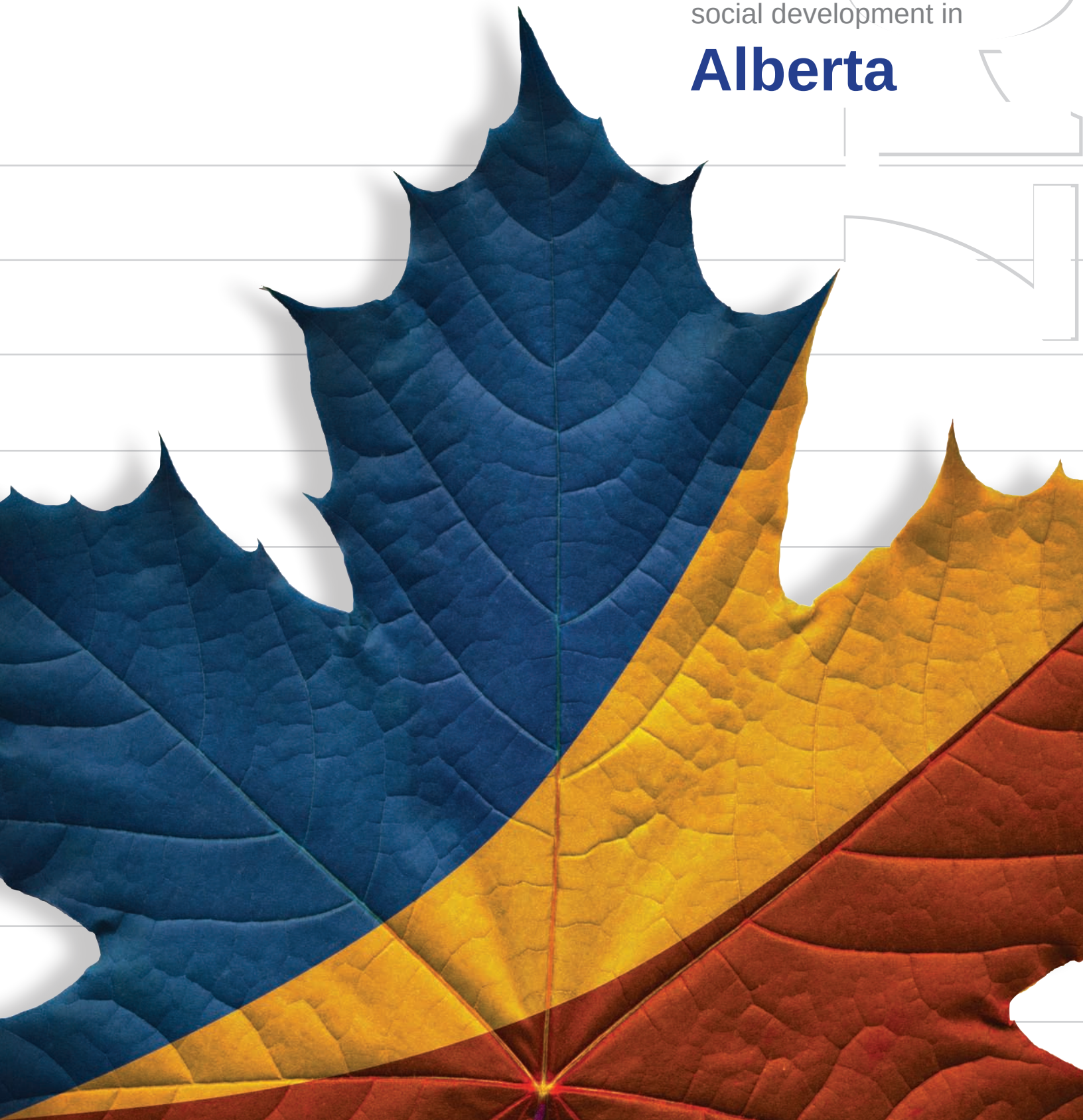
Global Entrepreneurship Monitor

Driving wealth creation & social development in

Alberta

2014



2017 GEM ALBERTA REPORT

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The Alberta context

The socio-economic context for Alberta in the past few years is relevant to the results generated within this report. Both 2015 and 2016 were recessionary years. However, by 2017 signs of an economic recovery were apparent. Such economic trends provide important background for the results presented.

Why GEM?

The Global Entrepreneurship Monitor (GEM) Project is widely recognized as the most comprehensive longitudinal study of entrepreneurship in the world. Uniquely, GEM paints a portrait of the individual entrepreneur in terms of attitudes, activities, and aspirations. It also permits a more detailed demographic breakdown of how factors like age, education, gender, region, and sector participation, impact provincial entrepreneurship. This analysis is based on the Alberta results from the Canadian Adult Population Survey (balanced for gender and age distribution) and the Provincial Expert Survey.

Report Findings

ATTITUDES

Overall, Albertans see entrepreneurship as a good career choice, associate it with high status, and think it is awarded favourable status in the media.

PERCEPTIONS TOWARDS ENTREPRENEURSHIP

“Fear of Failure” stands out nationally and provincially as being higher in Alberta than anywhere else (50.9%). Albertans are not nearly optimistic about the opportunities that present themselves, tracking at levels that are 5% less than the rest of Canada. Albertans knowledge of an entrepreneur is in line with Ontario and Canada’s. Moreover, Albertans are more assured in their skill sets than Canadians on a whole (tracking 1% higher).

ACTIVITY AND MOTIVATIONS

Total Early-Stage Entrepreneurial Activity (TEA): Alberta continues to exceed TEA rates in comparison to all other innovation-driven economies within the GEM framework with its rate of 19.6%.

Established Business: While, this rate is still higher than the Canadian result (Alberta's is 7.5% versus the Canadian rate of 6.2%), the province's Established Business levels are slightly lower than other jurisdictions like the United States and Australia.

Employee Entrepreneurs /Intrapreneurs: Alberta has lower levels of Employee Entrepreneurship/Intrapreneurship (5.7% versus the Canadian finding of 6.6%).

Motivations: Overall, TEA opportunity motivations were significantly higher than TEA necessity levels in Alberta. However, the province's TEA necessity rate is higher than other jurisdictions within Canada.

Discontinuance: Alberta has lower levels of Exits and Discontinuances than Canada as a whole, and than other provinces (it is tied with Ontario on Exits). This is a positive trend. The top three reasons Alberta entrepreneurs are leaving their ventures include: an opportunity to sell the business (31.3%), government tax/bureaucracy (12.8%), and problems getting financing (10.3%).

DEMOGRAPHICS

Age: Most of the reported TEA for Alberta is in the 25-34 year age range. What appears to be more significant in Alberta however, is the participation rates of the 55-64 age cohort: it is at least double of that found anywhere else. There is also a higher rate of young entrepreneurs (18-24) in the Established Business category within the province.

Education: Alberta, and the rest of Canada, exhibits a trend of an increase in the level of entrepreneurship as education increases. This same pattern is not apparent in the reports of educational levels for Established Business owners. Though Alberta does have higher rates of those with grad experience in this category.

Gender: Alberta is a clear leader for female entrepreneurship in comparison to other places both within Canada and internationally.

Sector Participation: Alberta profiles slightly differently than other jurisdictions for sector participation with higher levels in the extractive and transformative industry. Alberta has a higher business-oriented composition for TEA over consumer-oriented services whereas

EXECUTIVE SUMMARY

in Canada, Ontario and Quebec there is more consumer-oriented participation. In Alberta, transformative jobs rival consumer-oriented services in reported Established Business Activity.

ASPIRATIONS

Job Creation and Market Expansion: There is a large jump between high TEA job aspirations (+20) from now (6.7%) to 5 years (23.2%). This suggests that Alberta entrepreneurs are ambitious and optimistic regarding what they can achieve. A significant fraction of respondents report no market expansion but over 50% do anticipate some.

Export Orientation: Alberta scores lower than other jurisdictions for both weak and strong export orientation.

Product Novelty: Over 18.3% of Albertans believe their product or service is novel to customers, this is lower than elsewhere but fewer are convinced they face no competition from parallel products or services (over 12%). Alberta entrepreneurs are potentially producing less innovative products than counterparts in other provinces but they seem better skilled at picking markets where there is less competition.

Technology Use: The majority of Alberta entrepreneurs do not report the use of newer technologies and they rank lower than other places across the country.

GENERAL CONDITIONS FOR ENTREPRENEURSHIP

Framework summary: Experts rate Physical Infrastructure and Service Access as very favourable within the province. They were also more likely to see Internal Market Dynamics (i.e. the level in changes within markets from year to year) as working in favour of entrepreneurs (5.1 versus Canada's 4.3) and slightly more positive about the Cultural, Social Norms, Society Support (6.4 versus Canada's 6.0 median rate).

Constraining Factors: Financial Support is a constraining priority for many of the experts. Government Programs and Government Policies along with the Capacity for Entrepreneurship were also mentioned consistently.

Fostering Factors: Cultural and Social Norms remains a key builder of entrepreneurship within the province. Moreover, Work Force Features, Government Programs, Education, and some aspects of Financial Support are identified as fostering factors. Nevertheless, it seems that the experts in Canada are more optimistic than those within Alberta.

Expert Recommendations: The key areas where recommendations emerged occurred around Financial Supports, Government Policies and Education and Training.

RECOMMENDATIONS

1. Continue to highlight opportunities for entrepreneurs in the province and develop tactics to mediate fears in future training initiatives.
2. Consider ways to increase Employee Entrepreneurship/ Intrapreneurship within Alberta.
3. Aim to close the gender gap completely and investigate further why Alberta is more successful in this area than elsewhere across Canada.
4. Provide support for burgeoning entrepreneurs with high growth expectations within the province in order to optimize their impact.
5. Follow expert advice and look for improvements in Government Policies, Finance, and Education.

CHAPTER 1 Introduction

This is the fifth year of a comprehensive survey of entrepreneurship in Alberta. The document that follows provides information that can guide efforts aimed at equipping Albertans with the capabilities they need to launch and run their businesses and create environments within which their ventures can thrive. This analysis is based on the Alberta survey of the adult population (balanced for gender and age distribution) and a Provincial Expert Survey using the methodology of the Global Entrepreneurship Monitoring (GEM) Consortium. This approach has been used for the past 18 years to collect data in over 100 economies.

The Alberta context

The socio-economic context for Alberta in the past few years is relevant to the results generated within this report. Both 2015 and 2016 were recessionary years. The economic downturn was caused by a dramatic decline in oil and gas investment and a rapid decrease the price of oil. In addition, a massive wildfire in the Wood Buffalo area had implications on overall economic stability.

Alberta's economy contracted an estimated 3.5 % in 2016. Nevertheless, positive indicators began to appear later in the summer and continued into early 2017.[1] For example, by the end of 2016-2017, rig activity had almost doubled, retail sales had recovered many of its losses, population growth was 1.8%, and non-energy exports and manufacturing shipments were on the rise.[2]

Some questions that emerge in the context of this environment for entrepreneurship are:

- Is the impact of the economic downturn apparent on some of the data emerging from the Alberta context?
- Are any of these economic trends echoed in the statistics associated with entrepreneurial activity (early activity and established business)?
- Are future aspirations influenced by the potential shift in the economy?

[1] See Government of Alberta Annual Report highlights: https://www.alberta.ca/release.cfm?x-ID=471999177BF46-EDB0-D08F-10BFE7A91BFB5ABA

[2] See Government of Alberta Annual Report highlights: https://www.alberta.ca/release.cfm?x-ID=471999177BF46-EDB0-D08F-10BFE7A91BFB5ABA

Why GEM?

CHAPTER 1

The Global Entrepreneurship Monitor (GEM) Project is widely recognized as the most comprehensive longitudinal study of entrepreneurship in the world. Launched in 1999 as a joint project between London Business School (UK) and Babson College (USA), the initial aim was to consider why some countries are more 'entrepreneurial' than others. It has expanded its mandate to include a range of annual global, regional, national and 'special topic' reports on topics like youth, women, and senior entrepreneurship.

