



Global Entrepreneurship Monitor

Driving wealth creation &
social development in

Ontario



**2015 GEM
ONTARIO REPORT**

Sigal Haber ¹

Matthew Lo ²

Charles H. Davis ³

¹ Research Associate, Media Innovation Research Lab, Ryerson University

² Brookfield Institute for Innovation + Entrepreneurship, Ryerson University

³ Media Innovation Research Lab, Faculty of Communication & Design,
Ryerson University



CONTENTS

EXECUTIVE SUMMARY	1
INTRODUCTION	10
METHODOLOGY	15
FINDINGS - ADULT POPULATION SURVEY	17
ATTITUDES	17
ACTIVITY	18
MOTIVES	21
ENTREPRENEURS IN ONTARIO'S ECONOMY BY SECTOR	23
INNOVATION	27
ASPIRATIONS	30
INTRAPRENEURSHIP	33
ENTREPRENEURSHIP DEMOGRAPHIC IN ONTARIO	34
EXIT	44
ENTREPRENEURIAL FRAMEWORK CONDITIONS	
(Provincial Experts Survey - PES)	46
AVAILABILITY OF FINANCE	46
GOVERNMENT POLICIES	47
GOVERNMENT PROGRAMS	48
ENTREPRENEURSHIP EDUCATION	49
RESEARCH & DEVELOPMENT TRANSFER	50
COMMERCIAL AND SERVICE INFRASTRUCTURE	50
MARKET OPENNESS	51
PHYSICAL INFRASTRUCTURE	52
CULTURAL AND SOCIAL NORMS	52
PERSPECTIVES ON THE BUSINESS SECTOR'S ROLE IN SOCIETY	53
CONCLUSIONS	54
RECOMMENDATIONS	57
ABOUT THECIS	60
ABOUT RYERSON UNIVERSITY	61
ABOUT THE BROOKFIELD INSTITUTE FOR INNOVATION + ENTREPRENEURSHIP	62
MORE INFORMATION	63
SPONSOR RECOGNITION	64
REPORT AUTHORS	65
Sigal Haber, Ph.D	65
Matthew Lo, MA	65
Charles H. Davis, Ph.D	66
REFERENCES	67
GLOSSARY	68

TABLE OF FIGURES

Figure 1: The GEM Conceptual Framework	10
Figure 2: GEM Process Model	14
Figure 3: Personal attitudes towards entrepreneurship in Ontario and reference economies	17
Figure 4: Entrepreneurial activity in Ontario and reference economies	19
Figure 5: Entrepreneurial activity and entrepreneurial intent in Ontario and reference economies	20
Figure 6: Opportunity vs. necessity motive in Ontario and reference economies	21
Figure 7: Opportunity motive in Ontario and reference economies (% of TEA entrepreneurs)	22
Figure 8: Entrepreneurial activity by sector in Ontario and reference economies (% of TEA entrepreneurs)	24
Figure 9: Entrepreneurial activity by sector type in Ontario and Canada	25
Figure 10: Ontario's entrepreneurs by sector - Division by 1D ISIC Code Sector (2013-2015)	27
Figure 11: Use of advanced technology in Ontario and reference economies	28
Figure 12: Introducing new products to the market in Ontario and reference economies	29
Figure 13: Innovation among established businesses (EB) in Ontario and Canada	30
Figure 14: Job creation aspirations in Ontario and reference economies	31
Figure 15: Export aspirations in Ontario and reference economies	32
Figure 16: Aspirations among established businesses (EBs) in Ontario and Canada	33
Figure 17: Rates of intrapreneurship in Ontario and reference economies	34
Figure 18: Participation in entrepreneurial activity by age in Ontario and reference economies	35
Figure 19: Participation in entrepreneurial activity by age among established businesses (EBs) in Ontario and reference economies	35
Figure 20: Entrepreneurial activity by education level in Ontario and reference economies	36
Figure 21: Entrepreneurial activity among established businesses (EBs) by education level in Ontario and reference economies	37

TABLE OF FIGURES

Figure 22: Entrepreneurial activity by gender in Ontario and Canada	38
Figure 23: General public attitudes towards entrepreneurship by gender in Ontario and Canada	39
Figure 24: Opportunity motive of males and females in Ontario and reference economies	39
Figure 25: Necessity motive of males and females in Ontario and reference economies	40
Figure 26: Ontario's male entrepreneurs by sector – Division by 1D ISIC Code Sector (2013-2015)	41
Figure 27: Ontario's female entrepreneurs by sector- Division by 1D ISIC Code Sector (2013-2015)	42
Figure 28: Socioeconomic status (income tertiles) among early-stage and established businesses (EBs) in Ontario and reference economies	44
Figure 29: Exit reasons among early-stage entrepreneurs in Ontario and reference economies	45
Figure 30: Experts' evaluation of availability of finance to entrepreneurs in Ontario	47
Figure 31: Experts' assessment of adequacy of government policies in Ontario in support of entrepreneurship	48
Figure 32: Experts' assessment of government policies for entrepreneurship in Ontario	49
Figure 33: Experts' assessment of entrepreneurship education in Ontario	49
Figure 34: Experts' assessment of R&D transfer in Ontario	50
Figure 35: Experts' assessment of commercial infrastructure in Ontario	51
Figure 36: Experts' assessment of market openness in Ontario	51
Figure 37: Experts' assessment of adequacy of commercial services in Ontario	52
Figure 38: Experts' assessment of entrepreneurial culture and norms in Ontario	52
Figure 39: Experts' assessment of the business sector's role in society	53

EXECUTIVE SUMMARY

The Global Entrepreneurship Monitor (GEM) is a global, comparative and longitudinal study, aiming to enhance the understanding of the impact of entrepreneurship on economic growth. GEM focuses on the *entrepreneur* as the key unit of analysis, thus enabling the monitoring of the actual entrepreneurial process from its earliest stages. The largest study of entrepreneurship in the world, GEM has been providing annual evaluations and comparisons of entrepreneurs' characteristics, motives, growth aspirations, attitudes towards entrepreneurship and the "entrepreneurial climate" of scores of economies in different stages of development. GEM has been running for 17 years, since 1999, and annually reviews the entrepreneurial activity in each participating economy. 62 economies of various levels of economic development participated in the 2015 GEM survey. In 2015, approximately 198,000 adults from 62 countries participated in GEM.

Studying entrepreneurship in Ontario from the GEM perspective enables us to identify patterns of early-stage entrepreneurial activities in Ontario and compare entrepreneurship's performance to similar developed economies. The 2015 GEM Ontario report compares Ontario's entrepreneurial measures with those of major economies: Canada, US, Australia and groups of developed countries (e.g. G7, EU28, G20 and Innovation-Driven Economies (IDEs)). In addition, three other economies, Norway, Germany and Israel, considered leaders in specific entrepreneurial aspects, have been added to the report as reference points. Some metrics of change over time in Ontario are also presented.

In 2015, GEM tracked rates of entrepreneurial activity in 62 economies based on the Adult Population Survey (APS) in each participating economy. Recognizing the interdependency between entrepreneurship and the economic growth of firms, GEM also examined the topic of intrapreneurship in participating economies. In Canada, the stratified sample included 3,561 adults between the ages of 18 and 99, 803 of whom were located in Ontario. However, to permit easy comparison with results of GEM surveys in other countries, we provide an analysis

only of adults between the ages of 18 and 64. The complementary Provincial Expert Survey (PES) provides a comprehensive examination of factors affecting entrepreneurship in Ontario. The PES's results are based on interviews conducted with 36 experts from diverse backgrounds connected to entrepreneurship in Ontario regarding entrepreneurial framework conditions in the province.

The Importance of Entrepreneurship

Entrepreneurship is well understood to be a key factor in economic growth and job creation, and it is usually promoted in pursuit of these goals. Entrepreneurship is also an important factor in the social and personal well-being of a country's population.

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”. Although GEM's definition of entrepreneurship is intended to be inclusive, it deliberately emphasizes entrepreneurship that aims primarily at economic value creation.

ATTITUDES

Attitudes toward entrepreneurial activity are positive in Ontario. Ontario enjoys one of the highest levels of positive attitudes reported toward entrepreneurship among the innovation-driven economies surveyed. Compared to the reference group of countries, Ontario shows the highest rate of respondents who perceive good conditions to start a business (53.2% of adult respondents). Further, Ontarians report high levels of confidence in having the needed skills to seize opportunities (51.2%), which are comparably higher than reference countries' reported rates of confidence. At the same time, nearly half of Ontarians express the concern that a fear of failure would prevent them from starting a business (46.6%).

EXECUTIVE SUMMARY **ACTIVITY**

For the first time, Ontario, together with Canada, shows the highest rate of total early-stage entrepreneurial activity (TEA), compared to developed countries in the reference group. In previous years, the US held first place. In 2015, 14.4% of Ontarians were involved in setting up a firm, comparable to Canada (14.7%) and higher than Australia (12.8%) and the US (11.9%). Similar to Canada, nearly 10% of Ontarians have been engaged for at least one year in an early-stage venture that has not yet paid wages, while 5.2% are running an income-generating business aged less than 3.5 years. In addition, among the developed countries, Ontario and Canada show the highest level of entrepreneurs running established businesses (EBs). EBs are defined as those generating income and operating for more than 3.5 years, and Ontario and Canada have rates of 9.1% and 8.8% respectively, followed by Australia (8.7%) and the US (7.3%).

MOTIVES

The data reveals that Ontarians are driven by opportunity more than necessity when embarking on entrepreneurial activity. Ontarians show six times more opportunity-driven early-stage entrepreneurship than necessity-driven entrepreneurship, and Canada shows a similar pattern. Australians follow the Canadian pattern with 10.9% indicating opportunity motives, exhibiting a higher ratio of opportunity to necessity, thus indicating a higher gap between these two principal motives of entrepreneurship.

Among the opportunity-driven motives, independence is considered the main motive for entrepreneurship or venturing by more than half of adult early-stage entrepreneurs in Ontario, ranking them third after Australia and Germany. With regard to the motive to increase income, Ontarians indicate a lower rate (29.2%) compared to Canada (36.4%), the US (42%), Israel (54%) and the other reference group of countries. Approximately 9% of Ontarians are motivated to start a business by the desire to maintain income, similar to Canada (10%) but lower than Australia and Germany (each at 13%).

ENTREPRENEURSHIP AND SECTORS

Most Ontario early-stage businesses are in consumer-oriented services, followed by business-oriented services, the transforming (manufacturing) sector and, with the lowest rate, the extractive sector (e.g. mining, agriculture).

Norway (8.7%) has the highest rate of start-ups in the extractive sector, followed by Australia (6.4%) and Ontario (6.3%). Although Ontario shows a higher rate of entrepreneurial activity in the business-oriented services sector (28% of early-stage entrepreneurs) than Canada (24.7%), its performance in this sector is lower than that of Norway (37%), Israel (35%) and the US (32.8%). Ontario's rate of early-stage entrepreneurial engagement in the transforming sector (17.8%) and consumer service-oriented sector (47.8%) is slightly lower than Canada's (19.9% and 51.5% respectively). Among EBs, the Ontario business-oriented services sector commands a rate of 45.2% versus 39.1% in Canada. Among EBs, more Ontarians are running or managing business-oriented services (45.2%) than consumer-oriented services (28.1%).

Data show a relatively large drop of participation rates among consumer service-oriented initiatives, from the start-up stage (47.4%) compared to the established stage (27.4%), apparently reflecting the difficulty of small service-oriented ventures to survive over time. EBs in Ontario (8.1%) and Canada (8.2%) show similar rates in the extractive sector and a higher rate compared to early-stage Ontario start-ups in the extractive sector.

INNOVATION

Ontario TEA ventures also use the very latest technologies at the highest rates (12%) and new technologies available in the last five years (21%), compared to the US and Australia. Canada (12.5%) is also comparable to Ontario.

Ontario's relatively extensive use of new technologies does not necessarily translate into commercialization of technologies and delivering unique products and services to consumers. Ontario shows a lower level of TEA businesses offering relatively unique and innovative

EXECUTIVE SUMMARY

products (40%) than the reference group of countries such as Germany (49.3%), Australia (46.5%), the US (43.8%), and Canada (43.2%). Ontario ranks fifth in products new to some customers, following Canada (39.3%), Germany (35.2%), Australia (35%) and the US (32.8%). Ontario ranks second (15%) in introducing products new to all customers, after Canada (18%).

Among EBs, Ontario's share of using the very latest technology is marginally lower (1.6%) than Canada's (2.3%). Nearly 5% of Ontario EBs use new technology, less than Canada EBs (7.6%). Only 1.6% of Ontario EBs sell products that no other business offers, and 28.6% sell products that few businesses offer, compared to 37% in Canada. Approximately 30% of Ontario EBs sell products that are completely new or new to some customers, compared to just over 40% of Canadian EBs.

ASPIRATIONS

Ontario entrepreneurs show relatively modest job creation aspirations compared with reference countries. 10.7% of Ontario entrepreneurs expect to create any number of jobs within five years, and 2.3% expect to create more than 19 jobs within five years, both of which are comparable to Canada, the US and Australia. Ontario entrepreneurs have slightly higher job creation expectations (e.g. creating more than 10 jobs and growth of over 50% in five years) than Canada with 21% and 19.5% respectively, but lower than in the US (25.3%) and Australia (24.2%). Ontario entrepreneurs show a similar level of new product-market combinations (29%) to those of Innovation-Driven Economies (IDEs) which rest at 30.6%. However, Ontarian entrepreneurs' performance in new product-market combinations is low compared to Canada, the US (36%) and Australia (34.1%).

Ontario start-ups are also relatively export-oriented. They lead the reference group with 32.6% indicating having more than 25% of their export revenues from outside the country.

INTRAPRENEURSHIP

Nearly 11% of Ontarians were involved in entrepreneurship within organizations (intrapreneurship) as leaders in the past three years, slightly more than intrapreneurship rates in Canada, the US and Israel and more than in IDEs (8%). Yet only 7% of Ontarians indicate a current involvement in intrapreneurship, a lower rate compared to Canada (7.4%), the US (8%), Australia (9%) and Norway (9.7%).

DEMOGRAPHICS

AGE: Ontario and Canada exhibit the highest rate among the reference economies of early-stage entrepreneurial activity in all age cohorts. Nearly 17% of Ontarians in the age cohorts of 35-44 and 45-55 are involved in entrepreneurship, exhibiting the highest participation rate in early-stage entrepreneurship, compared to the reference group of economies.

Among the age cohort of 18-24, Canada (18.2%) and Ontario (15.9%) lead with the highest entrepreneurial rates. 7.5% of Ontarians in the age group of 55-65 are involved in entrepreneurial activity, placing Ontario second after Canada (9.5%) and comparable to the US (7.4%). Ontario is also rated second with 15.2% involved in entrepreneurship in the age cohort 25-34, following Canada (16.6%). Among EBs, 16.4% of Ontarians in the 45-54 age cohort are involved in leading or managing a business, the highest among reference group countries including Canada (15.4%), Australia (13.2%), and the US (12%). Similarly, Ontario showed the highest EB participation rate in the age group of 25-34 (6.3%).

In the age groups of 35-44 and 55-64, Ontarians' participation in EBs ranks third, with slightly lower participation (7.1% and 10.1% respectively) than Canada (7.4% and 11.4% respectively). Over 6% of Ontarians in the age group of 25-34 are involved in leading or managing an EB, showing the highest rate of participation in this age category compared to other economies. Nearly 1% of Ontarians are involved in leading or managing EBs in the age group of 18-24, comparable to Canada (0.9%) and the US (1.1%).

EXECUTIVE SUMMARY

EDUCATION: Data show that the higher the education level, the higher the rate of involvement of Ontarians in early-stage entrepreneurial activities. The rate of early-stage entrepreneurship in Ontario is the highest among those with post-graduate experience (17.6%); however, it is less than in Canada (19.6%).

GENDER: In Ontario, 15% of males and 13.8% of females between ages 18 and 64 are engaged in early-stage entrepreneurial activities, meaning that for every 100 male entrepreneurs in Ontario, there are 92 female entrepreneurs.

Ontarian female and male entrepreneurs vary in their perceived skills and attitudes towards running a business. Ontarian females are less likely to have an acquaintance with entrepreneurs (30.5%), and report lower confidence in their capabilities to run a business (41.8%) than Ontarian males (32% and 61% respectively). Ontarian males also indicate a higher rate of confidence in their entrepreneurial capabilities than Canadian males (57.4%), but slightly lower than US males (62.2%).

In addition, Ontarian females perceive a relatively high rate of entrepreneurial capabilities (41.3%) but lower than females in Canada (43.2%) and the rates reported by US females (49.5%). However, females in Ontario see more entrepreneurial opportunities (54%) than those reported by Ontarian males (52%) and those of Canadian females (51.7%) or US females (43.5%). Ontarian females showed the highest rate of fear of failure that would prevent them from starting a business (52.4%) compared to Ontarian males (40.7%), Canadian females (47%) and US females (34.5%). This reported fear of failure is a significant finding, given Ontarian females' ability to see opportunity and their high level of confidence in their capabilities.

Further analysis of gender representation in economic sectors revealed that overall, female entrepreneurs showed higher rates of involvement in service-oriented ventures, including social and professional services, and wholesale and hospitality ventures, while Ontarian males show higher rates of involvement in the manufacturing, information and communication and extractive sectors.

SOCIAL CLASS: Ontario early-stage entrepreneurship reaches its highest levels in the lowest as well as the highest social classes (16%). In both cases, rates of early-stage entrepreneurial activity are higher than in Canada and other reference groups. Among EBs, Ontario's highest social class has the highest rate of participation (14%). This might indicate the ability of entrepreneurs in higher social classes to overcome the early-stage challenges more effectively than entrepreneurs in lower-income groups.

EXIT

Nearly 3% of Ontarian entrepreneurs have exited and closed a business in the past year, while 2.7% have exited a business that is still in operation. Among the main reasons for exiting a business in Ontario are: lack of profitability (20.6% of all exits), family or personal reasons (17.6%), opportunity to sell (14.7%) and another job or business opportunity (11.8%).

THE FRAMEWORK CONDITIONS OF ENTREPRENEURSHIP IN ONTARIO

The Provincial Expert Survey included 36 experts' evaluations of nine framework conditions' impacts on entrepreneurial activity in Ontario. Experts assessed various factors within each of the nine framework conditions, providing a sense of the strengths and weaknesses of Ontario's entrepreneurship ecosystem.

Financing – Venture Capitalists (VCs) and business angels are found to be the most sufficient sources of financing, followed by informal individuals and Initial Public Offerings (IPOs). Private lenders' funding and governmental subsidies appear to be inadequate compared to the other sources available for Ontario entrepreneurs.

Governmental policies – Ontario's tax rates and regulations are considered quite predictable, thus reducing business uncertainty. On the other hand, governmental assistance and public procurement for new and growing firms at the local and national levels are considered insufficient.

EXECUTIVE SUMMARY

Governmental programs – Experts indicate high professionalism of governmental assistance programs’ personnel that support new and growing firms. Ontario’s science parks and business incubators are also rated as highly effective. On the other hand, assistance programs are not available to everyone who needs them and they are not available as a “one-stop” service.

