Women Entrepreneurship in Canada

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Executive summary

We have conducted a high-level review of data and literature on the issue of participation in entrepreneurship by Canadian women and its possible implication on Saskatchewan. Our review suggests that while women in Canada reached close to parity in their participation in the labour force, they lag significantly behind men in entrepreneurial activity.

This discrepancy is not just an equality issue—it is also an issue of economic well-being. Entrepreneurship fuels economic growth, with new and young businesses accounting for nearly all net new job creation in Canada. Increasing the number of entrepreneurs and creating conditions for them to succeed is key to Canada's future well-being. Given the relatively low participation of women in business ownership, targeting female entrepreneurs and tapping into this relatively underutilized resource pool has the potential to boost economic activity

We are at the outset of an era marked by rapid advances in automation and artificial intelligence. This era will create "winners and losers" and as such countries that want to belong to the winners' camp will have to rely increasingly on entrepreneurship, especially innovative entrepreneurship, as a source of economic activity and prosperity. Entrepreneurship levels in Canada and other developed countries are declining mainly due to the aging of their populations. Moreover, Canada is lagging other developed countries in embracing the "new economy". This suggests that Canada is facing an urgent need to substantially increase its entrepreneurship activity, and in particular innovative entrepreneurship, in order to maintain its economic prosperity.

Since women in Canada are currently under-represented in entrepreneurial activity and substantially so in innovative entrepreneurship, it is essential that economic policy in Canada focus on enhancing women's participation in entrepreneurship and define this as a key priority. Moreover, such economic policy is essential to deal with the fact that females will be more negatively affected than males by the digital revolution, as females current employment is relatively more concentrated than males in service, administrative and financial and insurance industries that are more susceptible to automation.

Based on our preliminary study, we put forward the following key reasons for women's low representation in entrepreneurship and in particular innovative entrepreneurship in Canada that warrants further examination:

1. though Canada has a positive perception for women entrepreneurship in general, cultural barriers may vary across regions, depending on the structure of the respective economies, indigenous presence, and size of immigrant communities in these regions. **Given the relatively high share of indigenous population in Saskatchewan, women entrepreneurs may suffer from additional culture and/or business climate barriers. Further study is needed to identify these barriers and impacts**;
2. research indicates that most innovative entrepreneurship and the resulting scaling up of their business occurs between ages 25-44, which is generally when women have families. Therefore, balancing family responsibilities with business growth impacts women entrepreneurs' desire and ability to scale up their business;
3. lack of access to role models, mentors and networks often impacts confidence and business growth negatively;
4. lack of access to capital and growth capital often results from low representation of women in decision making related to growth capital investments; and
5. women-owned businesses predominate in traditionally female-dominated industries such as the service sector. Women entrepreneurs face more obstacles in male–dominated sectors such as science and technology. Low STEM (Science, Technology, Engineering and Mathematics) education may further restrict women entrepreneurs from participating in high technology enterprises.

Time is of the essence, as the digital revolution is knocking on our doors, and as such it is essential that governments move in a fast pace to address this issue, which is critical to Canadian society's well-being. **As indicated in this report, Saskatchewan is lagging the Canadian average in some benchmarks. Female share of employment and self-employment are 46% and 34% in Saskatchewan, which are lower than the Canadian average levels at 48% and 37%, respectively. In Saskatchewan, only 13.7% of small medium enterprises ("SMEs") are majority female-owned, compared to 17.0% in the top province (Ontario).** We note that Saskatchewan has the highest provincial level of equal (male/female) ownership of SMEs, at 29%. However, in our view, which is consistent with a 2015 study conducted in the US, the level of equal ownership is not a reliable indicator for women's entrepreneurship activity level, as the equal ownership structure often reflects tax and legal considerations and does not involve real business involvement by women. **These facts suggest that the issues raised in our study for Canada are somewhat more acute in Saskatchewan**.

We suggest studying best practices for economic policy that will address in a bold manner the above noted reasons. As a starting point, we suggest considering policies of the following nature in Saskatchewan and other provinces:

1. supportive work-life policies for women foster "lean-in" rather than "fall back" women entrepreneurship. Research shows that women who live in regions that offer better work-life policies tend to build higher-impact and more scalable enterprises. Therefore, policy should aim at providing more external assistance to families (e.g. free early child care) and incentivizing men to participate more in raising children (e.g. mandatory paternal leave), especially for those women who want to become entrepreneurs;
2. fund the creation of networks of experienced business women that will act to provide mentoring, emotional support, and training to young women entrepreneurs;
3. provide training and education opportunities to women in traditionally male-dominated sectors such as agriculture, science and technology; and
4. provide venture capital funds that would be dedicated to women only.

We also suggest that further studies be conducted to identify gender-inequality in inputs to entrepreneurship (e.g. financing and networks) and reasons of under-performance of women entrepreneurship in Saskatchewan. In addition, **we note that data on a provincial level is sparse; thus, the first step to promote women entrepreneurship in Saskatchewan needs to be the establishment of a comprehensive database that would lead to the development of information-based policies**.

Introduction

Over the past three decades, the influx of women into the labour force ushered in significant gains in economic growth and workers' productivity. Research shows this rise in women's share of the workforce since the 1980s was responsible for 7% of the Canadian GDP by 2012,[1] and further advancing women's equality in the creation of economic activity has a potential to increase GDP by $150-420 billion GDP (6%-18%) by 2026.[2]

While more women sought and found employment in greater numbers, their participation as entrepreneurs did not match their participation in the labour force. Fewer women became entrepreneurs, meaning their potential contributions to job creation, innovation and economic growth may be under-utilized. In Canada, women are half as likely as men to operate their own businesses.[3] Moreover, progress toward gender parity in entrepreneurship has stalled over the past two decades. The female-to-male ratio of entrepreneurs progressed during that period at an annual rate of 0.3% only. Should this trend continue, it would take 180 years to close the gender gap as it relates to entrepreneurship.[4]

This discrepancy is not just an equality issue—it is also an issue of economic well-being. Entrepreneurship fuels economic growth, with new and young businesses accounting for nearly all net new job creation in Canada. Increasing the number of entrepreneurs and creating conditions for them to succeed is key to Canada's future well-being.

We are at the outset of an era marked by rapid advances in automation and artificial intelligence. This era will create "winners and losers", and countries that want to belong to the winners' camp will have to rely increasingly on entrepreneurship, especially innovative entrepreneurship, as a source for economic activity and prosperity. A recent research estimated that 375 million people (14% of the global workforce) would be displaced by automation and would need to completely switch their occupation.[5] Moreover, females would be more affected than males, as women are more likely to work in service, administrative, and financial and insurance industries that are more susceptible to automation. A study by PwC in 2018 estimated that 23% of women would be impacted by the rise of automation between now and the late-2020s, while only 17% of men would be impacted.[6] Self-employment and entrepreneurship may be the only viable option for many women that would find their job being replaced by automation.

In this regard, we note that entrepreneurship levels in Canada and other developed countries are declining mainly due to the aging of their populations.[7] Moreover, Canada is lagging in embracing the "new economy". For example, in 2017, Canada venture capital funds raised in Canada were approximately US$69 per capita compared to US$221 in the US. Canada's productivity in "new economy" industries in 1996 was approximately 15% below that of the US, and in 2015 the gap increased to 50%.[8] This suggests that Canada needs to increase entrepreneurship activity and in particular "new economy" entrepreneurship in order to maintain its economic prosperity in the face of the digital revolution.

