



Women's Entrepreneurship & Entrepreneurial Ecosystems in Canada

















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Women Entrepreneurship Knowledge Hub (WEKH) is a national network and accessible digital platform for sharing research, resources, and leading strategies. With ten regional hubs and a network of more than 200 partners, WEKH is designed to address the needs of diverse women entrepreneurs across regions and across sectors. In response to COVID-19, WEKH adopted an agitator role connecting women entrepreneurs and support organizations across the country and led network calls and training sessions. WEKH's advanced technology platform, powered by Magnet, will enhance the capacity of women entrepreneurs and the organizations who serve them by linking them to resources and best practices from across the country.

With the support of the Government of Canada, WEKH will spread its expertise from coast to coast, enabling service providers, academics, government, and industry to enhance their support for women entrepreneurs. Ryerson University's Diversity Institute, in collaboration with Ryerson's Brookfield Institute for Innovation + Entrepreneurship and the Ted Rogers School of Management, is leading a team of researchers, business support organizations, and key stakeholders to create a more inclusive and supportive environment to grow women's entrepreneurship in Canada.

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For more information on the Global Entrepreneurship Monitor (GEM) global reports and on GEM, please contact the GEM Executive Director, Aileen lonescu-Somers, at asomers@gemconsortium.org.

The 2018/2019 GEM Global report is available at gemconsortium.org

Although GEM data were used in the preparation of this report, their interpretation and use are the sole responsibility of the authors and the GEM Canada team.

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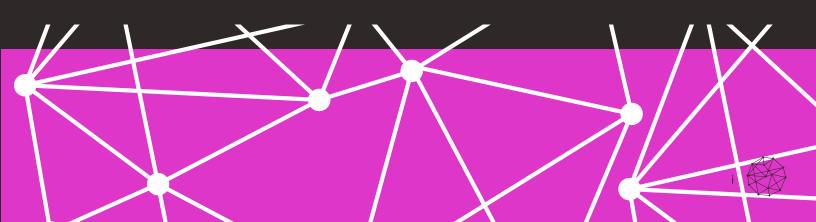
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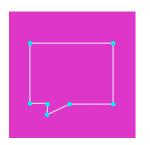
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Executive Summary

This report examines Canadian women's entrepreneurship and entrepreneurial ecosystems (EE), using data from the 2019 Global Entrepreneurship Monitor (GEM) Canada survey. The value of an "ecosystem" approach is increasingly recognized by researchers, practitioners, and policymakers. It marks an important shift in thinking about entrepreneurship. Traditionally, entrepreneurship has been conceptualized as a largely "individual" endeavor, with an emphasis on the traits and characteristics needed for success. Clearly, individual entrepreneurs have a pivotal role to play in the success and growth of their businesses, but so too do the contexts and "ecosystems" of which they are a part (Welter, 2019).

While there are many ways of thinking about entrepreneurial ecosystems (EE), they are generally regarded as a set of interdependent actors (e.g., leaders, policymakers) and factors (e.g., financing, infrastructure) that are coordinated in such a way as to enable "productive entrepreneurship" within a specific territory or region (Stam and Spigel, 2016; Stam, 2018). Examples of some of the ingredients of a supportive ecosystem might include having access to financing and a welleducated workforce, as well as successful, established, entrepreneurial leaders who are willing to serve as mentors and role models for those starting up.

Building on recent studies of women's entrepreneurship and ecosystems in Canada (Orser et al., 2019; Cukier and Chavoushi, 2020; Hughes and Yang, 2020), the purpose of this report is to deepen our understanding of the gendered nature of entrepreneurial ecosystems in Canada using a gender-

aware approach (Brush et al. 2009). The report focuses on two distinct ecosystems for which GEM Canada gathered data in 2019: Alberta and Nova Scotia. Using the methodological approach developed by the Global Entrepreneurship Monitor (GEM), it analyzes the 10 pillars that make up the "entrepreneurship ecosystem" (Stam, 2015). These include: networking (Pillar 1), leadership (Pillar 2), financing (Pillar 3), talent (Pillar 4), knowledge (Pillar 5), support services and infrastructure (Pillar 6), formal institutions (Pillar 7), culture (Pillar 8), physical infrastructure (Pillar 9), and demand for goods and services (Pillar 10).

Overall, the analysis identifies key strengths and weaknesses of the two ecosystems, Alberta and Nova Scotia, as well as gender differences within each. While each ecosystem is shaped by local and provincial influences, federal government policies are important as well-for example, those focused on economic growth and innovation, as well as focused initiatives such as the Women's Entrepreneurship Strategy (Cukier and Chavoushi, 2020). In considering specific ecosystems, it is important to note that Canada has seen fluctuation in GDP growth in recent years, with strong regional variation. Alberta, while historically a centre of strong growth, has seen significant volatility in recent years. In contrast, Nova Scotia, has offered a steadier economic climate, despite having historically lower growth and higher unemployment than Alberta.



Concerning the assessments of each ecosystem, both Alberta and Nova Scotia are characterized by very positive attitudes toward entrepreneurship. We also see high levels of entrepreneurial activity, especially in Alberta, but also distinct gender gaps. For Alberta, this is borne out in the data in the following ways:

- > Overall, Albertans show a great level of interest in, and support for, entrepreneurship. High scores are evident for networking (Pillar 1), culture (Pillar 8), and demand (Pillar 10). Not only do Albertan entrepreneurs see good opportunities for business start-ups in the near future, they also report having strong networks, which help them tap into essential knowledge and resources available within a connected ecosystem.
- > Entrepreneurs view the physical infrastructure as strong and agree there is a talented pool of affordable employees. Support services are generally perceived favourably, and bureaucracy and regulation are not seen as a serious impediment to start-up activity.

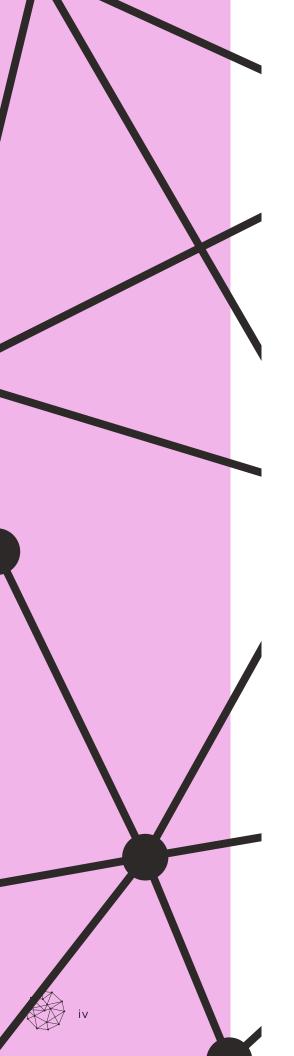
With respect to gender and assessments of the Alberta ecosystem, we see minimal or no gender gaps on a number of pillars but there are several pillars that receive less favourable scores from women, especially leadership (Pillar 2), finance (Pillar 3), and talent and capabilities (Pillar 4).

On the leadership pillar, women business owners are less likely than men to agree that there is visible and impactful entrepreneurial leadership that can aid their endeavours (e.g., mentorship, role modelling); on a scale from 1 to 5, the average leadership score for men is 2.62 while the average score for women is 2.51.

- > Women business owners are also less likely than their male peers to report that they have the financial support they need as they launch their businesses. On a scale from 1 to 5, the average score for women is 2.62, while the average score for men is 2.91.
- > With respect to preparedness for entrepreneurship, Alberta women are far more likely than men to question their capabilities and talent to start a business and to perceive a slightly less supportive culture overall. 67% of men respondents answered in the affirmative that they have the knowledge, skill, and experience for a new business, in comparison to 49.7% of women.

Turning to the Nova Scotia ecosystem, the data also suggest a generally supportive environment for entrepreneurial activity. This is seen on key dimensions measured in this data as follows:

- Nova Scotia displays a very positive culture of support for entrepreneurship, with high scores on this dimension (Pillar 8). The vast majority of respondents regard entrepreneurship as a desirable career choice and view successful owners of start-ups with a high level of status and respect. The average score for culture of support in Nova Scotia was 4.06, on a scale from 1 to 5.
- > High scores are also found for networking (Pillar 1), with an average score of 3.25 out of 5. There is a strong aspect of connection, with both men and women entrepreneurs actively participating in relevant business networks and able to seek advice.
- Nova Scotia also fares quite well with respect to demand and opportunities for business (Pillar 10). Over half of Nova Scotians perceive that conditions are favourable for starting a new business in the next six months.



Although the climate is generally good for entrepreneurship in Nova Scotia, there are noteworthy gender differences. Specifically:

- > We see notable gender gaps in the assessment of leadership, mentorship, and role models (Pillar 2). The absence of visible and impactful leadership is especially evident for emerging women entrepreneurs in Nova Scotia.
- Concerning finance (Pillar 3), men report a much greater sense of financial support in the start-up phase than do women. The average score in this category was 2.52 out of 5 for women and 3.48 out of 5 for men. In turn, women are less able to support other businesses financially than are men.
- > With respect to talent (Pillar 4), women are strikingly less likely than men to report that they have the necessary abilities to begin a business venture. 42.22% of women answer that they have the necessary capacity, in comparison to 73.39% of men. While this is also the case in Alberta, the gap in Nova Scotia context is far wider.
- > While both men and women are fairly equally satisfied with labour availability and affordability, men in established businesses report a dramatically different perspective on labour shortages, indicating that it is more of a concern and challenge for them.
- > Women report more support in the start-up phase than men, but they are also more likely to perceive bureaucratic impediments in the early stages. Nascent women entrepreneurs are also notably less satisfied with physical infrastructure supports, although this evens out between men and women in established businesses.

In summary, both Alberta and Nova Scotia have highly supportive cultures for entrepreneurship; entrepreneurs in both provinces perceive adequate levels of support on most pillars of entrepreneurship measured in this data. Nevertheless, gender gaps are evident throughout the data, to a slightly greater extent in Nova Scotia than in Alberta. For women entrepreneurs, the most important gaps in the ecosystem relate to leadership (e.g., visible leaders and role models), practical facilitators for business (e.g., adequacy of financing), and finally women's own perceptions about their capabilities to take on business ownership.



Canada and the Rise of the Entrepreneurial Economy

Over the past decade or more, Canada has seen a remarkable surge of interest in entrepreneurship and start-up activity, often ranking among the leading countries for entrepreneurship across innovation-based economies. According to GEM's 2019 Global Report, for example, Canada had the highest rate of total early-stage entrepreneurial activity (TEA), compared to other G6 countries including the USA, United Kingdom, Germany, Italy, and Japan.¹

Women's growing engagement with business ownership and new venture creation is a particularly striking feature of the shift toward a more entrepreneurial economy in Canada.² Since 2013, GEM Canada reports have shown that Canada has consistently ranked in the top-tier of mature, high-income nations with respect to early-stage start-up activity. Canadian women have held a solid place among high-income nations for established business ownership as well (i.e., businesses 3.5 years or older). 3 Importantly, this shift has taken place amidst a significant expansion of and interest in women's entrepreneurship around the globe, with a growing body of policy and academic research exploring a wide array of issue in terms of gender and entrepreneurial attitudes, motivations, and opportunities, to name a few.4

Accumulating evidence suggests that entrepreneurial ecosystems play a critical role in supporting women's entrepreneurial endeavours (Brush et al., 2009). However, to date, they have not yet received as much attention as other issues. Moreover, in mainstream entrepreneurship research there has been a tendency to view ecosystems in

gender-neutral terms, assuming that they shape the endeavours of entrepreneurs in relatively similar ways, regardless of their gender, age, location, or other sources of difference. However, a growing body of research suggests the need for gender-based analysis in this regard (Orser et al., 2019; Cukier and Chavoushi, 2020).