Educations and training – Entrepreneurship education in Ontario is considered favourable at the post-secondary education level, but there is insufficient encouragement of entrepreneurial behavior at the primary and secondary education levels.

Research and development (R&D) and technology commercialization – Experts indicate favorable conditions for R&D transfer for scientists and engineers in Ontario. At the same time, experts point to the barriers to commercialization, especially inefficient transfer of technologies from universities to the market. Experts also indicate that firms lack sufficient governmental support for acquiring new technologies.

Commercial infrastructure – Experts indicate a favourable and affordable commercial infrastructure for supporting new firms’ growth in Ontario. This includes financial and legal services as well as sub-contractors and consultancy services.

Internal market openness – Although growing firms can easily penetrate new markets and afford the costs involved with it, substantial challenges are believed to exist due to unfair competitive blocking moves by established firms.

Physical infrastructure – Ontario’s physical infrastructure is considered favorable and affordable to new and growing firms.

Cultural and social norms – Ontario has an entrepreneurship-oriented culture that supports new and growing firms’ development. Ontarians’ favourable attitude toward self-responsibility, creativity, innovativeness and entrepreneurial risk-taking are at the core of entrepreneurial culture.

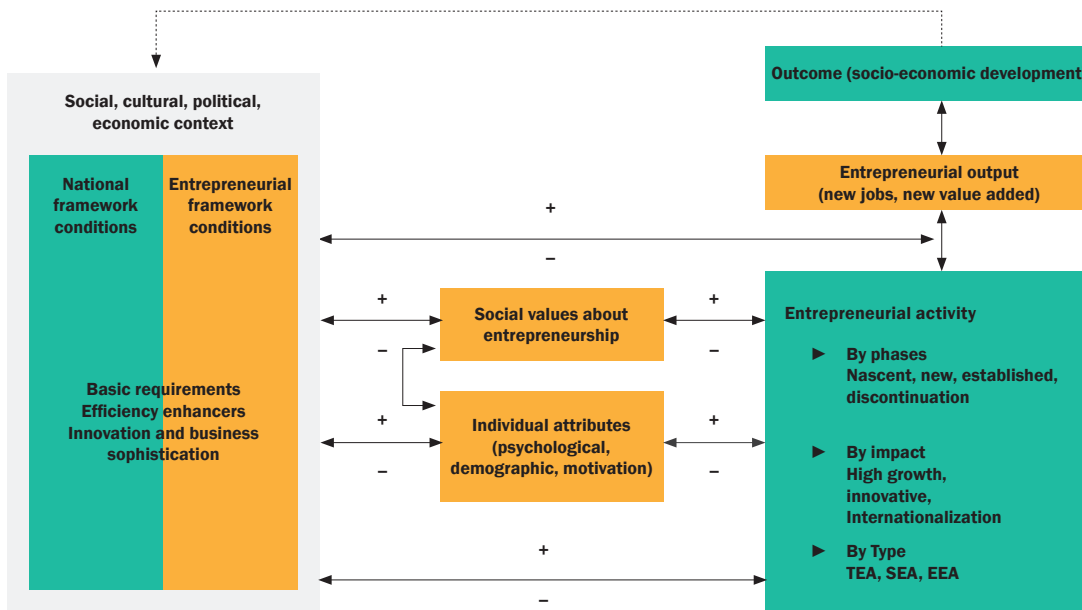
GEM AND ONTARIO

The Global Entrepreneurship Monitor (GEM) is the world’s largest longitudinal study of entrepreneurial activity and economic growth. The uniqueness of GEM, compared to other major cross-national studies, is in its focus on the entrepreneur as the key unit of analysis, which enables monitoring the actual entrepreneurial process from its earliest stages. The GEM research framework, as illustrated in Figure 1, describes entrepreneurship within its ecosystem and recognizes the interaction of the entrepreneur’s behavior and characteristics with the environment.

GEM uses data from an Adult Population Survey (APS) to examine entrepreneurs’ characteristics and behavior, and data from a National Expert Survey (NES) to examine social-cultural, political and economic framework conditions in each participating country. Thus, GEM permits comparison of entrepreneurs’ characteristics, motives and growth aspirations along with their societies’ “entrepreneurial climate,” as well as their attitudes towards entrepreneurship. In 2015, approximately 198,000 adults from 62 countries participated in GEM.

INTRODUCTION

Figure 1: The GEM Conceptual Framework



(Source: GEM 2015/16 Global Report)

INTRODUCTION

The 62 participating countries represent three stages of economic development, as measured by World Economic Forum (WEF) using GDP per capita and share of primary goods in the export mix:

- Factor-driven economies have low GDP per capita and export mainly natural resources.
- Efficiency-driven economies are in the middle range of GDP per capita and their export mix includes more value-added products.
- Innovation-Driven Economies (IDEs) have a predominant service sector and businesses that are relatively knowledge-intensive. Canada and Ontario are classified under this category.

Another way GEM distinguishes between entrepreneurial activities among different economies is conveyed in a key difference between two motives for venturing:

- **Opportunity-Driven Entrepreneurship** – common in developed and healthy economies and has major impact on prospects of economic growth and job creation.
- **Necessity-Driven Entrepreneurship** – predominant in less developed economies and in times of economic crisis or recession, where individuals lack employment alternatives.

The 2015 GEM Canada report was released on June 27, 2016, and outlines Canada's performance in various aspects of entrepreneurship. The 2015 GEM Ontario report examines the provincial early-stages entrepreneurial activities of start-ups and growing ventures.

Thus, the main objectives of this report are to:

- a) Describe the principal features and trends of entrepreneurship in Ontario.
- b) Compare entrepreneurship patterns between Ontario and Canada and other comparable economies.
- c) Assess the contribution and impact of entrepreneurial activity in Ontario to economic growth.
- d) Make practical recommendations to public policymakers and other stakeholders aiming to promote and cultivate entrepreneurial activity in Ontario.

For a broader and complementary perspective on entrepreneurship in Canada, it is suggested to read the Ontario report in conjunction with the 2015/16 GEM Global and GEM Canada reports.

ENTREPRENEURSHIP AND ECONOMIC GROWTH – THE GEM MODEL

In the basic entrepreneurial process model, new firm creation takes place in three stages:

- Opportunity recognition stage
- Business concept stage
- Organization creation stage

In reality, the venture creation process is internally and externally stimulated. It is an iterative, nonlinear, feedback-driven process that interacts within the larger business and social ecosystem. GEM's conceptual framework recognizes this complexity and the multifaceted nature of entrepreneurship which defines the need for proactivity, risk responsible behavior, and an innovative attitude on the part of the entrepreneur. Entrepreneurs introduce differing amounts of novelty during venture creation, and the varying amounts of novelty qualitatively distinguish one kind of entrepreneurship from another (Bhave, 1994).

Entrepreneurship and innovativeness play a major role in established firms' growth and development. Through employees' innovations of products and processes, firms can grow within existing and new markets. The "intrapreneur," as first defined by Pinchot (1984), also known as an "idea champion," takes direct responsibility for turning an idea into a commercialized product. Intrapreneurs' ability to innovate and bring new products and services to the market through a tangled internal organizational environment, may turn them into markets' agents of change in the Schumpeterian sense, that is, engaged in a process of "creative destruction" or one that "revolutionizes the economic structure from within" by transforming the old and creating the new. These characteristics might differentiate them from other entrepreneurs (Schumpeter, 1934).

INTRODUCTION

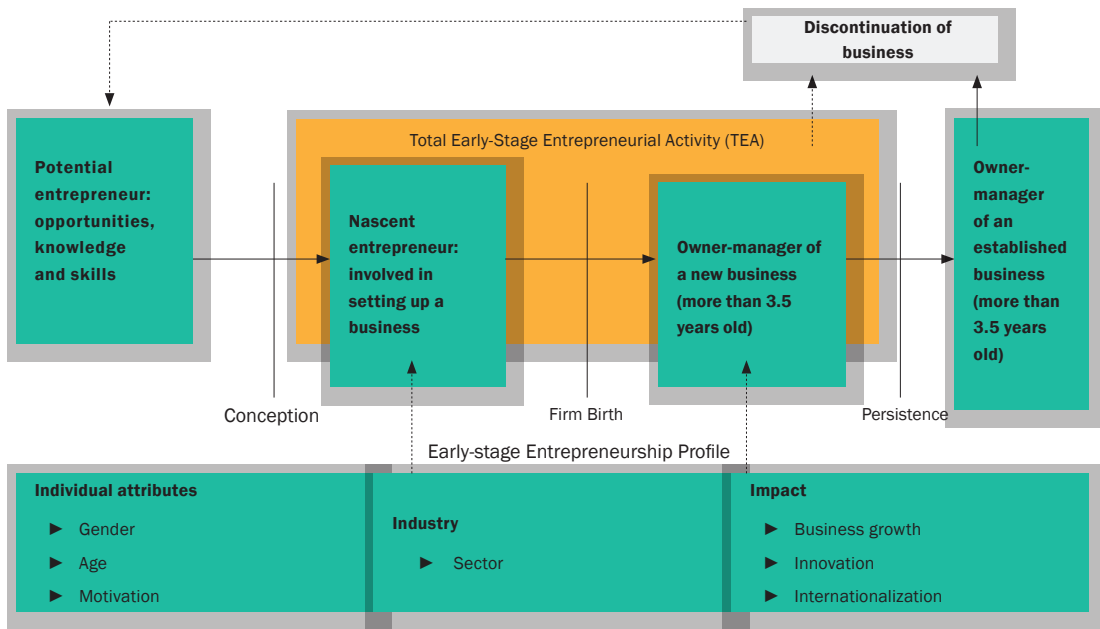
Accordingly, the GEM model emphasizes the interdependency between entrepreneurship and economic development, aiming to reveal enabling or hindering conditions for entrepreneurial activity (including social values, personal attributes and entrepreneurial ecosystem), and offers a platform for assessing entrepreneurial activity's contributions to economic growth (Source: GEM 2015/16 Global Report).

To achieve comprehensive information on entrepreneurship in any economy, GEM uses the Adult Population Survey (APS), which focuses on the individual entrepreneur's ecosystem, based on the following variables:

- **Individual attributes** – perceptions about opportunities, capabilities to act entrepreneurially, entrepreneurial intentions and fear of failure
- **Social values** – reflections on how the society values entrepreneurial behavior
- **Entrepreneurial indicators** – different forms of entrepreneurial activity along the life cycle of a venture. In 2015, GEM brings the intrapreneur into focus and examines his or her role in pursuing initiatives within organizations.

Interviewing the individual entrepreneur enables comprehension of the entrepreneurial process from its early inception, when the commitment to new venture creation originates, to running the new and established venture. The GEM Process Model also takes into account the circumstances leading to exit and discontinuance of enterprise. Figure 2 illustrates the entrepreneurial phases.

Figure 2: GEM Process Model



(Source: GEM 2015/16 Global Report)

GEM was founded 17 years ago in 1999 to annually review the entrepreneurial activity in participating economies. 62 economies of various levels of economic development participated in the 2015 GEM survey. Based on the underlying assumption of interdependency between entrepreneurship and economic development, three sources of data are included:

- **Adult Population Survey (APS)**

The global report is based on results from 62 economies and nearly 200,000 adults across the world. The core of the APS questionnaire is identical in each country. It asks respondents about their attitudes towards entrepreneurship, whether or not they are involved in some form of entrepreneurial activity and, if so, what their aspirations for the venture are. In accordance with GEM's approach, participants for the APS were randomly selected and surveyed between June and September 2015. The stratified sample included adults between the ages of 18 and 99. The sampled data was weighted to ensure accuracy by age range, gender and province. 3,561 adults were surveyed in Canada, of which 803 were located in Ontario.

Although the Canada and Ontario surveys included adult respondents in the 65-99 age cohort, we provide an analysis only of adults between the ages of 18-64 for the purpose of comparison with results of GEM surveys in other countries.

Ontario is considered one of the most highly-developed provinces in Canada and makes a major contribution to Canada's economic development with a 36,854 USD GDP per capita. Given the lack of GEM surveys in other comparable subnational economies in other countries, we compare Ontario to Canada as a whole and to other developed economies including the United States and Australia as well as to groups of developed economies of G7, EU28, G20 and Innovation-Driven Economies (IDEs) as defined by GEM.

Occasionally, we include comparison of the following countries that are considered leaders in specific aspects of entrepreneurship:

- **Norway** – known for its high entrepreneurial rates and its economy based on natural resources with a per capita GDP of 97,299.6 USD
- **Germany** – considered the largest economy in EU with a GDP per capita of 47,773.9 USD
- **Israel** – known as a knowledge-based and advanced developed market economy with a GDP per capita of 37,206.2 USD

(Sources: <http://www.fin.gov.on.ca/en/economy/ecupdates/factsheet.html>
<http://data.worldbank.org/indicator/NY.GDP.PCAP.CD?page=5>)

- **National Expert Survey (NES) and/or Provincial Expert Survey (PES)**

A questionnaire survey that was developed and used in the global GEM project to query national experts, was also used in Canada at the national and provincial levels. 36 experts from Ontario were interviewed and carefully selected to create a group of individuals with diverse backgrounds. All are connected to entrepreneurship in Ontario according to one or more of the nine Framework Conditions indicated in the GEM conceptual model. Experts completed an online survey in which respondents were asked to indicate their degree of agreement with statements regarding entrepreneurial conditions in Ontario.

- **Other Statistics Sources** – In this report, we occasionally include statistics on national and international economic measures to provide further insight into the results of the GEM Ontario adult population and expert surveys.

FINDINGS - ADULT POPULATION SURVEY

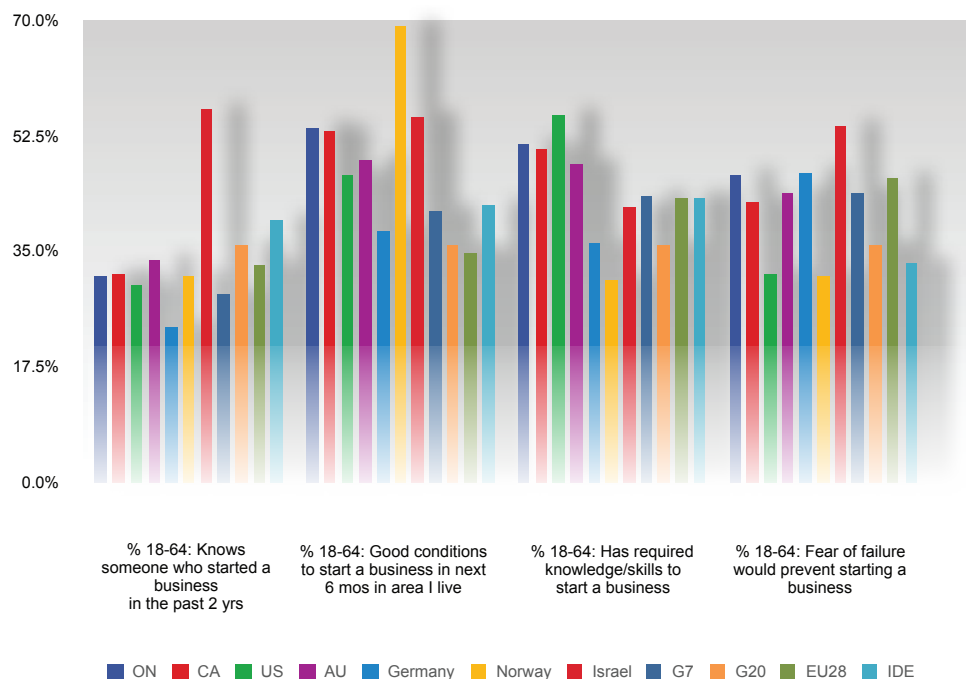
ATTITUDES

Attitudes towards entrepreneurship suggest how the adult population regards entrepreneurship as a career choice.

Four questions assess the Ontario adult population's perception of capacity for entrepreneurship:

- Do you know someone who started a business in the past two years?
- Do you think there is a good opportunity to start a business in the next six months?
- Do you have the required knowledge/skills to start a business?
- Would fear of failure inhibit you from starting a business?

Figure 3: Personal attitudes towards entrepreneurship in Ontario and reference economies



As illustrated in Figure 3, attitudes toward entrepreneurship among Ontarians are positive and among the highest rated when compared to developed countries. Ontario's scores are similar to Canada's scores. Ontarians have one of the highest rates of confidence about possessing the required knowledge and skills to start a business (51.2% of adults) and of having good conditions to start a business (53.2%) among developed countries in general, and IDE countries in particular. 31.2% of Ontarians know someone who started a business in the past two years. But at the same time, almost half of Ontario adults (46.6%) believe that fear of failure would prevent them from starting a business, a higher rate than the average in innovation-driven countries (33.1%).

The results point to an interesting combination of attitudes towards entrepreneurship in Ontario. Ontarians display a healthy sense of confidence in their entrepreneurial capabilities, generally exceeding their peers in comparative countries. Unlike the US, however, which displays a similar high level of confidence, Ontarians possess a relatively high degree of fear of failure, which may indicate a low level of risk tolerance. Ontarian entrepreneurs appear to possess a higher-than-average level of risk aversion, which may represent a significant barrier to further growth in entrepreneurial activities in the province.

ACTIVITY

The analysis focuses on two measures which together represent the total early-stage entrepreneurial activity (TEA) in Ontario:

- 1) **The nascent entrepreneurship rate** – the percentage of the adult population who are currently engaged in setting up a business that has not paid salary, wages or other payments to owners for more than three months.
- 2) **The new business ownership rate** – percentage of the adult population who are currently owners/managers of new businesses that have paid wages, salaries or any other payments to owners for more than three months but not more than 3.5 years.

As mentioned, these two measures combined (counting each individual only once) yield an overall total early-stage entrepreneurial activity (TEA), or the entrepreneurial activity rate.

FINDINGS - ADULT POPULATION SURVEY

Ontarians were asked about their involvement in various stages of entrepreneurship. Answers were categorized as follows:

- **TEA** – total early-stage entrepreneurial activity, involved in setting up a firm or owner/manager of a young firm.
- **Nascent Entrepreneur** - an owner/manager or partly owner/manager of a one-year-old business that doesn't pay wages yet.
- **Baby Business** - an owner/manager of a business aged less than 3.5 years that generates income.
- **Established Business (EB)** - owner/manager of a business with income that is active for more than 3.5 years.