[1] RBC Economics (2013).
[2] McKinsey Global Institute (2017a).
[3] Based on self-employment rate from Statistics Canada. Table: 14-10-0027-01 (formerly CANSIM 282-0012).
[4] McKinsey Global Institute (2017a).
[5] McKinsey Global Institute (2017b).
[6] PwC (2018).
[7] Globerman, S. & Clemens, J. (2018b).
[8] Brookings Institute (2018).

Given the under-representation of Canadian women in entrepreneurship, women are the obvious untapped resource that could be used to increase the entrepreneurship pool of Canada. To this end, we need to understand the reasons for the low entrepreneurship rate of women and the hurdles women are facing in becoming entrepreneurs.

In this report, we conduct a high-level review of data and literature on the issue of women participation in entrepreneurship. On that basis, we develop hypotheses regarding the reasons for the current state, the barriers faced by women and the potential policy measures that may be effective to remove such barriers.

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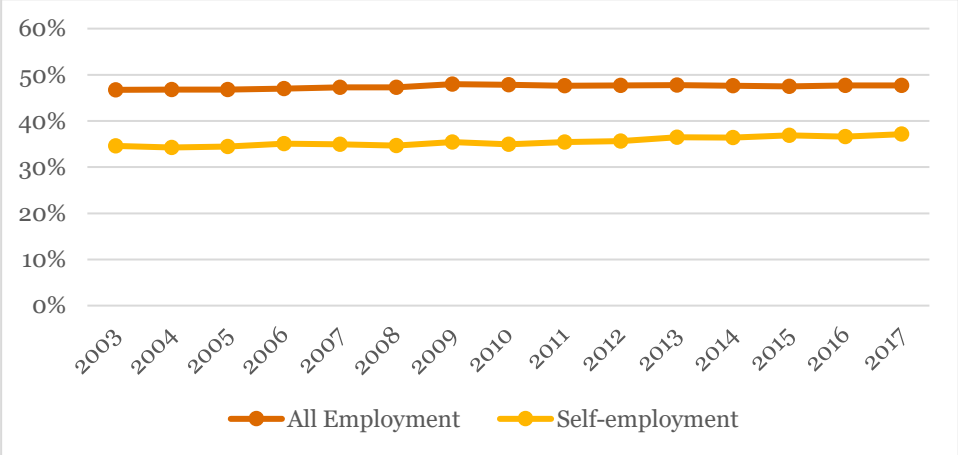
Women entrepreneurship in Canada

In 2016, 13.3% of Canadian women were engaged in early-stage entrepreneurial activities ("TEA"), and this marked the highest participation rate among developed countries.[9] 6.6% of Canadian women engaged in established business ownership ("EBO"), which ranks fifth among innovation-based countries.[10] The share of women in total business owners is relatively high among high-income countries, with about 27% in 2016.[11] According to the 2018 Mastercard Index of Women Entrepreneurs (MIWE), Canada is ranked the third among 57 economies, as it relates to the level of Women's Advancement Outcomes: Knowledge Assets & Financial Access and Supporting Entrepreneurial Factors. The most favourable conditions to women entrepreneurs in Canada reside in underlying social and cultural norms and commercial infrastructure. Specifically, Canada is evaluated to perform comparatively well in the percentage of women professionals, positive cultural perceptions of women entrepreneurs, and relative ease of doing business.

Economic impacts of women entrepreneurship

As shown in Figure 1, female participation in the workforce has been stable in recent years, with 47%-48% female share of employment since 2003, which suggests plateauing of women's participation rate. In contrast, as Figure 1 shows in 2017, women accounted for only 37% of self-employment in Canada. Moreover, only 16% of small and medium businesses (SMEs) in Canada were majority owned by women.[12] The aggregate revenue of female majority-owned SMEs was $148 billion in 2011.[13] For example, a 10% rise in the number of female majority owned firms by 2021 would bring this to a $198 billion contribution to economic activity.[14]

Figure 1: Female Share of Employment in Canada, 2008-2017[15]



Thus, despite the relative success of Canada in a global context, these numbers indicate that **when it comes to entrepreneurship, Canada has still a long way to go in fully utilizing the potential of women**

[9] Global Entrepreneurship Monitor (2016). Early-stage activities (TEA) involve business less than 3.5 years old.
[10] Global Entrepreneurship Monitor (2016). Established business ownership (EBO) involves business that is 3.5 years or older.
[11] Mastercard Index of Women Entrepreneurs (2018).
[12] Industry Canada (2014). A small or medium sized industry is one with fewer than 500 employees, and between $30,000 and $500 million in annual revenues.
[13] Industry Canada (2011)
[14] RBC Economics (2013).
[15] Statistics Canada. Table: 14-10-0027-01 (formerly CANSIM 282-0012).

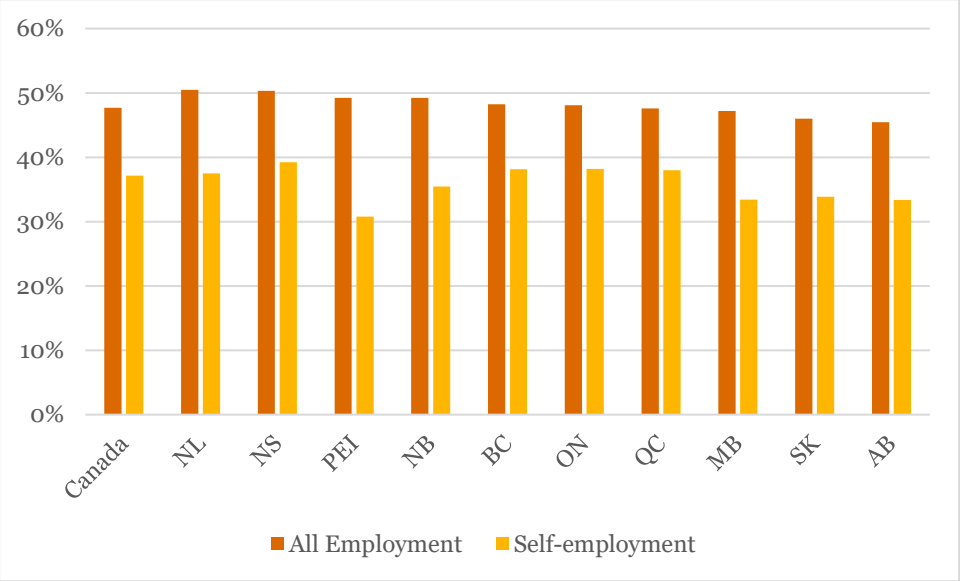
entrepreneurs. Moreover, high technology entrepreneurship, which is key to the wellbeing of Canada's economy in the long term, is completely dominated by men, with a share of well over 80%.

Given the importance of entrepreneurship in general, and high technology entrepreneurship in particular, combined with an aging of the population that reduces entrepreneurship activity, it is critical from an economic standpoint to increase the pool of entrepreneurs in Canada. Given the low participation of women in entrepreneurship, they are the natural group that should be targeted for increasing this pool in Canada.