Contributing to the accumulating knowledge about entrepreneurship in the Canadian context, this report undertakes a genderbased analysis of ecosystem issues, based on recent GEM Canada data. It focuses on two regional ecosystems: Alberta and Nova Scotia. This choice of ecosystems serves to complement other recent work on these issues in Canada, such as the gender-based analysis of the Ontario entrepreneurial ecosystem (Orser et al. 2019). This report, however, utilizes a distinct methodology based on the GEM Entrepreneurial Ecosystem Index (ESI) (see Section 2, Entrepreneurial Ecosystems in the Canadian Context) with important adjustments to allow for gender-based analysis.

Key Questions and Report Organization

This report explores several important questions concerning the nature of the specific entrepreneurship ecosystems in Alberta and Nova Scotia. The first set of questions concerns the general features of Alberta and Nova Scotia, such as their economic history, industrial base, population, and labour markets. The second set of questions concerns general assessments of the key dimensions of the ecosystem. A third set of questions concerns the gendered nature of ecosystems and the similarities and differences in how women and men experience entrepreneurship.



In terms of organization, the second section introduces the GEM methodology and approach to studying ecosystems. It also outlines data sources used in the 2019 GEM Canada study, especially the adult population survey (APS) and ecosystem indicators (ESI). The third section introduces the two ecosystems under study, Alberta and Nova Scotia, and examines their general characteristics. The fourth and fifth sections examine the central pillars of the regional ecosystems for Alberta and Nova Scotia, focusing on the 10 key pillars identified within the GEM-ESI approach. These include: networking (Pillar 1), leadership (Pillar 2), financing (Pillar 3), talent (Pillar 4), knowledge (Pillar 5), support services and infrastructure (Pillar 6), formal institutions (Pillar 7), culture (Pillar 8), physical infrastructure (Pillar 9), and demand for goods and services (Pillar 10). The final section draws together key findings and offers policy recommendations based on the empirical results.

GEM Canada ESI Data and Methodology

The GEM Canada survey is conducted annually and follows the methodology and protocols developed by the Global Entrepreneurship Monitor (GEM). Launched in 1999 as a joint project between London Business School (UK) and Babson College (USA), the Global Entrepreneurship Monitor (GEM) is the longestrunning and most comprehensive longitudinal study of entrepreneurship in the world. It operates as a consortium of national teams who are typically comprised of researchers at leading academic institutions in their countries. GEM is the only global academic partnership of its kind to collect data about the experience of entrepreneurship at the individual level, from entrepreneurs themselves. Over the past 20 years, GEM has gathered data from over 100 countries, with numbers varying each year. In 2019, 49 countries, including Canada, participated in GEM.

The primary goal of GEM is to understand entrepreneurship in national and global contexts, focusing on two key dimensions: i) the attitudes, activity, and aspirations of individual entrepreneurs; and ii) the national context and how it impacts entrepreneurial activity. Canada has participated in GEM on a regular annual basis since 2013, with the GEM Canada team gathering data and producing a wide series of national and regional reports each year.5 These reports provide a muchneeded picture of entrepreneurial activity in Canada. Though not focusing explicitly on women entrepreneurs, the national reports highlight broad gender trends on a number of indicators (e.g., types of entrepreneurial activity). In addition to the regular GEM Canada reports, three special reports have focused on gender-based trends in entrepreneurship, including two focusing on national trends, and one focusing on Alberta.6

GEM Model and Methodology

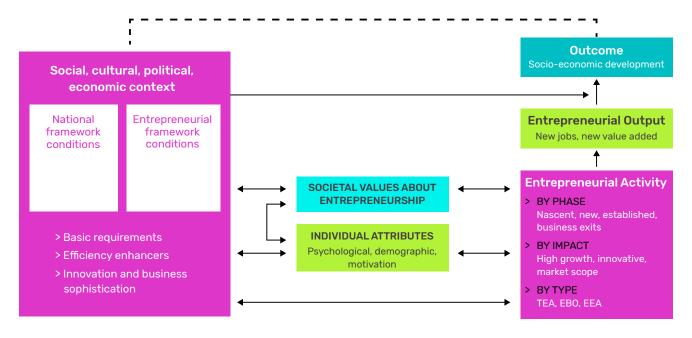
The Global Entrepreneurship Monitor (GEM) defines entrepreneurship as: "Any attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of an existing business, by an individual, a team of individuals, or an established business."

At the heart of the GEM model is a focus on the individual entrepreneurs, and their attitudes, activities, and aspirations, as well as the entrepreneurial ecosystems in which they operate. The GEM Framework (see Figure 1) is designed to capture comprehensive data on an economy's entrepreneurial conditions, including the attitudes and social values attached to entrepreneurship, the background and characteristics of individual entrepreneurs (e.g., age, gender, education), types of entrepreneurial activity (e.g., earlystage, established) and the characteristics of the businesses that entrepreneurs are involved in (e.g., industry, region, job creation, innovation, exporting, financing, growth aspirations).



FIGURE 1

The GEM Framework



Source: Bosma, Neil and Donna Kelley. 2019. Global Entrepreneurship Monitor 2018/19 Global Report.

Overall, the GEM model views entrepreneurship as a process with distinct phases. As depicted in Figure 2, this process moves from exploring potential ideas and opportunities for a business, to nascent entrepreneurship involved in setting up a new business, to owner-manager of a relatively new business (up to 3.5 years), to owner-manager of a more established venture (3.5 years or more). Following this process approach, the GEM model also tracks business exits and discontinuance.

A central measure of GEM is early-stage entrepreneurial activity (TEA). This includes those in the process of starting a business (nascent entrepreneurs), and those running a young business (3–42 months old), but excludes those in the established business phase (firms older than 42 months or 3.5 years). By exploring these various phases—

and especially the difference between "early-stage" (TEA) and "established businesses" (EB)—the GEM project offers data not typically available from standard business statistics or official government measures.

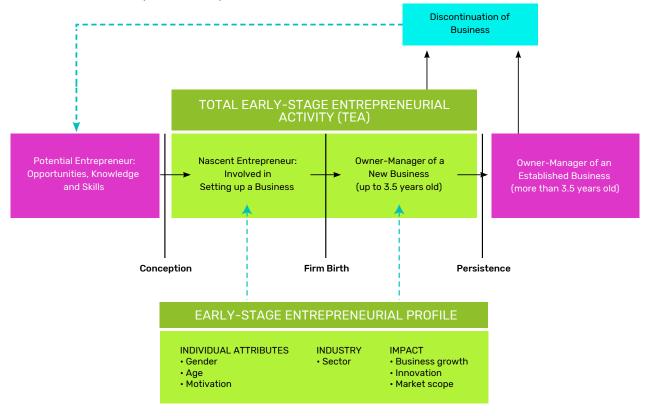
With respect to data collection, GEM collects information at the national level through two main sources:

Adult Population Survey (APS)

Data for the APS is gathered through a telephone survey of randomly selected adults, aged 18 to 99 years, conducted by an independent polling firm. Using the standard GEM questionnaire protocol, it covers a variety of questions on entrepreneurial attitudes, activities, and aspirations. The APS data provides a profile of representative data, weighted for age and gender to standard Canadian demographic data.⁸

FIGURE 2

The Phases of Entrepreneurship



Source: Langford, Josty and Saunders (2016). GEM Canada 2015 Report, p. 14.

National Expert Survey (NES)

Data is also collected through the National Expert Survey (NES). Areas of expertise that are specified by GEM include finance, policy, government programs, education and training, technology transfer, support infrastructure, and wider socio-cultural norms. The questionnaire presents a series of statements concerning support for entrepreneurship, and experts are asked to assess the degree to which each is true for Canada. The final section solicits openended responses. In the context of provincial ecosystem data collection, these are referred to as Provincial Expert Surveys (PES).

GEM Ecosystems Indicators (ESI)

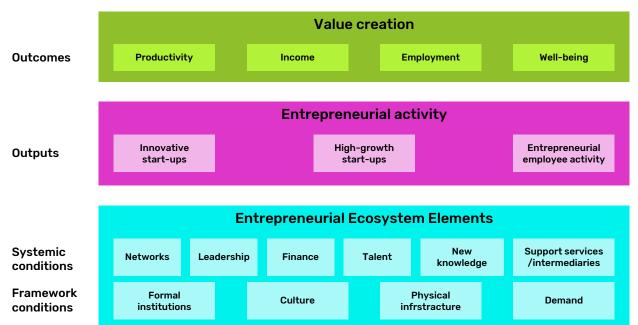
For the past 20 years, the GEM APS and GEM NES have been the main focus of data collection. In 2019, building from this foundation, data collection for GEM ESI (ecosystem indicators) have been added to generate new insights and analysis on the economic, social, political, and cultural contexts in which entrepreneurship occurs. This approach has been influenced by a broader shift within entrepreneurship research, mentioned in the Introduction, that has shifted away from an emphasis on individualized models of the solitary, heroic entrepreneur, toward a more contextualized approach that views entrepreneurship as a process that occurs within diverse contexts and involves many different actors, communities, and supports (Welter, 2019; 2020).

Following the work of Stam & Spiegel (2016), the GEM ESI approach conceptualizes entrepreneurial ecosystems as involving interdependent actors and factors that come together in such a way as to support and enable "productive entrepreneurship" (Baumol, 1990) within a specific geographical territory, with a focus on territories at a subnational level (e.g., regional, local). As shown in Figure 3 there are 10 elements, or pillars, at the heart of the ecosystem:

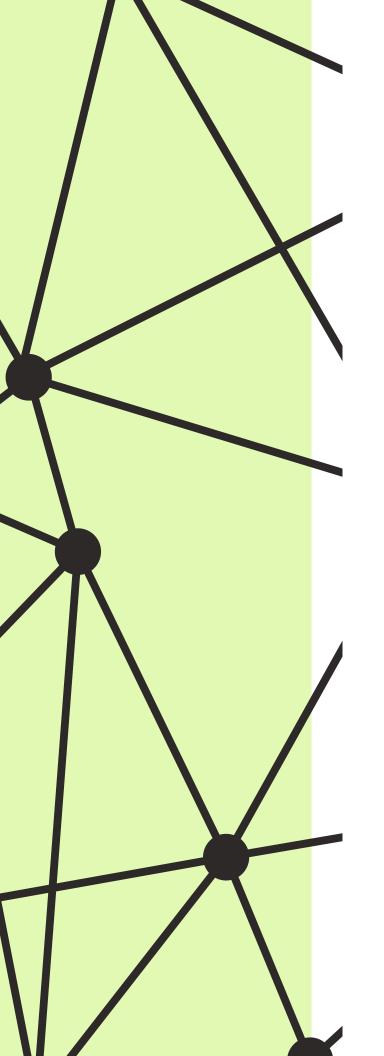
- Networks of entrepreneurs who provide a flow of information, distributing knowledge, capital, and labour;
- Leadership, which provides a set of visible entrepreneurial leaders to serve as advocates for the regions and as potential role models and mentors for active or aspiring entrepreneurs;
- Finance, including robust systems of formal and informal investors;
- 4) Talent, seen as one of the most important ingredients and involving a diverse and skilled set of individuals:

- 5) **Knowledge** of a wide range, from both public and private organizations;
- Support services by various intermediaries that can speed the time to market for new innovations or assist in reducing barriers to entry for new entrepreneurs;
- 7) Formal institutions, including various levels of government (e.g., municipal, provincial), recognizing the role that these institutions play in setting the framework for business start-up and growth;
- 8) Culture, addressing contextual attitudes toward entrepreneurship, which shape the willingness of individuals to consider business start-up and business ownership activities;
- 9) Physical infrastructure, focusing on features of the broader infrastructure (e.g., transportation, telecommunications, physical space) that are critical for launching new businesses and running established ventures;
- 10) Demand, reflecting the general economic health of the regional ecosystem and the extent to which conditions are favourable for starting a business.