The primary purpose of GEM is to understand entrepreneurship in national and global context, 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. In doing so it hopes to identify policies that may foster the quality and quantity of the entrepreneurial activity.

Canada was an early participant in GEM, taking part several times in the survey in the early years. It did not participate between 2005-2012. In 2013 however, Canada resumed their involvement, with the GEM Canada team gathering data and producing national, regional, and provincial reports from 2013-2017.[3]

GEM MODEL AND METHODOLOGY

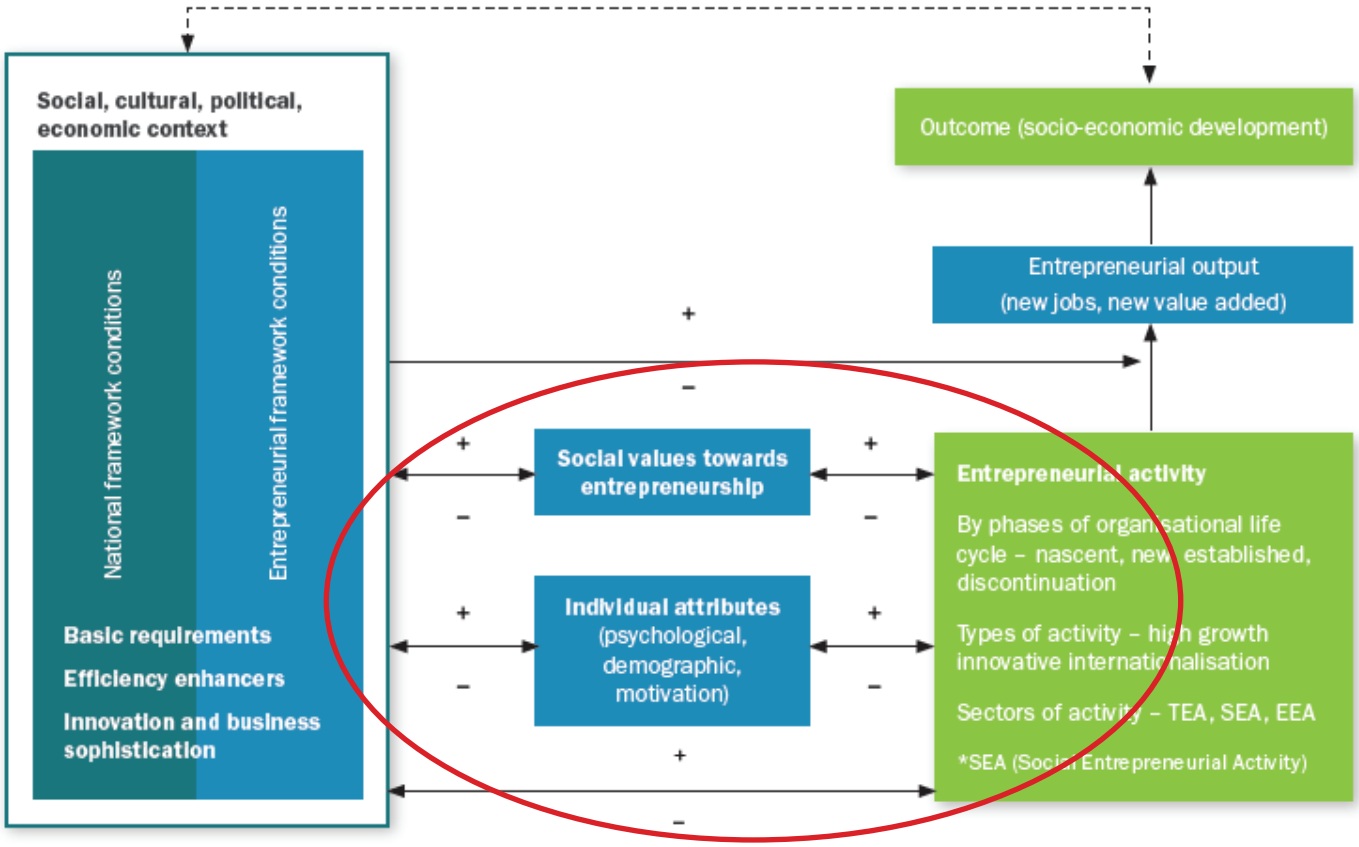
The Global Entrepreneurship Monitor (GEM) defines entrepreneurship as:

> *"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 personal aspirations and capabilities, as well as the entrepreneurial ecosystem. The GEM model is outlined below.

[3] Canada and Alberta reports can be found on the THECIS website: http://thecis.ca/index.php/gem-2016/reports-and-papers/.

Figure 1.1: The GEM conceptual framework



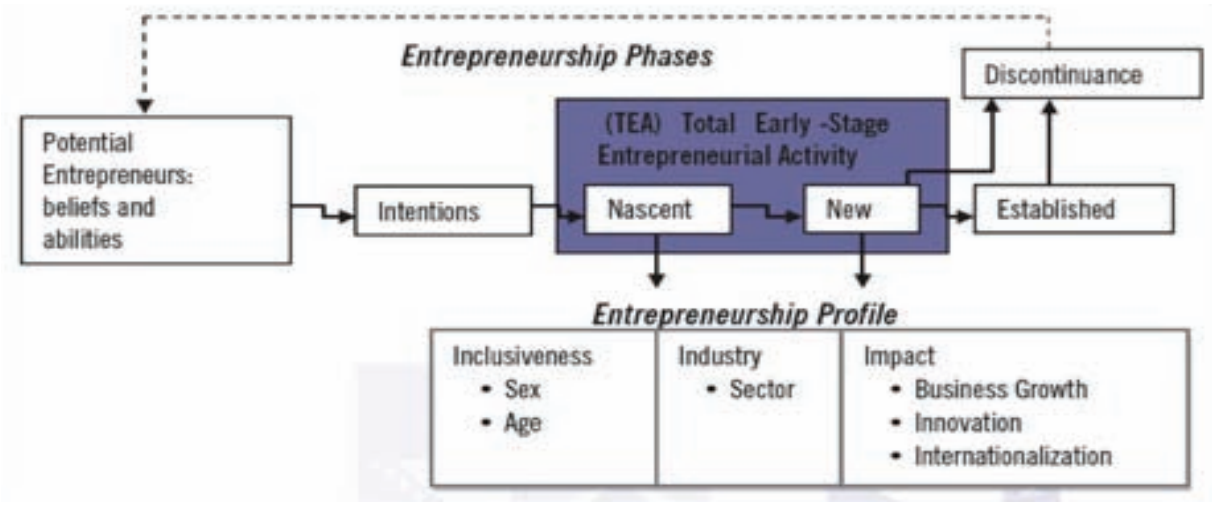
The area inside the red oval includes the aspects of entrepreneurial activity that are the subject of questions to entrepreneurs, and to the surrounding population about attitudes ("Social values", upper left) in the Adult Population Survey (APS). Within the red oval, in a first layer of the ecosystem, are questions addressed to all respondents that explore both general public attitudes toward entrepreneurship and general demographic characteristics. Moving to the left block outside the red oval, the top part refers to parts of the ecosystem determining the framework in which an entrepreneur must work, in the form of general national (or regional) conditions specifically influencing entrepreneurship. These are assessed in a national expert survey (NES) or a provincial expert survey (PES). The lower part on the left refers to general socioeconomic conditions that for example determine the assignment of the jurisdiction to one of the three World Economic Forum categories of economy – in this case primarily those associated with innovation and business sophistication as core characteristics.

GEM classifies countries that participate in the study according to the three-fold typology from the World Economic Forum's Global Competitiveness Report.[4]

Factor- driven economies are the least developed, with highest rates of entrepreneurship, often driven by necessity. In a more intermediate position are efficiency-driven economies where early innovation and infrastructure are emerging. Innovation-driven economies (such as Canada), typically have lower overall rates of entrepreneurship, but this activity is more likely to be technologically innovative, knowledge-based, and novel, and driven by opportunity-based, rather than necessity-based, motivations.

Overall, the GEM model also views entrepreneurship as a process with distinct phases. As depicted in Figure 1.2, this process moves from the intention to start a business, to nascent entrepreneurship involving a new start-up, to owner-managers of a relatively new business, to owner-manager of a more established venture. Following this process approach, it also tracks business exits (discontinuance).

Figure 1.2: The GEM entrepreneurial process



[4] The most recent report can be found here: https://www.weforum.org/reports/the-global-competitiveness-report-2017-2018. In this report Canada ranks 14th in comparison to the United States which occupies 2nd place.

A central measure of the GEM is Total Early-Stage 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 uses two main sources:

The Adult Population Survey (APS) - Data for the APS is gathered through a telephone survey of randomly selected adults, aged 18-99 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.

The National or Provincial Expert Survey (NES/PES) - The NES/PES is a questionnaire completed by a group of experts in a county, or province (in this case Alberta), using the instrument developed for the global GEM project. The survey presents a series of statements concerning support for entrepreneurship, and experts are asked to assess the degree to which each is true. Areas probed are: finance, policy, government programs, education and training, technology transfer, support infrastructure, and wider socio-cultural norms. The final section solicits open-ended responses.

Structure of this report

What follows in this report is a look at entrepreneurship in Alberta for 2017 using the APS and PES. Comparisons are made between Canada and other provinces where appropriate. Ontario and Quebec both met a larger sample size threshold within the data-set so they are used to offer additional context for the discussion. The Global GEM report is also used in some instances to indicate how other Innovation-driven economies compare to the Alberta results.

Chapter 2 investigates both the attitudes and activity of Albertans and entrepreneurs within the province.

Chapter 3 examines the demographic dimensions of Albertan entrepreneurship in greater detail including age, education, gender and sector participation.

Chapter 4 looks at the aspirations of entrepreneurship in the economy focusing on factors like job creation, export orientation, innovation, and the use of technology.

Chapter 5 provides a review of the Provincial Expert Survey by examining the general framework for entrepreneurship as well as constraints, fostering factors, and potential recommendations.

Chapter 6 offers a brief summary and specific policy recommendations.

CHAPTER 2

Using GEM APS data this chapter investigates both the attitudes and activity of Alberta entrepreneurs.

Attitudes

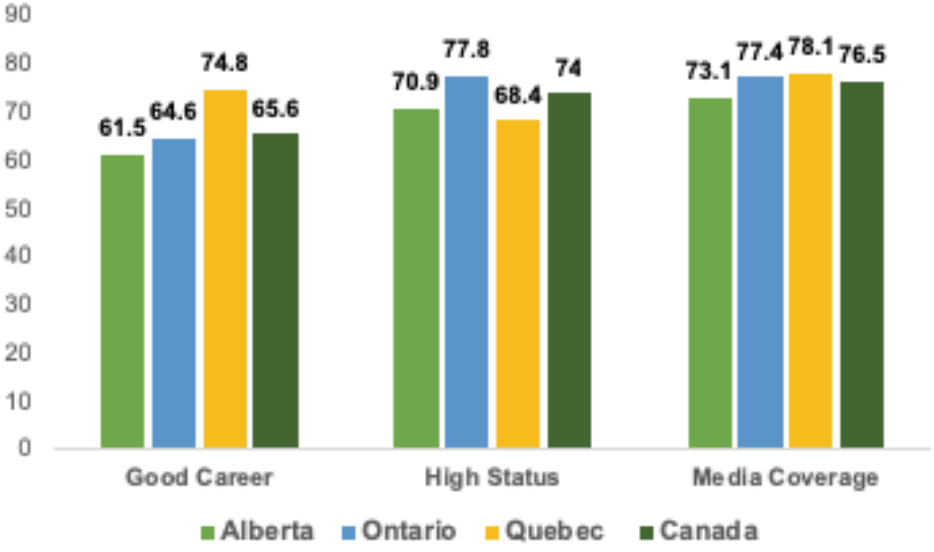
GEM was one of the first initiatives that collected data related to attitudes, perceptions, and intentions towards entrepreneurship. Now, with multiple years of data available for many jurisdictions, it is possible to not only analyze differences between countries/and or provinces but also to observe changes over time.