Provincial review

Figure 2 illustrates the female share of employment by province in 2017. Female share in all employment had relatively small variation across provinces, from 45% in Alberta to 50% in Newfoundland and Labrador and Nova Scotia. Nonetheless, regional variation of female self-employment is greater, with the highest in Nova Scotia (39%) and the lowest in Prince Edward Island (31%). The Prairie Provinces have smaller female shares in terms of employment and self-employment. **For example, female share of employment and self-employment are 46% and 34% in Saskatchewan, which are lower than the Canadian average levels (48% and 37%, respectively).**

Figure 2: Female Share of Employment by Province, 2017[16]

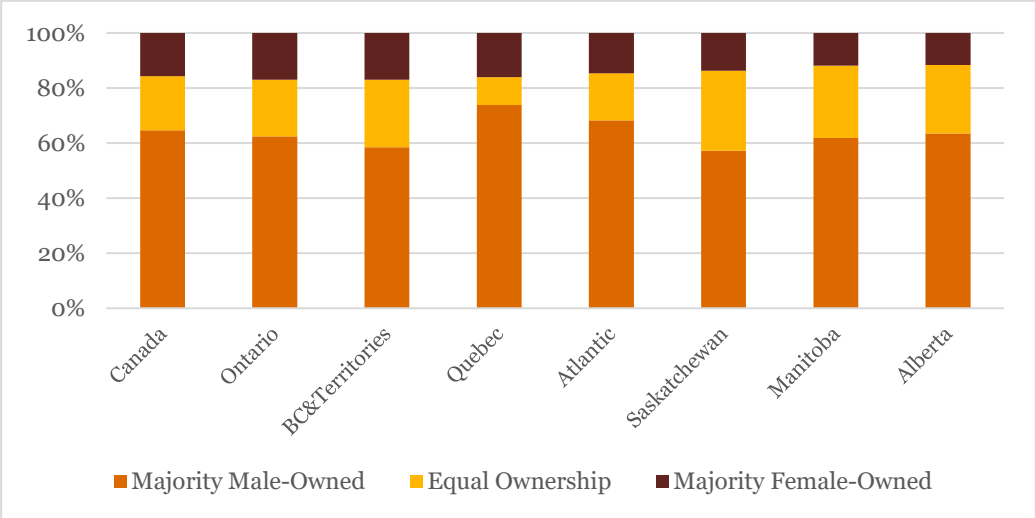


In 2014, majority female-owned SMEs accounted for 15.7% of total SMEs in Canada (Figure 3). Women owned businesses were most common in Ontario, BC and Quebec, with Ontario leading the way (17% of majority female-owned SMEs). **In Saskatchewan, only 13.7% of SMEs were majority female-owned. Moreover, in recent years, the ratio of majority female-owned to majority male-owned businesses in Saskatchewan grew slower than the national average.**[17] We note that Saskatchewan has the highest provincial level of equal (male/female) ownership of SMEs, at 29%. However, in our view, the level of equal ownership is not a reliable indicator for women's entrepreneurship activity, as the equal ownership structure often reflects tax and legal considerations and does not necessarily involve real business involvement by women. This notion is supported by a 2015 study in the US that showed that equal-ownership businesses were more likely to be family-owned or owned jointly by a married couple, where the male partner was usually the primary drive behind

[16] Statistics Canada. Table: 14-10-0027-01 (formerly CANSIM 282-0012).
[17] Grekou et al. (2018)

the business.[18] Therefore, the level of women majority owned businesses is, in our view, a better indication for women's entrepreneurship activity.

Figure 3: SME Ownership by Gender and Provinces, 2014[19]



According to Global Entrepreneurship Monitor ("GEM") 2016 study, 20.3% of the male population reported to be involved as entrepreneurs in TEA, compared to only 13.3% of the female population in Canada.[20] Across the country, women's early stage entrepreneurial activity rates were above the national average in Manitoba/Saskatchewan, Alberta and Ontario, and the lowest rate of women's TEA is in Quebec (10%). The gender gap in EBO is smaller, with 7.1% and 6.6% for men and women populations. Higher rates of women EBO are evident in the Atlantic regions (8.5%), Ontario (7.6%) and Alberta (7.2%). Manitoba/Saskatchewan has 5.5% of women participating in EBO, which was the second lowest rate among all provinces. We caution that, as per GEM, Atlantic, Manitoba/Saskatchewan, Alberta and BC had smaller samples that reduced the accuracy of their respective estimates. Therefore, these findings should be treated as preliminary and directional.

The heterogeneity among provinces likely reflects a range of factors, such as the structure of provincial economies, attitudes towards entrepreneurship in general and women's entrepreneurship in particular, entrepreneurial ecosystems and supporting policies. However, there are only a few studies that examined the cross-province heterogeneity of women entrepreneurship, and these studies often adopted different methodologies and they generally lack gender-specific perspectives. Although these different approaches revealed some aspects of women entrepreneurship across provinces, very little is currently known about factors that lead to variation cross provinces, business performance of women controlled businesses and the efficacy of supporting policy and programs. **Thus, there is a need for a more comprehensive study at a provincial level that links women entrepreneurs, business performance and policy design.**

Portrait of women entrepreneurs in Canada

There are several notable differences between female and male entrepreneurs in relation to factors such as age, education, and motivation. It is important to analyze these differences in order to gain a deep understanding of the barriers faced by women entrepreneurs as well as identifying policies that can help in overcoming them.

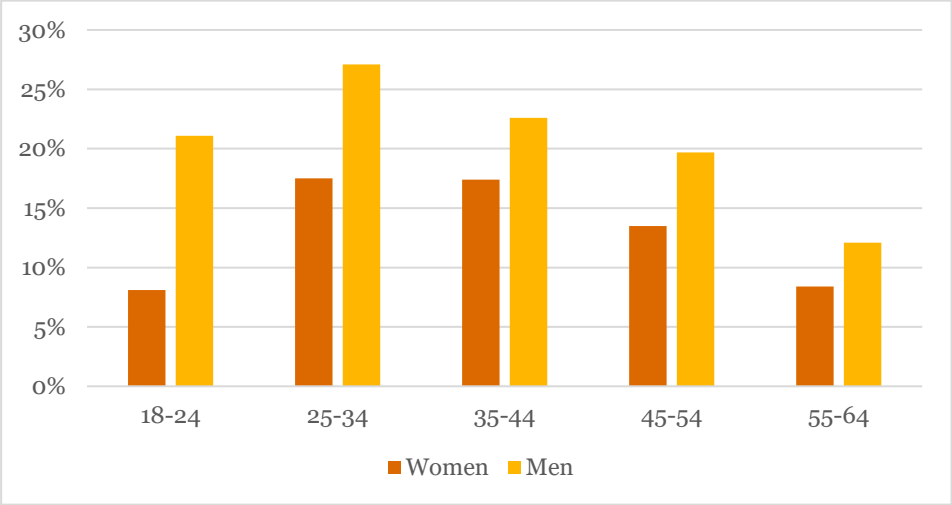
[18] Segal (2015).
[19] Industry Canada (2014).
[20] GEM Canada (2016).

Demographics

Women and men's rates of activity vary by age and life cycle stage. Women tend to engage in TEA at a later life cycle stage than men do.