FIGURE 3
Stam (2015) Model of Entrepreneurial Ecosystems







Using the GEM surveys (APS, NES, and ESI), it is possible to assess elements of these 10 pillars in the regional ecosystems and to generate an average score for each of them. The goal is to provide policymakers, and other stakeholders who interact with and support the target ecosystem, with objective information that can help to improve its performance and socioeconomic impact.

While there are a number of other methodological and empirical approaches to assessing entrepreneurial ecosystems (e.g., Startup Genome, Startup Commons), the GEM ESI approach is unique, as it can be applied to any target ecosystem that participates in the annual GEM data collection process and is independent of other secondary information. However, it should be noted that the methodological approach used in this study departs in some ways from the GEM ESI approach, as that approach does not fully support a gender-based analysis. That is, the indices created are weighted scores based on data from the APS (i.e., a broad spectrum of entrepreneurs in the ecosystem) and PES (i.e., small number of experts in the ecosystem). While APS data can be analyzed by gender, this is not possible for PES data. Thus, the approach used in this report is based upon the GEM ecosystem indices without inclusion of the PES data. This approach still provides very valuable insights into gender-based differences in entrepreneurial experiences within distinct provincial ecosystems. Further refinements in the GEM ESI approach that would be helpful going forward include the ability to analyze PES data by gender and the inclusion of additional gender-aware questions on the nature of the ecosystem (e.g., including access to quality, affordable childcare as a measure of infrastructure). Additional data collection on key sociodemographic information (e.g., federally designed equity groups) would also enable a deeper intersectional analysis of ecosystems (see Orser et al., 2019; Cukier and Chavoushi, 2020 for valuable discussions).



Entrepreneurial Ecosystems in the Canadian Context

Entrepreneurial ecosystems are complex entities and have been conceptualized and defined in a number of different ways. Generally speaking, ecosystem approaches share an interest in the economic and social history of specific regions, their current macro-economic conditions, specific physical infrastructure, public policy, educational systems, and culture (see Stam, 2015 for a useful overview of approaches). Sorting through different factors that make up an ecosystem, Stam differentiates between what he terms "systemic conditions" and "framework conditions." "Systemic conditions" include the networks of entrepreneurs that exist and leadership in the ecosystem, as well as the availability of key resources, such as finance, talent, knowledge, and support services. "Framework conditions" include the culture of a specific region, its formal institutions and physical infrastructure, as well as the overall demand for goods and services (e.g., annual GDP growth).

In this section, we offer a brief overview of the two provincial ecosystems of interest in this report: Alberta and Nova Scotia. We also briefly discuss the broader national context, as it plays an important role in shaping each provincial ecosystem.

Canadian Context

In Canada, the federal-provincial division of powers and systems of transfer and equalization payments are especially important to consider when discussing entrepreneurial ecosystems; it must be recognized that both federal and provincial levels of government (as well as municipal

levels) have an influence on economic growth, opportunities, and engagement with entrepreneurship in specific provinces and regions. As an example, national programs such as Employment Insurance ensure the presence of a social safety net across all regions, while taking local conditions into account. Likewise, systems of transfers and equalization payments help to establish a minimum floor of public services across the provinces, which has an impact on the support and infrastructure that may exist in an ecosystem. Over the years, Nova Scotia has been a net beneficiary of equalization, while Alberta has typically been a net contributor, with the latter being seen historically as a far more entrepreneurial province.9

Especially important for women's entrepreneurship in Canada is the recent work of the federal government in spearheading a major initiative, the Women's Entrepreneurship Strategy (WES). Announced in the 2018 federal budget, this initiative involves a nearly \$5 billion investment to help double the number of women-owned businesses by 2025,10 by both increasing the number of women involved in business startup activity and encouraging greater growth and longevity for more established womenled businesses (see Cukier and Chavoushi. 2020 for an overview). Included in these investments are the Business Development Bank of Canada's \$1.4 billion envelope of lending for women entrepreneurs; \$200 million for the Women in Technology Venture Fund aimed at supporting womenled businesses in tech and tech-related industries; a \$500 million Farm Credit Canada Women Entrepreneur Program for women in agriculture, agribusiness and food; and



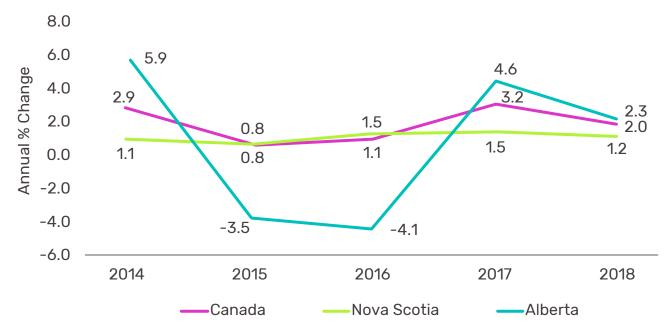
Export Development Canada's \$2 billion target for women exporters and \$100 million Women in Trade Investment Program. It is envisioned as "a comprehensive effort to break down the barriers to growth-oriented entrepreneurship that will include new direct funding from the regional development agencies targeted to women entrepreneurs, mentorship and skills training, as well as targets for federal procurement from women-led business" (Canada, 2018: 256). An additional \$10 million will be invested into Global Affairs Canada's Trade Commissioner Service, to support enhancements to the Business Women in International Trade (BWIT) initiative¹¹ and activities such as women-focused trade missions, advisory services, and access to global value chains (Canada, 2018: 244). Several new initiatives have also been launched, such as the Women Entrepreneurship Fund, the WES Ecosystem Fund, and the Women Entrepreneurship Knowledge Hub (WEKH).12 Historically, the federal government has also played a central role in supporting and developing women's enterprise through federally funded women's enterprise

centres. For example, Western Economic Diversification Canada is a federal agency that funds four women business support and financing organizations in the provinces of Manitoba, Saskatchewan, Alberta, and British Columbia.

Other facets of the Canadian context are important to consider with respect to provincial ecosystems. An especially important one, reflecting Stam's (2015) previously noted "framework conditions," concerns overall GDP growth. In recent years, Canada has experienced periods of strong economic growth, as well as downturns, in specific sectors and regions. Currently, the COVID-19 pandemic, which began affecting the Canadian economy and businesses in March 2020, constitutes an unprecedented negative shock. While its medium- to longterm impact are yet to be charted, it is clear in the short term that there will be dramatic impacts on economic growth.

With respect to past trends in GDP growth, Statistics Canada (Figure 4) shows annual GDP growth from 2014 to 2018 for Canada and the two provinces of interest in this

FIGURE 4
Annual GDP Growth, Canada, Nova Scotia, and Alberta, 2014–2018¹³



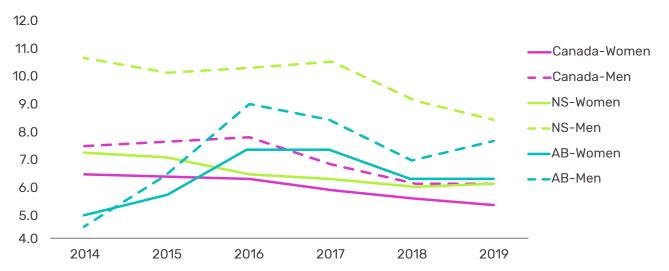


report: Alberta and Nova Scotia. As we can see, growth rates at the national level have fluctuated over time, moving from 2.9% in 2014 to 2.0% in 2018, with a notable decline in 2015 and 2016 and then a strong rebounding in 2017. Provincially, we see distinct patterns between Alberta and Nova Scotia, reflecting their economic base. Given the volatility in energy markets, Alberta has seen much wider swings in annual GDP growth, in both positive and negative directions. In 2014, growth levels were far above the national average, falling sharply in 2015 and 2016, and then rising dramatically in 2017, before levelling out toward the national average in 2018. In contrast, Nova Scotia has seen relatively little volatility, with growth rates typically below the national average and fluctuating only mildly, from 1.1% in 2014 to 1.2% in 2018.

A second indicator that is important to keep in mind when discussing entrepreneurial ecosystems is the unemployment rate, which has often been a focus of attention in relation to entrepreneurship

on the assumption that job loss may lead unemployed individuals into "necessity entrepreneurship." As Figure 5 shows, Canadian rates of unemployment have slowly trended downward in recent years, both for women and men, following the 2008 financial crash, where the national unemployment rate rose to 8.3% in 2009, a dramatic jump from 6.1% in the previous year. Currently men's unemployment rates are higher than women's at the national level-a trend that is also evident for Nova Scotia and Alberta. However, in Nova Scotia, the gender gap in unemployment is much wider than in Alberta. In contrast, in Alberta, there is much more volatility in rates over the 2014-2019 period, with much higher unemployment rates for women and men in 2019 than in 2014, due to the recent collapse in energy markets. In contrast, in Nova Scotia, unemployment has declined over the 2014-2019 period, mirroring national trends, though the unemployment rate for men remains especially high.

FIGURE 5
Unemployment Rates, Women & Men, Canada, 2011–2019 (Annual Avg.)¹⁴



Regional Ecosystem: Alberta

In terms of the specific ecosystems of interest in this report, Alberta is the fourth largest province in Canada, with a population of 4.4 million in 2019. The largest of the three Prairie provinces, it is bordered by the provinces of Saskatchewan to the east and British Columbia to the west. Since its inception as a province in 1905, Alberta has been seen as a resource-rich jurisdiction. While agriculture played a leading role in its early history, with the discovery of oil in 1947, Alberta became known as an "energy" province, with the oil and gas sector being a primary driver of its growth and wealth, and leading to many boom and bust cycles given the global market for energy. During the booms, Alberta has seen unprecedented levels of economic growth, low unemployment, and high in-migration from other provinces. Busts, including the recent collapse of oil prices in 2019-2020, have meant significant hardship and rising unemployment and economic precarity. Nonetheless, Alberta retains a highly entrepreneurial culture, with some of the highest rates of early-stage and established business ownership in the country.

As we can see in Figure 6, men have much higher labour force participation (76.9%) than women (65.7%)—though it bears noting that Alberta still has some of the highest rates of women's labour force participation in the country. Unemployment rates are currently much higher than in recent years, as noted earlier, with much higher rates for men (7.5%) than for women (6.2%). The entrepreneurial nature of the province is evident in the very high rates of start-up business activity, with 16.9% of women and 16.3% of men reporting some form of early-stage activity. Engagement in established business (3.5 years and older) is also high compared to the national average, with 6.8% of women and 11.5% of men involved in some form of established business.

FIGURE 6

Key Indicators for Alberta



Population (2019)	4.37 million (11.6% of total pop)		
	Women	Men	
Labour force indi	cators		
Participation rate (2019)	65.7%	76.9%	
Unemployment rate (2019)	6.2%	7.5%	
Entrepreneurial activ	vity rates		
Total early-stage entrepreneurial activity (GEM 2019)	16.9%	16.3%	
Established business activity (GEM 2019)	6.8%	11.5%	
Attitudes toward entre	preneursh	nip	
% see good opportunities	67.6%	66.7%	
% agree entrepreneurship a good career choice	78.6%	81.2%	
% agree entreprenurship has high status	74.3%	76.7%	
% have knowledge, skills, experience for success	49.7%	67.0%	

Source: Data is from Statistics Canada Labour Force Survey Table 14-10-0327-02 and GEM APS.



In terms of attitudes and outlooks, the GEM Canada data provides clear indicators of strong engagement with enterprise in Alberta. Despite the challenging nature of the Alberta economy in 2019, over two-thirds of women and men in the general population saw good opportunities for a business (in roughly equal proportions). Roughly 4 of 5 women and men viewed entrepreneurship as a good career choice, and about threeguarters felt it had high status. There are very few gender gaps on these indicators. Where we do see a gender divide is in selfassessments of having the capabilities (e.g., skills, knowledge, and experience) to start a business. Here just under half of women (49.7%), but over two-thirds of men (67.0%), felt prepared to launch and run a business. This gap is important, suggesting the need for stronger supports to encourage women in Alberta to consider and prepare for business ownership. Overall, however, Albertans appear to have an extremely positive outlook on entrepreneurship suggesting a strong supportive culture, which Stam (2015) identifies as an important "framework condition."