ATTITUDES TOWARDS ENTREPRENEURSHIP

When measuring attitudes, the following factors related to entrepreneurship are probed: whether it a good career choice; if successful entrepreneurs enjoy high status and; and if the media covers entrepreneurship well.

The perception of Alberta entrepreneurs can be found in Figure 2.1 and is quite instructive when assessed against other jurisdictions.

Figure 2.1: Attitudes of Albertans Towards Entrepreneurship, Provincial and National Comparison (2017)



As this figure reveals, the results are positive. Albertans see entrepreneurship as a good career choice, associate it with high status, and think it is awarded favourable status in the media.

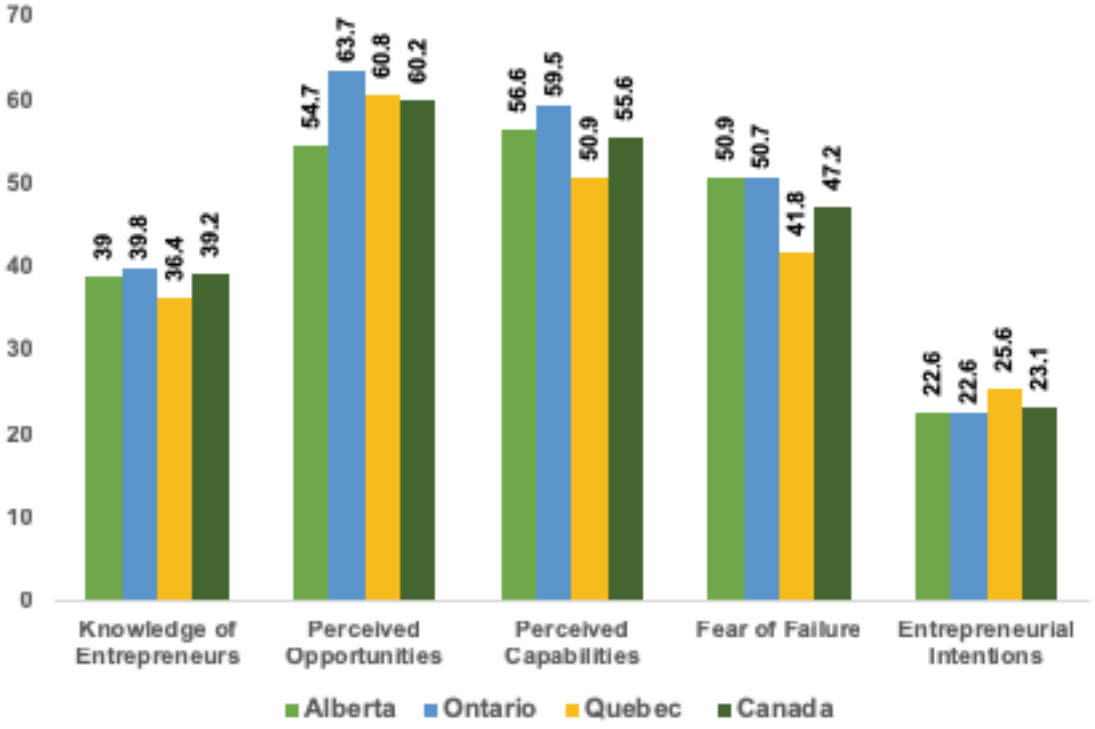
However, in comparison to the national results and other provinces, Albertans attitudes are slightly lower across two of the three indicators. The one exception is Quebec, whose view of entrepreneurship as high status was 68.4%, which is less than Alberta's rate of 70.9%.

In a global context for all Innovation-driven economies (24 in total)[5] the average 2017 rate are as follows: good career (57%), high status (70%), and positive media coverage (62%).[6] In this context, Alberta performs well, exceeding these results.

PERCEPTIONS TOWARDS ENTREPRENEURSHIP

In addition to broad attitude data, GEM collects more micro level findings about personal networks (knowledge of an entrepreneur), perceived strengths and weaknesses (opportunity, skills and experience, fear of failure), and future intentions (desire to start a new business in the next three years). Alberta's results are summarized below in a national and provincial context.

Figure 2.2: Perceptions of Albertans Towards Entrepreneurship, Provincial and National Comparison (2017)



[5] By region these Innovations-driven economies are: ***Asia and Oceania***- Australia, Israel, Qatar, Republic of South Korea, Taiwan, United Arab Emirates, Japan; ***Europe***- Cyprus, Estonia, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Slovenia, Spain, Sweden, Switzerland, United Kingdom; ***North America***- Canada, United States; ***Latin America and the Caribbean***- Puerto Rico. See GEM Global Report 2017/2018 (p. 20).

[6] See GEM Global Report 2017/2018 (p. 27).

"Fear of Failure" stands out nationally and provincially as being higher in Alberta than anywhere else (50.9% versus the Canadian rate of 47.2%). In addition, both national and provincial comparison, reveal that Albertans are not nearly optimistic about the opportunities that present themselves, tracking at levels that are 5% less than the rest of Canada and Quebec, and 8% less than Ontario.

Albertans knowledge of an entrepreneurs is line with Ontario and Canada's. Moreover, Albertans are more assured in their skill sets than Canadians on a whole (tracking 1% higher), though they are not as confident as those found in Ontario.

Globally, in comparison to the cumulative average of other Innovation-driven economies Alberta tends to fare well. Global averages for such economies are: perceived opportunity (43%), skills and experience (43%), fear of failure (40%) and intention (15%).[7] The anomaly being fear for failure as it is higher in Alberta (50.9%) than in other comparable settings.

Taken as a whole, this data suggests that Albertans, while confident in their skills and experiences, might be slightly more risk adverse because they do not want to fail, and/ or they do not feel there are adequate opportunities. These results make sense given the negative economic environment of from 2015-2016 discussed in Chapter 1 of this report.

Strategies to highlight opportunities for entrepreneurs in the province, and tactics to mediate fears might be worth incorporating in both media coverage and future training initiatives.

Activity & Motivations

Since its early inception, GEM has focused on the phase that combines the stage in advance of the start of a new firm (nascent entrepreneurship) and the stage directly after the start of a new firm (owning-managing a new firm). Taken together this phase is denoted as "total early-stage activity" (TEA). Individuals involved as owner-managers in established firms are identified (Established Business), and those that choose to discontinue their entrepreneurial activity have also been tracked. Additionally, GEM provides the unique opportunity

[7] GEM Global Report 2017/2018, p. 28

to track those who are involved in the start-up of a new venture or activity under the control of an employer known as either "Employee Entrepreneurs" or "Intrapreneurs".

TEA, ESTABLISHED BUSINESSES, EMPLOYEE ENTREPRENEURS /INTRAPRENEURS

Historically, Alberta has had one of the highest TEA rates in developed economies.[8] As Figure 2.3 reveals, the 2017 findings are consistent with past results:

Figure 2.3: TEA, Innovation-Driven Economies, International Comparison (2017)

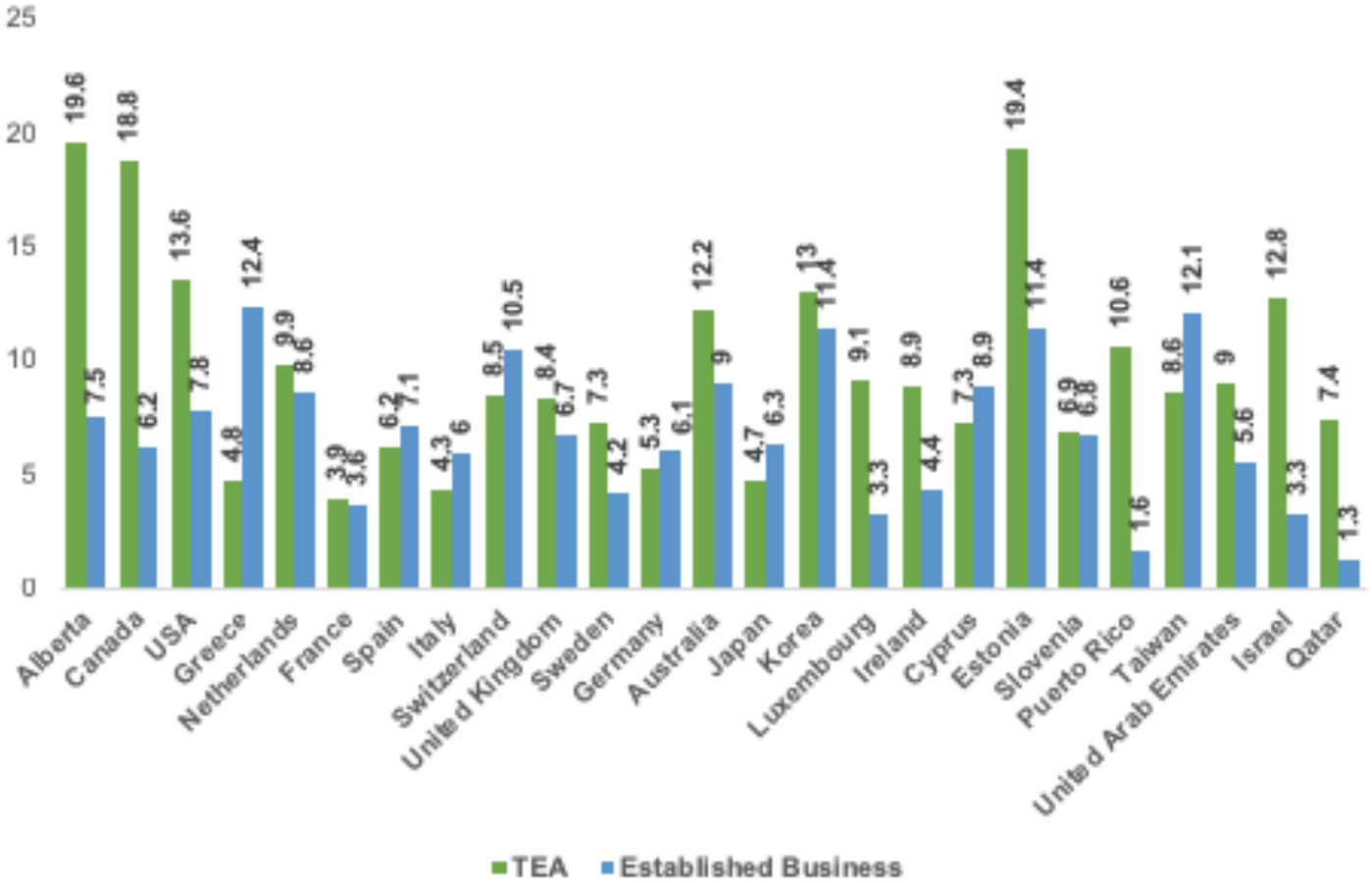


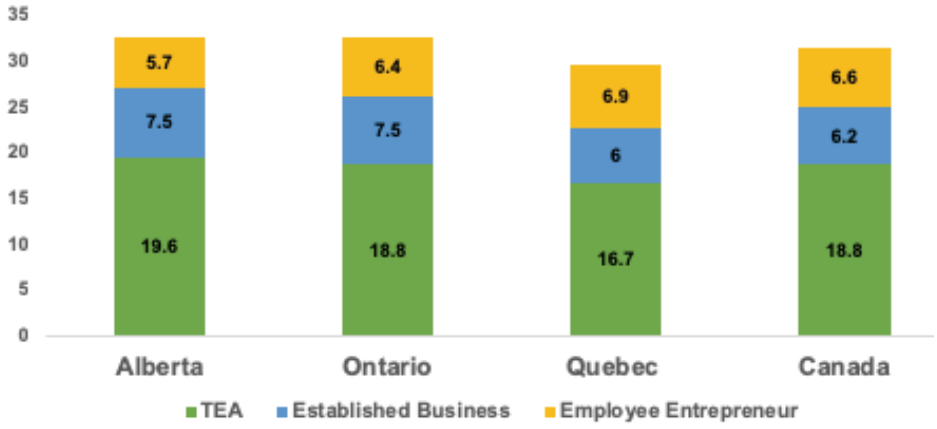
Figure 2.3 shows that Alberta continues to exceed TEA rates in comparison to all other innovation-driven economies within the GEM framework, with its rate of 19.6%.