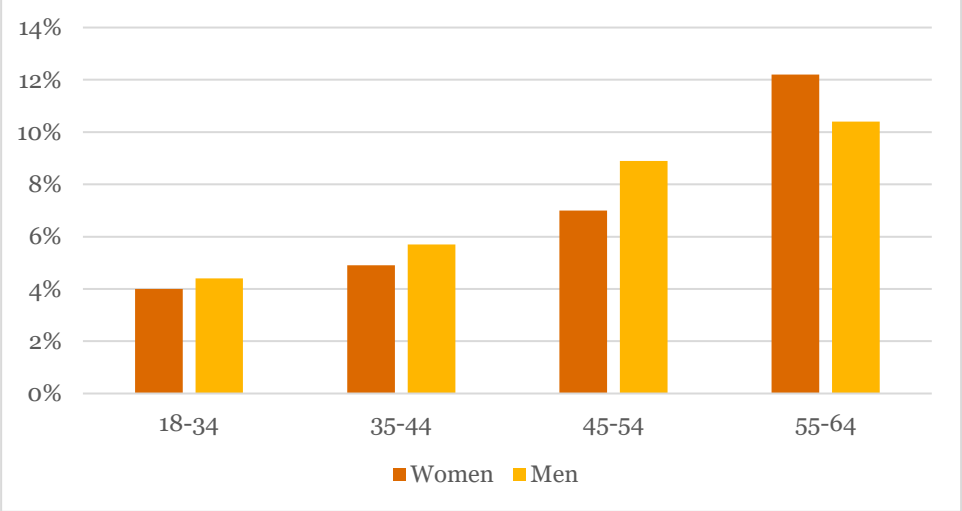
Figure 4 provides participation in entrepreneurship of the population by gender and age. It is apparent from this figure that gender gap is the highest at the age groups of 18-24 and 25-34, which studies show are critical years for developing innovative enterprises.[21]

Figure 4: Participation Rates of the Population in TEA by Age, 2016[22]



Established business entrepreneurs tend to have an older age profile overall. Figure 5 shows that women and men have more similar activity rates in established firms across the various age groups.

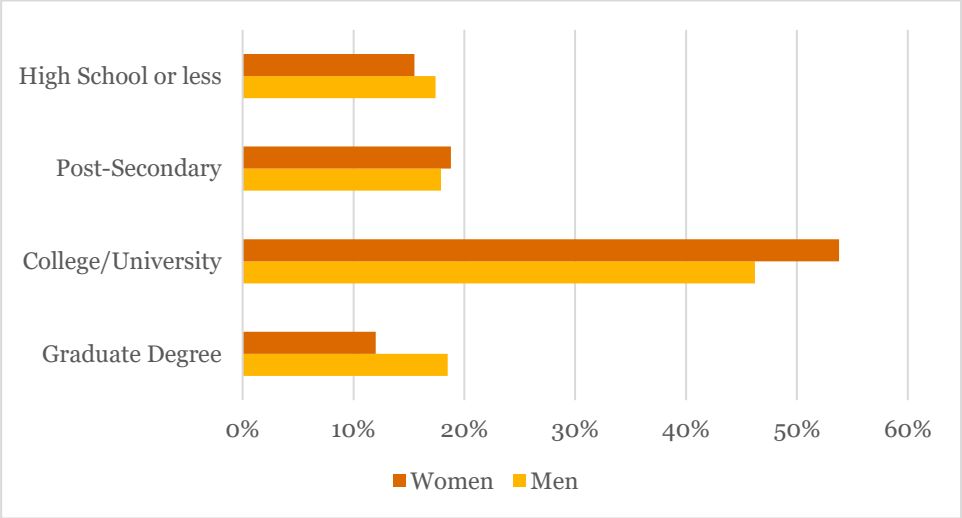
Figure 5: Participation Rates of the Population in EBO by Age, 2016[23]



[21] Globerman, S. & Clemens, J. (2018b).
[22] GEM Canada (2016).
[23] GEM Canada (2016).

For many entrepreneurs in Canada, as in other knowledge-based economies, specialized knowledge and expertise is increasingly important to business development and innovation. In this respect, the dramatic rise in Canadian women's post-secondary educational achievement in recent decades has been important for expanding entrepreneurial opportunities. In the past two decades, the female-to-male ratio of higher education increased from 0.85 to 1.13 by 2016.[24] Figure 6 profiles women and men involved in early start-up activity by education attainment. Both women and men are highly educated, with the vast majority of all early-stage entrepreneurs having college and university degrees. While men are more likely to have a graduate degree than women, women are more likely to have completed a college or university degree (53.8% vs. 46.2%).

Figure 6 Education Background of Entrepreneurs Involved in TEA, 2016[25]

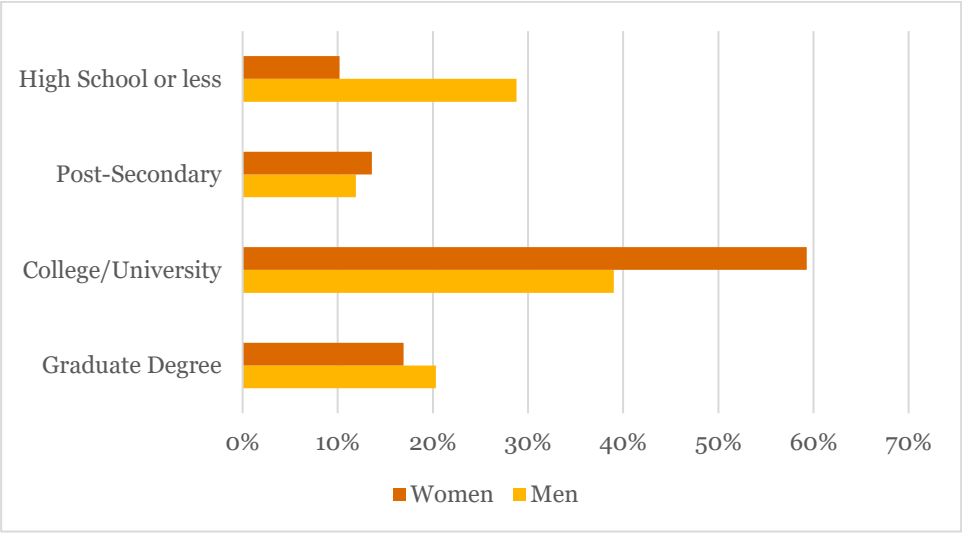


However, it is important to note that women lag significantly behind men in acquiring education in Science, Technology, Engineering and Mathematics ("STEM") studies. According to Statistics Canada, in 2016, women's share in Canada of STEM related positions was only 22%. STEM studies are critical for the development of new enterprises in the high technology areas.

For entrepreneurs in established businesses, greater variation exists in the educational profiles of women and men (Figure 7). Approximately 76% of women in these businesses hold degrees at university/college level or above; this is the case for just 59% of men. Among male business owners of EBOs, there is a notable group who have a high school degree or less, a pattern that is distinct from that of women.

[24] McKinsey Global Institute (2017a).
[25] GEM Canada (2016).

Figure 7: Education Background of Entrepreneurs Involved in EBO, 2016[26]



In addition, while the majority of female business owners have more than ten years of ownership or management experience, they have slightly less experience than their male counterparts.[27] Interestingly, female SME owners are also slightly more likely (25%) to be born outside of Canada than male owners (20%). Studies show that immigrants have a significantly higher tendency to become entrepreneurs than non-immigrants. This may explain Ontario's leadership in women's early stage entrepreneurship.

In summary, women tend to become entrepreneurs at an older age, which is less conducive to innovation. Moreover, while women entrepreneurs are more educated than men, they lag behind in STEM degrees and this restricts their ability to be involved in innovation that is currently driven mainly by the digital revolution. It is also important to note that immigrant women tend to be more risk takers than non-immigrant women.