Regional Ecosystem: Nova Scotia

Turning to the second ecosystem of interest, Nova Scotia is the seventh most populous province/territory in Canada, with a population of just under 1 million in 2019. With respect to population, it is the largest of the Atlantic provinces, with a sizeable urban population that resides in the main metropolitan centre, Halifax. Historically, Nova Scotia's economy centred around shipbuilding and the fishery, as well varied resource extraction and related activities (e.g., coal mining, forestry, steel making). Nova Scotia also had some of the first factories (e.g., glass, clothing) in early industrializing Canada, though manufacturing would later relocate to and consolidate in Ontario and Quebec.15

In the contemporary context, while the Atlantic provinces have typically lagged behind other Canadian provinces on key economic indicators (e.g., GDP growth, labour force participation), Nova Scotia's economy is viewed as relatively strong and well diversified in comparison to other Atlantic provinces and certainly by historical standards. Today, it operates as the regional hub for Atlantic Canada, benefiting from high levels of immigration and having the largest service sector share of GDP in the country. This, along with several federal mega projects (e.g., shipbuilding), has made up for declines in manufacturing, mining, and oil and gas extraction over the years.16

As we can see in Figure 7, men have much higher labour force participation (65.2%) than do women (59.4%), though with rates much lower (about 10%) than in Alberta. While unemployment rates in Nova Scotia have trended downwards in recent years, rates are still higher than the national average, especially for men (8.4%). In terms of entrepreneurial activity in Nova Scotia, men have high levels of engagement, with 14.6% of men reporting some involvement in early-stage businesses that are 3.5 years or younger. For women, however, activity rates are much lower, with just 8.1% reporting engagement in start-ups. Men are also much more likely to be involved in established businesses (9.9%), while women's involvement is very low by comparison (3.8%). When comparing Nova Scotia's situation to that of Alberta, it is clear that there are much more pronounced gender gaps in entrepreneurial activity. Indeed, while Nova Scotian men have a profile more like Albertan men (though with somewhat lower activity rates), Nova Scotian women are far less involved in business ownership, especially when looking at start-ups, with activity rates roughly half those of Albertan women.



<u>FIGURE 7</u> Key Indicators for Nova Scotia



Population (2019)	971,395 (2.6% of total)		
	Women	Men	
Labour force indic	force indicators		
Participation rate (2019)	59.4%	65.2%	
Unemployment rate (2019)	6.0%	8.4%	
Entrepreneurial activ	ity rates		
Total early-stage entrepreneurial activity (GEM 2019)	8.1%	14.6%	
Established business activity (GEM 2019)	3.8%	9.9%	
Attitudes toward entrep	reneursh	ip	
% see good opportunities	67.5%	75.0%	
% agree entrepreneurship a good career choice	85.0%	82.9%	
% agree entreprenurship has high status	81.2%	81.0%	
% have knowledge, skills, experience for success	42.5%	73.4%	

Source: Data is from Statistics Canada Labour Force Survey Table 14-10-0327-02 and GEM APS.

Turning to entrepreneurial attitudes and outlooks among the general population, GEM Canada data shows exceptionally high levels of engagement on some indicators for Nova Scotians-in some cases, slightly higher than those seen among Albertans. For instance, over four-fifths of the population views entrepreneurship as a good career choice and as having high status. Here we see few differences in the perspectives of women and men. A very strong majority also see good opportunities to start a business in the near future, though this is more the case for men (75.0%) than women (67.5%). More significant gender gaps are apparent, as with Alberta, in self-assessed capabilities (e.g., skills, knowledge, and experience) to launch and run a business successfully, with a 30% gap between women and men. While a minority of women (42.5%) believe they have the skills, knowledge, and experience for entrepreneurship, this is the case for the vast majority (73.4%) of men.

Summary

The ecosystem lens is increasingly used as a frame for the study of entrepreneurship. Entrepreneurship ecosystems involve a set of inter-related elements that support entrepreneurial activity within a given context. These elements include regional economic and social histories, current macro-economic conditions, and specific supports and facilitators such as physical infrastructure, public policy, educational systems, and cultural attitudes around entrepreneurship.

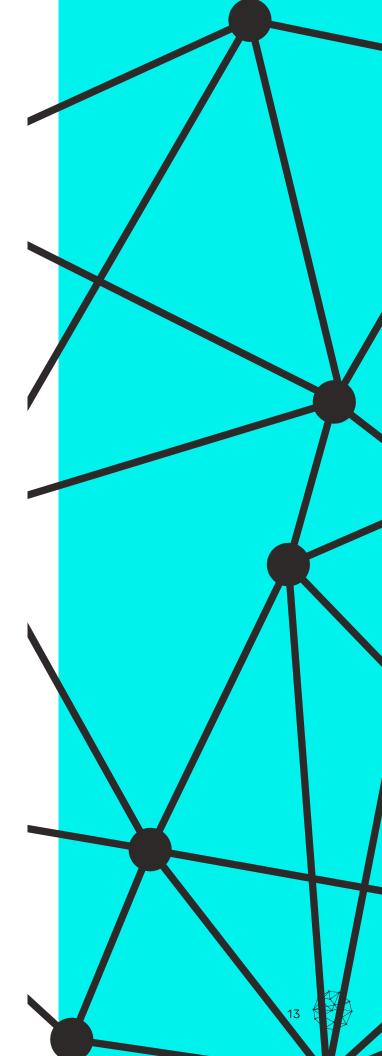
Canada is composed of ten provincial and three territorial jurisdictions, each with their own unique regional characteristics, overarched by a federal government representing national interests. Canada's federal government has implemented several programs in support of entrepreneurship, especially in an effort to enhance women's entrepreneurial possibilities. When

considering overall economic well-being, Canada has seen fluctuations in annual GDP growth over the last six years, with regional variations in the extent of these changes. Alberta, relying significantly on an oil and gas economy, has seen wide fluctuations over this period, while Nova Scotia's economy has been much steadier. These trends are evident with regard to unemployment as well.

Alberta is a well-populated, resource-rich jurisdiction with a strong entrepreneurial culture. Nova Scotia is a small province, through it is a hub in Atlantic Canada and has a relatively strong economy within the region. Alberta has higher labour force participation overall, with less of a difference between men and women when compared to Nova Scotia. Men in both provinces have fairly high levels of entrepreneurial engagement, while there is a notable gender gap on this measure between regions. Entrepreneurship is viewed as a good career option for Albertans and Nova Scotians alike. What is especially notable is the gender gap in both provinces on self-assessment of capabilities to start a business venture, with far fewer women than men agreeing that they have the skills and experience required.

The next two sections explore each of these Canadian entrepreneurial ecosystems in greater detail.

What is especially notable is the gender gap in both provinces on self-assessment of capabilities to start a business venture, with far fewer women than men agreeing that they have the skills and experience required.





Alberta Ecosystem: Assessment of 10 Pillars

Within the Canadian context, Alberta has long been recognized as one the most entrepreneurial economies in the country. According to GEM Canada reports, Alberta has had the highest rate of entrepreneurship of any province over the past five years, with 16.6% of Albertans involved in early-stage activity and 9.2% of Albertans in established business in 2019. Alberta women have played an especially significant role spurring entrepreneurial activity in both Alberta and Canada, with several highly successful influential entrepreneurs, such as Arlene Dickinson and Manjit Minhas, making the province their home (Hughes, 2018). Alberta also has a long running and highly successful Women Enterprise Centre, Alberta Women Entrepreneurs, which has developed very innovative programs to support women's entrepreneurial aspirations, both in start-up activity and increasingly in high-growth enterprise (Hughes, 2018; Hughes and Yang, 2020). In recent years, GEM Canada data shows that women in Alberta are involved in early-stage activity (firms less than 3.5 years old) at rates far above the national average. For established firms, women's activity is also very high.

Pillar 1: Networking

It is clear from a wide range of studies that social capital and networks are critical for entrepreneurial success.¹⁷ Networking is a core strength of the Alberta ecosystem, with an overall score of 3.15, as we can see from Table 1. Overall, women entrepreneurs are very well connected, with 84.3% of them indicating that they know other entrepreneurs. This is higher than the figure for men (78.7%) but both groups appear to be very well connected to others involved in business ownership. Generally, nascent entrepreneurs are much more engaged in active networking, which is as we would expect. They attend local business networking events more often than established owners and have higher levels of agreement that they can get in touch with others operating young businesses, find the advice they need, and be a part of a community that is actively participating in at least one local business network. Interestingly, there are differences among women and men in this regard. Women engaged in nascent businesses appear to be less connected and less likely to report that they can tap into the support they need. Yet, this reverses among established business owners, with women more likely to attend events and feel they can easily contact peers, though there is little gender gap on perceptions of connectedness and being able to easily find peers that can provide help or advice.



<u>TABLE 1</u>
Networking: Average State of Pillar for Alberta, 2019

Networking Pillar	Women	Men	Total
How many people do you know personally who have started a business or become self-employed in the past 2 years? (% who answered in the affirmative)	84.3%	78.7%	81.3%
Nascent Entrepreneurs [1–5 scale]			
How often do you attend local business networking events?	2.64	2.80	2.72
It is easy to get in touch with other owner-managers of young businesses personally.	3.60	3.87	3.73
If you need any advice or help regarding your business, you can easily find the right people through your network.	3.45	3.74	3.59
Most business owner-managers in the same industry and region as you actively participate in at least one local business network.	3.35	3.72	3.53
Average score	3.26	3.53	3.39
Established Owner-Managers [1–5 scale]			
How often do you attend local business networking events?	2.01	1.76	1.89
It is easy to get in touch with other owner-managers of young businesses personally.	3.13	2.86	3.00
If you need any advice or help regarding your business, you can easily find the right people through your network.	3.33	3.38	3.35
Most business owner-managers in the same industry and region as you actively participate in at least one local business network.	3.04	3.05	3.05
Average Score	2.82	2.88	2.76
NETWORKING AVERAGE SCORE	3.11	3.07	3.15

Pillar 2: Leadership

Compared to other pillars, the leadership pillar in Alberta is a much weaker element in the ecosystem, with an average score of 2.56, as can be seen in Table 2. In the GEM ESI model, the leadership index captures whether there are skilled and successful entrepreneurs who are adept at shaping the ecosystem, connecting others, raising awareness and advocating for supportive policies and infrastructure, and inspiring other entrepreneurs as very visible, successful role models.

There are interesting and notable differences on this index, both by gender and firm stage. Nascent entrepreneurs rate leadership far more highly (2.90) than do owner-managers (2.21), and it is interesting to note that both women and men have the highest agreement with the statement that their decision to start their own business was "strongly inspired" by a start-up in their region. There are few gender differences in receiving advice and mentoring, but notably men at the nascent stage are more likely to report giving advice to others. Overall evaluations of leadership for owner-managers is much lower, with a gender shift of women more likely to give

TABLE 2 Leadership: Average State of Pillar for Alberta, 2019

Leadership Pillar	Women	Men	Total
Nascent Entrepreneurs [1–5 scale]			
How often do you receive advice for your new business in form of mentoring from established business founders in your region?	2.64	2.73	2.68
How often do you give advice in form of mentoring to new business owner-managers?	2.38	3.01	2.69
Your decision to start your own business was strongly inspired by a start-up or business from your region.	3.30	3.39	3.34
Average score	2.77	3.04	2.90
Established Owner-Managers [1–5 scale]			
How often do you receive advice for your new business in form of mentoring from established business founders in your region?	1.86	2.03	1.94
How often do you give advice in form of mentoring to new business owner-managers?	2.29	2.07	2.18
Your decision to start your own business was strongly inspired by a start-up or business from your region.	2.56	2.47	2.52
Average Score	2.24	2.19	2.21
LEADERSHIP AVERAGE SCORE	2.51	2.62	2.56

advice and mentoring, and men more likely to receive it. Again, we see the importance of role models, with the highest level of agreement on items for owner-managers relating to being "strongly inspired" by other business leaders in the region.