Figure 4: Entrepreneurial activity in Ontario and reference economies

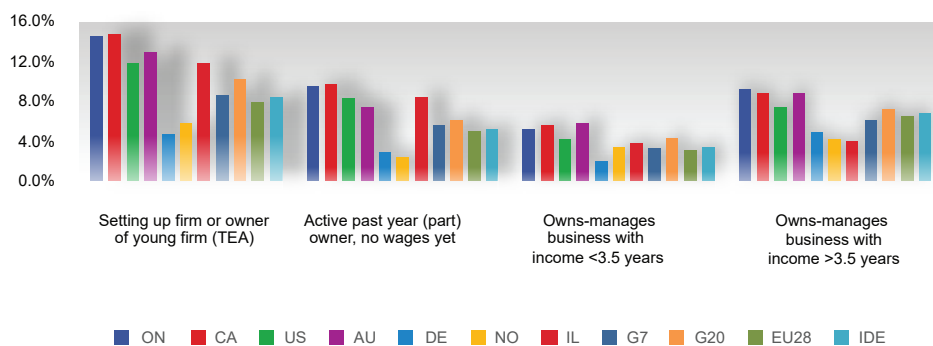


Figure 4 illustrates that entrepreneurial activity in Ontario is largely comparable to that of Canada and both show the highest rates of activity in the various entrepreneurial stages, compared to other developed countries. 14.4% of Ontarians are involved in setting up an early-stage firm, comparable to Canada (14.7%) and higher than Australia (12.8%) and the US (11.9%). Similar to Canada, nearly 10% of Ontarians have been active for at least one year in a venture that has not yet paid wages or generated income, while 5.2% were running an income-generating business aged less than 3.5 years. This difference may be attributed to the liability of newness of early-stage start-ups which face a set of difficulties associated with their newly founded status, therefore increasing their vulnerability and ability to create long-term sustainability (Stinchcombe, 1965).

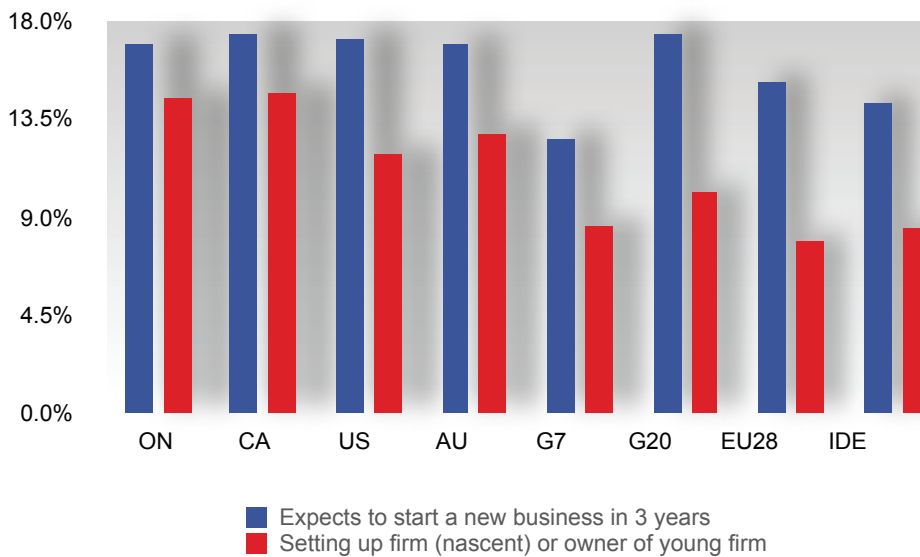
In addition, Ontarians show the highest level of involvement in (EBs) as owners or managers (9.1%) among the reference group of countries including Canada (8.8%), Australia (8.7%) and the US (7.3%).

It should be noted that, for the first time, Ontario and Canada have displayed the highest TEA rates amongst their peers in developed and innovation-driven countries. In previous years, the US held the first place in this regard. This may represent a significant performance improvement in entrepreneurship participation in Ontario and Canada. There are several factors that may contribute to Ontario’s high performance, which will be examined further in the following sections.

***ACTUAL ENTREPRENEURIAL ACTIVITY
VERSUS INTENTIONS TO VENTURE***

Figure 5 compares activity of early-stage entrepreneurs (nascent and young businesses) with intentions to venture within three years. The Ontario rate of 17% is comparable to the rate of intention to start a business in Canada, the US and Australia. Adult Ontarians report having greater intentions to start a business in the next three years (17%) than in 2014 (15.5%), but fewer than in 2013 (17.6%).

Figure 5: Entrepreneurial activity and entrepreneurial intent in Ontario and reference economies



FINDINGS - ADULT POPULATION SURVEY

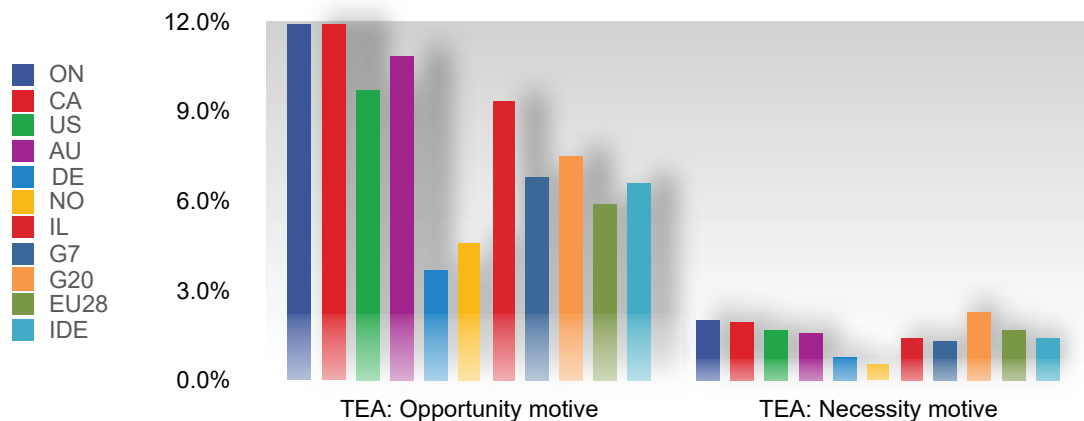
MOTIVES

GEM distinguishes between two main motives for venturing:

- The necessity motive, which indicates becoming an entrepreneur due to lack of other alternatives to generate income, and
- The opportunity motive, which indicates that one is being “pulled” into business following internal motives of self-management and autonomy.

GEM research has shown that most entrepreneurs in the world are opportunity-driven, regardless of their country’s economic development. However, the higher the level of a country’s economic development, the higher the rate of opportunity-driven entrepreneurs. (Source: GEM 2015/16 Global Report)

Figure 6: Opportunity vs. necessity motive in Ontario and reference economies



In 2015, almost 12% of Ontario adults were involved in opportunity-driven, early-stage entrepreneurial activity. Only 2% indicated a necessity-driven motive in their early stage of entrepreneurial activity. The rest of Canada shows a similar pattern. Australians are following the Canadians with 10.9% indicating opportunity motives (Figure 6).

Compared with its peers, including the US and Australia, Ontario shows a higher propensity to engage in opportunity-driven entrepreneurship. This is a notable trend, as it shows that not only is

Ontario a place of relatively high entrepreneurial activity, but also with business-minded entrepreneurs who are willing and able to identify and leverage business opportunities.

**Table 1: TEA opportunity vs. necessity motives ratio 2015 and 2014
Ontario and reference group**

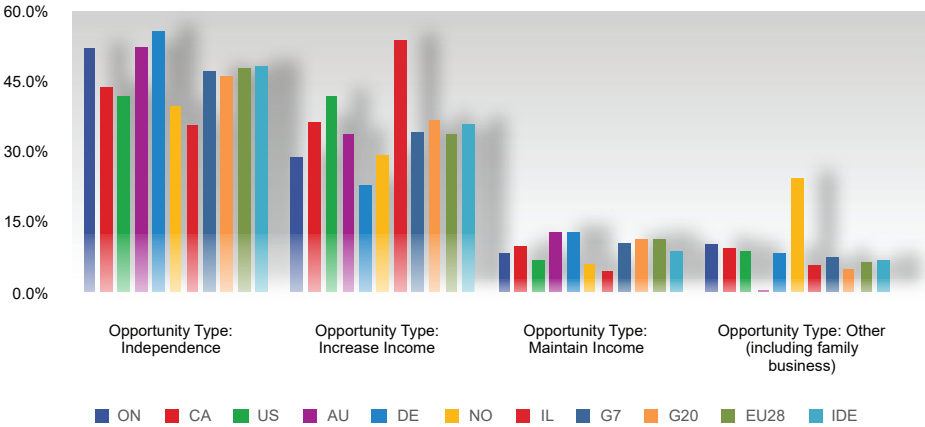
	Ontario	Canada	US	Australia	G7	G20	EU28	IDE
2015	5.9	6.0	5.7	6.7	4.9	3.2	3.5	4.5

Table 1 indicates the ratio between opportunity and necessity motives. In 2015, the rate of opportunity-driven entrepreneurship was six-times greater than necessity-driven entrepreneurship in both Ontario and Canada.

The following TEA opportunity motives were examined:

- Independence
- Increase of income
- Maintain income
- Other, including family business

Figure 7: Opportunity motive in Ontario and reference economies (% of TEA entrepreneurs)



FINDINGS - ADULT POPULATION SURVEY

More than half of adult early-stage entrepreneurs in Ontario (51.9%) indicate that independence was their motive to starting a business, third after Australia (52.6%) and Germany (56%). With regard to the motive to increase income, Ontarians indicate a lower rate (29.2%) compared to Canada (36.4%), the US (42%), Israel (54%) and the other reference groups of countries. The motive of increasing income is the highest in Israel (54%). Approximately 9% of Ontarians were motivated to start a business by the desire to maintain income, similar to Canada with 10%, but lower than Australia and Germany with 13% each (Figure 7).

Ontario's relatively lower rate in the motive of increasing income might indicate that while there are a substantial number of opportunity-driven entrepreneurs in Ontario, they do not view their businesses primarily as a source of financial wealth. This may imply a "lifestyle" orientation among Ontarian entrepreneurs who aim to maintain a level of income sufficient to maintain their chosen way of life and not necessarily to maximize the growth of a venture.

At the same time, this may indicate a certain inability of the Ontario economy to suitably reward entrepreneurs financially for their efforts. This may be a potential barrier to the further improvement of the entrepreneurial ecosystem in Ontario.

ENTREPRENEURS IN ONTARIO'S ECONOMY BY SECTOR

Analysis of GEM data of entrepreneurial activity among sectors aims to refine the understanding of economic development through such activity. Responses were classified into four main sectors:

- Extractive (e.g. mining, agriculture)
- Transforming (e.g. manufacturing)
- Business-oriented services
- Consumer-oriented services

Figure 8: Entrepreneurial activity by sector in Ontario and reference economies (% of TEA entrepreneurs)

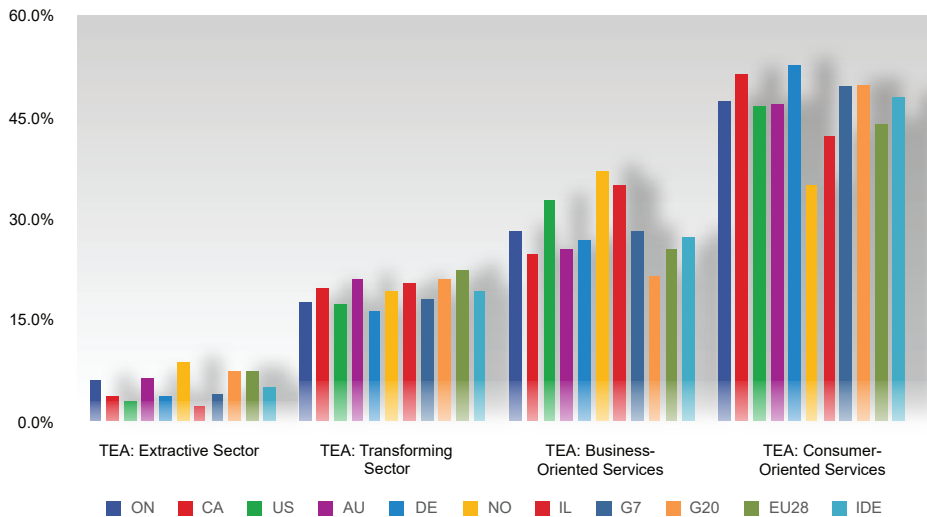


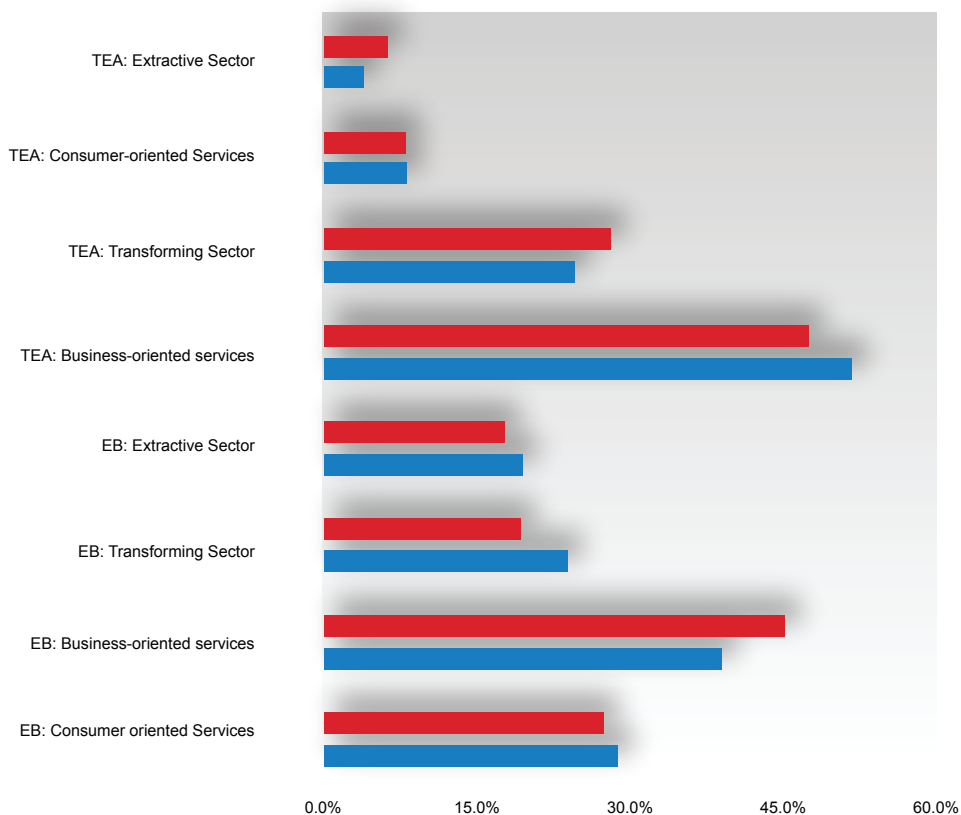
Figure 8 illustrates a similar sectoral distribution pattern among Ontario and the reference group. Most early-stage businesses are consumer-oriented services, followed by business-oriented services, transforming-sector businesses and, with the lowest rate of start-ups, the extractive sector.

Ontario (6.3%) and Australia (6.4%) show the highest rate of start-ups in extractive industries after Norway (8.7%). Canada with 3.9% and the US with 3% indicate a relatively lower rate of TEA in extractive industries. Ontario shows a higher rate of entrepreneurial activity in the business-oriented services sector with 28%, compared to Canada (24.7%), but lower than Norway (37%), Israel (35%) and the US (32.8%). However, in transforming (17.8%) and consumer-oriented service businesses (47.8%), Ontario is rated slightly lower than Canada (19.9% and 51.5% respectively).

TEA distribution among sectors for Ontario and Canada is compared to the sectoral distribution of EBs in Figure 9. The EB sectoral distribution offers some insight into prospects of new initiatives, although EBs may represent a range of economic circumstances at founding.

FINDINGS - ADULT POPULATION SURVEY

Figure 9: Entrepreneurial activity by sector type in Ontario and Canada



Business-oriented services EBs command 45.2% of Ontario ventures versus 39.1% in Canada. However, business-oriented service EBs in Ontario show a higher rate (45.2%) compared to business-oriented service start-ups (28.1%).

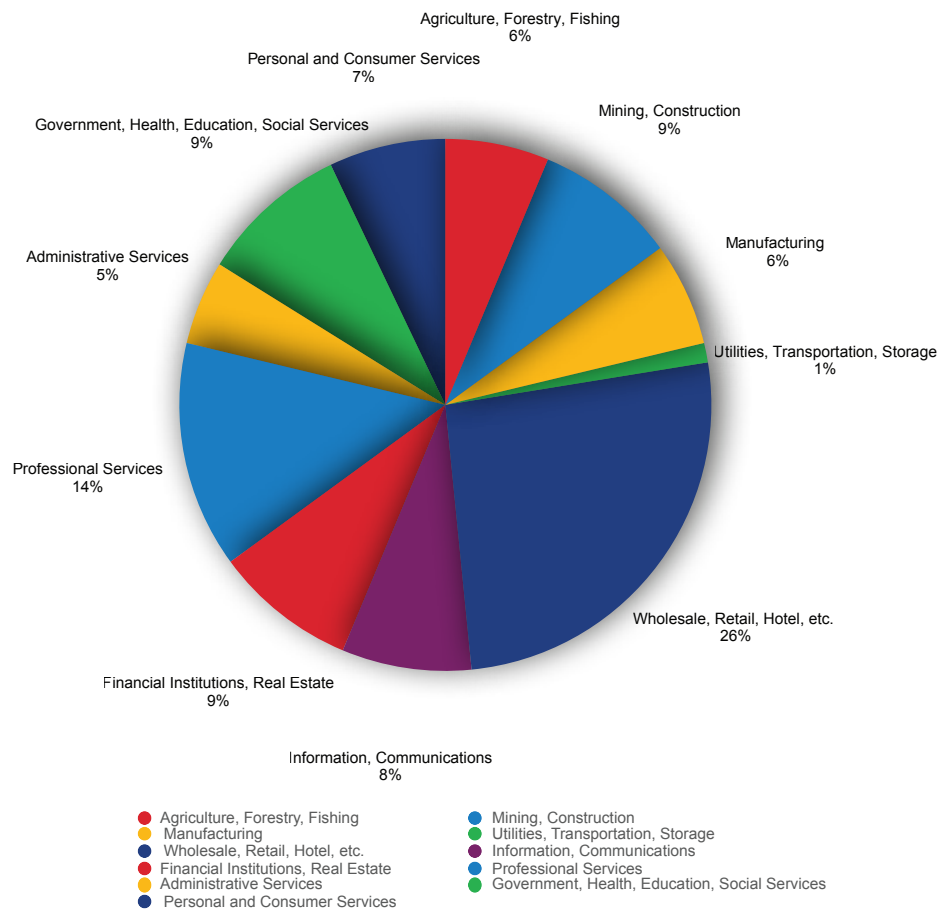
On the other hand, consumer-oriented service EBs in Ontario command 27.4% - a lower rate compared to 47.4% of early-stage, consumer-oriented service start-ups. This relatively large drop in the rate of entrepreneurship among consumer-oriented service initiatives, from the start-up stage compared to the established stage, may reflect the difficulty of small service-oriented ventures to survive over time. In other words, the increase in the business-oriented services share and decrease in the consumer-oriented services share in the EB population compared to the TEA population suggests higher survival rates in business-oriented services.