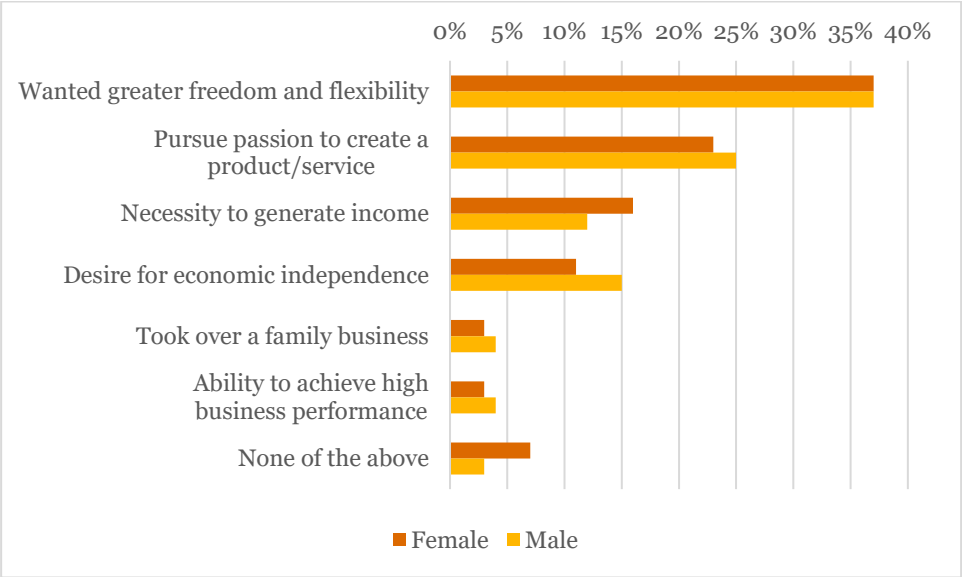
Motivation

Millions of Canadians find passion in their work as employees, but many feel the need or desire to pursue self-employment. Such entrepreneurs are motivated by a variety of factors, including pursuing "opportunity-based" ventures driven by new ideas and innovation or by "necessity-based" factors, such as job loss and a lack of good job opportunities.

Recent Canadian studies demonstrated that women and men are similar in terms of opportunity-based and necessity-based factors. From Figure 8, we see that a notable portion of entrepreneurs of both genders were prompted to start a business by "opportunity-based" factors, which include wanting greater freedom and flexibility or pursuing passion to create a specific product or service.

[26] GEM Canada (2016)
[27] TD Economics (2015)

Figure 8: Motivations for Becoming Entrepreneurs, 2016[28]



Nonetheless, although entrepreneurs of both genders are largely driven by opportunity-based factors, entrepreneurship research has shown that more refined motivations differ between male and female entrepreneurs, and this is likely shaping the portrait of women-owned businesses.[29] As Figure 8 shows, a higher percentage of males than females tend to pursue their passion while a higher percentage of females start their business out of necessity. In addition, studies show that one major difference is that female entrepreneurs tend to have a stronger desire towards greater work-family balance. **These differences suggest that women entrepreneurs who opt to establish their own business are likely to pursue less aggressive growth strategies and thus be involved in lower value added businesses.**[30]

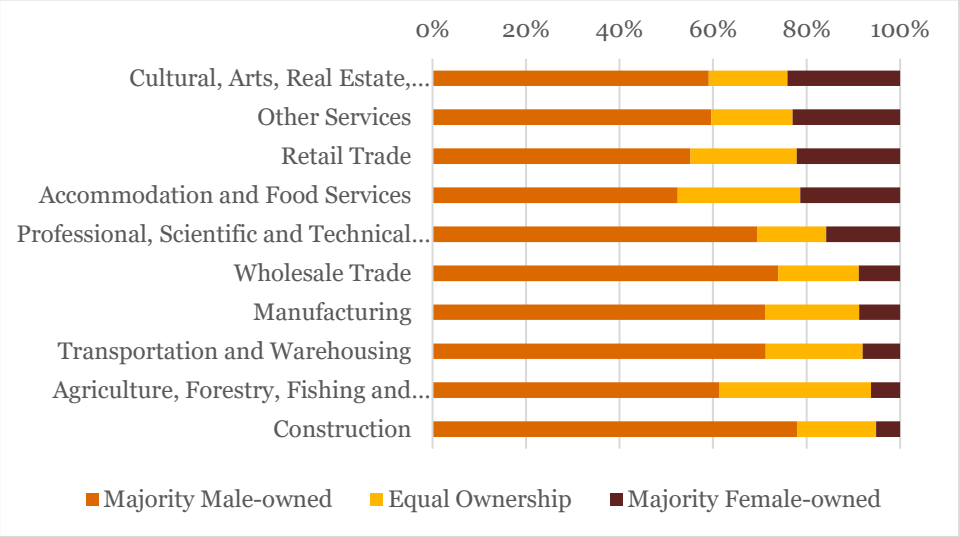
In summary, women are driven to entrepreneurship more by considerations of income security and life balance than men. This is likely reducing their tendency to develop innovative high impact businesses.

Industries

SMEs owned by females are relatively concentrated in the service sector, most commonly in cultural industry, administration, health care and recreation, real estate and retail trade. Figure 9 shows that in those industries women control over 20% of businesses,[31] whereas in the science and technology industries women control only 15.8% of businesses. Construction and agriculture/primary have the lowest values for majority ownership by females. Women-owned businesses predominate in traditionally female-dominated industries. Overall, 90% of women-owned SMEs are in the services sector, compared with 70% of those owned by men.[32]

[28] BMO Wealth Management (2016).
[29] GEM Canada (2016); TD Economics (2015).
[30] TD Economics (2015); Women's Enterprise Center (2013); Hughes, K. D. (2006).
[31] The following industries are included in the group by Industry Canada: Information and Cultural Industries (NAICS 51), Real Estate and Rental and Leasing (NAICS 53), Administrative and Support, Waste Management and Remediation Services (NAICS 56), Health Care and Social Assistance (NAICS 62), Arts, Entertainment and Recreation (NAICS 71)
[32] TD Economics (2015).

Figure 9: Share of Business Ownership Type by Industries, 2014[33]



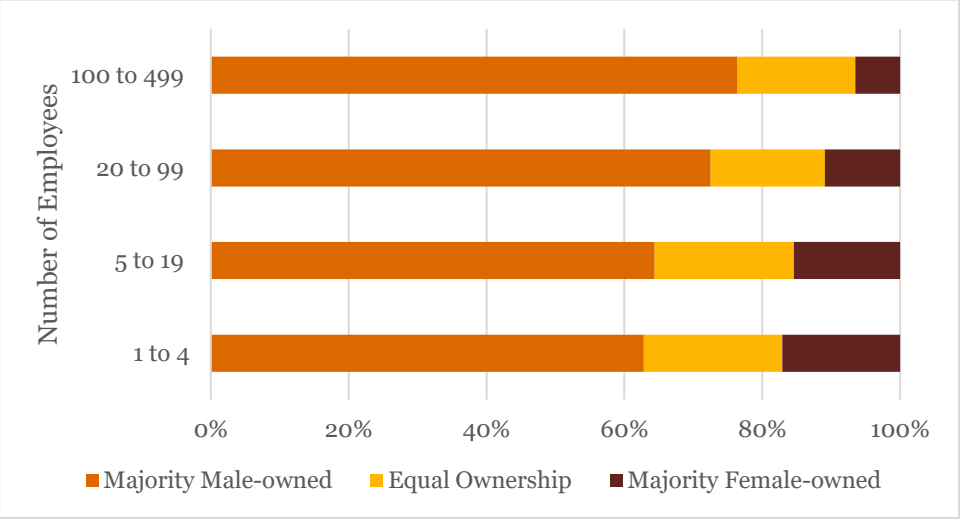
In summary, women tend to focus their entrepreneurship efforts on less innovative businesses than men.