[8] See GEM Alberta 2016.

This is not however the case for Alberta's Established Business rate. While, this rate is still higher than the Canadian result (Alberta's is 7.5% versus the Canadian rate of 6.2%), the province's Established Business levels are slightly lower than the neighbouring United States (by .3%) and noticeably lower than Australia's (a country who is often used as a comparative benchmark for Canada) whose Established Business rate for entrepreneurship is 9% versus Alberta's rate of 7.5%.

It is also instructive to consider Alberta's entrepreneurial activity within Canada. Below is a comparative look at how TEA measures up compared to Established Businesses and Employee Entrepreneurs/ Intrapreneurs.

Figure 2.4: TEA, Established Business and Employee Entrepreneurship, Provincial & National Comparison (2017)



The results here are generally positive. Alberta continues to be a leader in TEA and Established Business, surpassing the Canadian totals and most provincial counterparts. It is tied with Ontario for higher than the national results for Established Business activity.

Alberta's performance in 2017 also surpasses 2016 figures in both the TEA and Established Business rates, as demonstrated in Figure 2.5:

Figure 2.5: TEA and Established Business, National Comparison (2016 and 2017)

Despite these successes, as Figure 2.4 reveals, Alberta does have lower levels of Employee Entrepreneurship/ Intrapreneurship (5.7% versus the Canadian result of 6.6%). This lower rate was apparent last year as well.[9]

In sum, Alberta continues to experience TEA and Established Business success but less so in the domain of Employee Entrepreneurship/ Intrapreneurship. It is thus worth exploring further how to increase this activity within the province. Perhaps there are some lessons to be learned from Quebec's success (as their rates are the highest in the country). Furthermore, since the opportunity to participate in Employee Entrepreneurship/Intrapreneurship activity depends on a firm's innovation strategy, policy could be directed to increasing this aspect of firm performance via additional training.

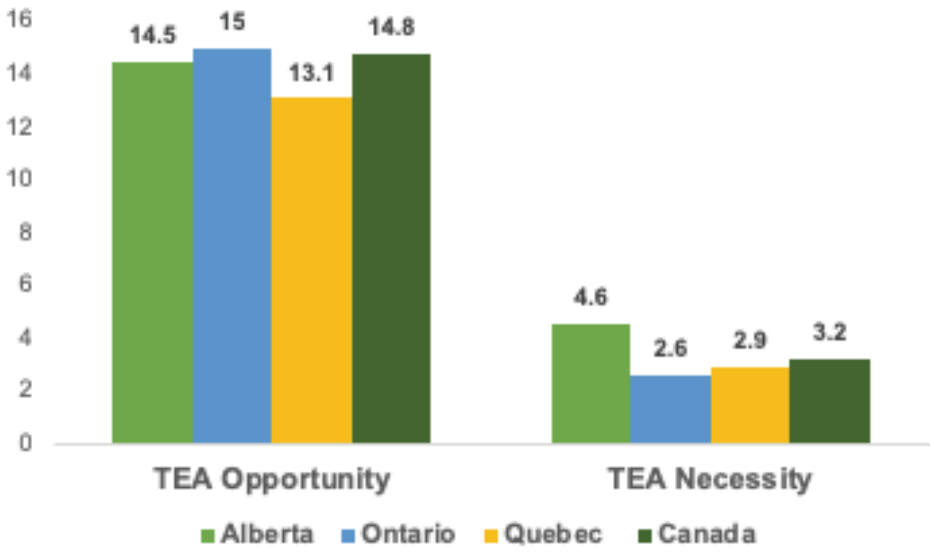
MOTIVATIONS

From 2001 onward, GEM has paid attention to different motivations for starting a business. Respondents were asked: Were you involved with this start-up to take advantage of a business opportunity or because there was no better choice for work?

[9] See GEM Alberta 2016 (p. 26).

As GEM notes, countries like Canada which are primarily Innovation-driven should be expected to have high levels of improvement-driven opportunity entrepreneurship. This is because opportunities for employment are generally more abundant, offering individuals different alternatives to make a living. Alberta's entrepreneurs TEA motivations are capture below:

Figure 2.6: TEA Motivations, Provincial & National Comparison (2017)



The expected result is reinforced by the findings in Figure 2.6; TEA opportunity motivations were significantly higher than TEA necessity levels for all the larger provinces and Canada. However, Alberta's TEA necessity rate is higher than the Canadian level and its provincial counterparts. This could perhaps be because of the challenging economic conditions that presented themselves in both 2015 and 2016, though other factors might also play a role. Necessity driven opportunity rates are worth monitoring as the overall economic health of Alberta improves.

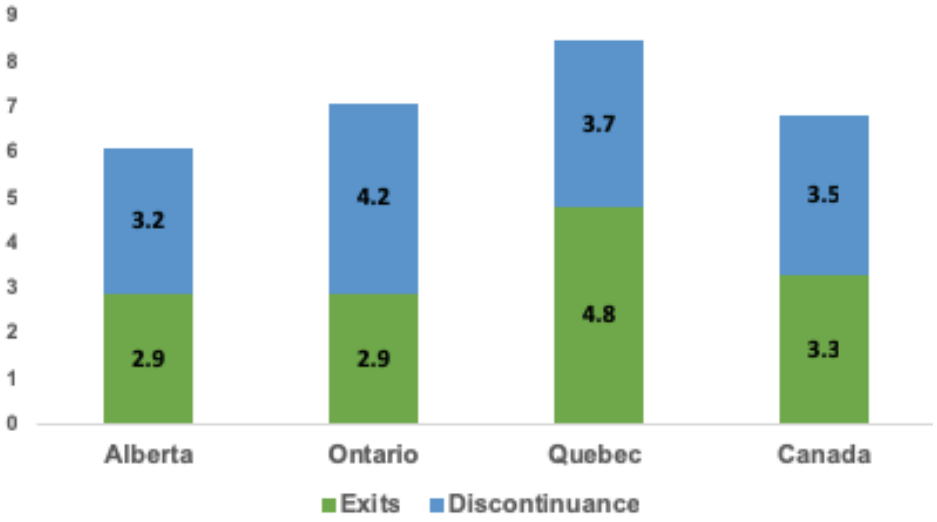
EXITS AND DISCONTINUANCE

Just as the formation and establishment of new enterprises are important, exits from a business also forms an essential part of the entrepreneurial process. In GEM, exits are captured not only by

[10] See GEM website: https://www.gemconsortium.org/wiki/1177

asking respondents if they have been involved in the exit of a business, but also in exploring the main reason for their departure. There is a differentiation between exits and discontinuance. "Discontinuances" are whether a business ceased operation after an entrepreneur left, whereas "Exits" are measured by whether the business continue its business activities after a departure. The comparative findings for Alberta are found in Figure 2.7.

Figure 2.7: Exits and Discontinuance, Provincial & National Comparison (2017)



As these results demonstrate, Alberta has lower levels of Exits and Discontinuances than Canada as a whole, and other provinces (it is tied with Ontario on Exits), which is a positive sign. This means entrepreneurs are not leaving their businesses at higher than expected levels. According to additional GEM data, the top three reasons Albertan entrepreneurs are leaving (outside of the broad categorization of "Other") include: an opportunity to sell the business (31.3%), government tax/bureaucracy (12.8%), and problems getting finance (10.3%). This is different than other Innovation-driven economies who have consistently identified lack of business profitability as their reasons for exiting.[11]

[11] GEM Global Report 2017/2018, p. 13.

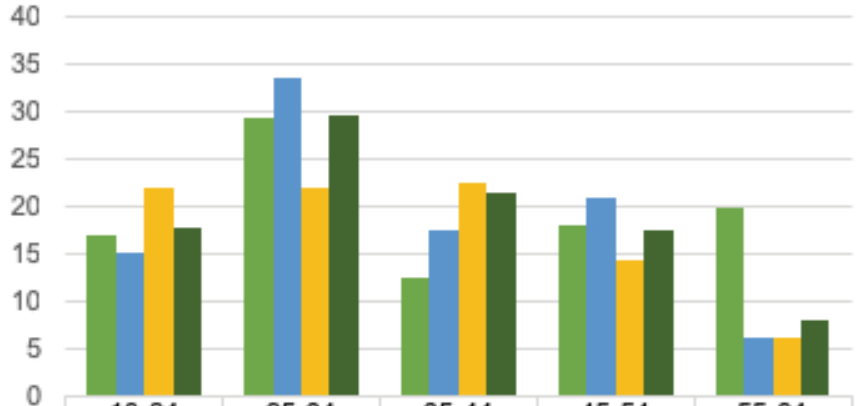
CHAPTER 3 Demographics

Using the GEM APS data, this chapter examines the demographic dimensions of Alberta entrepreneurship in greater detail including age, education, gender, and sector participation.

AGE

Below is a look a breakdown of the Alberta Entrepreneurship by age: first by TEA, and then by Established Business rates. The sample sizes in each age category are small, so these results should be used with caution. Nevertheless, they offer a tentative snapshot profile of a typical Alberta entrepreneur.

Figure 3.1: TEA % total by Age, Provincial & National Comparison (2017)

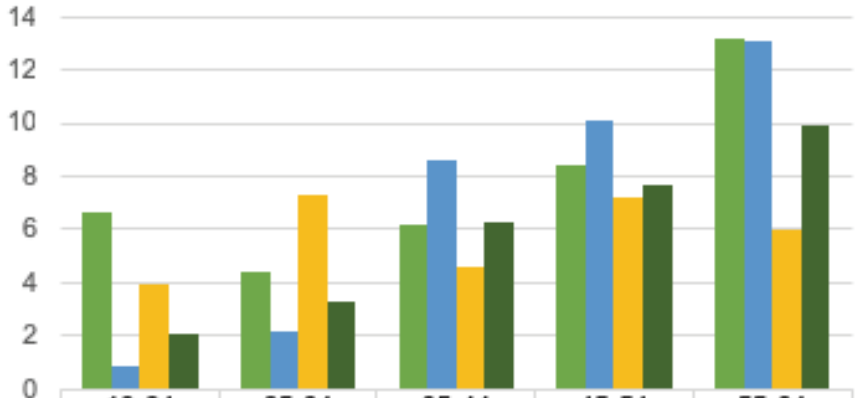


	18-24	25-34	35-44	45-54	55-64
Alberta	16.9	29.3	12.4	18	19.9
Ontario	15.1	33.4	17.5	20.9	6.1
Quebec	21.9	22	22.3	14.3	6.1
Canada	17.8	29.5	21.5	17.5	8.1

These findings reveal that Alberta, like the rest of Canada, has most of its TEA reports within the 25-34 year old age category; Quebec is an exception here with its 25-34 year old cohort and 35-44 year old cohort being almost equal. What appears to be more significant in Alberta is the participation rates of the 55-64 age cohort: it is at least double of that found anywhere else. It is possible that some of these older employees suffered job losses with the oil and gas downturns discussed in Chapter 1, but feel they have expertise to offer as consultants, thus launching their own businesses.