The share of Ontario EBs in the extractive sector (8.1%) indicates an increase compared to the early-stage (TEA) share of 6.3%. Among EBs, Ontario and Canada show similar rates in the extractive sector. Respondents are coded according to the International Standard Industrial Codes (ISIC) and then assigned to the above discussed four sectors. In order to refine the sector description and analysis, we used the one digit ISIC codes. This created 11 sectors for the Ontario data. To achieve a sufficient number of respondents in each sector, data from three consecutive years (2013, 2014 and 2015) was aggregated, creating a sample of 254 entrepreneurs' responses.

Figure 10 illustrates the share of each of the 11 sectors. The extractive sectors of agriculture, forestry and fishing (6%) together with mining and construction (9%) indicate a total share of 15% for the extractive sector. Manufacturing has a share of 6% and transportation, storage and wholesale form a small category with a share of 1%. However, retail, hotels and restaurants account for the largest sector, contributing to consumer services with a share of more than a quarter (26%) of the total sample of enterprises. Other personal and consumer services form a share of 7%. Financial intermediation and real estate (9%) with professional services (14%) and administrative businesses (5%) form a significant part of business services. Information and communication form 8% of the enterprises and combine both consumer and business services. A category that probably needs to be better defined in the four aggregated GEM sectors is related to enterprises working for government, health, education and social services (9%) which are generally known as social or third sector enterprises.

FINDINGS - ADULT POPULATION SURVEY

Figure 10: Ontario's entrepreneurs by sector - Division by 1D ISIC Code Sector (2013-2015)



INNOVATION

Innovation involves the delivery of value-added newness to the market.

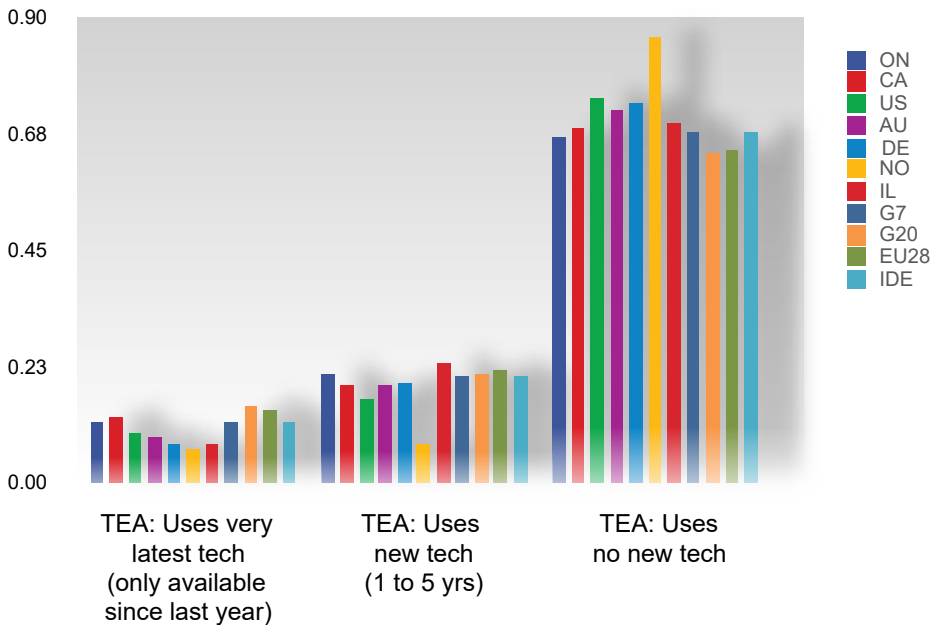
GEM assesses innovation on three dimensions:

- The use of new technologies.
- The extent to which products or services are offered by competitors.
- The degree to which the products or services offered are new to markets.

Figures 11 and 12 illustrate the use of new technology, level of competition and newness of the product or service to customers in Ontario and in the reference groups.

Figure 11 indicates that Ontario TEA ventures show the highest scores with regard to the use of the very latest technologies (12%) and new technologies available in the last five years (21%) compared to the US and Australia. Canada (12.5%) is comparable to Ontario.

Figure 11: Use of advanced technology in Ontario and reference economies



On the other hand, Figure 12 indicates that Germany (49.3%), Australia (46.5%), the US (43.8%), and Canada (43.2%) show higher TEA performance than Ontario (40%) in terms of businesses offering relatively unique and innovative products. Ontario (15%) is ranked second in introducing products new to all customers after Canada (18%) and fifth in introducing product new to some customers, following Canada (39.3%), Germany (35.2%), Australia (35%) and the US (32.8%).

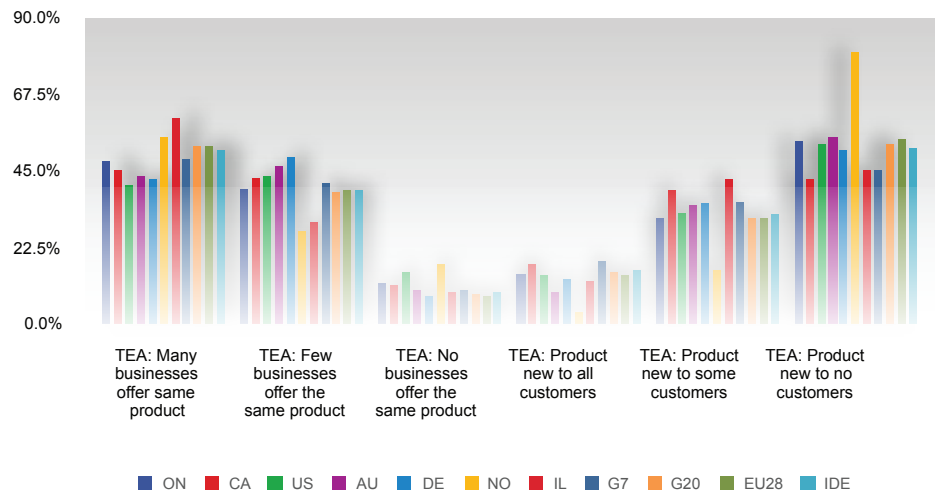
In other words, the relatively extensive use of new technologies in Ontario does not necessarily translate into delivery of unique products and services to consumers.

In summary, the high rate of new technology utilization in Ontario is likely a reflection of the province’s developed high-tech industry and its substantial knowledge generation capabilities.

FINDINGS - ADULT POPULATION SURVEY

The province's lower performance in product innovation suggests a weakness in business innovation and commercialization of new technologies.

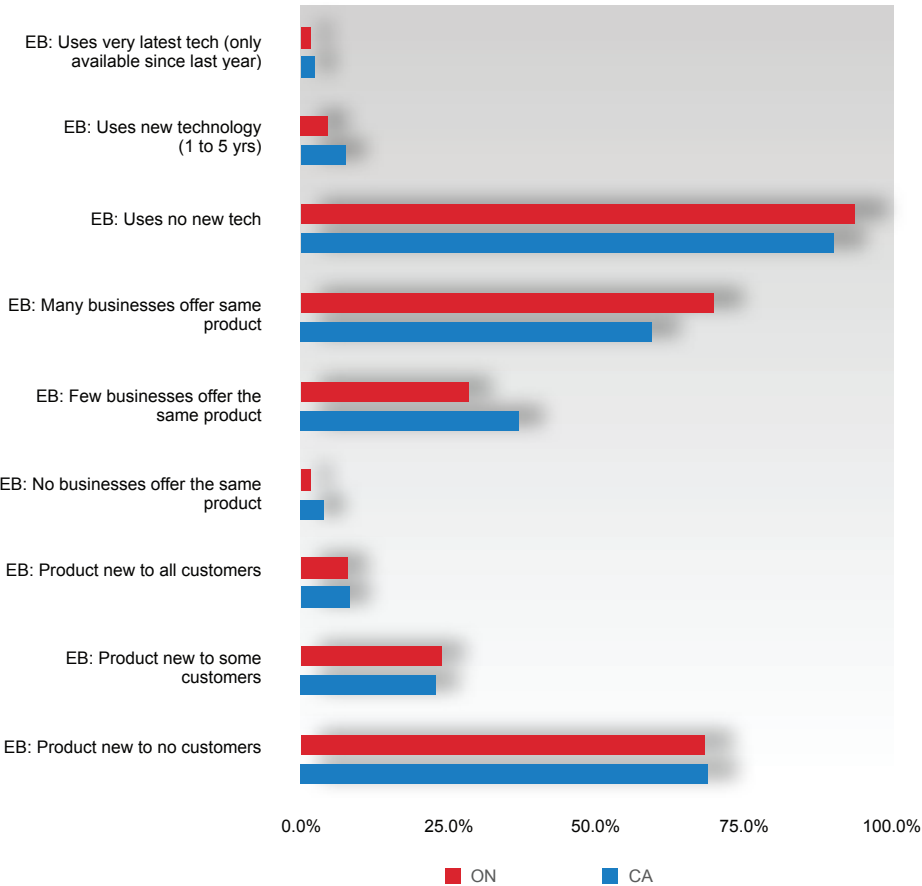
Figure 12: Introducing new products to the market in Ontario and reference economies



In Ontario's established businesses (EBs), rates of use of advanced technology and offers of new products are comparable to Canada's. Figure 13 indicates that Ontario's rate of EBs that use the very latest technology is marginally lower (1.6%) compared to Canada's (2.3%). Approximately 5% of Ontario EBs use new technology, less than Canada EBs (7.6%).

Only 1.6% of Ontario EBs sell products that no other business offers and 28.6% sell products that few businesses offer compared to 37% in Canada. Approximately 31% of EBs sell products that are completely new or new to some customers in Ontario and in Canada. Conversely, nearly 70% of EBs sell products that are new to no customers.

Figure 13: Innovation among established businesses (EBs) in Ontario and Canada



ASPIRATIONS

Economic growth is affected by the extent and nature of entrepreneurial activity. The type of businesses generated will impact the economy’s structure and development. Whether an individual expects to create a small or large number of jobs, whether the product or market developed is new, or whether the source of revenues is from export or from a local market will affect the economy’s growth. Figures 14 and 15 and Table 2 illustrate the three types of measures created by

FINDINGS - ADULT POPULATION SURVEY

GEM to distinguish between entrepreneurs according to their growth expectations:

- Job creation
- Innovativeness – as reflected in creating new product and market combinations
- Export

The results are for early-stage entrepreneurs: nascent and new business owners.

Figure 14: Job creation aspirations in Ontario and reference economies

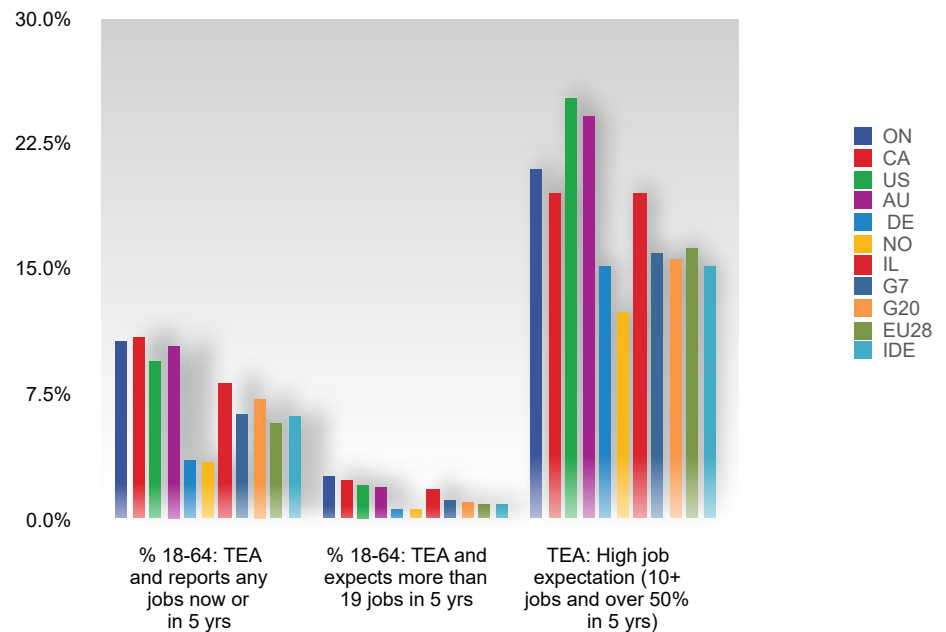


Figure 14 shows that early-stage entrepreneurs' job expectations in Ontario vary across the examined aspirations metrics. Figure 14 indicates that Ontario (10.7%) is comparable to Canada, the US and Australia in expecting to create any jobs within five years as well as in expectations to create more than 19 jobs in 5 years (2.3%). Among early-stage entrepreneurs, rates of high job creation expectations (creating more than 10 jobs and over 50% growth in 5 years) in Ontario are slightly higher (21%) than in Canada (19.5%) but lower than in the US (25.3%) and Australia (24.2%).

This implies relatively modest job creation aspirations in Ontario, compared with similar economies such as the US and Australia. Ontarian entrepreneurs are relatively hesitant to pursue high-growth

or scale-up activities to further expand their businesses and may prefer a type of business suitable for lifestyle aspirations.

FINDINGS - ADULT POPULATION SURVEY

Table 2: New product-market combination in Ontario and reference economies (TEA %)

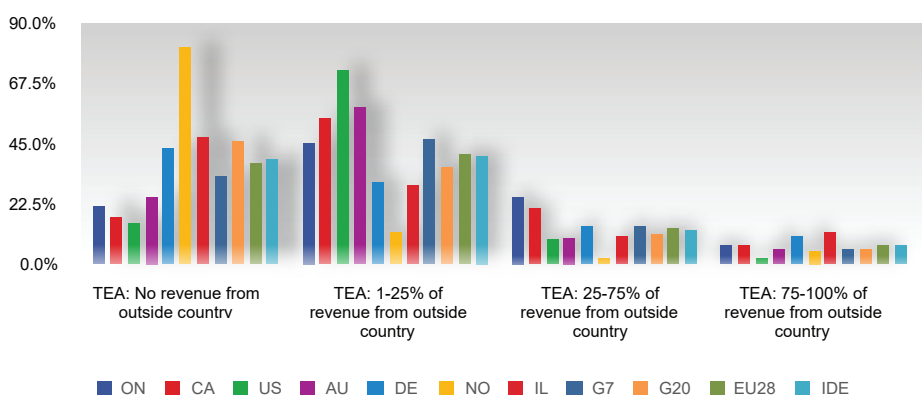
Ontario	Canada	US	Australia	Germany	Norway	Israel	G7	EU28	IDE
29.0	36.1	36.0	31.7	34.2	14.0	30.8	34.1	28.5	30.6

Table 2 reveals that only 29% of Ontarians indicate aspirations of innovation in product-market combination similar to IDEs (30.6%) but substantially fewer than in Canada (2.9%), the US (36%) and Australia (34.1%).

Figure 15 illustrates that Ontario start-ups lead the reference group with 32.6% indicating having more than 25% of their export revenues from outside the country, despite lagging behind in the “less than 25%” category. This gives some indication to the comparatively stronger export-oriented nature of Ontarian entrepreneurs, and their capability in reaching foreign markets.

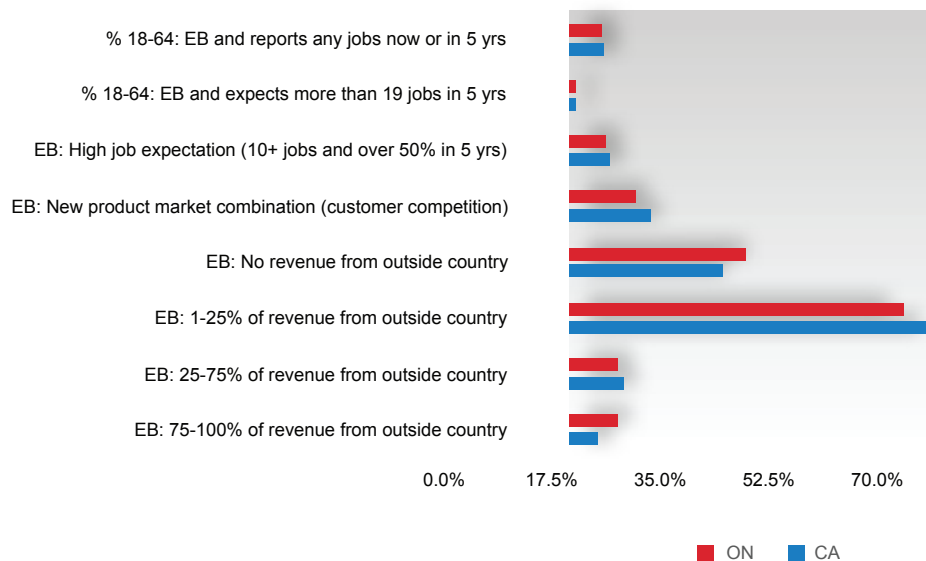
Export activity among Ontario start-ups may indicate business strength based on high competitiveness in terms of attractive prices as well quality and value-added products and services in the global market. Export activity plays an important role in economic development and growth, job creation and improvement of the balance of payments. Thus, improving conditions hindering start-ups’ ability to innovate and improving support for them to bring new products to market would further contribute to Ontario’s economy.

Figure 15: Export aspirations in Ontario and reference economies



FINDINGS - ADULT POPULATION SURVEY

Figure 16: Aspirations among established businesses (EBs) in Ontario and Canada



A comparison of entrepreneurs' aspiration among EBs in Ontario and Canada (Figure 16) suggests that broadly, the expectation of job creation in five years is similar. Only about 7% of entrepreneurs running EBs expect to create 10 or more jobs and grow over 50% in the next five years.

Greater differences exist in other aspiration metrics. Only 11.1% of Ontario EBs indicates innovation of new product-market combination, compared to 13.5% of EBs in Canada. In Ontario, 62.9% of EBs generate substantially less revenues from outside the country compared to approximately 70% in Canada.

INTRAPRENEURSHIP

In 2015, GEM examined entrepreneurial activity within existing organizations by employees, which is represented by the Entrepreneurial Employee Activity (EEA) index.