Firm size

Figure 10 shows that the percentage of majority female-owned businesses increases as the size of the business decreases. Many studies investigated this phenomenon and suggested that women business owners seem to be less likely to pursue other growth-enhancing strategies compared to men. There is evidence that female entrepreneurs seem to set a maximum threshold size for their businesses, beyond which they are not interested in growing. [34]

These findings are consistent with our earlier notes regarding the motivations of women in becoming entrepreneurs and the fact that women seem to become entrepreneurs at a relatively late age.

Figure 10: Business Ownership Type by Number of Employees[35]



[33] Industry Canada (2014)
[34] RBC Economics (2013); TD Economics (2015); GEM(2016).
[35] Industry Canada (2014)

Barriers to women entrepreneurs

As indicated previously, women are significantly less likely than men to start a business, and when they do, their enterprises are often small and operate in lower value added fields that generally require less capital funding. As entrepreneurs, women are on average less equipped than men with key resources such as access to business networks, financial capital, STEM education and management experience. This gender inequality in entrepreneurship is a complex phenomenon, encompassing the cultural and economic barriers that generate differences in business ownership rates, business types, and the entrepreneurial "success" of women and men.

Stereotypes, such as the belief that being an entrepreneur is a man's job, and lower exposure of women to female role models may explain why women report less interest in entrepreneurial careers, and often believe they are not capable of becoming successful entrepreneurs. Many studies have reported that these cultural barriers are generally relatively low in Canada compared to other countries; i.e. entrepreneurship is positively regarded as an aspirational career choice for women by society. Nonetheless, as indicated previously, cultural barriers may vary across regions, depending on the local economy structure, indigenous presence and size of immigrant communities in various provinces.

The following describes some of the barriers that women face in Canada in pursuit of entrepreneurship.

Access to financing

Many studies show that women tend to rely more heavily on internal than on external sources of capital for start-up, and that they raise smaller amounts of capital for financing their activity. The fact that women raise less outside financing can deprive their enterprises of the capital needed to innovate, develop new products and services, hire key employees and grow.

Access to financing remains a prominent barrier for women entrepreneurs in Canada. The BMO poll in 2013 found that 42% of Canadian women who would consider starting a business report that access to capital is their biggest challenge.[36] GEM's study in 2016 pointed that despite the high rank of Canada in global women entrepreneurship, lack of finance is still a key constraint to women's ability to thrive as business owners.[37] Recent interviews with women entrepreneurs conducted by Carleton University revealed that lack of access to capital is particularly a problem for women entrepreneurs due to various factors such as ageism and sexism.[38] In addition, women entrepreneurs operating high-growth businesses face significant difficulties to raise capital needed to transit to larger and more established businesses.[39]

The limited access to financing for women may be caused by a combination of factors, from demand-side gender differences (e.g. risk attitude) to supply-side gender differences (e.g. lending discrimination).

The demand-side of gender differences

Women are less likely than men to use bank loans for starting their activity, preferring other sources of financing such as their own savings or loans from family and friends. This lower use of external financing for start-ups by women is observed in the large majority of OECD countries. The highest levels of external financing for start-ups in Europe are in Denmark, where almost 40% of female founders used bank loans. In the US, women are more likely than men to use credit cards for financing the costs of establishing their enterprises. [40] Although similar studies for

[36] BMO (2013).
[37] GEM Canada (2016).
[38] Beckton, C., McDonald, J., and Marquis-Bissonnette M. (2018).
[39] Status of Women Canada (2015).
[40] Piacentini, M. (2013).

Canada are limited, according to Industry Canada, in the case of early-stage businesses only 45% majority female-owned SMEs requested external financing, compared to 53% of majority male-owned SMEs.

Women also tend to invest lower amounts of funds when setting up their activity**.** Data from the US suggests that a gender gap exists in the initial funding of business activities. A high percentage of majority women-owned enterprises in the US were founded with low initial capital (US$5,000 or less).[41] Adequate capitalization in the start-up phase also means higher chances of survival over the initial years, as young ventures are often exposed to unexpected shocks and liabilities.[42]

Many studies examined the demand side differences and made the following observations:

- **Lack of confidence**. Although self-employed women have made great strides in the world of business, many continue to fight barriers related to traditional constructs of gender, economic power and expectations, which impacts negatively their confidence.[43] These confidence issues impact the way women business owners decide to pursue financing, to present themselves and negotiate on behalf of their business with a financial institution.
- **Less ambitious.** Women who have become entrepreneurs for work-family balance or at a late age may be less likely to pursue aggressive growth strategies. Also, women are highly concerned by the issue of "keeping control" of their business, which reduces their inclination to pursue external funding.
- **Type of businesses operated by women.** Female entrepreneurs traditionally operate in service sectors that require relatively lower capital intensity.
- **Unequal distribution of economic resources across genders.** Women-owned enterprises often start small because women, on average, have lower income than men, and so they are able to invest less money into their businesses.

The supply-side of gender differences

According to Industry Canada (2015), the rejection rate for financing was more significant for majority female owners than majority male owners, due to insufficient collateral (66.6% vs 35.7%) and the fact that the lending institution judged that the SME operated in an unstable industry (65.7% vs 24.8%).

Lending discrimination

Various articles suggest that women are discriminated against by financial institutions and, thus, more likely to be denied a loan or to be asked for additional guarantees while facing higher interest rates. However, lending discrimination is hard to prove, and there is only scattered evidence that it is a common practice in OECD countries such as Canada. For example, a study by Jung (2010) found female entrepreneurs had to provide lenders with more documentation – such as personal financial statements, appraisals of assets and cash flow projections – than male entrepreneurs in Canada.[44]

Barriers to venture capital market

Barriers to entry into the venture capital market seem particularly high for women. The gender gap in access to venture capital is evident in OECD countries. For example, in the US, female entrepreneurs are undercapitalized, with only 3% of women-owned businesses receiving venture capital funding in 2014.[45] In Silicon Valley, less than one in ten high-tech start-ups are led by women.[46] The venture capital market in Canada has a similar problem: female start up founders have to work harder and receive far less investment than their male competitors. The primary reason cited by studies is that venture capital firms have too few women on their teams, and the

[41] Piacentini, M. (2013).
[42] Beckton, C., McDonald, J., and Marquis-Bissonnette M. (2018); Piacentini, M. (2013).
[43] Russell, J. (2002); Kets de Vries (2005).
[44] Jung, O. (2010).
[45] The Diana Project (2014) Women Entrepreneurs 2014: Bridging the Gender Gap in Venture Capital, *Babson College*
[46] Global Women Entrepreneur Leaders Scorecard (2015)

perspectives are often biased regarding the capability of women entrepreneurs (e.g. motherhood) to pursue a high technology business. [47]

Network

According to the Barometer Survey in 2013, alongside capital, networks have emerged as the most important driver for women's entrepreneurial success.[48] For those women-owned businesses taking the next step on their growth path, networks are a conduit for access to new capital, new markets and specialized skills. **Thus, networks are a crucial accelerator in closing the gender gap for entrepreneurial activity.**

Networks help female entrepreneurs build their reputations and tap funding. Many venture capitalists and angel investors make their investment decision in partnership and on the basis of information provided by their networks, but very few women are active members of these networks.[49] Moreover, the management positions in the venture capital industry in North America are mostly occupied by men. Women might be reluctant to turn to venture capital firms or "angels," fearing that they might be underrated by male investors.[50] Networks stimulate collaboration and partnership, which are key elements for the success of women entrepreneurs. Mainstream networks, incubators and accelerators are often not welcoming to women entrepreneurs, yet networks, mentoring and growth opportunities are considered to be important to entrepreneurial success.

