309~theSitePK:542820,00.html
World Summit on the Information Society	http://www.itu.int/wsis/index.html

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