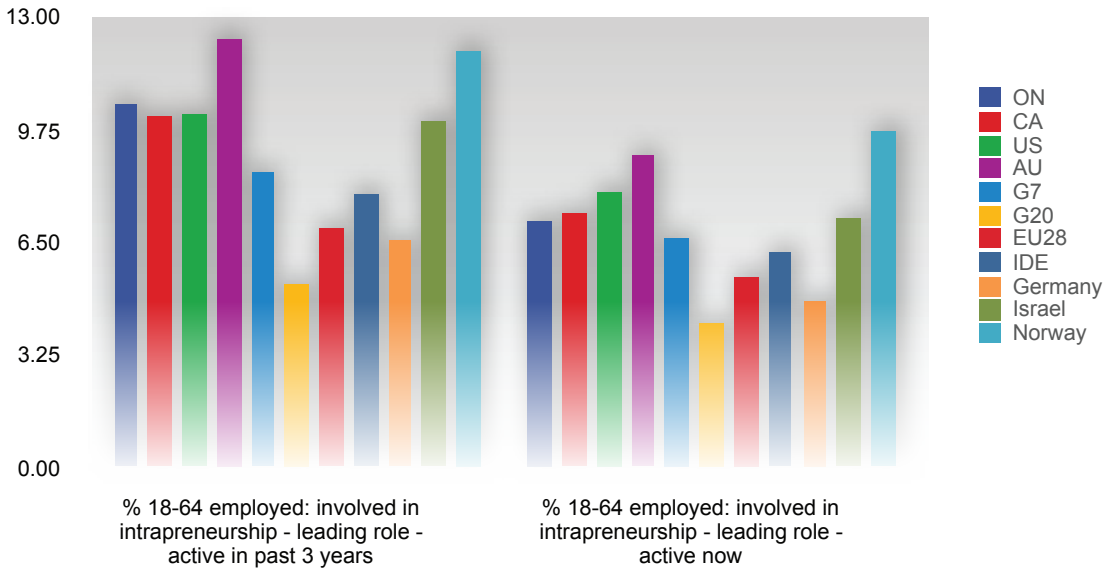
Nearly 11% of Ontarians were involved in entrepreneurship within organizations (intrapreneurship) as leaders in the past three years, slightly more than intrapreneurship rates in Canada (10.1%), the US

FINDINGS - ADULT POPULATION SURVEY

(10.2%) and Israel (10%) and more than in IDEs (8%). Australia and Norway indicate the highest rates of intrapreneurial activity among the reference group (12.4% and 12.1% respectively).

At the same time, as illustrated in Figure 17, only 7% of Ontarians indicate a current involvement in intrapreneurship, a lower rate compared to the reference group of countries Canada (7.4%), the US (8%) Australia (9%) and Norway (9.7%).

Figure 17: Rates of intrapreneurship in Ontario and reference economies



ENTREPRENEURSHIP DEMOGRAPHIC IN ONTARIO

AGE

GEM studies age by dividing adults in the working ages into five age group ranges:

18-24; 25-34; 34-44; 45-54; 55-64 years.

FINDINGS - ADULT POPULATION SURVEY

Figure 18: Participation in entrepreneurial activity by age in Ontario and reference economies

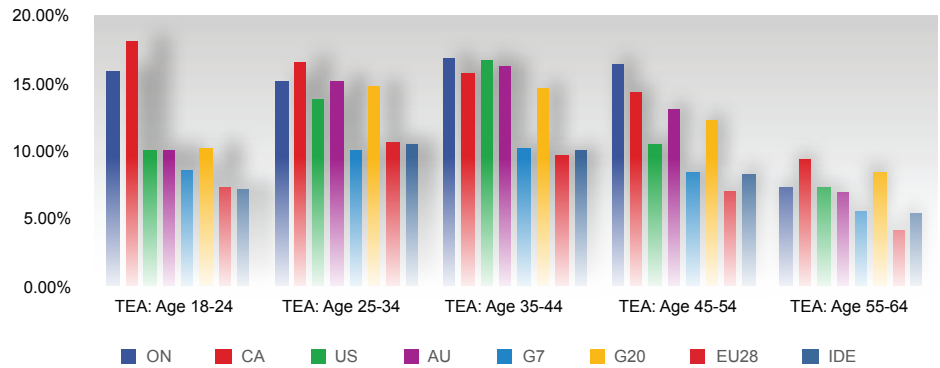


Figure 18 indicates that Ontario and Canada exhibit the highest rates of entrepreneurial activity in all age cohorts. Ontarians show the highest participation rate in entrepreneurship within the 35-44 (16.9%) and 45-55 (16.5%) age cohorts, compared to the reference group. Among the age cohort of 18-24, Canada (18.2%) and Ontario (15.9%) lead with the highest entrepreneurial rates. 7.5% of Ontarians in the age group of 55-65 are also involved in entrepreneurial activity, ranking Ontario second after Canada (9.5%) and comparable to the US (7.4%) in this age group. Ontario is also ranked second (15.2%) after Canada (16.6%) in entrepreneurial activity in the age cohort of 25-34.

Figure 19: Participation in entrepreneurial activity by age among established businesses (EBs) in Ontario and reference economies

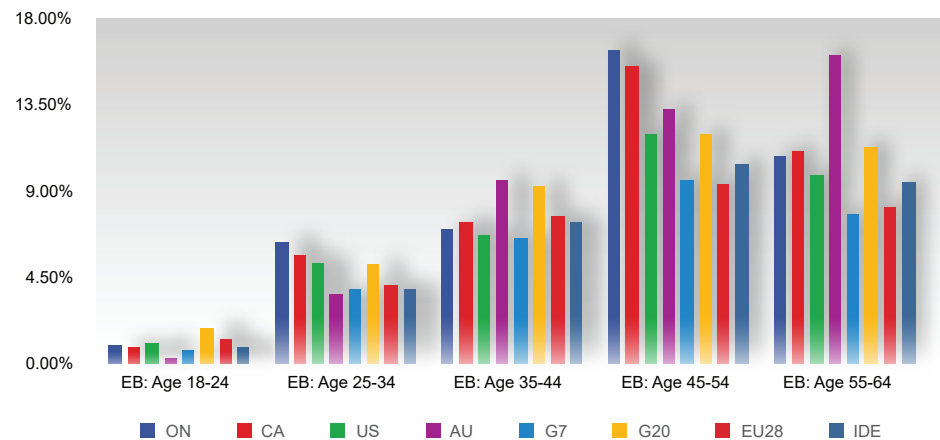
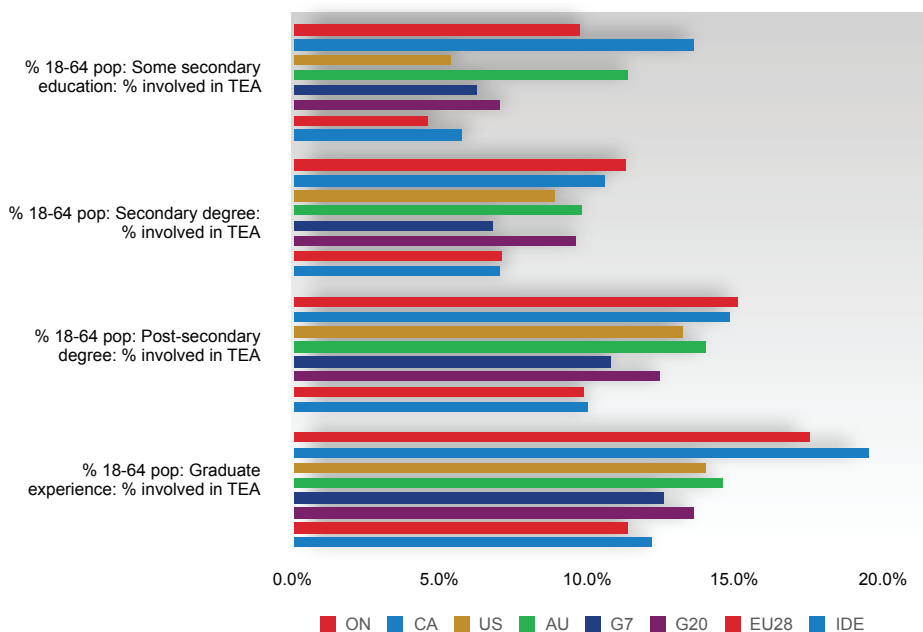


Figure 19 shows that in the 45-54 age group, Ontario's participation rate in entrepreneurship among EBs (16.4%) is the highest among reference groups including Canada (15.4%), Australia (13.2%) and the US (12%). Ontarians also show the highest rate of leading or managing an EB (6.3%) in the age group of 25-34, compared to other economies. On the other hand, at the age cohorts of 35-44 and 55-64, Australia has the highest participation level (9.6% and 16.1% respectively). In these age groups, Ontario's participation in EB entrepreneurship is ranked third, with slightly lower participation rates (7.1% and 10.1% respectively) than Canada (7.4% and 11.4% respectively). Nearly 1% of Ontarians were involved in EB entrepreneurial activity in the age group of 18-24, which is comparable to Canada and the US (1.1%).

EDUCATION

Figure 20 indicates that the higher the education level, the higher the involvement of Ontarians in early-stage entrepreneurial activities. TEA in Ontario is the highest among those with graduate experience (17.6%); however, it is less than Canada (19.6%). The Ontario TEA rate among entrepreneurs with some secondary education is lower (10.4%) than in Canada (13.6%).

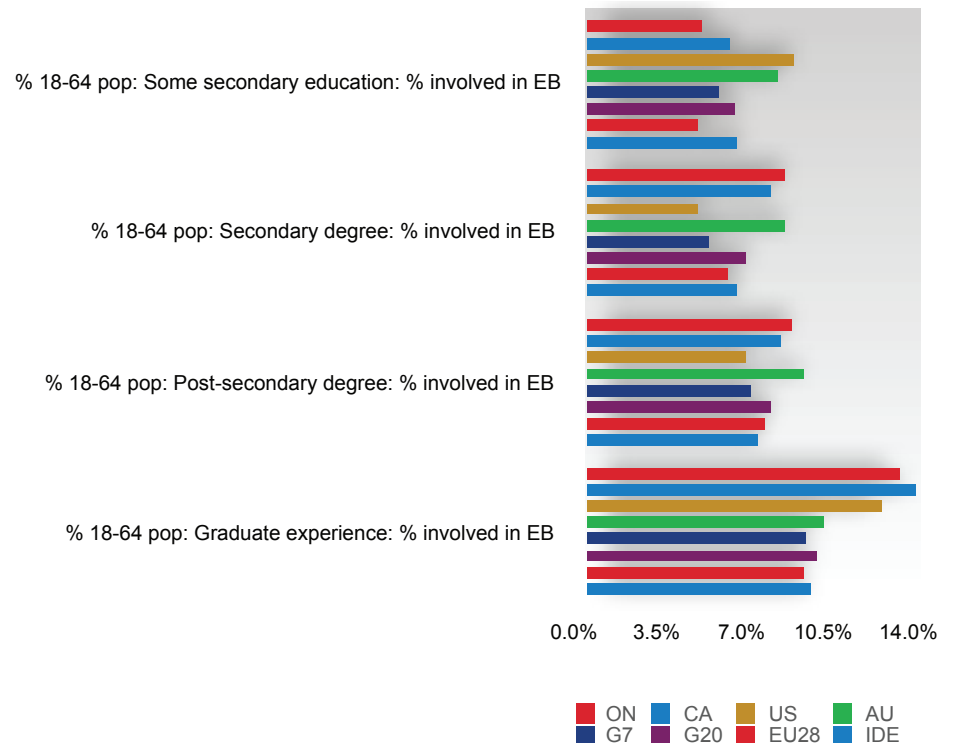
Figure 20: Entrepreneurial activity by education level in Ontario and reference economies



FINDINGS - ADULT POPULATION SURVEY

The same pattern is shown among EBs as shown in Figure 21, demonstrating that the Ontario rate is lower among individuals with some secondary education (4.5%) and graduate experience (12.8%) than in Canada (6% and 13.8% respectively).

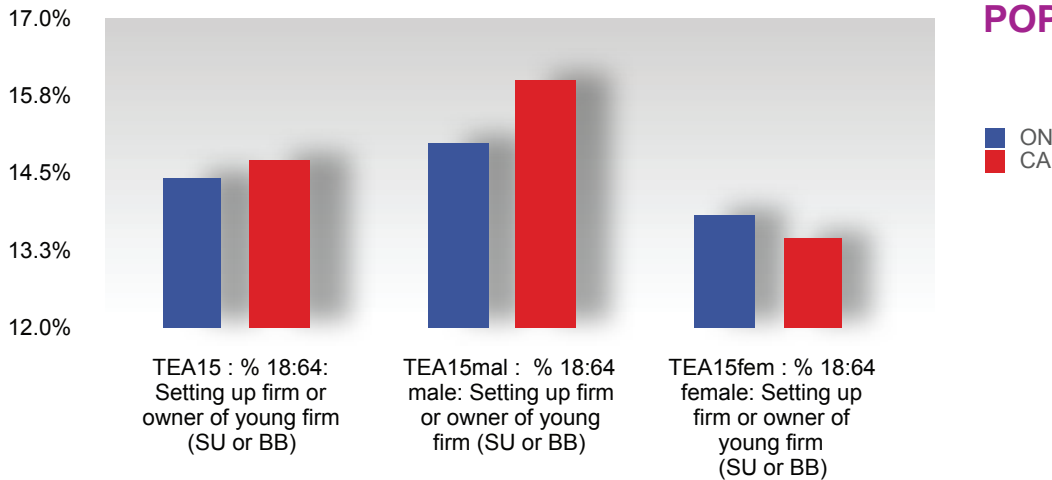
Figure 21: Entrepreneurial activity among established businesses (EBs) by education level in Ontario and reference economies



GENDER AND ENTREPRENEURSHIP

In Ontario, 15% of males and 13.8% of females between 18 and 64 are engaged in early-stage entrepreneurial activities, indicating a ratio of 1:0.92, compared to 1:0.84 in Canada. This means that in 2015 in Ontario, for every 100 male entrepreneurs, there were 92 women entrepreneurs. The rate of female entrepreneurs in Ontario (13.8%) is slightly higher than that of Canada (13.5%). The rate of male entrepreneurs in Ontario (15%) is slightly lower than that of Canada (16%), as shown in Figure 22.

Figure 22: Entrepreneurial activity by gender in Ontario and Canada



GENDER AND ATTITUDES

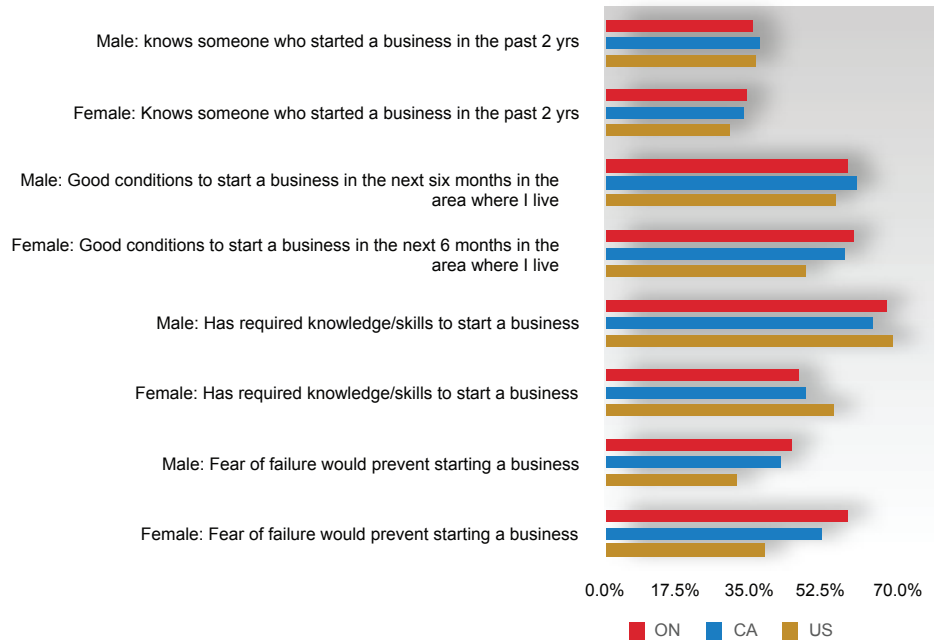
Figure 23 illustrates attitudes towards entrepreneurship among males and females in Ontario, Canada and the US. In Ontario, as in Canada and the US, females are somewhat less likely to have an acquaintance who is an entrepreneur (30.5%) than males (32%). Ontario females are, however, more likely to see entrepreneurial opportunities (54%) than males in Ontario (52%) as well as in Canada (51.7%) and the US (43.5%).

Females (41.3%) are much more likely to report a lower level of skills and knowledge to run a business than males (61%) in Ontario. Ontarian males indicate a higher rate of capabilities than males in Canada (57.4%), but slightly lower than US males (62.2%). Ontarian females' perceptions of their entrepreneurial capabilities (41.3%) is lower than among females in Canada (43.2%) and the US (49.5%).

Significantly, more than half (52.4%) of Ontarian females stated that fear of failure would prevent them from starting a business. This is the highest rate among Ontarian males (40.7%), Canadian females (47%) and US females (34.5%). This finding is worth noting, given Ontarian females' high rates of opportunity recognition and confidence in their entrepreneurial capabilities.

FINDINGS - ADULT POPULATION SURVEY

Figure 23: General public attitudes towards entrepreneurship by gender in Ontario and Canada



GENDER AND MOTIVE

Figures 24 and 25 exhibit males' and females' opportunity and necessity motives in Ontario and reference economies.

Figure 24: Opportunity motive of males and females in Ontario and reference economies

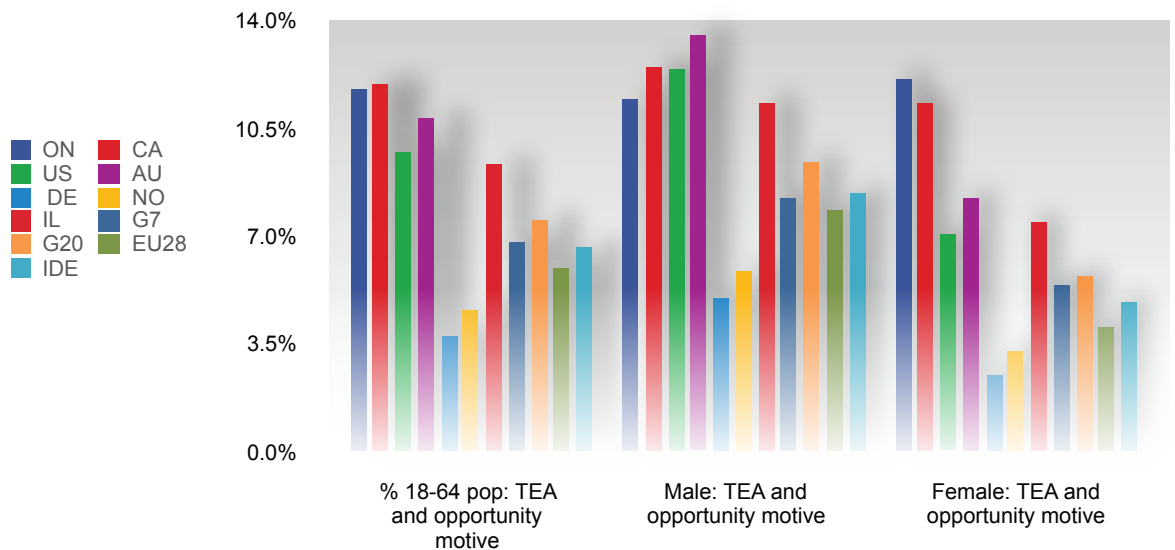
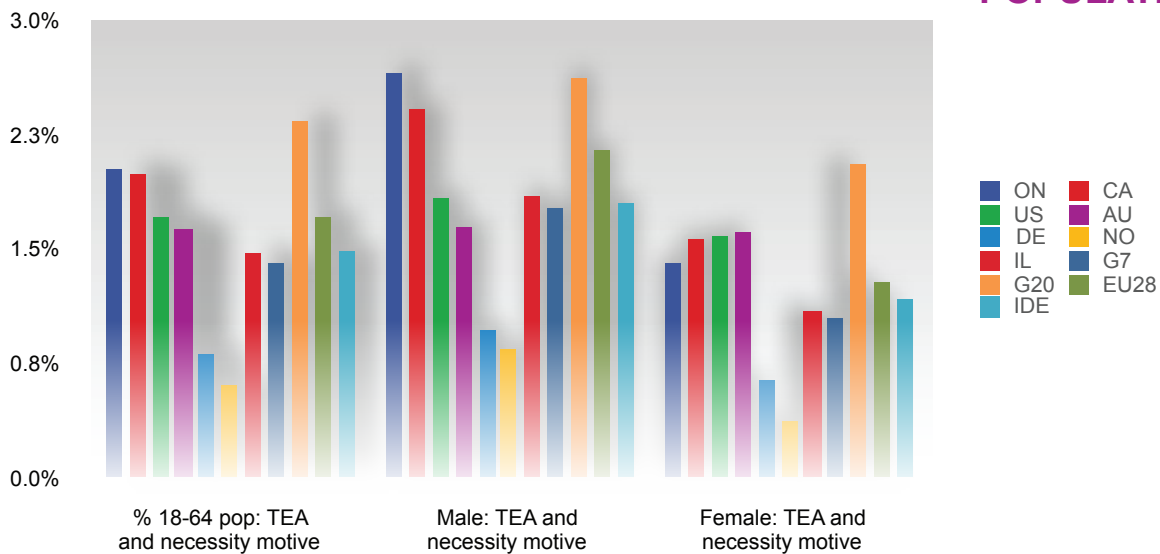


Figure 25: Necessity motive of males and females in Ontario and reference economies



In 2015, the opportunity motive among female early-stage entrepreneurs in Ontario (12.1%) was higher than in the US (7.1%), Australia (8.3%) and slightly higher than the opportunity motive rate among Canadian females (11.4 %) and Ontarian male entrepreneurs (11.5%).