Lack of business training and mentors

Mentorship plays an important role in developing successful entrepreneurs. The Barometer Survey in 2013 revealed differences in business outcomes for female entrepreneurs who were actively engaged in external workshops and networking events and those who were not. For instance, female respondents who indicated they were active in entrepreneurial workshops or support meetings reported greater improvement in access to growth and expansion capital than those who did not report such involvement. For those female entrepreneurs surveyed who participated in teaming/mentoring programs, 27% reported "easy" access to funding, compared to 19% of female entrepreneurs overall.

However, given the relatively low participation in business of the female population, women entrepreneurs are less likely to have access to role models, mentors and trainings that are oriented towards women entrepreneurs' needs. Nearly half of women entrepreneurs state that a challenge facing their business is the lack of available mentors.[51] GEM's study in 2016 pinpointed a lack of education geared towards women entrepreneurship at the pre-tertiary levels in Canada. Therefore, training and mentoring programs that are customized to women entrepreneurs may provide valuable support to help Canadian women start their businesses and pursue growth strategies.

Work-life balance

Women entrepreneurs may face additional hurdles maintaining a work-life balance. Women tend to start businesses at a later life stage than men do. For women, the highest rates of participation in early-stage activity are at 25-34 and 35-44 years of age.[52] On the other hand, nearly three-quarters of births are delivered by women between the ages of twenty and thirty. Consequently, women face additional pressures due to parenthood that result in lower rates of entrepreneurship. Research has also shown that women with STEM PhDs are significantly less likely to engage in entrepreneurship if they have a child under the age of two, while there is no statistical difference in entrepreneurial rates between male STEM PhDs with and without a child under the age of two.[53] Therefore, the fact that women entrepreneurs face more work-life challenges than their male counterparts suggest the need to provide extra support, e.g. affordable childcare and better parental leave policy, to help address the unique challenges for women entrepreneur.

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[47] Mcbane, M., Robinson, L. (2018).
[48] EY (2013).
[49] Hochberg et al (2007); Piacentini, M. (2013).
[50] Chin et al(2018); Coleman, S. and A.M. Robb (2012)
[51] Kauffman Foundation (2015)
[52] GEM Canada (2016).
[53] Kauffman Foundation (2015).

Case studies

No single initiative, program or policy will likely level the playing field for high-impact female entrepreneurs; in other words, there is no "silver bullet". Therefore, a holistic approach is needed, with active engagement at all levels: from the government and corporations to the media and individuals. In this section, we provide three case studies of policy initiatives outside Canada that address one or more hurdles to women entrepreneurship.

Equitable procurement processes

The US was ranked the fourth in the 2018 Mastercard Index of Women Entrepreneurs. This high rating is driven by the economy's efficient business regulations, established financial systems with wide outreach to female entrepreneurs.

The promotion of women's entrepreneurship has a prominent space in the US. The main peculiarity of the US case is the development of a strong network of public and private institutions with a mandate to support the creation and growth of women's ventures over five decades. The Office of Women's Business Ownership at the Small Business Administration (SBA) has fostered the participation of women entrepreneurs in the economy since 1979, overseeing a network of Women's Business Centers (WBCs). Those centers provide management and technical assistance to women's entrepreneurs, especially those who are economically or socially disadvantaged.

The US is the only developed country that has a gender procurement policy. **The SBA's Women-Owned Small Business (WOSB) federal contract programme, implemented in February 2011, authorizes the contracting officers of the federal agencies to set aside 5% of federal contracts for eligible and certified women-owned small businesses or economically disadvantaged women-owned small businesses.** In addition, many US government departments actively seek out women-owned businesses to meet their targets. As a result, women-owned businesses in the US often proactively display their women-owned certified business credentials on their business cards and company information.

In Canada, while many businesses have adopted policies to include diverse suppliers, public institutions and governments are still behind the curve. Given the significance of government purchases, equitable procurement process is likely to give more growth opportunities to early-stage women entrepreneurs. Inclusive federal procurement is a potential avenue through which the government can demonstrate leadership and support for women's entrepreneurship.

Building networks

The European Commission (EC) is increasingly active in the coordination of national policies for women entrepreneurs. One of the Commission's main initiatives is to support networking among female entrepreneurs, potential female entrepreneurs and support organizations. A set of tools, networks and platforms have also been created by the EC in order to further support the growth and development of women lead entrepreneurship:

- **The European Community of Women Business Angels and women entrepreneurs** has the objective to increase the number of Women Business Angels in Europe and to facilitate the funding of Women Entrepreneurs.
- **WEgate-platform was launched in 2016** and is designed as a European network meant to promote women's entrepreneurship.
- **The European Network of Mentors for Women Entrepreneurs**: a Europe-wide network of mentors that provides women entrepreneurs in the early phase of their entrepreneurial activities with concrete business advice, sharing of knowledge and experience. The European Network of Mentors for Women Entrepreneurs was launched in November 2011 with the participation of 17 countries. Results from 10 of the participating

countries show that more than 250 new women-led enterprises have been created through the support of this initiative.[54]

In 2013, the EC launched the European Entrepreneurship Action Plan to boost entrepreneurship at all levels. In particular, Action Pillar III of the Plan aims to realize untapped entrepreneurial potential by reaching out to and including specific groups in entrepreneurship support and development programs. An EU-wide educational, mentoring, advisory and business networking platform for women entrepreneurs is being developed. All these initiatives urge EU Member States to offer mentoring and support to female entrepreneurs and to exchange information on best practices.

Women entrepreneurs in science and technology

STEM are traditionally male dominated fields. Women are much less represented in both education and employment of STEM related occupations. The gender inequality in STEM creates more obstacles for women entrepreneurs in these fields. For example, business ideas put forward by women tend to be ignored more easily than those put forward by men, and decision-makers do not always see the value of business ideas that are aimed at women in science and technology sectors.[55]

Encouraging and supporting female entrepreneurship is part of mainstream policy in Finland. The barriers that women face in becoming entrepreneurs in the science and technology sectors are well documented. Several public programs and projects have been initiated to encourage female entrepreneurs in science and technology sectors.

WomEQUAL was a three-year EQUAL project that aimed at promoting women's entrepreneurship in science and technology in 2007. It combined an online community with coaching and training. The scope of the program included:

- promote networking among women working in technology fields;
- create a mentoring programme for women that were working or studying in technology fields; and
- provide business/entrepreneurship education for post-graduate female students in technology fields.

WomEQUAL was developed into an international co-operation with partners in Austria and Germany. The program had substantial impact on national and international networks of female graduates and scientists.[56]

Later, the NaisWAY project was launched and aimed to increase women's entrepreneurship in technology sectors such as logistics and transport by supporting aspiring women entrepreneurs and women that had recently set up their own business in the sector. The project encouraged women to enter traditionally male-dominated sectors by developing different training methods and ways to deliver them according to women's specific needs. The program also supported women already working as entrepreneurs in transport/logistic sectors with a specialist vocational qualification in entrepreneurship and management. This project won a European award for being one of the most innovative projects in the field of equal opportunities.