Established Business rates can also be profiled for age, as Figure 3.2 demonstrates.

Figure 3.2: Established Business % total by Age, Provincial & National Comparison (2017)



	18-24	25-34	35-44	45-54	55-64
Alberta	6.6	4.4	6.2	8.4	13.2
Ontario	0.9	2.2	8.6	10.1	13.1
Quebec	3.9	7.3	4.6	7.2	6
Canada	2.1	3.3	6.3	7.7	9.9

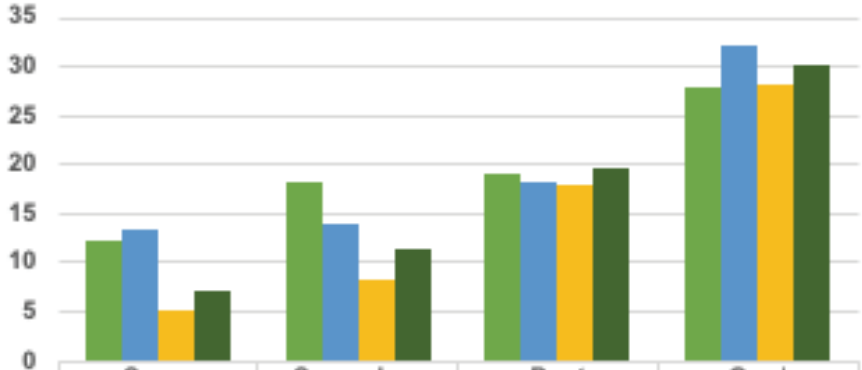
The gap between other jurisdictions the 55-64 age cohort is higher in Alberta than it is elsewhere. There is also a higher rate of young entrepreneurs (18-24) reporting Established Business activity. This could suggest that younger people may be having more success maintaining businesses in Alberta than elsewhere.

Overall, the age data is an excellent reminder that it is not only "young" entrepreneurs that need support but that there continues to be the need to assist with the start-up and maintenance of entrepreneurial ventures at different ages and stages.

CHAPTER 3 EDUCATION

Canada is classified as an innovative economy because it represents one of the highest educated populations globally. The question becomes: Is this reflected in the Alberta entrepreneurship data? Figure 3.3 presents how education levels are connected to TEA.

Figure 3.3: TEA Education Levels, Provincial & National Comparison (2017)



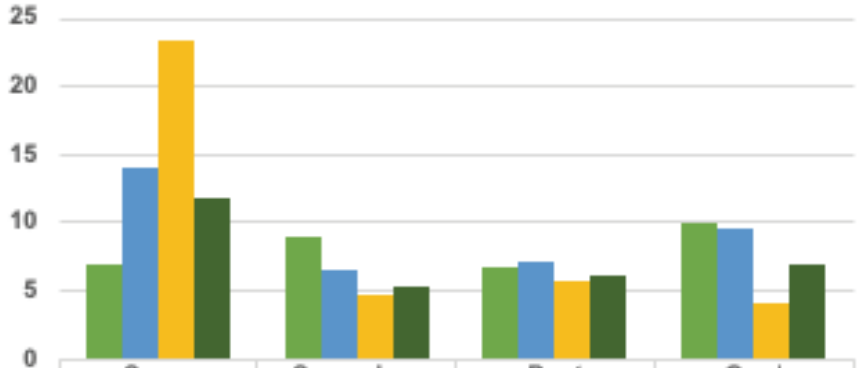
	Some Secondary	Secondary Degree	Post Secondary	Grad experience
Alberta	12.2	18.2	19.1	28
Ontario	13.4	14	18.2	32.2
Quebec	5.1	8.4	17.9	28.1
Canada	7.1	11.3	19.7	30.1

The pattern shown here was one also observed in both 2015 and 2016.[13] Alberta, and the rest of Canada, exhibits a trend of an increase in the level of entrepreneurship as education increases.

Education levels were also reported for the Established Business respondents (though the sample size is small here).

[13] See GEM Alberta 2016 (p.37).

Figure 3.4: Established Business, Education Levels, Provincial & National Comparison (2017)



	Some Secondary	Secondary Degree	Post Secondary	Grad experience
Alberta	6.9	9	6.8	10
Ontario	14	6.5	7.1	9.5
Quebec	23.4	4.8	5.8	4
Canada	11.8	5.4	6.1	7

As Figure 3.4 reveals, the same educational trends are not immediately apparent in the reports of educational levels of Established Business owners. Though Alberta does have higher rates of those with grad experience in this domain.

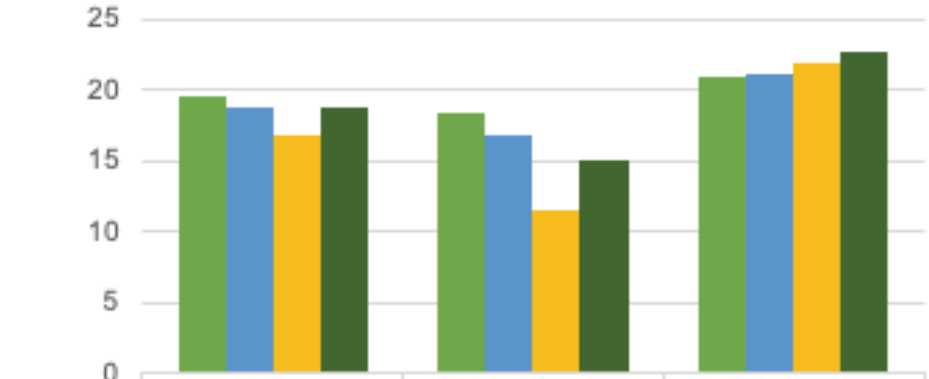
Overall, this data suggests that Alberta's entrepreneurial population has the educational background to engage in sophisticated initiatives in both TEA and Established Businesses.

GENDER

Globally, and nationally, a gender gap has been reported for male and female entrepreneurs.[14] Nevertheless, Alberta has historically been a leader for demonstrating less gender disparity. Exploring TEA rates demonstrates current gender ratios.

[14] See GEM Global Report 2017/2018 (p. 15).

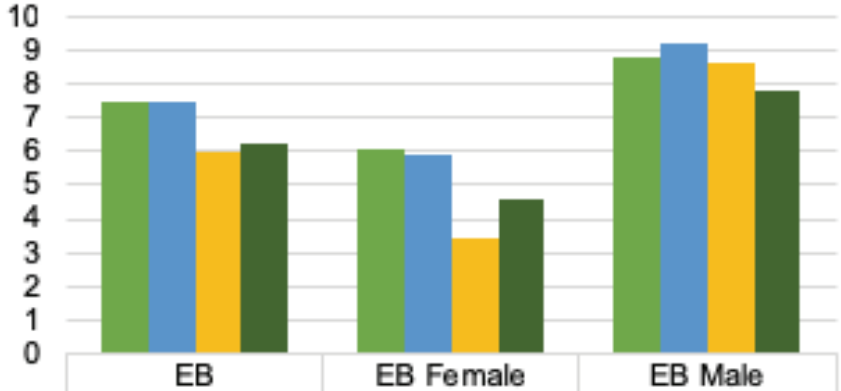
Figure 3.5: TEA by Gender, Provincial & National Comparison (2017)



	TEA	TEA Female	TEA Male
Alberta	19.6	18.4	20.8
Ontario	18.8	16.7	21.1
Quebec	16.7	11.5	21.9
Canada	18.8	15	22.6

This data show that the gender gap for TEA is indeed lower Alberta than it is elsewhere. This same pattern is apparent in Established Business, as Figure 3.6 below demonstrates.

Figure 3.6: Established Business Rates by Gender, Provincial & National Comparison (2017)



	EB	EB Female	EB Male
Alberta	7.5	6.1	8.8
Ontario	7.5	5.9	9.2
Quebec	6	3.4	8.6
Canada	6.2	4.6	7.8

Both these figures indicate positive signs. Alberta is a clear leader for female entrepreneurship in comparison to other places, nevertheless it would be preferable to close this gap completely. At present, however there are only three economies in the GEM data set where women report equal or higher entrepreneurship rates than men: Ecuador (28.7%), Vietnam (21.7%), and Brazil (19.8%).[15]

SECTOR PARTICIPATION

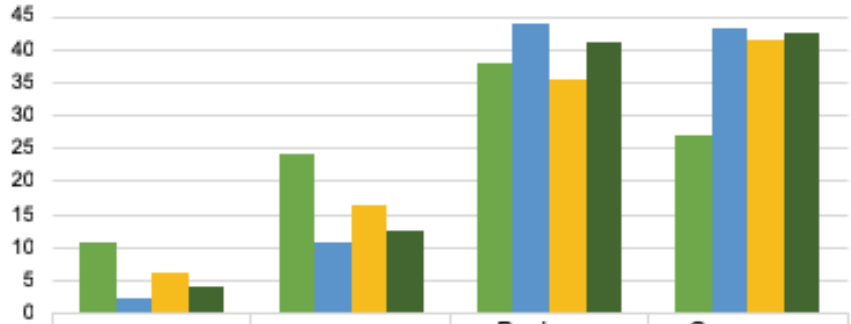
In the absence of large samples, businesses in the GEM data set are assigned to one of four broader all-encompassing categories, based initially on ISIC 1D categories:

- extractives, including agriculture and oil and gas;
- transformatives which is mainly manufacturing;
- business oriented services; and
- consumer oriented services.

The figures below track the four-sector distribution of initiatives TEA and Established Business rates for Alberta and offers comparative data.

The sample sizes are still small here, so the data should be used with caution.

Figure 3.7: TEA by Sector, Provincial & National Comparison (2017)



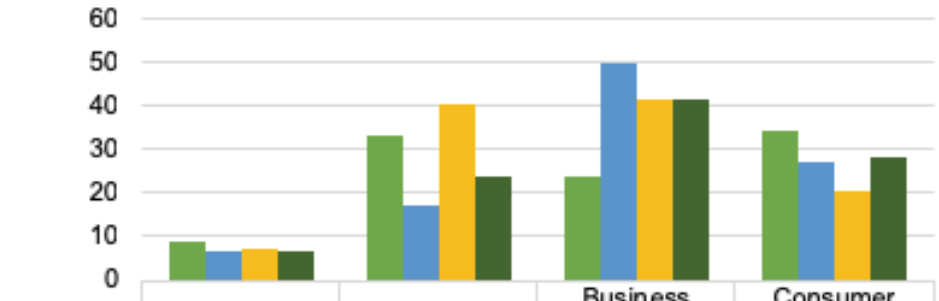
	Extractive	Transformative	Business oriented	Consumer oriented
Alberta	10.7	24.3	38	27
Ontario	2.3	10.7	43.8	43.1
Quebec	6.3	16.6	35.5	41.6
Canada	4.2	12.5	41	42.4

[15] See GEM Global Report 2017/2018 (p. 15).

As this figure demonstrates, Alberta profiles slightly differently than other jurisdictions for sector participation: it has higher levels in the extractive and transformative industries. What is also of note is that Alberta has a higher business-oriented composition for TEA over consumer-oriented services. In contrast, in Canada, Ontario and Quebec there is more consumer-oriented participation.

It is also possible to see if this pattern translates to the Established Business findings:

Figure 3.8: Established Business by Sector, Provincial & National Comparison (2017)



	Extractive	Transformative	Business oriented	Consumer oriented
Alberta	9	33	24	34
Ontario	6.7	17	49.6	26.8
Quebec	7.3	40	41.22	20.5
Canada	6.8	23.5	41.6	28.1

Here the distributions are different. Alberta responses are still higher in the extractive sector but Quebec surpasses Alberta, Canada, and Ontario, in the transformative sector. In Alberta, transformative jobs rival consumer-oriented services in reported Established Business Activity.