Pillar 3: Financing

While far less data is available for the financial indices, we still see some interesting patterns (see Table 3). The overall score of 2.77 suggests that there is room to improve the financial pillars of the Alberta ecosystem. For nascent entrepreneurs this is perhaps less of a concern, as they are far more likely than owner-managers to agree that there are adequate start-up funds in the region. However, the high(er) agreement among nascent entrepreneurs varies strikingly across gender, with men having much more positive assessments (3.42) than women (2.84) concerning the extent of support. It is

interesting that the gender gap disappears among established owner-managers. Although the reasons for this are unclear, the gap is potentially offset by higher survival rates for women-led ventures. With respect to levels of business angel investing, it is relatively low, with men (15.7%) much more likely than women (9.2%) to report that they have personally provided funds for a new business start-up spearheaded by someone else.

Pillar 4: Talent

Having access to a skilled, knowledgeable, and capable labour force is critical for launching and growing a business venture. The talent pillar captures these elements both in terms of current workforce needs, as well as those anticipated in the future. It also captures self-assessments from entrepreneurs themselves concerning their own preparedness in terms of the skills, knowledge, and experience (KSEs) they have in relation to business ownership.



<u>TABLE 3</u>
Financing: Average State of Pillar for Alberta, 2019

Financing Pillar	Women	Men	Total
Have you, in the past three years, personally provided funds for a new business started by someone else?	9.2%	15.7%	12.6%
Nascent Entrepreneurs [1–5 scale]			
You feel there are adequate sources of external start-up funding in your region.	2.84	3.42	3.14
Established Owner-Managers [1–5 scale]			
You feel there are adequate sources of external start-up funding in your region.	2.39	2.39	2.39
FINANCE AVERAGE SCORE	2.62	2.91	2.77

Overall, the score for the talent pillar in the Alberta ecosystem is mid-range among the 10 pillars, with an overall score of 3.3. As we can see from Table 4, there are slight differences in the evaluations both by gender and by business stage. Concerning their own preparedness for entrepreneurship, nearly 6 in 10 entrepreneurs (58.4%) believe they have the knowledge, skills, and experience (KSEs) needed for success—although a notable gender gap exists, with men far more likely to agree (67.0%) with this statement than women (49.7%). This is surprising, in some respects, given higher levels of formal education among women in Alberta and Canada. However,

TABLE 4
Talent: Average State of Pillar for Alberta, 2019

Talent Pillar	Women	Men	Total
You personally have the knowledge, skill and experience required to start a new business.	49.7%	67.0%	58.4%
Nascent Entrepreneurs [1–5 scale]			
There is <u>no</u> shortage of the types of employees you need for your business in your region.*	2.91	2.29	2.61
You can afford to hire the employees you need for your business locally.	3.45	3.73	3.58
You are satisfied that the skill levels of people in Alberta are sufficient for your business needs.	3.89	3.86	3.88
Average score	3.42	3.29	3.36
Established Owner-Managers [1–5 scale]			
There is <u>no</u> shortage of the types of employees you need for your business in your region.*	2.84	3.53	3.17
You can afford to hire the employees you need for your business locally.	2.83	3.30	3.05
You are satisfied that the skill levels of people in Alberta are sufficient for your business needs.	3.39	3.71	3.53
Average Score	3.02	3.51	3.25
TALENT AVERAGE SCORE	3.22	3.40	3.30

^{*}Original negatively worded questions and scores have been reversed.

the difference may reflect a lack of specific training in small business development and operations. It may also be shaped by gender differences in self-assessment, with women typically rating similar competencies less favourably than men.¹⁸

In terms of business stage, nascent entrepreneurs (3.36) and owner-managers (3.25) have fairly similar assessments concerning the talent pillar. For nascent entrepreneurs, their most positive assessments concern the skill levels of the workforce (3.88) as well as affordability (3.58). Gender differences are fairly minimal across indicators, except with respect to potential for labour shortages. By comparison, ownermanagers have less positive assessments than nascent entrepreneurs; they are generally favourable with respect to skill levels (3.53), though lower on affordability (3.05). Gender differences are more apparent among owner-managers, with women entrepreneurs being less satisfied with skill levels and affordability overall.

Pillar 5: Knowledge

The knowledge pillar captures the circulation of ideas, expertise, and innovation, and the ways in which knowledge transfer occurs within the regional ecosystem. Sometimes knowledge transfer may occur from institutions of higher education; in

other cases, it may be influenced by other businesses or high-profile entrepreneurs and/or mentors that entrepreneurs have access to through their networks and broader community. As we can see in Table 5, the overall score for the knowledge pillar is in the mid-range (3.53) among the 10 pillars. Nascent entrepreneurs (3.75) are more likely than owner-managers (3.30) to report that their business was developed as a result of learning from people or organizations within the region. Women are somewhat less likely than men to report this influence at the nascent stage and somewhat more likely to agree at the established stage, but overall the differences by gender are small.

Pillar 6: Support Services & Infrastructure

Pillar 6 captures the availability of and access to commercial and professional services along with public infrastructures and facilities that support the work of entrepreneurs. Examples include a robust professional services community attuned to the needs of entrepreneurs (e.g., legal, financial); events and short- or long-term programming that supports start-up and scale-up activity; mentorship programs, makerspaces, and workspace; and so on. In Alberta, StartupEdmonton, and StartupCalgary, are two examples of such support services.

<u>TABLE 5</u> Knowledge: Average State of Pillar for Alberta, 2019

Knowledge Pillar	Women	Men	Total
Nascent Entrepreneurs [1–5 scale]			
Your business was built on the result of something you learned from a person or organization in your region.	3.63	3.88	3.75
Established Owner-Managers [1–5 scale]			
Your business was built on the result of something you learned from a person or organization in your region.	3.34	3.24	3.30
KNOWLEDGE AVERAGE SCORE	3.49	3.56	3.53



<u>TABLE 6</u> Support: Average State of Pillar for Alberta, 2019

Support Services & Infrastructure Pillar	Women	Men	Total
Nascent Entrepreneurs [1–5 scale]			
Your new business is strongly supported by a program in your region which is aimed at business start-ups (e.g. an accelerator or incubator program).	2.78	2.96	2.87
There are in general, enough workshops and other training opportunities accessible within Alberta to learn the business skills you need for your business.	3.67	3.86	3.76
Average score	3.23	3.41	3.32
Established Owner-Managers [1–5 scale]			
Your new business is strongly supported by a program in your region which is aimed at business start-ups (e.g. an accelerator or incubator program).	2.13	1.77	1.96
There are in general, enough workshops and other training opportunities accessible within Alberta to learn the business skills you need for your business.	3.19	3.48	3.33
Average Score	2.66	2.63	2.65
SUPPORT SERVICES & INFRASTUCTURE AVERAGE SCORE	2.94	3.02	2.98

Evaluations on this pillar are in the mid-range (2.98), with very strong differences by the type of business stage (see Table 6). Whereas nascent entrepreneurs have somewhat positive assessments (3.32), these are much lower for owner-managers (2.65). There are also distinct evaluations by indicator, with generally positive evaluations of workshop and training program to help entrepreneurs "learn the business skills you need for your business." Evaluations are much lower. however, around accelerator and incubator programs, suggesting gaps in growth-oriented support. Notable gender differences exist as well, with women typically less likely to offer positive evaluations of support services and infrastructure. The one exception concerns assessment of incubators and accelerators for established owner-managers, where the gender gap is reversed; however, neither women nor men have favourable assessments of this dimension.

Pillar 7: Formal Institutions

The formal institutions pillar captures perceptions of support from various levels of government (e.g., municipal, provincial), recognizing the role that these institutions play in setting the framework for business start-up and growth. Business licensing, corporate tax rates, employment standard regulations, and occupational health and safety frameworks are all examples of the types of regulations that can affect businesses.

In Alberta, Pillar 7 shows an overall score in the mid-range (2.67), with very little variation between women (2.77) and men (2.57) overall (see Table 7). However, there is a more marked gender gap among nascent entrepreneurs, with women (2.81) more likely than men (2.14) to agree that regulations and other bureaucratic requirements are not a problem in pursing their business ideas. Here we need to keep the scale in mind. As it ranges from 1 (strongly disagree) to 5 (strongly agree), the overall score of 3.0 would suggest a neutral stance on the issue of regulation and

<u>TABLE 7</u>
Formal Institutions: Average State of Pillar for Alberta, 2019

Formal Institutions Pillar	Women	Men	Total
Nascent Entrepreneurs [1–5 scale]			
Bureaucracy and regulations you encounter during the founding of your business are <u>not</u> a serious problem.	2.81	2.14	2.48
Established Owner-Managers [1–5 scale]			
Bureaucracy and regulations you encounter during the founding of your business are <u>not</u> a serious problem.	2.73	2.99	2.86
FORMAL INSTITUTIONS AVERAGE SCORE	2.77	2.57	2.67

^{*}Original negatively worded questions and scores have been reversed.

bureaucracy. The only group who correspond to that assessment are male owner-managers (2.99). Overall, the remainder of entrepreneurs tend to "disagree" (though not "strongly disagree") that serious bureaucratic hurdles are not a serious problem, with men nascent entrepreneurs (2.14) most likely to hold that view.

Pillar 8: Culture

Cultural attitudes toward entrepreneurship play a large role in the willingness of individuals to consider business start-up and business ownership activities. The culture pillar captures this, focusing on the degree of interest and respect displayed toward entrepreneurial endeavours. Overall, the culture pillar is the most positive aspect of the ecosystem in Alberta with an overall score of 3.93. As we can see from Table 8, a strong

TABLE 8
Culture: Average State of Pillar for Alberta, 2019

Culture Pillar	Women	Men	Total
In your country, most people consider starting a new business a desirable career choice.	67.6%	66.7%	67.1%
In your country, those successful at starting a new business have a high level of status and respect.	78.7%	81.2%	80.0%
Are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years?	21.0%	22.0%	21.6%
Nascent Entrepreneurs [1–5 scale]			
Are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years?	3.71	4.14	3.92
Established Owner-Managers [1–5 scale]			
Are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years?	3.91	3.98	3.94
CULTURE AVERAGE SCORE	3.81	4.06	3.93



majority of Albertans have very favourable views of entrepreneurship. Roughly two-thirds consider entrepreneurship to be a "desirable career choice." Four out of five agree that successful entrepreneurs have a "high level of status and respect." Of note, both women and men share this assessment, with little gender gap on these indicators.

The same is true with respect to "entrepreneurial intentions", with roughly 1 in 5 Albertans expressing interest and expectations that they will start a business sometime within the next three years. Again, we see little by way of a gender gap on this indicator, which bodes well for the prospects of women entrepreneurs in this ecosystem. The one exception to this, where attention is needed, is among nascent entrepreneurs, where we see that men report higher entrepreneurial intentions than women, using the 5-point scale.