Male entrepreneurs in Ontario were somewhat less likely than Canadian entrepreneurs to be motivated by opportunities (Figure 24). On the other hand, the rate of necessity-motivated entrepreneurship among males and females in Ontario was comparable to the Canadian rate of necessity-motivated male and female entrepreneurship (Figure 25).

GENDER AND SECTORS

Given the relatively high level of women entrepreneurs’ participation in Ontario’s economy, an examination of gender representation in sectors was conducted using the ISIC codes. Sectoral distribution of early-stage ventures for males and females was calculated, based on an aggregation of answers over 2013 through 2015. This provides a larger sample of 254 entrepreneur respondents of which 150 were males and 104 females, permitting a more detailed description of entrepreneurial activity at the sectoral level.

FINDINGS - ADULT POPULATION SURVEY

Figures 26 and 27 illustrate the sectoral distribution of early-stage ventures for Ontarian males and females among the 11 sectors.

Figure 26: Ontario's male entrepreneurs by sector – Division by 1D ISIC Code Sector (2013-2015)

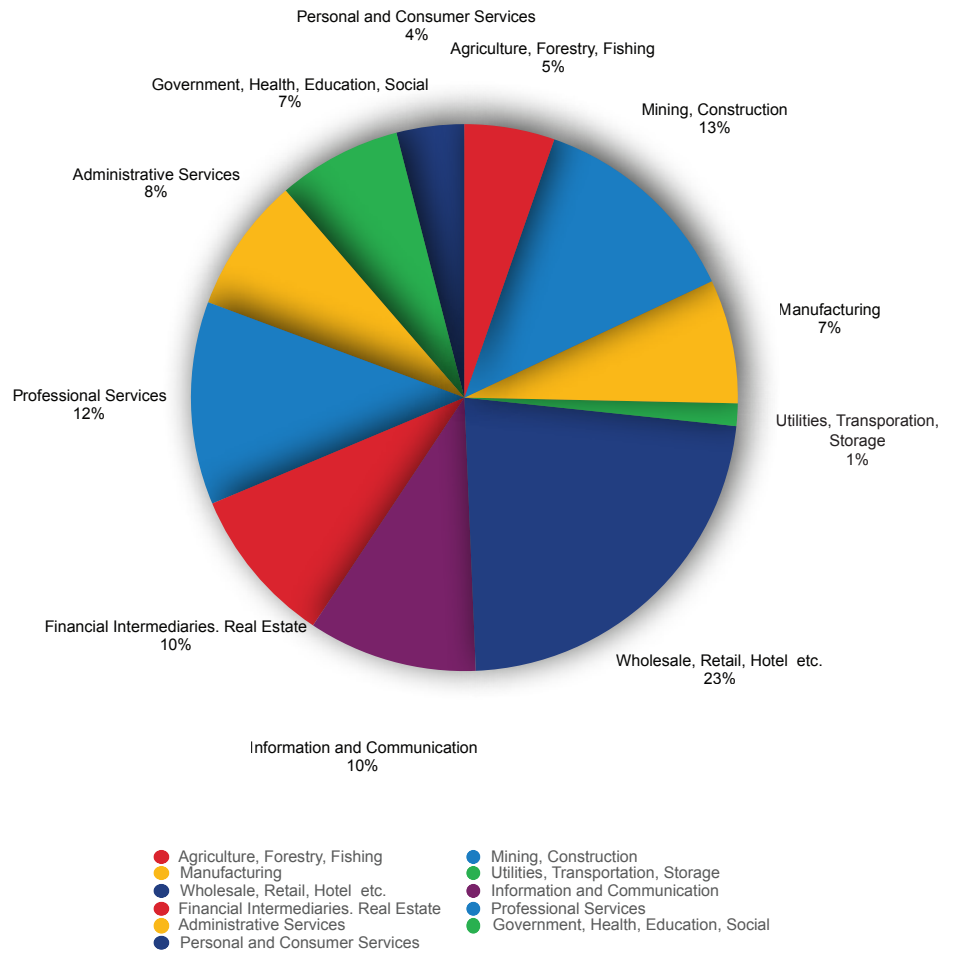
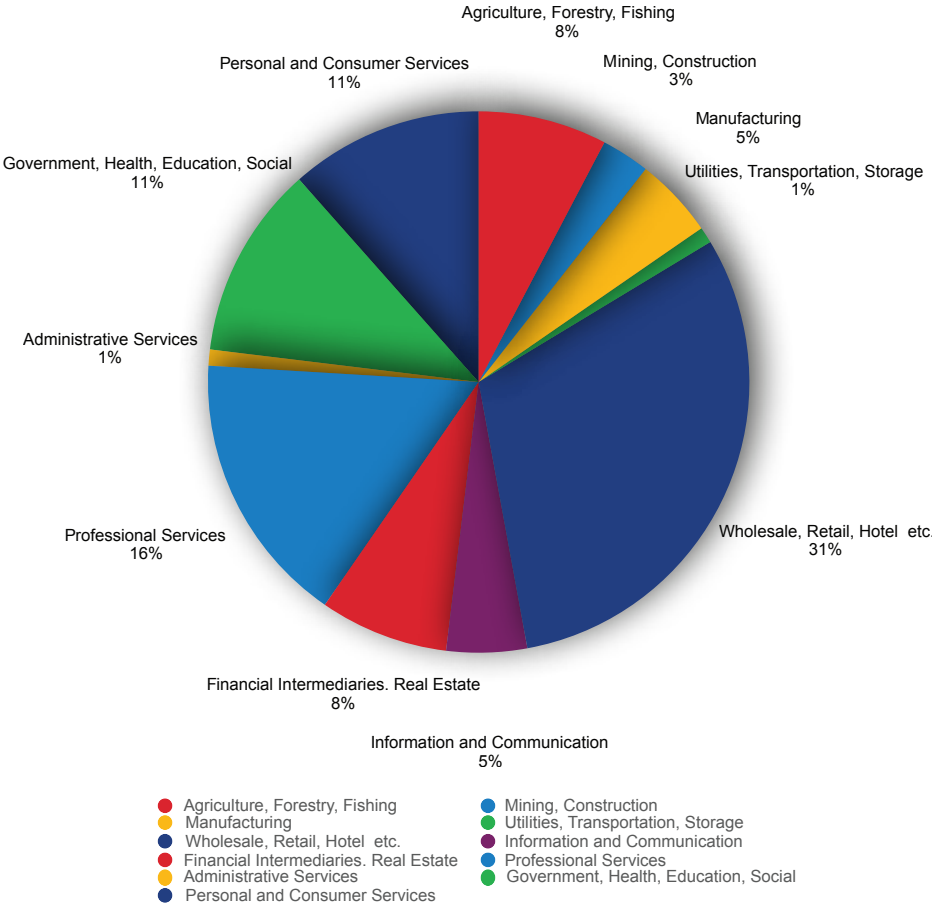


Figure 27: Ontario's female entrepreneurs by sector- Division by 1D ISIC Code Sector (2013-2015)



Overall, Ontarian males' share in the extractive sectors of agriculture, forestry and fishing (5%), together with mining and construction (13%), is higher than the females' share (8% and 3% respectively). Ontarian males' share in manufacturing (7%) is also higher than Ontarian females' (5%). Both males and females form a small share in transportation, storage and utilities category of 1%. Males in financial intermediation and real estate (10%), administrative businesses (8%) and information and communication (10%) form a significant part of business services and an overall larger share of enterprises compared to females in these sectors. However, wholesale, retail and accommodations form the largest sector among both genders,

FINDINGS - ADULT POPULATION SURVEY

accounting for almost one third (31%) of the female enterprises, compared to less than a quarter (23%) of Ontarian male enterprises. Other personal and consumer services form a share of 11% of females' enterprises versus 4% of males' enterprises. Also, the professional services category in the female sample is larger (16%) than that of males (12%), as is the female share of enterprises working for government, health, education and social services (11%) versus that of males (7%).

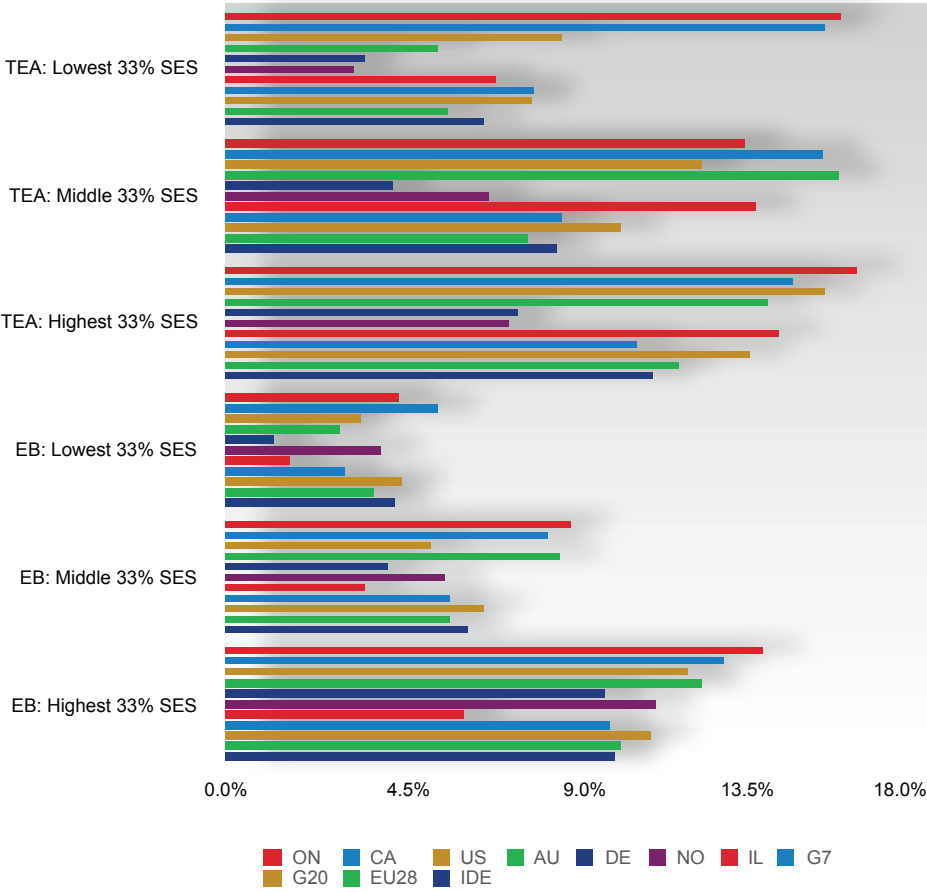
Overall, female entrepreneurs show higher representation in service-oriented ventures including social and professional services and wholesale and hospitality ventures, while Ontarian males show higher representation in manufacturing, information and communication and extractive-oriented sectors.

SOCIAL CLASS AND ENTREPRENEURSHIP

Ontario TEA reaches its highest levels in the lowest as well as the highest social classes (16%) as measured in income tertiles (Figure 28) – lowest, middle and highest social class (as defined by household income). In both cases, its values are higher than the Canadian and other reference groups' TEA rates. In the middle class, the Ontario TEA rate (13.3%) is lower than in Canada (15.3%) and Australia (15.6%).

Ontario's highest social class has the highest rate of participation in EBs (14%). This might indicate the ability of entrepreneurs in higher social classes to overcome the early-stage challenges better than entrepreneurs in lower income groups. A similar pattern exists among other economies in the reference group.

Figure 28: Socioeconomic status (SES) or income tertiles among early-stage and established businesses (EBs) in Ontario and reference economies



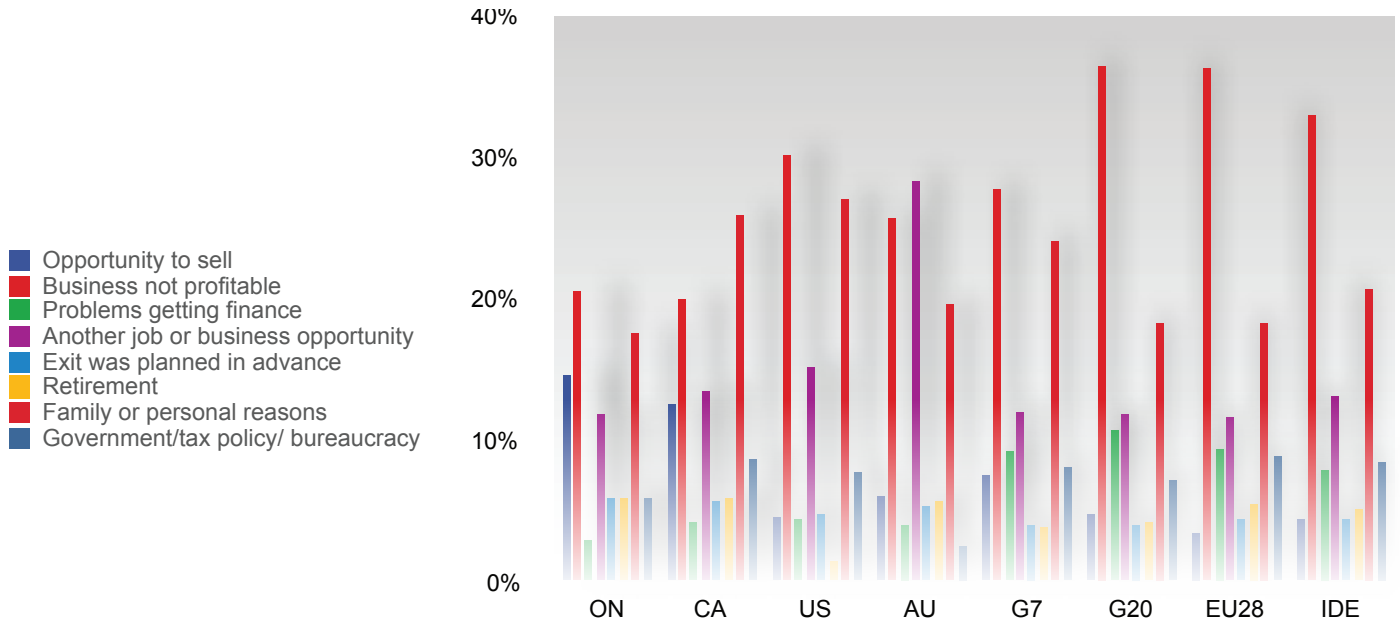
EXIT

Approximately 3% of Ontarian entrepreneurs indicated exiting a business in the past year and closing it, while 2.7% indicated exiting a business that remains in operation. This pattern is comparable to that seen in Canada and in reference group of countries.

FINDINGS - ADULT POPULATION SURVEY

As Figure 29 illustrates, among the main reasons for exiting a business in Ontario are lack of profitability (20.6% of all exits), family or personal reasons (17.6%), opportunity to sell (14.7%) and another job or business opportunity (11.8%).

Figure 29: Exit reasons among early-stage entrepreneurs in Ontario and reference economies



ENTREPRENEURIAL FRAMEWORK CONDITIONS (PROVINCIAL EXPERTS SURVEY - PES)

GEM 2015 complements the survey of adult population with experts' assessments of nine socio-economic factors in the 62 participating economies. The nine factors are based on framework conditions outlined by the World Economic Forum (WEF) and have been used by GEM to examine the entrepreneurial climate and ecosystem in which venturing takes place.

The experts are from various professional backgrounds and all have a connection to entrepreneurship. The following results indicate the 36 experts' assessments on how favourable conditions in Ontario are by rating statements on a nine-point Likert scale. These statements were used in the National Expert Survey (NES) global GEM study, indicating different levels of agreement: 1–completely false; 2–false; 3–moderately false; 4–somewhat false; 5–neither false nor true; 6–somewhat true; 7–moderately true; 8–true; 9–completely true.

- Availability of finance
- Government policies
- Government entrepreneurship programs
- Entrepreneurship education
- Research and Development (R&D) transfer
- Commercial and services infrastructure
- Market dynamics and openness
- Physical infrastructure
- Cultural and social norms

In accordance with the 2015 GEM Canada report, mean scores for each statement are presented. Mean scores above the ranking of 5 indicate a partial agreement with the statement on the condition's favourability to entrepreneurship. On the other hand, mode identifies the score given most frequently by the experts.

(Sources: 2015 GEM Canada Report; GEM 2015/16 Global Report.)