This was not the case in 2016 which saw the following breakdown for Alberta in TEA: Extractives (13%), Transformative (11%), Business Services (54%), Consumer Services (22%).

These findings suggest more comparative work could be done in order to understand which sectors are proving most successful for Alberta Entrepreneurs with an awareness that this landscape can shift year over year.

CHAPTER 4

This chapter explores the future aspirations of entrepreneurship in the economy using the GEM APS data focusing on factors like job creation, export orientation, and innovation. It also examines the use of technology.

Aspirations

In recent years, increased attention has been paid to particular types of entrepreneurship that have to do with aspiration levels of the individuals involved. While the degree of involvement in entrepreneurial activity in general is essential information, many academics and policy makers are interested in particular types of entrepreneurial activity. The following (ambitious) types of entrepreneurship can be determined using GEM data:

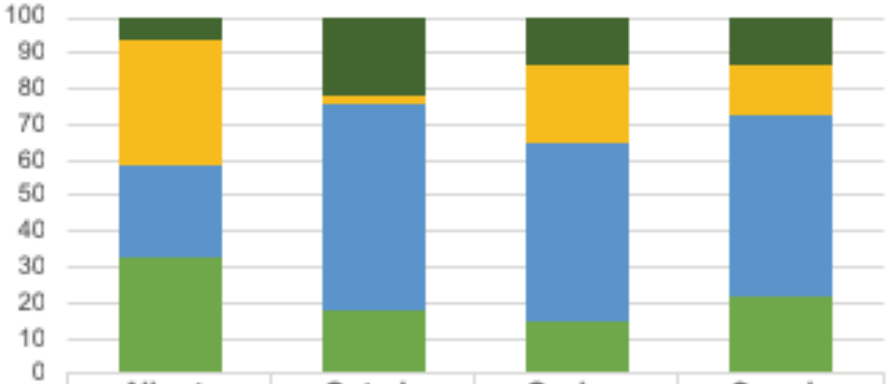
- Entrepreneurship with high growth expectations;
- Entrepreneurship with (self-reported) innovative characteristics; and
- Entrepreneurship with (self-reported) international orientation.

JOB CREATION

Job creation is one of the most discussed consequences of entrepreneurship and is of considerable importance to Alberta. The basic GEM survey assessment of job creation potential is a question about aspiration for development over the next five years. The question begins with a report of the current level of employment and is followed by asking for the projected number of employees in five years. Figures 4.1a and 4.1b represent the results for four employment levels.

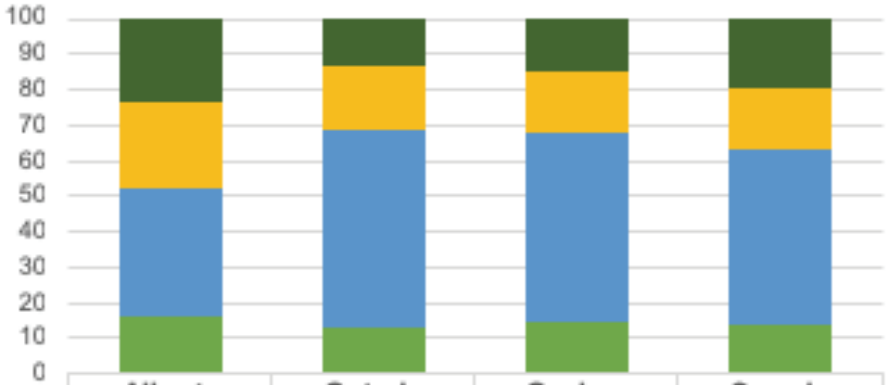
CHAPTER 4

Figure 4.1a: TEA Job Aspirations Now, Provincial & National Comparison (2017)



	Alberta	Ontario	Quebec	Canada
20+	6.7	21.8	13.2	12.9
(6-19)	35.7	2.6	22	14.6
(1-5)	25.5	57.5	50.4	50.5
None	32.8	18.1	14.5	22

Figure 4.1b: TEA Job Aspirations in 5 Years, Provincial & National Comparison (2017)

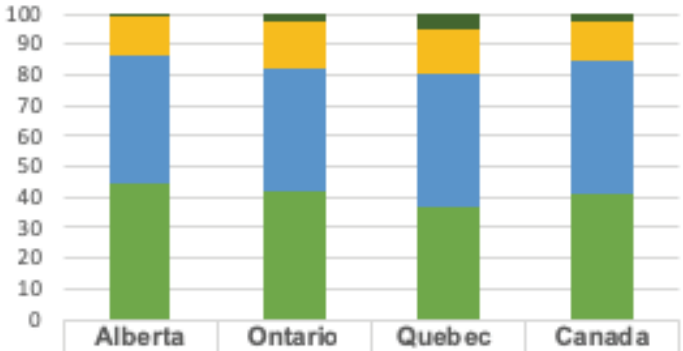


	Alberta	Ontario	Quebec	Canada
20+	23.2	12.9	14.7	20
(6-19)	24.8	18.5	17.2	16.8
(1-5)	36	55.6	53.2	49.7
None	16.1	12.9	14.7	13.6

What these findings reveal is there is a large jump between high TEA job aspirations (+20) from now (6.7%) to 5 years (23.2%). This suggests that Alberta entrepreneurs are ambitious and optimistic regarding what they can achieve. Support could be required in upcoming years to support this expectation for these burgeoning entrepreneurs within the province in order to optimize their impact.

Another parameter closely related to employment growth is market expansion, a second dimension of growth. In most cases ambitions to expand markets will accompany employment growth, but the two do not have to correlate. The data of interest are those related to ambitions for market expansion in the five-year time frame. The responses are categorised as: no expansion, some expansion with no linkage to new technology, expansion linked to new technology, and profound market expansion.

Figure 4.2: Market Expansion, Provincial & National Comparison (2017)



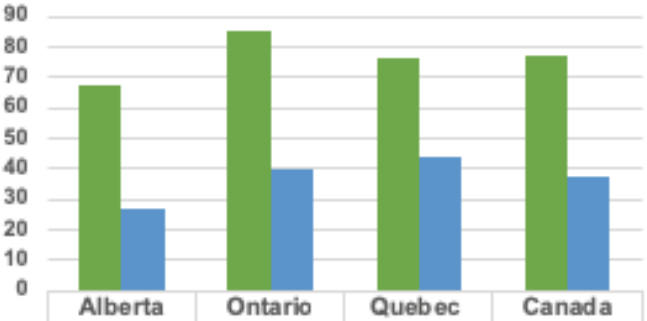
	Alberta	Ontario	Quebec	Canada
Profound	1	2.3	5	2.6
Some (technology)	12.9	15.3	14.7	13.2
Some (no technology)	41.9	40.1	43.6	43.4
No market expansion	44.4	42.3	36.7	40.9

A significant fraction of respondents report no market expansion but over 50% do anticipate some. There are very few indicating “profound” levels in any of the jurisdictions compared. The statistical significance of the differences between the provinces and Canada is however too low to make generalizations.

CHAPTER 4 EXPORT ORIENTATION

Another activity that is thought to be correlated with innovation is export orientation. The GEM survey provides data on the expected share of revenue coming from outside Canada for TEA. Two indicators can measure this: strong and weak export orientation. Both these levels are reported in Figure 4.3.

Figure 4.3: TEA Export Orientation, Provincial & National Comparison (2017)



	Alberta	Ontario	Quebec	Canada
Weak (more than 1% of revenue from outside country)	67.5	84.8	76	77.3
Strong (more than 25% of revenue from outside country)	26.7	40	44	37.1

What these findings illustrate is that Alberta scores lower than other jurisdictions for both weak and strong export orientation. The sample sizes are small, so these comparisons should be used with caution, nevertheless there is evidence to suggest more could be done to encourage an export orientation in Alberta. This is a trend that has been apparent in previous years.[16]

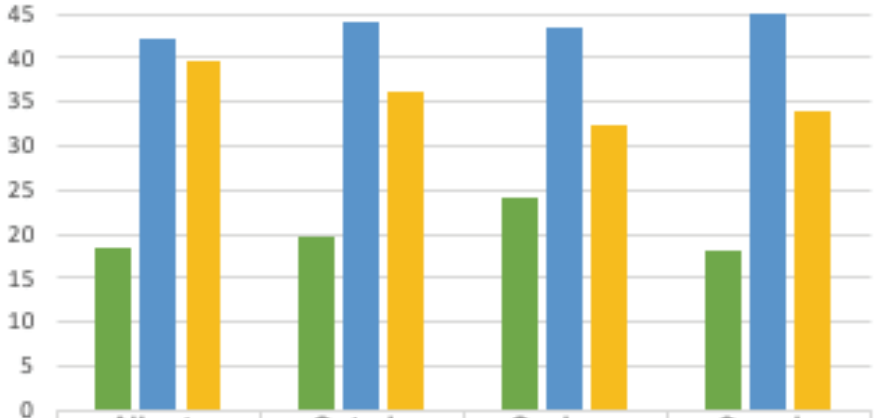
PRODUCT NOVELTY

Innovation is a major goal of entrepreneurship policy, even if only a fraction of new initiatives offer substantial innovations. Innovation is hard to define precisely. In some respect all of the new initiatives respond to an entrepreneur undertaking something new. However, the most relevant formal definition of innovation is an activity new to a market.

[16] See for example, GEM Alberta 2016 (p. 31).

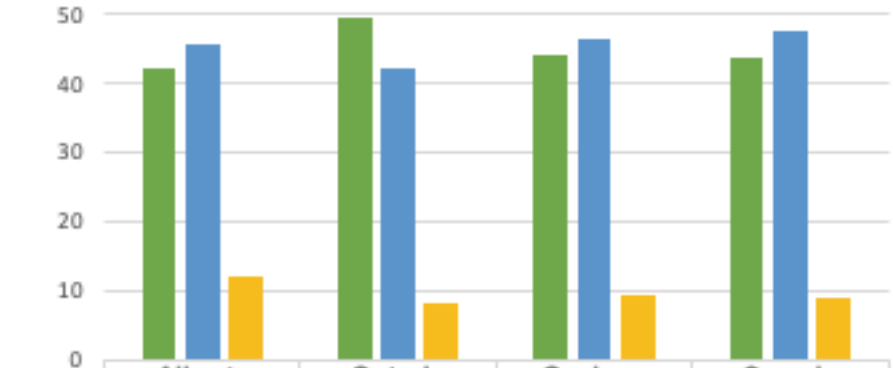
Initiatives that provide products or services that are novel or unfamiliar in a market lie clearly within that definition and those initiatives that have no competitors are also clearly innovative within the relevant market. This definition coincides with two dimensions of GEM data about the TEA population: the share of customers who are expected to find the new product or service novel or unfamiliar (innovative in that market), and the number of other firms who offer similar (competitive) products or services. Findings are supplied in Figure 4.4 regarding novelty, and Figure 4.5 regarding competition.