Pillar 9: Physical Infrastructure

The physical infrastructure pillar reflects assessments of transport, telecommunication, office and production space, and other features of the broader infrastructure that are critical for launching new businesses and running established ventures. A limitation of the GEM ESI approach is that it does not adopt a broader definition of infrastructure, such as early childhood development and pre-school services, which are also critical for supporting business activity, especially among women entrepreneurs. Overall, this pillar receives positive ratings, with an overall score of 3.54 (see Table 9). There are very few notable differences between nascent entrepreneurs and established owner-managers. By gender, there is no gender gap on some indicators, such as telecommunications. But women have somewhat less positive assessments, at both nascent and established stages, of transportation infrastructure and the price and availability of business space for growing a business. The gender gap on "physical

<u>TABLE 9</u>
Physical Infrastructure: Average State of Pillar for Alberta, 2019

Physical Infrastructure Pillar	Women	Men	Total
Nascent Entrepreneurs [1–5 scale]			
Transport infrastructure (e.g. roads parking space, traffic flow)	3.35	3.63	3.49
Telecommunications, internet access and speed	3.76	3.65	3.71
Price and availability of additional physical space to grow your business	3.24	4.04	3.65
Average score	3.45	3.77	3.62
Established Owner-Managers [1–5 scale]			
Transport infrastructure (e.g. roads parking space, traffic flow)	3.10	3.68	3.37
Telecommunications, internet access and speed	3.72	3.65	3.69
Price and availability of additional physical space to grow your business	3.21	3.47	3.33
Average Score	3.34	3.60	3.46
PHYSICAL INFRASTRUCTURE AVERAGE SCORE	3.40	3.69	3.54

space" is especially notable among nascent entrepreneurs and may reflect the nature of businesses (e.g., women's higher share in retail spaces which may be more expensive) or a function of reduced assess to adequate financing and financial support, as is noted in Pillar 3.

Pillar 10: Demand

Concerning the demand pillar, there is just one general indicator that captures this element of the ecosystem. It reflects assessments of the general economic health of the regional ecosystem and the extent to which conditions are favourable for starting a business. As we can see in Table 10, roughly half of respondents in Alberta are positive, indicating that the next six months offers "good opportunities" overall. While women entrepreneurs (47.3%) are somewhat less likely than men (54.5%) to report there are opportunities for their business, the gender gap is relatively small, at roughly 7%.

Summary

Alberta is characterized by and known for its highly entrepreneurial outlook. This is borne out in this data, particularly with respect to the pillars that consider the attitudinal and relational context of entrepreneurs and entrepreneurship. Specifically, overall scores are high on networking (Pillar 1), knowledge (Pillar 5), culture (Pillar 8), and demand (Pillar 10). This demonstrates that Alberta constitutes a strong context of interest in and respect for entrepreneurial activity and that respondents perceive that good opportunities exist in the region for business start-ups in the near future. This favourable entrepreneurial climate features strong networks, which bring opportunities to tap into the knowledge, experience, and advice available within a connected ecosystem. Physical infrastructure is seen as strong, there is a talented pool of affordable employees, support services are generally available, and bureaucracy is not regarded as an interference. For women entrepreneurs specifically, there is reportedly less leadership (mentorship, role modelling) when starting a business, as well as relatively low financial support in the early stages of business. Women are much more likely than men to guestion their capabilities and talent to start a business. Women tend to perceive a slightly less supportive culture overall and fewer ongoing opportunities for entrepreneurship than do men. Although these aspects of the ecosystem are still quite strong for women in this region, attention may be needed to facilitate women's business ventures to a greater extent.

TABLE 10

Demand: Average State of Pillar for Alberta, 2019

Demand Pillar	Women	Men	Total
In the next six months, there will be good opportunities for starting a business in the area where you live.	47.3%	54.5%	51.0%





Nova Scotia Ecosystem: Assessment of 10 Pillars

In Canada, the Atlantic provinces have historically had lower levels of entrepreneurial activity than the national average and much lower levels than provinces such as Alberta. They have also been prone to high seasonal and structural unemployment due to declines in traditional resource sectors, such as the fishery. That said, compared to other Atlantic provinces, Nova Scotia has had the highest rates of entrepreneurial activity in recent years, especially for early-stage firms operating for 3.5 years or less (Saunders, 2015: 43). In addition, although a great deal of early-stage firm activity in the Atlantic region is driven primarily by men, Nova Scotia stands apart in having a more equal gender ratio of women and men involved (Saunders, 2015). With respect to established firms (3.5 year and older), Nova Scotia falls more in the mid-range, with higher levels of established business than Newfoundland but much lower levels than Prince Edward Island (PEI) and New Brunswick (Saunders, 2015: 44)

Pillar 1: Networking

As noted previously, social capital and networks are critical for entrepreneurial success. Based on the average networking score from Table 11, it is evident that networking is a strong pillar among entrepreneurs in Nova Scotia. Women entrepreneurs are quite well connected (80.0%) to others who have recently become self-employed or started a business. In this context, men are notably more connected to other entrepreneurs (at 94.1%), although further exploration of the data for this pillar reveals nuances to this finding. For new entrepreneurs, women attend local business networking events slightly more often than men. Women may also find it easier to connect personally with other new business owners. Women and men have similar perspectives on the ease with which advice can be sought from the right people in their business network. For both men and women, there is a generally high participation rate in at least one local business network. Overall, among nascent entrepreneurs, women report higher connectedness than men. This is also true for more established entrepreneurs, although the gap between men and women is not as wide. Once established, both men and women are less likely to attend local business networking events, although they do tend to participate in at least one local business network. Established men entrepreneurs find it slightly easier than women to get in touch with other new business owners personally but for advice-seeking in particular, while women report slightly greater ease find the right people in their network to ask for help.



TABLE 11
Networking: Average State of Pillar for Nova Scotia, 2019

Networking Pillar	Women	Men	Total
How many people do you know personally who have started a business or become self-employed in the past 2 years?	80.0%	94.1%	88.9%
Nascent Entrepreneurs [1–5 scale]			
How often do you attend local business networking events?	3.21	2.62	2.75
It is easy to get in touch with other owner-managers of young businesses personally.	3.70	3.22	3.37
If you need any advice or help regarding your business, you can easily find the right people through your network.	3.70	3.62	3.64
Most business owner-managers in the same industry and region as you actively participate in at least one local business network.	4.00	3.81	3.84
Average score	3.65	3.32	3.40
Established Owner-Managers [1–5 scale]			
How often do you attend local business networking events?	1.62	1.69	1.66
It is easy to get in touch with other owner-managers of young businesses personally.	3.48	3.85	3.72
If you need any advice or help regarding your business, you can easily find the right people through your network.	3.70	3.56	3.60
Most business owner-managers in the same industry and region as you actively participate in at least one local business network.	3.59	3.38	3.45
Average Score	3.10	3.12	3.11
NETWORKING AVERAGE SCORE	3.38	3.22	3.25

Pillar 2: Leadership

This index (Table 12) captures whether there are skilled and successful entrepreneurs who take on leadership in shaping the ecosystem, raising awareness, connecting others, advocating for supportive policies, and inspiring others with their success. There are notable differences between men and women and between nascent and established entrepreneurs within this dimension of entrepreneurship. Nascent women entrepreneurs (4.00) are considerably more likely than men (2.41) to receive advice about their new businesses from mentors in their region. They also tend to give advice and mentorship to other new business owners slightly more than do men. Demonstrating

the importance of role models, both men and women with newer businesses report being inspired by another start-up in their region; among women entrepreneurs, this is especially strong in the early stages. Once more established, advice-sharing, both receiving and giving, drops off notably for both men and women, although women do continue to engage in this to a slightly greater extent than men. Interestingly, men in established business continue to report that their decision to start their own business was inspired by another start-up in their area, whereas women report this to a much lesser degree once their businesses become established. Nevertheless, on average, the leadership pillar is reportedly more important for women entrepreneurs than men entrepreneurs.



TABLE 12
Leadership: Average State of Pillar for Nova Scotia, 2019

Leadership Pillar	Women	Men	Total
Nascent Entrepreneurs [1–5 scale]			
How often do you receive advice for your new business in form of mentoring from established business founders in your region?	4.00	2.41	2.59
How often do you give advice in form of mentoring to new business owner-managers?	2.85	2.37	2.48
Your decision to start your own business was strongly inspired by a start-up or business from your region.	4.50	3.63	3.74
Average score	3.78	2.80	2.94
Established Owner-Managers [1–5 scale]			
How often do you receive advice for your new business in form of mentoring from established business founders in your region?	1.79	1.43	1.56
How often do you give advice in form of mentoring to new business owner-managers?	2.76	2.62	2.67
Your decision to start your own business was strongly inspired by a start-up or business from your region.	1.83	3.08	2.56
Average Score	2.13	2.38	2.26
LEADERSHIP AVERAGE SCORE	2.96	2.59	2.60

Pillar 3: Financing

This pillar captures the availability of formal and informal investment into and financing for businesses within the ecosystem (see Table 13). While there are limited items within this index, differences across gender are striking. When asked whether there are adequate sources of start-up funding in their region, emerging women entrepreneurs are less in agreement than men entrepreneurs. Interestingly, established women entrepreneurs perceive even lower adequacy of external start-up funding than do nascent women entrepreneurs. For established men entrepreneurs, there is a slight increase in agreement that start-up funding is adequate. Men entrepreneurs (14.6%) are much more likely than women entrepreneurs (5.8%) to have personally provided funds for a new business started by someone else. Overall, men score much higher on this index than do women.

Pillar 4: Talent

The talent pillar captures self-assessments from entrepreneurs themselves concerning their own preparedness in terms of the skills, knowledge, and experience they have in relation to business ownership. This pillar also focuses on having access to a skilled, knowledgeable, and capable labour force in terms of current workforce needs, as well as those anticipated in the future (Table 14).

On this dimension of entrepreneurship, there is a dramatic difference between men and women in terms of their own sense of preparedness to enter business. Only 42.2% of women indicated that they personally have the knowledge, skill, and experience required to start a new business, whereas 73.4% of men assess themselves as having the necessary experience, background knowledge, and skill. Taken together, just over half (57.1%) of respondents indicate that they have the necessary talent to begin a



<u>TABLE 13</u>
Financing: Average State of Pillar for Nova Scotia, 2019

Financing Pillar	Women	Men	Total
Have you, in the past three years, personally provided funds for a new business started by someone else?	5.8%	14.6%	10.6%
Nascent Entrepreneurs [1–5 scale]			
You feel there are adequate sources of external start-up funding in your region.	3.00	3.39	3.31
Established Owner-Managers [1–5 scale]			
You feel there are adequate sources of external start-up funding in your region.	2.03	3.57	3.01
FINANCE AVERAGE SCORE	2.52	3.48	3.16

TABLE 14

Talent: Average State of Pillar for Nova Scotia, 2019

Talent Pillar	Women	Men	Total
You personally have the knowledge, skill and experience required to start a new business.	42.22%	73.39%	57.14%
Nascent Entrepreneurs [1–5 scale]			
There is <u>no</u> shortage of the types of employees you need for your business in your region.*	2.33	2.89	2.79
You can afford to hire the employees you need for your business locally.	3.87	4.22	4.12
You are satisfied that the skill levels of people in Nova Scotia are sufficient for your business needs.	3.42	4.08	3.91
Average score	3.21	3.73	3.61
Established Owner-Managers [1–5 scale]			
There is <u>no</u> shortage of the types of employees you need for your business in your region.*	4.17	1.92	2.86
You can afford to hire the employees you need for your business locally.	3.38	3.77	3.61
You are satisfied that the skill levels of people in Nova Scotia are sufficient for your business needs.	3.59	3.75	3.69
Average Score	3.71	3.15	3.39
TALENT AVERAGE SCORE	3.46	3.44	3.50

^{*}Original negatively worded questions and scores have been reversed.



business venture. This may reflect genderbased tendencies with regard to selfassessment rather than actual talent levels between men and women.

For emerging entrepreneurs, both men and women indicate some perception of labour issues in their fields of business. Both men and women in nascent businesses agree that they are able to afford the employees they need and that they are satisfied with the skill levels of people in the labour force in their region; men rate these indicators higher than do women.