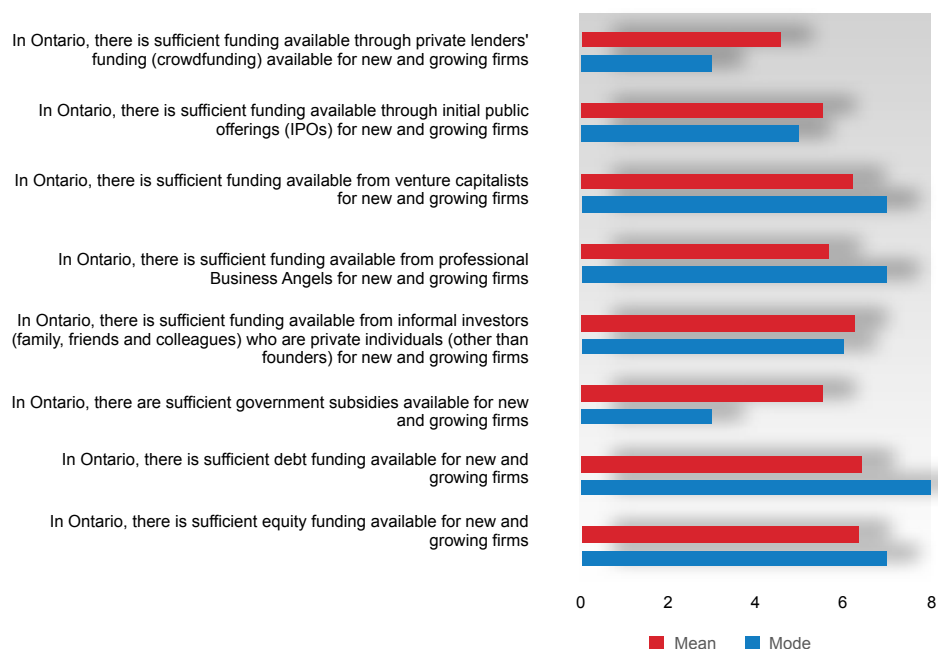
AVAILABILITY OF FINANCE

Figure 30 shows assessment of the sufficiency of six types of financial sources that are considered important for Ontario entrepreneurs' needs: private lenders, Initial Public Offerings (IPOs), venture capitalists (VCs), business angels, informal investors (family, friends

ENTREPRENEURIAL FRAMEWORK CONDITIONS (PROVINCIAL EXPERTS SURVEY - PES)

and colleagues), government subsidies, debt funding and equity. Private lenders' funding and governmental subsidies appear to be inadequate, compared to the other sources available for Ontario entrepreneurs. VCs and business angels are found to be the most adequate sources, followed by informal individuals and IPOs.

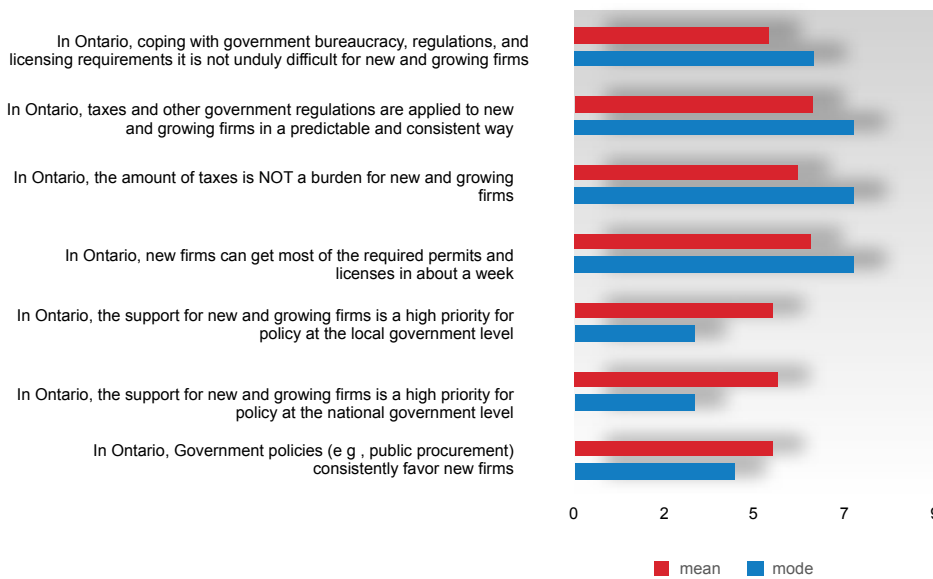
Figure 30: Experts' evaluation of availability of finance to entrepreneurs in Ontario



GOVERNMENT POLICIES

Among the governmental policies under consideration, experts considered Ontario's policies regarding taxes, government regulations and licences as consistent and relatively predictable. Similarly, the amount of taxes is not considered a burden. On the other hand, support for new or growing firms in the local and national government levels is considered the least adequate. Experts also indicate the insufficiency of public procurement for new firms (Figure 31).

Figure 31: Experts' assessment of adequacy of government policies in Ontario in support of entrepreneurship

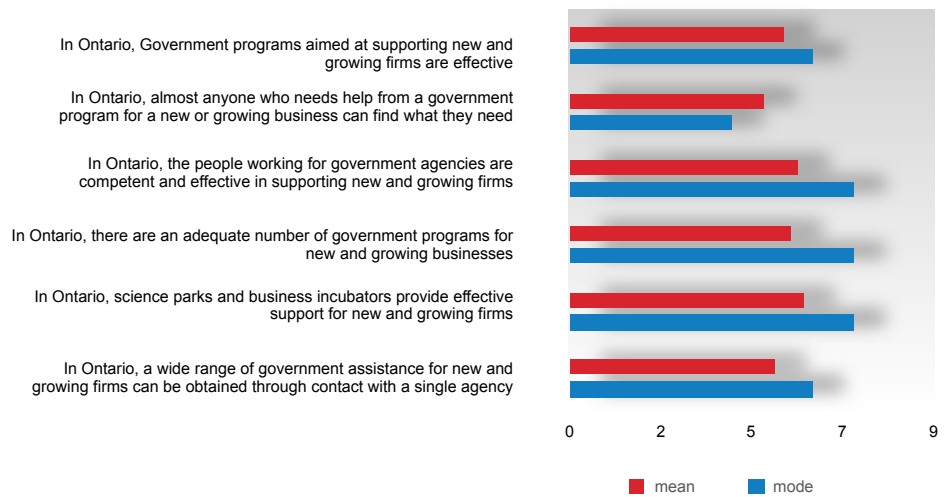


GOVERNMENT PROGRAMS

Experts' assessment reveals adequate program personnel working for government agencies for supporting entrepreneurs. High effectiveness is also attributed to science parks and business incubators that support new and growing firms in Ontario. A lower level of experts' agreement is shown with regard to the availability of governmental assistance programs to anyone who needs them and to the ability to obtain a wide range of assistance through contact with a single agency. In summary, although governmental programs are considered effective and professional, they are not easily obtained by everyone who needs them and they are not available as a "one-stop" service (Figure 32).

**ENTREPRENEURIAL
FRAMEWORK
CONDITIONS
(PROVINCIAL EXPERTS
SURVEY - PES)**

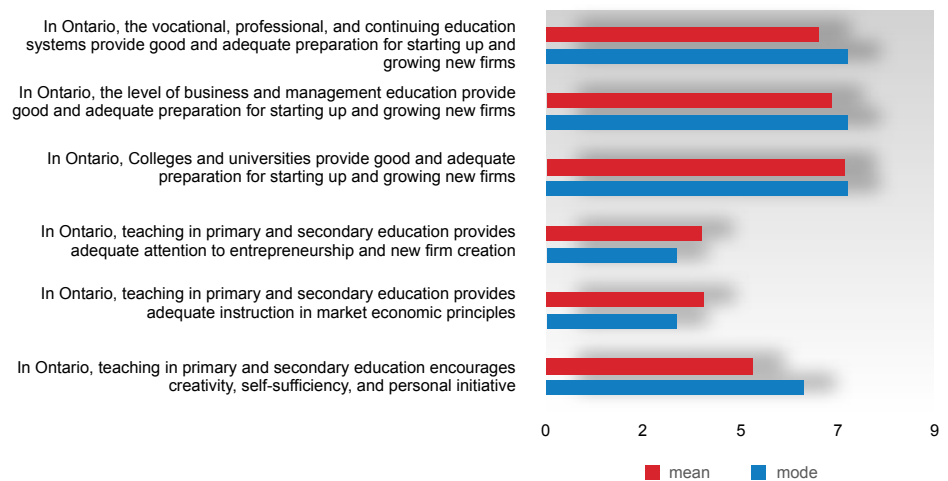
Figure 32: Experts' assessment of government policies for entrepreneurship in Ontario



ENTREPRENEURSHIP EDUCATION

Entrepreneurship education in Ontario is considered favourable in the post-secondary education level (e.g. colleges, universities and continuing education systems). It is considered much weaker in primary and secondary education levels, although teaching at these levels does involve creativity, self-sufficiency and encourages taking initiative (Figure 33). These patterns are similar to experts' assessment in 2014.

Figure 33: Experts' assessment of entrepreneurship education in Ontario

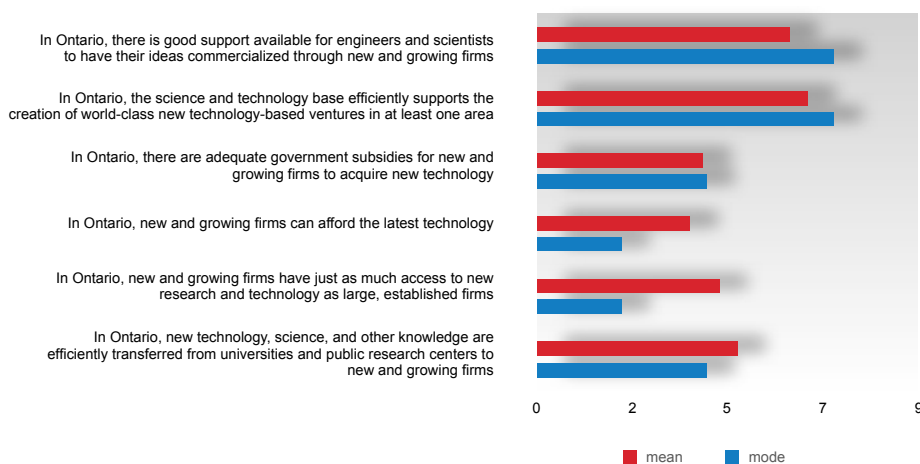


RESEARCH & DEVELOPMENT TRANSFER

Experts indicate favorable conditions for R&D transfer for scientists and engineers in Ontario. At the same time, they point to barriers in commercialization by mentioning the difficulty for new and growing firms to access and afford the latest technologies. The lack of sufficient governmental support to acquire new technology along with inefficient processes of transferring technologies from universities to the market are further weaknesses of the Ontario R&D commercialization system.

This finding corroborates the APS results indicating the widespread use of new technologies on the one hand and the lower ability to leverage them to commercialize new products on the other (Figure 34).

Figure 34: Experts' assessment of R&D transfer in Ontario

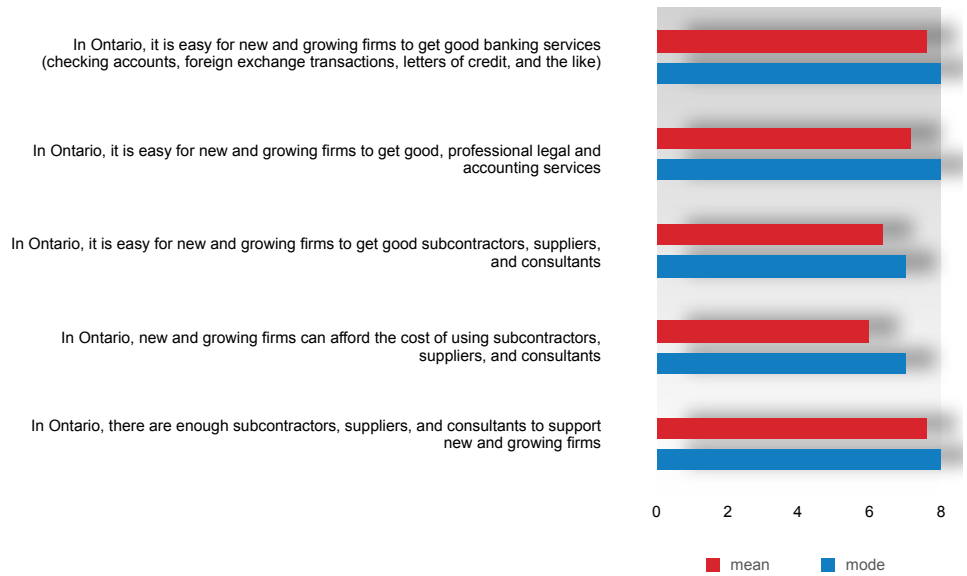


COMMERCIAL AND SERVICE INFRASTRUCTURE

Experts indicate a relatively affordable commercial infrastructure for supporting new firms' growth in Ontario. This includes financial and legal services as well as sub-contractors and consultancy services (Figure 35).

ENTREPRENEURIAL FRAMEWORK CONDITIONS (PROVINCIAL EXPERTS SURVEY - PES)

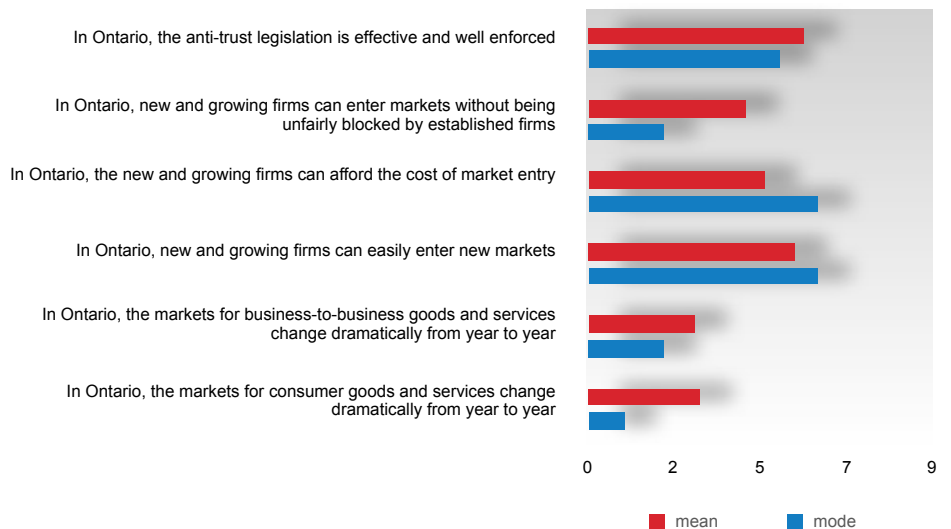
Figure 35: Experts' assessment of commercial infrastructure in Ontario



MARKET OPENNESS

Experts consider that consumer and business markets in Ontario are relatively stable. However, although growing firms can easily penetrate new markets and afford the costs involved with it, experts indicate substantial challenges related to being competitively blocked unfairly by established firms (Figure 36).

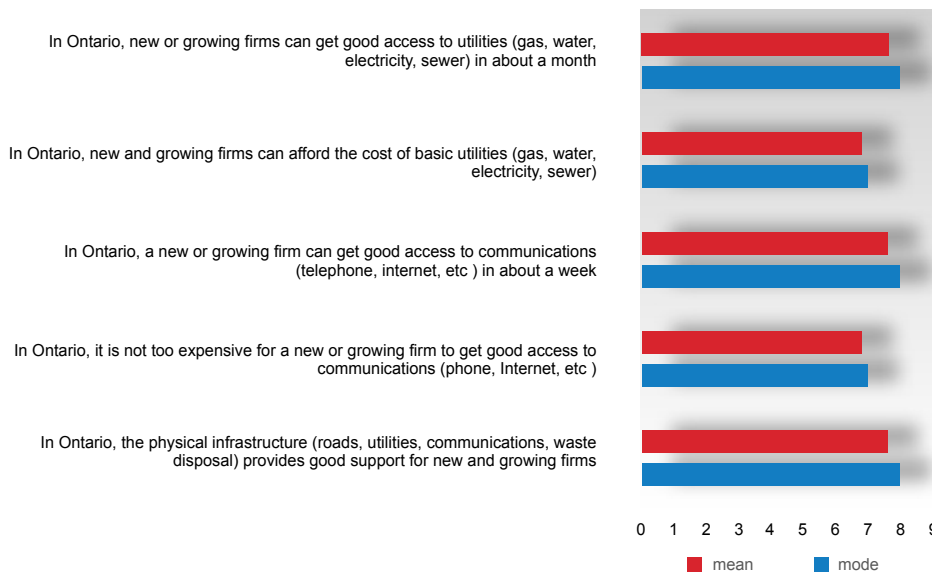
Figure 36: Experts' assessment of market openness in Ontario



PHYSICAL INFRASTRUCTURE

Ontario’s physical infrastructure is considered strong, easy to access and considerably affordable to new and growing firms. It includes basic utilities (e.g. water, electricity, gas), communications as well as adequate transportation infrastructure (Figure 37).

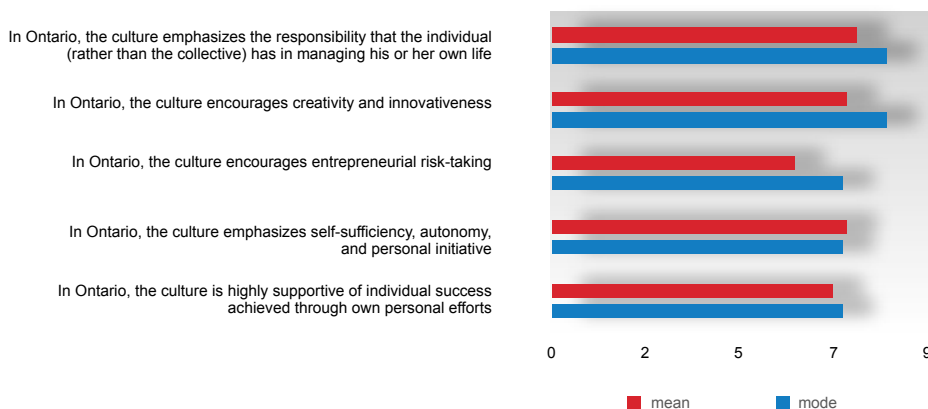
Figure 37: Experts’ assessment of adequacy of commercial services in Ontario



CULTURAL AND SOCIAL NORMS

According to experts, Ontario has an entrepreneurial culture and norms in support of new and growing firms’ development. In general, Ontarians’ favourable attitudes toward responsibility, creativity and innovativeness, and entrepreneurial risk-taking are at the core of entrepreneurial culture (Figure 38).