Figure 4.4: TEA Novelty (Unfamiliarity) of Product or Service, Provincial & National Comparison (2017)



	Alberta	Ontario	Quebec	Canada
All	18.3	19.6	24.2	18.2
Some	42	44.1	43.55	47.9
None	39.6	36.3	32.3	33.9

Figure 4.5: TEA Competition of Product or Service, Provincial & National Comparison (2017)



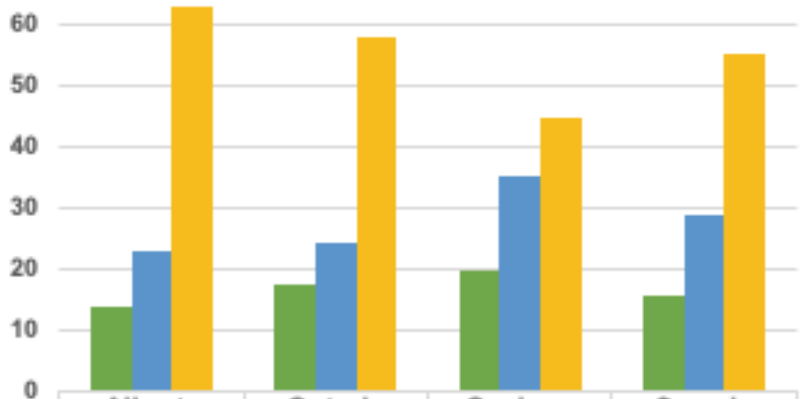
	Alberta	Ontario	Quebec	Canada
Many	42.1	49.4	44.3	43.6
Few	45.9	42.3	46.4	47.6
None	12	8.4	9.3	8.9

As these two Figures indicate, the most innovative parts of these scales are at opposite ends. Unfamiliarity or novelty to all customers is the most innovative case, whereas no other firms offering competitive products or services is the parallel case. Over 18.3% of Albertans believe their product or service is novel to customers. This is lower than elsewhere but fewer are convinced they face no competition from parallel products or services (over 12%). This suggests that Alberta entrepreneurs are potentially producing less innovative products than their counterparts in Ontario or Quebec but they seem better skilled at identifying markets where there is less competition.

Technology

Some innovation literature proposes a relationship between innovativeness and use of up to date technology. In GEM, the members of the TEA population are asked whether their initiative draws on the latest technology introduced in the last year, technology introduced in the previous one to five years, or older technology. Responses to this indicator are shown in Figure 4.6.

Figure 4.6: TEA Technology Use, Provincial & National Comparison (2017)



	Alberta	Ontario	Quebec	Canada
Latest Year	13.9	17.6	19.7	15.8
1 - 5 years	22.8	24.4	35.4	29.1
Older	63.4	58.1	44.9	55.2

As is common across most GEM studies, the majority of Albertan entrepreneurs do not report the use of newer technologies and they rank lower than other places across the country.

The samples sizes here are small. However, it could be worth monitoring if the Alberta economy brings in additional technology companies or diversifies in new ways, if these numbers change.

CHAPTER 5

The Canadian framework conditions that create the environment for entrepreneurship are examined in GEM via a Provincial Expert Survey (PES), which is the version of the expert survey used for participating countries known as the National Expert Survey (NES). In 2017, 37 Alberta experts from nine entrepreneurship related professional perspectives responded to a series of statements used in the global NES guide. These statements express GEM formulations of circumstances judged favourable to entrepreneurship. The experts identify how favourable conditions in Alberta are by rating the statements on a nine-point scale: Completely false (1), False (2), Moderately false (3), Somewhat false (4), Neither true nor false (5), Somewhat true (6), Moderately true (7), True (8), Completely true (9). Moreover, each of these statements is grouped in lager summary categorizations around these areas: culture, education, financing, infrastructure, government policies and support, market dynamics, and research and development.

The expert panel was also asked to offer open ended responses in three categories: constraining factors limiting entrepreneurship within the province, fostering factors promoting entrepreneurship for Alberta, and recommendations. In each of these areas, experts were asked to provide their top three assessments.

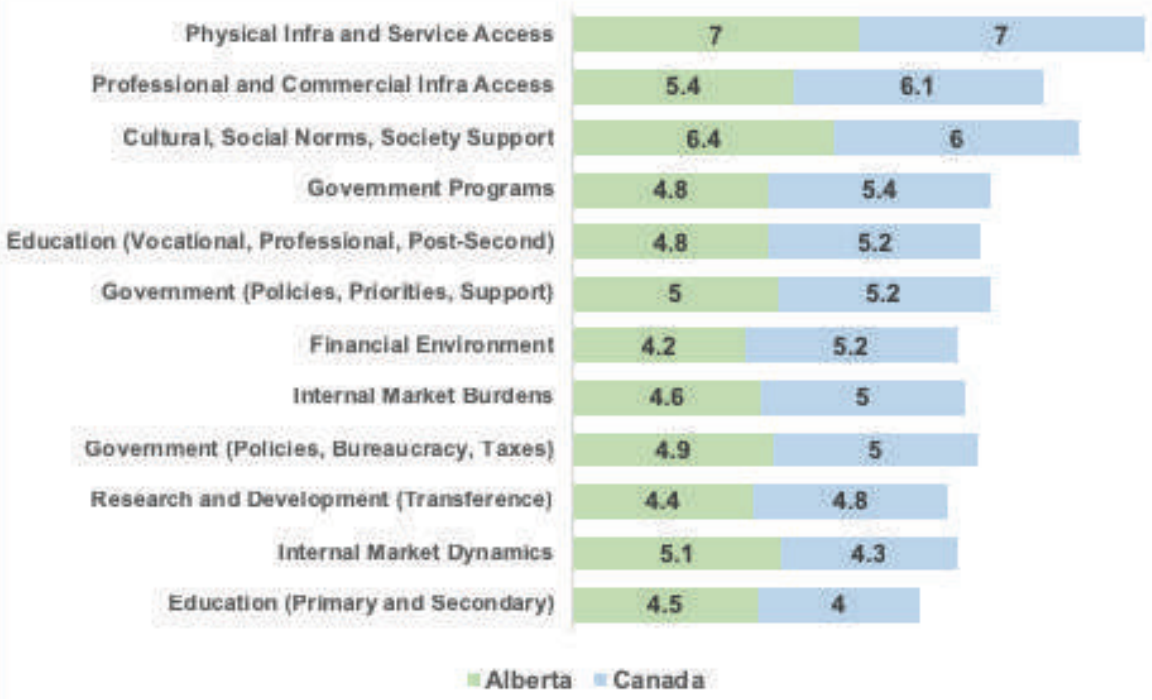
The section below offers a brief summary of these findings.

General Conditions for Entrepreneurship: Framework Summary

There are a variety of categories experts are asked to comment on regarding the general conditions for entrepreneurship. Discussion below report the mean on these areas comparing the Alberta data (37 experts) to the Canada data (40 experts). Mean scores above 5 indicate some satisfaction with the affirmatively worded statement on one of the conditions favourable to entrepreneurship. According to the Global GEM Report scores below 4 merit additional supports.[17]

[17] GEM Global Report 2017/2018, p. 18.

Figure 5.1: General Conditions for Entrepreneurship (Means), Provincial and National Comparison (2017)



This table illustrates some of the similarities and inconsistencies between Canada and Alberta. For example, in both cases, experts rate the ***Physical Infrastructure and Service Access*** as very favourable. This is consistent with global scores of Innovation-driven economies which all tend to rank this condition high.[18] Alberta's experts were more likely to see ***Internal Market Dynamics (i.e. the level of changes within markets from year to year)*** as working in favour of entrepreneurs (5.1 versus Canada's 4.3) and were slightly more positive about the ***Cultural, Social Norms, Society Support*** (6.4 versus Canada's 6.0 median rate).

These scores are consistent with global scores of innovation-driven economies which all tend to rank conditions like ***Physical Infrastructure and Service Access (6.6), Cultural, Social Norms, Society Support (5.1) and Internal Market Dynamics (5.0)***, high.[19]

[18] GEM Global Report 2017/2018, p. 26.
[19] GEM Global Report 2017/2018, p. 26.

Nevertheless, it seems that the experts in Canada are more optimistic than those within Alberta. In Canada, 9 out of the 12 factors have means above 5, in contrast to Alberta where only 5 out of the 12 score in this range. The expert opinions seem to match the overall direction of the data found in Chapter 2 which noted that Albertans more generally were less optimistic about the opportunities for entrepreneurship in Alberta. It also connects to the discontinuance factors which suggested government tax/bureaucracy and problems getting finance are key factors for not remaining an entrepreneur. Finally, these findings are not surprising given some of the broader economic challenges reported in Chapter 1 experienced across the province.

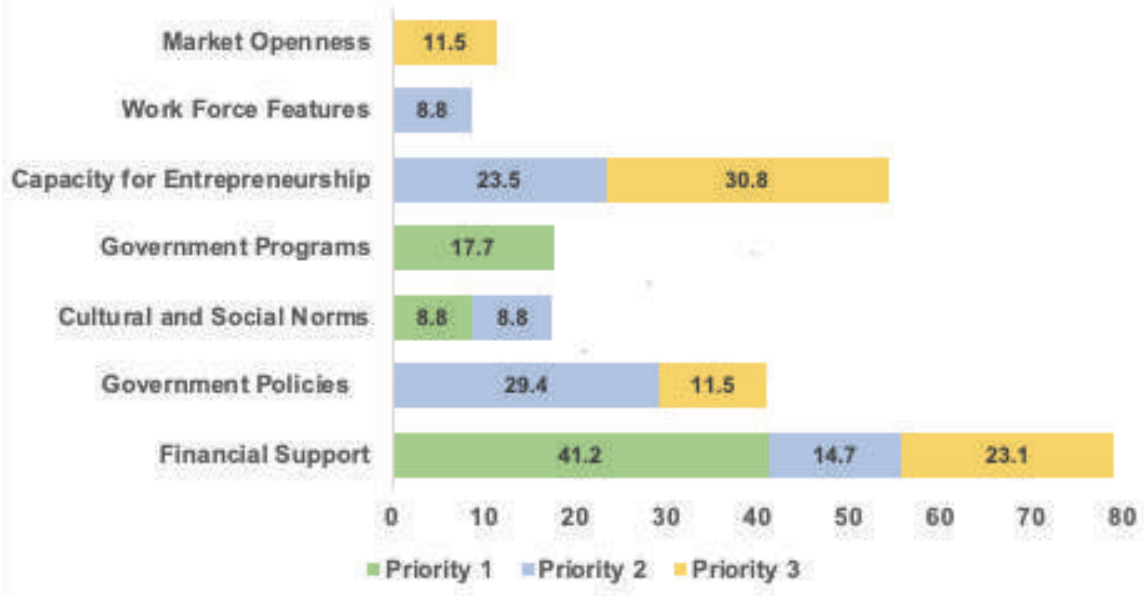
Constraints, Fostering Factors and Recommendations

Below is a more detailed look at the constraints, fostering factors, and key recommendations offered by the respondents of the Alberta PES. An effort was made to link the findings to the more detailed open-ended responses provided.

CONSTRAINING FACTORS

Multiple constraining factors received top priority. The ones cited by more three or more experts are highlighted in the Figure 5.2.

Figure 5.2: PES Constraints for Alberta (2017)



As this Figure illustrates, ***Financial Support*** is a constraining priority for many of the experts. ***Government Policies*** and ***Government Programs*** along with the ***Capacity for Entrepreneurship*** were also mentioned consistently. The comments provided by experts offers some additional insight into what is meant by these constraints.

Illustrative statements of the ***Financial Support*** issues identified included the need for:

- "fast access to capital when needed";
- "access to angel capital";
- "early stage funding"; and,
- "smart angel investors outside of the energy sector."

Typical samples of the constraint issues identified within the ***Government Policies/Programs*** areas were:

- "development programs focused on individuals who are employed (e.g., Alberta Job Grants Scheme) but not those who own or manage growth-oriented SMEs";
- "tax policy - especially on employment" and "taxes, carbon tax, regulations";
- "confusing and uncoordinated government policies";
- "trivial direct support for patents and innovation; more focus on jobs and trades"; and,
- "too many public agencies often offering overlapping support services and no co-ordination around a unifying strategy of how to support economic growth."

Finally, in general, the ***Capacity for Entrepreneurship*** comments suggested key challenges are:

- "lack of expertise and capabilities to support effective scaling of ventures";
- "lack of understanding of government policy, incentives and regulations";
- "government dislike of business";
- "lack of management and financial experience for new entrepreneurs"';
- "[need for] mentors"; and,
- "[lack of] access to good professional support and advice."