For established entrepreneurs, men and women indicate very different perceptions about labour shortages for business in their region; women agree very strongly (4.17) that labour shortages are not an issue, whereas men indicate an opposite perception (1.92). Affordability of employees and the skill level these employees bring are assessed fairly highly by both men and women in established business, although women are slightly less satisfied with these labour force issues. Overall, despite some notable differences between men and women on the talent indicators, especially their own self-assessments, men and women score similarly in the mid-range on this index.

Pillar 5: Knowledge

This pillar focuses on the circulation of knowledge, ideas, and expertise within the ecosystem, emphasizing the transfer of knowledge among entrepreneurs in a network. Here (Table 15) we see dramatic differences based on gender and length of time in business. Data from nascent women entrepreneurs fully supports (5.0) that women built their emerging businesses based on something they learned from someone else (person or organization) in their area. However, when asked the same question, established women entrepreneurs are much less likely (1.83) to indicate that they built their business as a result of something they learned from another. When considering the responses of men, emerging and established entrepreneurs are almost equally likely (3.32 and 3.72) to indicate that they learned something from someone else and built their business on it. Despite the range of perspectives for women depending on how established their businesses are, the knowledge pillar is, on average, in the midrange and almost equally important to both men (3.52) and women (3.42) entrepreneurs.

<u>TABLE 15</u> Knowledge: Average State of Pillar for Nova Scotia, 2019

Knowledge Pillar	Women	Men	Total
Nascent Entrepreneurs [1–5 scale]			
Your business was built on the result of something you learned from a person or organization in your region.	5.00	3.32	3.54
Established Owner-Managers [1–5 scale]			
Your business was built on the result of something you learned from a person or organization in your region.	1.83	3.72	2.86
KNOWLEDGE AVERAGE SCORE	3.42	3.52	3.20

Pillar 6: Support Services & Infrastructure

As shown in Table 16, this pillar addresses supports by various intermediaries that can speed the time to market for new innovations or assist in reducing barriers to entry for new entrepreneurs. This may include commercial or professional services or programs specifically targeted to assist entrepreneurial start-ups. Again, with this dimension of entrepreneurship, there are important differences between women and men and over time. Women in new or emerging businesses report being strongly supported (5.0) by a program aimed at assisting business start-ups, whereas men in new businesses do not emphasize this aspect of support. Nascent women

entrepreneurs agree that there are enough workshops and training opportunities to support skill-development relevant to their businesses. Men in new businesses are, for the most part, in line with women on this item. For women who are in established businesses, there is low agreement that their business is supported by start-up programs and a decrease in agreement that there are training opportunities to help them learn new business skills. The perspectives of men change little over time, although established men entrepreneurs do more strongly indicate that there are available workshops and business training opportunities. While perspectives, and perhaps needs, change over time, especially for women in business, both men and women report fairly positive support for entrepreneurial activities in their region.

TABLE 16
Support: Average State of Pillar for Nova Scoatia, 2019

Support Services & Infrastructure Pillar	Women	Men	Total
Nascent Entrepreneurs [1–5 scale]			
Your new business is strongly supported by a program in your region which is aimed at business start-ups (e.g. an accelerator or incubator program).	5.00	2.82	3.10
There are in general, enough workshops and other training opportunities accessible within Nova Scotia to learn the business skills you need for your business.	3.70	3.34	3.45
Average score	4.35	3.08	3.28
Established Owner-Managers [1–5 scale]			
Your new business is strongly supported by a program in your region which is aimed at business start-ups (e.g. an accelerator or incubator program).	2.03	2.92	2.55
There are in general, enough workshops and other training opportunities accessible within Nova Scotia to learn the business skills you need for your business.	2.97	3.88	3.55
Average Score	2.50	3.40	3.05
SUPPORT SERVICES & INFRASTUCTURE AVERAGE SCORE	3.43	3.24	3.16

Pillar 7: Formal Institutions

The formal institutions pillar deals with perceptions of support from various levels of government (e.g., municipal, provincial), recognizing the role that these institutions play in setting the framework for business start-up and growth. Business licensing, corporate tax rates, employment standard regulations, and occupational health and safety frameworks are all examples of the types of regulations that can affect businesses.

In Nova Scotia, this pillar (Table 17) shows an overall score in the mid-range (2.93), indicating a neutral assessment of the impact of regulation and bureaucracy on entrepreneurship. There are, however, notable gender differences on this aspect of the entrepreneurship ecosystem. Women's scores are fairly low on this item for those in emerging businesses (2.30), which suggests that they do see bureaucratic hurdles as a problem to some extent. This improves for women in more established businesses. Men in nascent businesses score almost a full point higher than women (3.20), demonstrating that, for them, there are fewer issues with regulatory institutions in the start-up phase. Men in established businesses are slightly more likely to report bureaucratic obstacles.

Pillar 8: Culture

Regional attitudes about entrepreneurship as a career choice can influence people's decisions about whether to start a new business venture. The culture pillar explores perceptions about the respect and status afforded to entrepreneurial endeavours. Overall, as can be seen in Table 18, there is reportedly a strongly positive culture of support for entrepreneurship in Nova Scotia, with an overall score of 4.06, which varies only slightly between men and women. Just under three-quarters of respondents in Nova Scotia regard entrepreneurship as a desirable career choice, and almost 84% perceive that those who are successful at starting a new business have a high level of status and respect. Notably, men and women share these perceptions with only very small differences. Where gender differences are more visible is in relation to intention to start a new business within the next three years. Only 11.19% of women express an interest in launching a new business, whereas 24.06% of men express that they expect to do so. When considering intentions to start a new business, emerging entrepreneurs strongly agree that they expect to do this. Interestingly, this holds fairly steady, even for those in established businesses.

TABLE 17
Formal Institutions: Average State of Pillar for Nova Scotia, 2019

Formal Institutions Pillar	Women	Men	Total
Nascent Entrepreneurs [1–5 scale]			
Bureaucracy and regulations you encounter during the founding of your business are <u>not</u> a serious problem.	2.30	3.20	2.93
Established Owner-Managers [1–5 scale]			
Bureaucracy and regulations you encounter during the founding of your business are <u>not</u> a serious problem.	2.44	2.92	2.72
FORMAL INSTITUTIONS AVERAGE SCORE	2.37	3.06	2.83

^{*}Original negatively worded questions and scores have been reversed.

TABLE 18

Culture: Average State of Pillar for Nova Scotia, 2019

Culture Pillar	Women	Men	Total
In your country, most people consider starting a new business a desirable career choice.	67.54%	74.34%	71.37%
In your country, those successful at starting a new business have a high level of status and respect.	84.96%	82.88%	83.93%
Are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years?	11.19%	24.06%	17.39%
Nascent Entrepreneurs [1–5 scale]			
Are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years?	4.17	4.03	4.08
Established Owner-Managers [1–5 scale]			
Are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years?	4.13	3.95	4.03
CULTURE AVERAGE SCORE	4.15	3.99	4.06

Pillar 9: Physical Infrastructure

The physical infrastructure pillar reflects features of the broader infrastructure that can be critical for launching new businesses and running established ventures. In this data (Table 19), infrastructure refers to features such as transportation, telecommunication, and office and production space. It does not include elements of infrastructure such as childcare

TABLE 19

Physical Infrastructure: Average State of Pillar for Nova Scotia, 2019

Physical Infrastructure Pillar	Women	Men	Total
Nascent Entrepreneurs [1–5 scale]			
Transport infrastructure (e.g. roads parking space, traffic flow)	3.00	3.55	3.48
Telecommunications, internet access and speed	2.67	3.78	3.57
Price and availability of additional physical space to grow your business	3.00	3.46	3.37
Average score	2.89	3.60	3.47
Established Owner-Managers [1–5 scale]			
Transport infrastructure (e.g. roads parking space, traffic flow)	3.00	3.20	3.11
Telecommunications, internet access and speed	3.45	2.94	3.16
Price and availability of additional physical space to grow your business	3.17	3.23	3.21
Average Score	3.21	3.12	3.16
PHYSICAL INFRASTRUCTURE AVERAGE SCORE	3.05	3.36	3.32



services, which can be critical for supporting business activity, especially among women entrepreneurs. On the whole, there is a fairly positive assessment regarding infrastructure as a support for businesses in Nova Scotia (3.32). Nascent women entrepreneurs have notably less favourable assessments of infrastructure features such as transportation, communications and Internet access, and space. For the most part, the gender differences on this index even out on average among established entrepreneurs, but there are observable differences between nascent and established entrepreneurs. More established women entrepreneurs rate telecommunications more positively, whereas there are decreases in assessments of infrastructure among men in established businesses, with lower satisfaction evident regarding transportation, communication, and space.

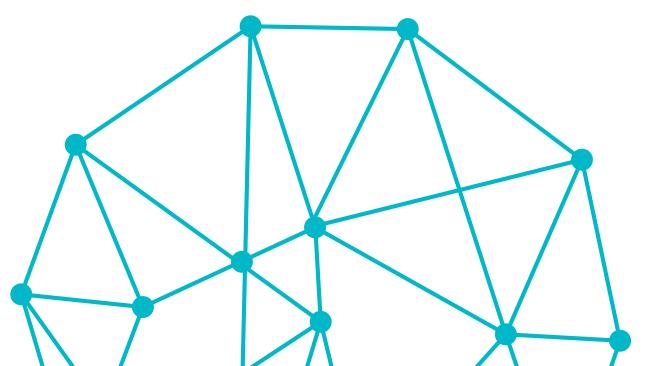
Pillar 10: Demand

With respect to demand, there is just one indicator that captures perspectives about the general economic health of the regional entrepreneurial ecosystem and a general sense about whether conditions are favourable for starting a business (Table 20). In Nova Scotia, a little over half of the respondents are positive that the next six months offers good opportunities for starting a business. Women entrepreneurs (50.9%) are somewhat less likely than men (57.0%) to report there are opportunities for their business, with a gender gap of roughly 6%.

TABLE 20

Demand: Average State of Pillar for Nova Scotia, 2019

Demand Pillar	Women	Men	Total
In the next six months, there will be good opportunities for starting a business in the area where you live.	50.9%	57.0%	53.7%



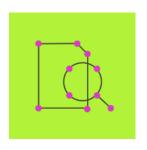
Summary

Nova Scotia presents as a supportive ecosystem for entrepreneurial activity on key dimensions measured in this data. There is a strongly positive culture of support for entrepreneurship in this region. The vast majority of respondents regard entrepreneurship as a desirable career choice and view successful start-ups with a high level of status and respect. Over half of Nova Scotians perceive that conditions are favourable for starting a new business in the next six months. There is a strong aspect of connection, with both men and women entrepreneurs actively participating in relevant business networks and able to seek advice.

Although the climate is generally good for entrepreneurship in this province, there are several noteworthy gender differences in how this plays out. Leadership, mentorship, and inspiration are especially important for emerging women entrepreneurs in Nova Scotia. In the finance pillar, men report a much greater sense of financial support in the start-up phase than do women, and in turn, women are less able to support other businesses financially than are men. Regardless of actual talent level, women are strikingly less likely than men to report that they have the necessary abilities to begin a business venture. Overall, both men and women are fairly equally satisfied with labour availability and affordability, although men in established businesses report a dramatically different perspective on labour shortages, indicating that it is more of an issue for them. When considering the circulation of knowledge in the ecosystem, women entrepreneurs fully support that they built their emerging businesses based on something they learned from someone else, although this drops off considerably in established businesses, in contrast to men. who are neutral on this indicator. Women report considerably more support in the

start-up phase than do men, but they also note more bureaucratic hassle in the early stages. Nascent women entrepreneurs are notably less satisfied with physical infrastructure supports, although this evens out between men and women in established businesses. Generally, men and women have quite different experiences with various aspects of entrepreneurship.