In Canada, female employees in STEM-related occupations are only one third of their male counterpart. Moreover, there is a more substantial and increasing gender gap in STEM education in Canada: for every four graduates from post-secondary STEM education, there is only one woman.[57] Several reports concluded that women are substantially underrepresented in Canada's tech industry, with only 6% of founders being female.[58] Therefore, women entrepreneurs in science and technology sectors would need specific support in order to narrow the significant gender gap in the important science and technology sectors.

[54] OECD (2014)
[55] Piacentini, M. (2013).
[56] OECD (2014).
[57] McKinsey Global Institute (2017a).
[58] #movethedial (2017). The report was co-authored by #movethedial, PwC Canada and MaRS,

Work-life balance

As noted earlier, a relatively small number of women owned enterprises are growth-oriented; i.e. producing high levels of income and employment. One of the reasons, according to Thébaud, S. (2015), is the absence of family-friendly work policies, which pushes many women to start their own businesses in order to gain more control over their work schedules and locations. In other words, countries that do not support work-life balance may be ironically pushing women to become entrepreneurs. However, this type of entrepreneurship has a relatively low economic impact.

In countries where governments mandate generous amounts of paid family leave, women who do start businesses tend to build larger, higher-impact, and more scalable enterprises. They employ more workers and express bigger product, service and growth ambitions. **This is a "lean in" entrepreneurship, rather than a "fall back" business.**

Nordic countries illustrate well this entrepreneurship and social care dynamic. In 2008, the Norwegian government launched an Action Plan to promote entrepreneurship among women. The plan included a clear target: women shall represent 40% of all new entrepreneurs by 2013. Among the various measures included in the plan were enhanced rights to maternity leave for self-employed persons, increased grants to micro-credit-projects, and public support for innovation projects. Also, Sweden has a higher labour force participation rate by women in part because it offers well paid leave and child care. In general, Nordic countries have a smaller proportion of women starting businesses than in the US and Canada, but the women-owned start-ups are more growth-oriented.[59]

[59] Thébaud (2015) defined growth oriented by number of people employed, expected number of additional hires, use of new technologies, and new product/service offerings.

Summary of key findings

In the face of the digital revolution, Canada must increase entrepreneurial activity, especially innovative entrepreneurship, in order to secure its economic prosperity. This objective is challenging, given the aging of Canada's population, which all other things being equal, reduces entrepreneurial activity. Since women in Canada are currently under-represented in entrepreneurial activity and substantially so in innovative entrepreneurship, it is essential that economic policy in Canada make the increase of women participation in entrepreneurship a key policy priority. Moreover, such policy will address the relatively higher negative impacts that the digital revolution is expected to create for women.

Based on our preliminary study, we put forward the following key reasons for women's low representation in entrepreneurship and in particular innovative entrepreneurship in Canada that warrants further examination:

1. though Canada has a positive perception for women entrepreneurship in general, cultural barriers may vary across regions, depending on the structure of the respective economies, indigenous presence, and size of immigrant communities in these regions. **Given the relatively high share of indigenous population in Saskatchewan, women entrepreneurs may suffer from additional culture and/or business climate barriers. Further study is needed to identify these barriers and impacts**;
2. research indicates that most innovative entrepreneurship and the resulting scaling up of their business occurs between ages 25-44, which is generally when women have families. Therefore, balancing family responsibilities with business growth impacts women entrepreneurs' desire and ability to scale up their business;
3. lack of access to role models, mentors and networks often impacts confidence and business growth negatively;
4. lack of access to capital and growth capital often results from low representation of women in decision making related to growth capital investments; and
5. women-owned businesses predominate in traditionally female-dominated industries such as the service sector. Women entrepreneurs face more obstacles in male–dominated sectors such as science and technology. Low STEM (Science, Technology, Engineering and Mathematics) education may further restrict women entrepreneurs from participating in high technology enterprises.

Time is of the essence, as the digital revolution is knocking on our doors, and as such it is essential that governments move in a fast pace to address this issue, which is critical to Canadian society's well-being. **As indicated in this report, Saskatchewan is lagging the Canadian average in some benchmarks. Female share of employment and self-employment are 46% and 34% in Saskatchewan, which are lower than the Canadian average levels at 48% and 37%, respectively. In Saskatchewan, only 13.7% of small medium enterprises ("SMEs") are majority female-owned, compared to 17.0% in the top province (Ontario). These facts suggest that the issues raised here are somewhat more acute in Saskatchewan**.

We suggest studying best practices for economic policy that will address in a bold manner the above noted reasons. As a starting point, we suggest considering policies of the following nature in Saskatchewan and other provinces:

1. supportive work-life policies for women foster "lean-in" rather than "fall back" women entrepreneurship. Research shows that women who live in regions that offer better work-life policies tend to build higher-impact and more scalable enterprises. Therefore, policy should aim at providing more external assistance to families (e.g. free early child care) and incentivizing men to participate more in raising children (e.g. mandatory paternal leave), especially for those women who want to become entrepreneurs;

2. fund the creation of networks of experienced business women that will act to provide mentoring, emotional support, and training to young women entrepreneurs;
3. provide training and education opportunities to women in traditionally male-dominated sectors such as agriculture, science and technology; and
4. provide venture capital funds that would be dedicated to women only.

We also suggest that further studies be conducted to identify gender-inequality in inputs to entrepreneurship (e.g. financing and networks) and reasons of under-performance of women entrepreneurship in Saskatchewan. In addition, **we note that data on a provincial level is sparse; thus, the first step to promote women entrepreneurship in Saskatchewan needs to be the establishment of a comprehensive database that would lead to the development of information-based policies**.

Appendix A

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Appendix B

Limitations

This study is preliminary in nature and was not intended to reach detailed conclusions and/or quantify the extent to which women are facing barriers in becoming entrepreneurs and the economic loss, resulting from such barriers. It is rather meant to provide a high-level review as to whether it is reasonable to assume that this phenomenon exists, and its economic significance warrants a larger study.

Data collected by us during the course of this engagement will be available for PwC in future engagements, at our discretion.

Receipt of new data or facts: PwC reserves the right at its discretion to withdraw or make revisions to this report should we receive additional data or be made aware of facts existing at the date of the report that were not known to us when we prepared this report. The findings are as of August 2018, and PwC is under no obligation to advise any person of any change or matter brought to its attention after such date, which would affect our findings.

Use limitations: This report has been prepared solely for the use and benefit of, and pursuant to a client relationship exclusively with the Women Entrepreneurs of Saskatchewan (WESK). We understand that WESK may share our report with third parties. WESK can release this report to third parties only in its entirety and any commentary or interpretation in relation to this report that WESK intends to release to the public either requires PwC's written consent or has to be clearly identified as WESK's own interpretation of the report. PwC accepts no duty of care, obligation or liability, if any, suffered by WESK or any third party as a result of an interpretation made of this report by WESK.

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This report and related analysis must be considered as a whole: Selecting only portions of the analysis or the factors considered by us, without considering all factors and analysis together, could create a misleading view of our findings. The preparation of our analysis is a complex process and is not necessarily susceptible to partial analysis or summary description. Any attempt to do so could lead to undue emphasis on any particular factor or analysis.