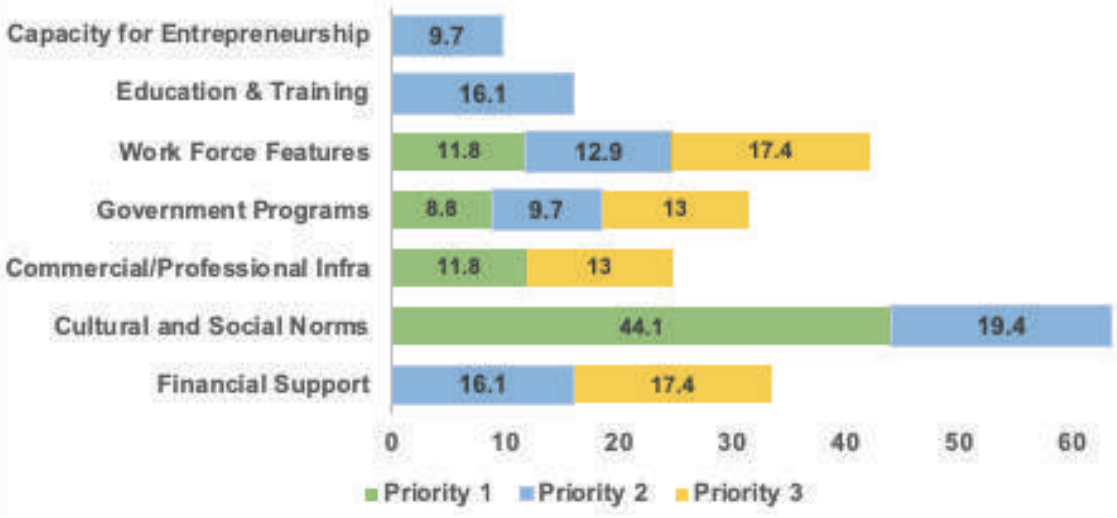
As these comments indicate, experts identified frustrations around access and diversity of capital, coordinating efforts at a government program level, and lack of mentoring and/or adequate support networks for entrepreneurs.

These findings are somewhat different than the global groupings of constraints for Innovation-driven economies. Here, ***Education, Government Policies, Research and Development Transfer***, and ***Finances*** were identified as the top constraints.[20]

FOSTERING FACTORS

Several categories of constraining factors received top priority. The ones cited by three or more experts are highlighted below.

Figure 5.3: PES Fostering Factors for Alberta (2017)



As Figure 5.3 reveals ***Cultural and Social Norms*** remains a key builder of entrepreneurship within the province. Elaboration on why includes comments about Alberta's:

- "innovative spirit";
- "culture of entrepreneurship";
- "bright people with good ideas";
- "general provincial attitude of entrepreneurship"; and,
- "culture of independence".

[20] GEM Global Report 2017/2018, p. 17.

Moreover, ***Work Force Features*** and ***Government Programs*** are identified as fostering factors within all three priorities. Some insights on these two areas are detailed below.

According to some respondents, ***Work Force*** is a fostering factor within Alberta because entrepreneurs have qualities such as:

- "an understandings of product weaknesses and opportunities";
- "market awareness";
- "a culture and history emphasizing small business/ entrepreneurship";

Moreover, having a "highly skilled (technical) work force" and an "educated population" was thought to make a difference.

Dimensions of ***Government Programs*** which foster entrepreneurship included comments about Alberta's:

- "good access to business services";
- "good incubation system"; and,
- "good intentions among our various support agencies (e.g. banks, community futures, etc.) but advice is of poor quality".

Finally, the positives of ***Financial Support*** for Alberta entrepreneurs were identified as:

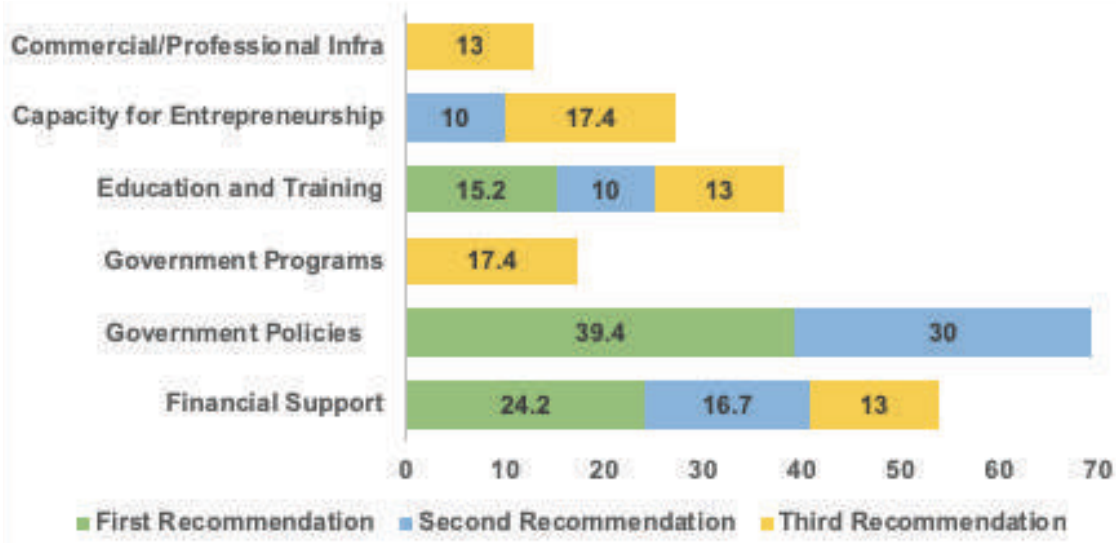
- "the genuine interest in entrepreneurship and innovation at all levels, despite a lack of clarity and alignment as to what this means, or how to achieve it";
- "the private sector is funding the public sector to help to develop the entrepreneurial mindset of the next generation";
- "increasing investment in manufacturing and international trade"; and,
- "capital from successful entrepreneurs [exists]."

These comments indicate that there is a perception amongst those engaged or connected with entrepreneurship that there is a strong entrepreneurial culture in Alberta, good financial intentions, and a qualified workforce.

CHAPTER 5 RECOMMENDATIONS

Finally, in terms of recommendations several were key. Those identified by three or more experts are highlighted in Figure 5.4.

Figure 5.4: PES Recommendations for Alberta (2017)



Given the constraints and fostering factors identified above, it is not surprising that the key areas where recommendations lay occur around ***Financial Supports, Government Policies*** and ***Education and Training***.

Among the more specific insights, the experts suggested some of the following:

Government Policies

- "Better alignment among the various support agencies/ organizations."
- "A well-articulated ambition for Alberta prospering into the medium and long term."
- "Move ahead with a 'growth/leadership' voucher to help those scalable firms" and "focus on growth not just start-up."
- "Major revision to IP policies of post-secondary and public research institutions."

Financial Support

- "Easier access to money."
- "More direct support for translational and commercialization activities - patent funding and early stage start-up programs."
- "Targeted financing for entrepreneur depending on the market segment."
- "More direct investment in higher education."
- "Reduce employment tax" and "...small business tax."
- "Provide micro funding for early stage idea development (pre-incorporation)."
- "Have more effective and available equity funding for pre-commercial [incentives]."
- "[Offer additional] tax incentives for new businesses."

Education and Training

- "[Train] more entrepreneurs."
- "Follow financial literacy by [providing] entrepreneurial or business literacy."
- "Begin education about business earlier."
- "Enhance entrepreneurial education at primary and secondary levels."
- "Provide more entrepreneurial experiences in post-secondary education."
- "Improve teaching on how to be an entrepreneur."
- "Separate commercialization activities from post-secondary education."

As these comments illustrate recommendations associated with government policies include alignment, visioning and Intellectual Property standards. In terms of finance: better access, different levels of support at all phases on the entrepreneurial cycle, tax credits as well as financial incentives were suggested. Finally, in terms of education and training, experts suggested: more entrepreneurial training and earlier in the educational cycle (i.e. K-12), train more entrepreneurs, and provide entrepreneurs with additional literacy (business and financial).

[37] See GEM 2016 Canada report.

CHAPTER 6 Recommendations for Policy and Areas to Monitor

There are many areas where Alberta entrepreneurs are exceeding expectations in comparison to their provincial counterparts and the broader Canadian population. Successful indicators include higher rates of TEA, a smaller gender differential in TEA, lower levels of exits and discontinuance, and solid educational levels. Experts also praise the 1) Physical Infrastructure and Service Access, 2) Cultural, Social Norms, Society Support and 3) Internal Market Dynamics within the province.

There are nevertheless places for improvement. Based on the findings within this report, several recommendations emerge.

POLICY RECOMMENDATIONS

1. ***Continue to highlight opportunities for entrepreneurs in the province and develop tactics to mediate fears in future training initiatives***: One of the key findings that stood out in Chapter 2 about perceptions are the high levels of fear of failure expressed by Alberta entrepreneurs and their perceived lack of opportunities. Fear of failure is higher than elsewhere in Canada and within other Innovation-driven economies. Some ways to mediate this fear might be to use the media (both conventional and social) to showcase positive examples. In addition, training initiatives through the K-12, post-secondary, and via government programs, could focus on risk management strategies to bolster confidence when pursuing entrepreneurial ventures.

2. ***Consider ways to increase Employee Entrepreneurship/ Intrapreneurship within the province***: As Chapter 2 reveals, historically, while Alberta has been successful in surpassing TEA, and fares relatively well when it comes to Established Business rates, an area that is not as strong is the encouragement of Employee Entrepreneurship. Additional programs and supports could be offered to small and medium firms to strengthen this capacity.

3. ***Aim to close the gender gap completely and examine why Alberta is more successful in demonstrating a lower gender gap***: As Chapter 3 notes, Alberta's gap between male and female TEA and Established Business activity is much smaller than other jurisdictions across Canada. Nevertheless, there are economies within the world, where this gender gap does not exist at all, thus it is possible to decrease the current ratio. Additionally, understanding why the gender gap in Alberta is lower, in order to provide some best practices for other areas across the country where female entrepreneurship is less prevalent, could be of use.

4. ***Provide support for burgeoning entrepreneurs with high growth expectations within the province in order to optimize their impact***: As Chapter 4 highlights, many entrepreneurs within Alberta are ambitious and optimistic regarding what they can achieve. Support could be required in upcoming years to manage this expectation and optimize their impact. Globally, policymakers are being encouraged to embrace human-centric development which encourages sustainable practices and equitable welfare for employees as higher growth businesses expand.[21]

5. ***Follow expert advice***: As Chapter 5 suggests, according to provincial experts there are some areas that could be improved to facilitate entrepreneurship. For example, they suggest that Government policies could be better aligned, a more developed vision of what it means to be entrepreneur could be articulated, and Intellectual Property Standards could in revised. In terms of Finance, they advocate for better access to funds, different levels of support at all phases of the entrepreneurial cycle (i.e. pre-commercialization, pre-incorporation, and throughout the patent process). Moreover, whether tax credits as well as tax incentives are as effective as they might be for entrepreneurs requires review. In terms of Education, experts recommend the following: entrepreneurial training needs to occur earlier (such as within the K-12 system), more entrepreneurs should be generated within the economic system, and the quality of business and financial literacy training should be improved.

[21] GEM Global Report 2017/2018, p. 40.

CHAPTER 6 AREAS TO MONITOR

According to this report, there are some trends to monitor moving forward. These include:

- ***Necessity driven TEA***: Chapter 2 reveals these rates were higher than in other provinces this year. It will be interesting to observe if as the economy recovers these rates drop.
- ***Sector distribution***: Chapter 3 notes that Alberta's sectoral composition differs from other places. Watching how this sector distribution changes from year to year may provide some useful insights for providing targeted policy supports.
- ***Technology Use***: Chapter 4 demonstrates that Alberta entrepreneurs tend not to use up to date technology. Seeing if this changes as the province diversifies could provide some additional information about whether these patterns are industry specific.

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