Discussion & Conclusion

Over the past several years, Canada has seen tremendous growth in entrepreneurship. Women's growing engagement with business ownership and new venture creation is a particularly striking feature of the shift toward a more entrepreneurial economy in Canada. Although the evidence suggests that entrepreneurial ecosystems play a critical role in supporting women's business endeavours, this has received relatively little research attention and, where it has, there has been a tendency to view ecosystems in gender neutral terms. Motivating this report, then, were important questions directed toward a deepened understanding of the gendered nature of entrepreneurial ecosystems in Canada.

The report focuses on two distinct provincial ecosystems for which GEM Canada gathered data in 2019: Alberta and Nova Scotia. Data was been collected and analyzed for 10 key pillars: networking (Pillar 1), leadership (Pillar 2), financing (Pillar 3), talent (Pillar 4), knowledge (Pillar 5), support services and infrastructure (Pillar 6), formal institutions (Pillar 7), culture (Pillar 8), physical infrastructure (Pillar 9), and demand for goods and services (Pillar 10).

Among the key findings:

> Both Alberta and Nova Scotia have highly supportive cultures for entrepreneurship, including respect for entrepreneurship as a career, access to advice and networking opportunities, and a hopeful outlook for business start-ups in the near future.

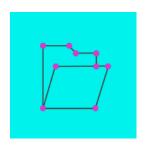
- On the whole, Albertan and Nova Scotian entrepreneurs perceive adequate levels of support on most pillars of entrepreneurship measured in this data. That said, gender gaps are evident throughout the data, to a slightly greater extent in Nova Scotia than in Alberta.
- > For women entrepreneurs, there are a number of gaps in the ecosystem. One missing element involves leadership, specifically a lack of visible and inspiring role models and successful business owners who can serve as mentors. This is evident both in Alberta and Nova Scotia. Women also appears to feel less prepared and ready to take on business ownership, questioning their capabilities much more than men. This dimension is especially striking in the Nova Scotia context.
- > Practical facilitators for women's business ventures also appear to be suboptimal in some cases, especially with respect to financing, physical infrastructure, and regulatory support. Finance is perhaps the most notable. In both Alberta and Nova Scotia, women are more likely than men to assess financial support as inadequate for their business ventures. The biggest gender gap is for established women business owners in Nova Scotia, though nascent women business owners in Alberta report also report having less access to financial support in the early stages of launching their business. Not surprisingly, women are also much less likely to offer financial assistance to others who are launching a business.

- > With respect to policy and programming that can support women's entrepreneurship, the results suggest that:
 - > Opportunities for women to connect with inspirational leaders, take inventory of their own abilities, understand and anticipate the gender-based difficulties in the entrepreneurial landscape, and identify potential mentors could be very beneficial.
 - > Further research would be helpful for clarifying whether women are actually less well equipped for entrepreneurship than men, in terms of specific skills and knowledge, or whether there are gender differences in self-assessments of ability, self-efficacy, and confidence, or both. Insights on this important issue would help to direct ecosystem supports appropriately.
 - > Greater inclusion, incentives and targeted programs, and supportive resources must also be introduced to enhance the availability of practical supports for women's businesses such as financing, physical infrastructure, and regulation.
 - > Going forward, specific measures that focus on women's unique business needs would also provide new data on support and infrastructure factors not addressed here, such as childcare, as well as data geared toward business types more common to women, such as service work and sole proprietorships. Further developing the GEM ESI methodology to include questions that capture the considerations of special importance to women entrepreneurs (e.g., access to childcare, inclusive climates, business types) would be especially valuable to further identify gaps in support for women in business.

- > Equally important is gathering a wider range of socio-demographic information from GEM Canada APS respondents (e.g., immigrant and racialized status, family status, household type) to enable intersectional analysis and generate more finely grained insights into the dynamics of various ecosystems within Canada.
- > Further research on a wider range of provincial ecosystems, using the GEM ESI approach, would allow for a rigorous comparison of the various provincial ecosystems grounded in a gender-aware analysis of women's experiences in business.

Taken together, the 2019 GEM Canada data suggests that the overall environment in both provincial ecosystems is highly conducive to entrepreneurial ventures and largely supportive of those who undertake them. However, it is clear there are a number of ways that entrepreneurial ecosystems, at least in these two provinces, could become more inclusive, working to understand, support, and facilitate women's businesses to a greater degree. Key pillars in need of attention are leadership (especially visible leaders and role models), access to financing, and skill development and selfassessment for aspiring entrepreneurs. Further efforts around these issues by key stakeholders will certainly aid in building more inclusive ecosystems. Ongoing research, both intersectional and on a wider range of ecosystems, can also help to deepen our understanding of ecosystem gaps and how best to support women entrepreneurs across the country.





Selected Resources on Women Entrepreneurs

Bosma, N. & Kelley, D. (2019). *Global Entrepreneurship Monitor 2018/19 Global Report*. https://www.gemconsortium.org/report/gem-2018-2019-global-report.

Brown, R. & Mason, C. (2017). Looking inside the spiky bits: a critical review and conceptualisation of entrepreneurial ecosystems. *Small Business Economics*, 49(1), 11-30.

Brush, C.G., N. Carter, E.J. Gatewood, P. Greene & Hart, M. (Eds.). (2006). *Growth-oriented Women Entrepreneurs and their Businesses*. Edward Elgar Publishing.

Canada. Innovation, Science and Economic Development Canada. (2016). *A comparison of the performance of majority female-owned small and medium-sized enterprises*. https://www.ic.gc.ca/eic/site/061.nsf/eng/h_03034.html.

Cukier, W. & Chavoushi, Z.H. (2020). Facilitating women entrepreneurship in Canada: the case of WEKH. *Gender in Management: An International Journal*, 35(3): 303-318.

Elam, A., Brush, C.G., Greene, P., Baumer, B., Dean, M. & Heavlow, R. (2019). *Global Entrepreneurship Monitor 2018/2019 Women's Entrepreneurship Report*. https://www.gemconsortium.org/report/gem-20182019-womens-entrepreneurship-report.

Gregson, G., Saunders, C. & Josty, P. (2019). GEM Canada 2018 National Report. http://thecis.ca/index.php/gem/.

Hughes, K.D. (2005). Female Enterprise in the New Economy. University of Toronto Press.

Hughes, K.D. (2017). *GEM Canada 2015/16 Report on Women's Entrepreneurship*. http://thecis.ca/index.php/gem/.

Hughes, K.D. & Yang, T. (2020). Building gender-aware ecosystems for learning, leadership and growth. *Gender in Management*, 35(3), 275-290.

Orser, B. & Elliott, C. (2015). Feminine Capital: Unlocking the Power of Women Entrepreneurs. Stanford University Press.

Orser, B., Elliott, C. & Cukier, W. (2019). Strengthening Ecosystem Supports for Women: Ontario Inclusive Innovation (i2) Action Strategy.

Stam, E. (2015). Entrepreneurial ecosystems and regional policy: A sympathetic critique. *European Planning Studies*, 23(9), 1759-1769.

Welter, F. (2019). *Entrepreneurship and Context*. Cheltenham: Edward Elgar Publishing.

Welter, F. (2020). Contexts and gender—looking back and thinking forward.

International Journal of Gender and Entrepreneurship, 10(1), 27-38.





References

- 1 See Gregson, G., Saunders, C. & Josty, P. (2019). 2018 GEM Canada National Report, p. 19. http://thecis.ca/index.php/gem/
- 2 For valuable academic studies of women's entrepreneurship in the Canada context, see Hughes, K.D. (2005). Female Enterprise in the New Economy. University of Toronto Press; Orser, B. & Elliott, C. (2015). Feminine Capital: Unlocking the Power of Women Entrepreneurs. Stanford University Press.
- 3 See Hughes, K.D. (2017). GEM Canada 2015/16 Report on Women's Entrepreneurship and Hughes, K.D. (2015). GEM Canada 2013/14 Report on Women's Entrepreneurship. http://thecis.ca/index.php/gem/
- 4 For current trends in entrepreneurship among innovation-based countries, see Bosma, N. & Kelley, D. (2019). Global Entrepreneurship Monitor 2018/19 Global Report. https://www.gemconsortium.org/report/gem-2018-2019-global-report. For discussions of trends in women's entrepreneurship globally, see Elam. A. et al. (2019). Global Entrepreneurship Monitor 2018/2019 Women's Entrepreneurship Report. https://www.gemconsortium.org/report/gem-20182019-womens-entrepreneurship-report
- For past reports, see Langford, C.H., Josty, P. & Holbrook, J.A. (2014). 2013 GEM Canada National Report; Langford, C.H. & Josty, P. (2015). 2014 GEM Canada National Report; and Langford, C.H., Josty, P. & Saunders, C. (2016). 2015 GEM Canada National Report. All reports available at: http://thecis.ca/index.php/gem/ and <a href="http://thecis.ca/index.php/ge
- 6 See Note 2 for details of national reports. For Alberta, see Hughes, K.D. (2018) *GEM Canada 2016/17 Report on Women's Entrepreneurship in Alberta*. https://thecis.ca/index.php/gem/
- 7 Reynolds, P., Hayand, M. & Camp, S.M. (1999). Global Entrepreneurship Monitor, 1999 Executive Report.
- 8 For the bulk of the analysis, we focus on the working age population (18–64 years old). For some topics (e.g., attitudes towards entrepreneurship), we examine trends for the entire adult population (18–99 years old).
- 9 See Bird, R.M. (2018). Policy forum: Equalization and Canada's fiscal constitution—Ties that bind?", Canada Tax Journal 66 (4), 847-69; and Kerim-Dekini, S. (2018). Distribution of Federal Revenues and Expenditures by Province, Canada: Economics, Resources and International Affairs Division. Parliamentary Information and Research Service. Publication No. 2017-01-E
- 10 For details, see the announcement by federal Minister of Small Business and Export Promotion, Mary Ng, at https://www.canada.ca/en/innovation-science-economic-development/news/2019/08/minister-ng-announces-women-entrepreneurship-strategy-investment.html
- 11 For details, see Business Women in International Trade (BWIT) at https://tradecommissioner.gc.ca/
 businesswomen-femmesdaffaires/index.aspx?lang=eng and WEConnect at https://weconnectinternational.org/en/
- 12 Further details can be found at: https://www.ic.gc.ca/eic/site/107.nsf/eng/home
- 13 Statistics Canada Tables 36-10-0402-01 and 36-10-0434-03. https://www150.statcan.gc.ca/n1/daily-quotidien/190501/t001a-eng.htm
- 14 Statistics Canada Table: 14-10-0020-01 (formerly CANSIM 282-0004). https://www150.statcan.gc.ca/t1/tbl1/ en/cv.action?pid=1410002001
- 15 See Krahn, H., Hughes, K.D. & Lowe, G.S. (2020) Work, Industry and Canadian Society. Nelson Canada
- 16 See Berletanno, M, Judge, K. & Bognar, T. (2020). *Provincial Budget Briefs: Nova Scotia*. CIBC Economics. https://economics.cibccm.com/economicsweb/cds?ID=9689&TYPE=EC_PDF
- 17 See Leitch, C. M., McMullan, C., & Harrison, R. (2010). The development of entrepreneurial leadership: The role of human, social and institutional capital. *British Journal of Management*, 24(3), 347-366; Hughes, K.D. & Yang, T. (2020). Building gender-aware ecosystems for learning, leadership and growth. Gender in Management, 35(3), 275-290.
- 18 See Correll, S. J. (2001). Gender and the career choice process: The role of biased self-assessments. *American Journal of Sociology*, 106(6), 1691-1730; Correll, S. J. (2004). Constraints into preferences: Gender, status, and emerging career aspirations. *American Sociological Review*, 69(1), 93-113; Ridgeway, C. L. (2011). *Framed by gender: How gender inequality persists in the modern world*. Oxford University Press.