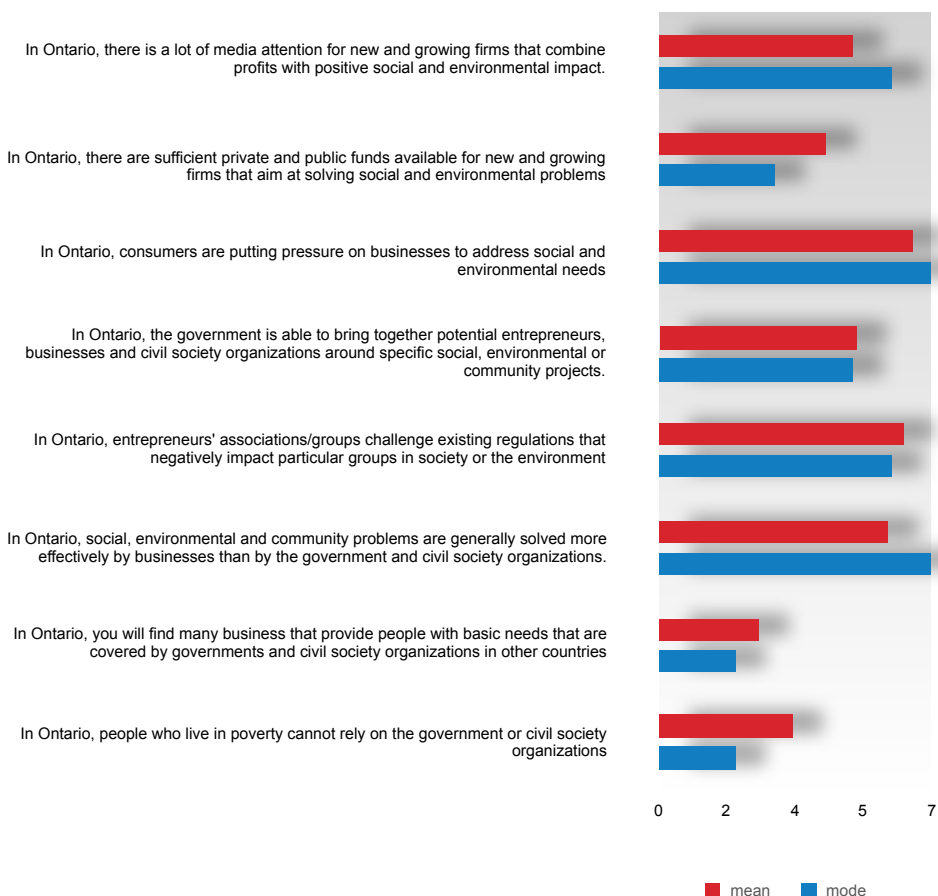
Figure 38: Experts’ assessment of entrepreneurial culture and norms in Ontario



**PERSPECTIVES ON THE BUSINESS SECTOR'S
ROLE IN SOCIETY**

Ontarian experts believe that businesses are able to deal more effectively with social and environmental issues than government agencies. This is, in part, due to the substantial influence of consumers on Ontario businesses aimed to address social and environmental issues. This is also accomplished through media channels and governmental campaigns to support environment and community matters, as well as by social entrepreneurs that challenge existing regulations that may negatively impact groups in the society. At the same time, lack of funds for supporting growing firms that combine profit with positive social and environmental impact is recognized, as well as the low involvement of the business sector in providing basic needs of people that are not addressed by government or civil society organizations (Figure 39).

Figure 39: Experts' assessment of the business sector's role in society



CONCLUSIONS

The GEM model examines the multiple phases of business initiation from its very early stages including the entrepreneur's characteristics, motivations and ambitions alongside the environment characteristics in which it evolves.

1. This year, Ontario achieved one of highest early-stage entrepreneurship participation rates (TEA) within its peer group, pulling ahead of the US and Australia, despite still being behind Canada as a whole. This is a unique position for Ontario, as its entrepreneurship participation rate has been comparable, if not below, the US and Australia in recent years.
2. Women's participation in entrepreneurship increased at a strong rate this year. This indicator is one of the key drivers for Ontario's performance in entrepreneurship participation. Compared to Canada, Ontario displayed a higher rate of women participating in entrepreneurship. In 2015 in Ontario, for every 100 male entrepreneurs, there were 92 female entrepreneurs, compared with a ratio of 1:0.84 in Canada. In Ontario, women also display a higher rate of opportunity-driven entrepreneurship than men. On the other hand, women entrepreneurs still display a lower sense of confidence in their entrepreneurial abilities and have a higher fear of failure. Ontarian females also demonstrate lower entrepreneurial activity in extractive, transformative and business-oriented ventures, compared to Ontarian males. Findings also highlight the prominence of Ontario females in service-oriented businesses compared to males.
3. Intrapreneurship in Ontario performed with mixed results. The data shows that the participation in intrapreneurship in Ontario in the past three years compared well with other peer economies. However, current participation in intrapreneurship in Ontario lags behind, and is outperformed by the US and Australia. This trend may be indicative of a decreasing participation in intrapreneurship, and should be noticed by corporate firms and other ventures who are striving to increase innovativeness through intrapreneurship.

CONCLUSIONS

4. The data point to an interesting combination of attitudes towards entrepreneurship in Ontario. Generally, Ontarians display a healthy sense of confidence in their entrepreneurial capabilities, exceeding their peers in reference economies. Unlike the US, however, which displays a similar high level of confidence, Ontarians possess a relatively high level of fear of failure. Ontarian entrepreneurs appear to possess a substantial amount of risk aversion, which may be a significant barrier to further growth in entrepreneurial activities in the province.
5. This year, 14.4% of Ontarians were involved in setting-up or owning a young firm, as indicated by the TEA rate. Yet only 9% were involved in running an income-generating business aged more than 3.5 years. This gap may be indicative of a survival issue, in which entrepreneurs face difficulties in turning their young firms into revenue-generating businesses that are sustainable in the long term.
6. There is a substantial number of opportunity-driven entrepreneurs in Ontario, leading other peer economies and on par with Canada. Despite that, Ontarian entrepreneurs do not see income increases as a key motivation for establishing a business. They view their businesses more as a source of independence, rather than as a source of financial wealth. This may imply that many Ontarian entrepreneurs are more drawn to “lifestyle entrepreneurship,” in which they do not aim to grow or scale-up their businesses. On the other hand, this may indicate a certain inability of the Ontario economy to suitably reward entrepreneurs financially for their efforts. This may be a potential barrier to the further improvement of the entrepreneurial ecosystem in Ontario.

CONCLUSIONS

7. Ontario has a high rate of technology utilization, yet low levels of novel products among its entrepreneurs. The high rate of technology utilization in Ontario is likely a reflection of the province's developed high-tech industry and its substantial knowledge generation capabilities. The province's laggard performance in product innovation indicates a weakness in its ability to commercialize new technologies and knowledge. In other words, the relatively extensive use of new technologies in Ontario does not seem to translate into the commercializing and delivering of unique products and services to consumers.
8. Ontario displayed a high capacity of exporting, with a high proportion of Ontario entrepreneurs earning 25% to 75% of their revenue from markets abroad. Export activity among Ontario start-ups may indicate a high level of business competitiveness which may be attributed to attractive prices as well quality in value-added products and services. Exports play an important role in economic growth and job creation in Ontario, and serve as a measure for innovative activities in its economy. Thus, efforts in improving conditions for innovativeness of start-ups and supporting access to market would further contribute to Ontario economy.

RECOMMENDATIONS

The 2015 GEM Ontario Report reveals substantial entrepreneurial activity in Ontario when compared to other developed economies around the world. For the first time, Ontario, together with Canada, shows the highest rate of early-stage entrepreneurial activity or total early-stage entrepreneurial activity (TEA), compared to developed countries in the reference group: the US, Australia, Norway, Germany and Israel. In previous years, the US held first place in early-stage entrepreneurial activities.

Compared to the reference group of countries, Ontario shows the highest rate of respondents who perceive good conditions to start a business (53.2% of adult respondents). Ontarians report high levels of confidence, comparably higher than reference countries' rates, in having the needed skills to seize opportunities (51.2%). This year, over 14% of Ontarians were involved in business start-ups. Overall, the data illustrates some positive and encouraging growth in entrepreneurship in Ontario.

To build on the positive momentum around entrepreneurship in Ontario, there are opportunities to continue to develop and enhance public assistance programs to support early-stage entrepreneurs and help businesses scale to sustain long-term growth:

1. **Mentoring Programs:** Continue mentoring and assistance programs to further develop entrepreneurs' strategic thinking, business capabilities, and abilities to cope with risks and challenges related to business growth within relevant industries.
2. **Women Entrepreneurship:** Develop strategic vision and programs in order to further take advantage of women's skills and opportunity-oriented perspectives. In particular, there is an opportunity to take steps to enhance and support technology and business training programs to help women enter sectors where they are currently under-represented.
3. **Public Procurement:** Strategically enhance public programs to turn new and existing technologies into products and support commercialization.

4. **R&D Transfer Channels:** Extend public programs and encourage industry initiatives aimed at acquiring new technologies from universities, and improve R&D transfer processes. Specifically, the process of turning knowledge generated in universities into commercially viable products should be streamlined and enhanced. This would help to develop the knowledge economy, and enhance entrepreneurial activity.
5. **Access to Government Funding:** To improve entrepreneurship participation, access to governmental funding should be improved. Emphasis should be put on understanding and supporting emerging entrepreneurs. These entrepreneurs can be potent knowledge generators and innovators, but perhaps lack connections or access to professional investors. Alternately, they might not fit into their conventional investment criteria. Public-private partnerships in entrepreneurship funding might be established to further strengthen the commitment to entrepreneurial development made at all levels of government, and help entrepreneurs more effectively target public funds.
6. **New Forms of Financing:** There is an opportunity to educate and encourage entrepreneurs to better utilize new forms of financing, such as crowdfunding. New funding channels may present a new way for entrepreneurs who lack the reach and connections to traditional financial sources and capital markets to gather the necessary capital.
7. **Entrepreneurship Education:** The relatively lower levels of participation in entrepreneurship among Ontarians with secondary education or less may be a signal of insufficient ambition to choose entrepreneurship as a career path. There is an opportunity to encourage the education systems and school boards to develop programs and encourage entrepreneurial behavior and thinking in primary and secondary schools. Such programs could encourage business creation initiatives, emphasizing innovation and business skills training in schools and within communities.

RECOMMENDATIONS

- 8. Entrepreneurship Research:** There is a significant opportunity to encourage a more in-depth understanding of entrepreneurs and innovative firms in Ontario. The opportunity to dig deeper into entrepreneurial ventures and innovation in Ontario will allow researchers and policy-makers to gain a better understanding of the possible requirements for policy differentiation among Ontario's regions.

ABOUT THECIS

THECIS (The Centre for Innovation Studies) is a not for profit organization devoted to the study and promotion of innovation. Based in Calgary, Alberta, and incorporated in 2001, it operates through a network of 35-40 **THECIS** Fellows.

THECIS has three **core functions** – research, networking and education.

- **Research.** Creating new knowledge and building insights into how the innovation systems functions and policies that can improve it.
- **Networking.** Providing opportunities for exchange of ideas through breakfast meetings, workshops and conferences.
- **Education.** Dissemination of information through Newsletters, events and other informal education activities, particularly for graduate students.

For more information about THECIS go to www.thecis.ca

The Centre for Innovation Studies (THECIS)

#125, Alastair Ross Technology Centre
3553 31 Street NW
Calgary, Alberta, Canada T2L 2K7



ABOUT RYERSON UNIVERSITY

Ryerson is Canada's leader in innovative, career-focused education and a university clearly on the move. It is a distinctly urban university with a focus on innovation and entrepreneurship. Ryerson has a mission to serve societal need and a long-standing commitment to engaging its community.

Guided by a bold Academic Plan, an ambitious research agenda, and a Master Plan to revitalize the campus and surrounding neighbourhood, Ryerson is the most applied-to university in Ontario relative to available spaces, and its reputation with business and community leaders continues to rise.

Ryerson offers more than 100 undergraduate and graduate programs. Culturally diverse and inclusive, the university is home to 38,950 students, including 2,300 master's and PhD students, nearly 2,700 faculty and staff, and more than 170,000 alumni worldwide. Research at Ryerson is on a trajectory of success and growth: externally funded research has doubled in the past four years. The G. Raymond Chang School of Continuing Education is Canada's leading provider of university-based adult education. The university's focus on innovation and entrepreneurship is represented most distinctly by the Digital Media Zone, a place for students to collaborate and bring their digital ideas to the marketplace.

For more information about Ryerson University, go to www.ryerson.ca

The logo for Ryerson University features the words "Ryerson" and "University" stacked vertically in a white, sans-serif font. The text is set against a dark blue rectangular background. To the right of this blue rectangle is a vertical yellow bar of the same height.

The Brookfield Institute for Innovation + Entrepreneurship (BII+E) is a new, independent and nonpartisan institute, housed within Ryerson University that is dedicated to making Canada the best country in the world to be an innovator or an entrepreneur.

BII+E supports this mission in three ways: insightful research and analysis; testing, piloting and prototyping projects; which informs BII+E's leadership and advocacy on behalf of innovation and entrepreneurship across the country.

For more information about the Brookfield Institute for Innovation + Entrepreneurship, please visit www.brookfieldinstitute.ca

ABOUT THE BROOKFIELD INSTITUTE FOR INNOVATION + ENTREPRENEURSHIP



MORE INFORMATION

For more information on the GEM Ontario 2015 report, please contact **Charles Davis** at c5davis@ryerson.ca.

For more information on GEM Canada, please contact **Peter Josty**, Executive Director of THECIS, at p.josty@thecis.ca.

For more information on the GEM global reports and on GEM, please contact the GEM Executive Director, **Mike Herrington**, at MHerrington@gemconsortium.org.

The 2015 GEM Canada report is available at www.gemcanada.org.
The 2015 GEM Global report is available at www.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.

In addition to the 2015 GEM Canada report, provincial reports will be published for Alberta, Ontario, Quebec and Atlantic Canada. These will be available at www.gemcanada.org in due course.

The GEM Canada and GEM Ontario projects would not be possible without the support and encouragement of many supporters and funders. We would like to recognize the following as funders for the 2014 GEM Canada and GEM Ontario reports.

SPONSOR RECOGNITION



REPORT AUTHORS

Sigal Haber, Ph.D

Sigal Haber is a GEM Canada researcher. Sigal's studies focus on the interface of entrepreneurship and tourism with its unique characteristics. She also studied family businesses, business incubators and entrepreneurship success in service industries. Sigal's studies were published in leading entrepreneurship academic journals including: *JBV*, *JSBM*, *Annals of Tourism Research*. Sigal has an extensive experience in teaching entrepreneurship from Israel (Ben-Gurion University and Tel-Aviv University) and from Schulich School of Business at York U. Sigal has also practical experience in marketing research and writing marketing and business plans. As a scientific consultant to the Israeli Ministry of Education she developed entrepreneurship and strategy related educational programs for secondary schools.

Matthew Lo, MA

Matthew Lo is a Policy Advisor at the Brookfield Institute for Innovation + Entrepreneurship (BII+E), with a background in economics, sustainable development and empirical analysis. His current research interests include fiscal policy, social welfare and the economic impacts of entrepreneurship. With work experience in the Federal Government and Fraser Institute, Matthew has practical knowledge on economic analysis, empirical policy evaluation and project management. In his past roles, he has conducted research on the economic impacts of taxation, and the relationship between resource development and economic growth.

Charles H. Davis, Ph.D

Charles Davis is a professor in Ryerson University's RTA School of Media (Faculty of Communication and Design) and is cross-appointed with the Entrepreneurship and Strategy Department in the Ted Rogers School of Management. He holds the ES Rogers Research Chair in Media Management and Entrepreneurship and he serves as Associate Dean for Scholarly Research and Creative Activities for the Faculty of Communication & Design. Charles teaches and conducts research on management and policy in industries that produce experience goods - with special interest in innovation and new product development in the software and content layers of creative industries. His research projects include studies of media product innovation, media labour, media industry clusters, audience responses to media offerings, corporate governance of innovation, digital entrepreneurship, and innovation policy.

REPORT AUTHORS

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GEM 2015 – Definitions and Terminology

- **Entrepreneurship** – any activity aimed towards the formation of an enterprise or a business organization, expansion or transformation of an existing business or the creation of independent employment of an individual or a team through a business organization.
- **Total Early-Stage Entrepreneurial Activity Rate – TEA** – The combined percentage of entrepreneurs among the adult population, ages 18-64, who are at one of the following first two stages of forming a business:
 - 1) *Nascent* – The creation and formation stage, at which individuals begin to commit resources, such as time or money to venture. It is the phase during which the new enterprise has not paid out wages of any kind for over 3 months.
 - 2) *New Business Stage/ Baby Business* – Any business operating for more than 3 months but not more than 42 months, that has been paying salaries or drawings.
 - 3) *Established Businesses (EBs)* – Any enterprise aged more than 42 months that has been paying salaries or drawings.

**A Stage of Economic Development in GEM study-
Classification was adapted from the World Economic
Forum (WEF).**

- 1) *Factor-Driven Countries* – Economies are dominated by subsistence agriculture and extraction businesses and mining of natural resources, reliance on a low to medium educated and unskilled workforce and focussed of guaranteeing the population's most basic sustenance needs.
- 2) *Efficiency-Driven Countries* – Economies characterized with advanced economic development and industrialization; mass production enables competitiveness and economies of scale; Development of large dominant and capital intensive organizations that focus on production efficiency. Needs of the population are provided beyond basic sustenance.

GLOSSARY

3) *Innovation-Driven Economies (IDEs)* – In developed Innovation-Driven Economies advances are more knowledge intensive, reliant on mass data and extensive research and development. These economies are much diverse and include developed service sector.

Attitudes – Self-perception about entrepreneurship

- Indicates rates of personal perception about entrepreneurship. It is assumed that the decision to start a business would be influenced by the following indicators:
- Whether people know entrepreneurs
- Whether people identified opportunities around them in the last 6 months
- Whether those who see opportunity would feel constrained by fear of failure
- Whether they believe they are capable of starting a business
- Whether they intend to do so within the next 3 years

Motives

- *Opportunity-Driven Entrepreneurs* – Owner/manager of a business whose motive for establishing the business is autonomy and self-management (%).
- *Necessity-Driven Entrepreneurs* – Owner/manager of a business who went into business due to lack of other job options (%).

Sectors - The rate of entrepreneurs who are active in one of the following sectors:

- Extractive (e.g. mining, agriculture)
- Transformative (e.g. manufacturing)
- Business-oriented services
- Consumer-oriented services

Aspirations - Aspiration is measured by 3 types of indicators:

- Job creation
- Product-market combination
- Internationalization

Job Creation - The rate of entrepreneurs who declare their ambition to add employees to its payroll in the 5 next years of the research period.

- 1) No growth orientation –adding up to 5 employees (%)
- 2) Medium to high growth-oriented entrepreneurs - adding 6 to 19 employees (%)
- 3) High growth-oriented entrepreneurs – adding 20 employees and more in the 5 next years and employing 10 or more workers and growth of over 50% within 5 years (%).

Product-market combination – The rate of entrepreneurs who anticipate to create new product and new market.

Internationalization – The rate of entrepreneurs who report that a portion of their sales come from exporting to economies outside their own.

- High internationalization – up to 25%
- Medium internationalization level – 25%-75%
- High internationalization level – 75%-100%

Intrapreneurship – Individuals that were employed in an organization and have been involved in venturing within the organization as a leader in the past 3 years (%).

Exit – Individuals, who stated that they have either sold, shut down, discontinued or quit a business in the past year (%).

(Source: GEM 2015/16 Global Report)



Global Entrepreneurship Monitor

Global Entrepreneurship Research Association

London Business School
Regents Park, London NW1 4SA, UK.

+44 796 690 81 71
info@gemconsortium.org

www.gemconsortium.org



The Centre for Innovation Studies (THECIS)

#125, Alastair Ross Technology Centre
3553 31 Street NW
Calgary, Alberta, Canada T2L 2K7

www.thecis.ca

