Beyond the $ Value:
Attitudes, behaviours, and aspirations of Ontario entrepreneurs

December 2017

Global Entrepreneurship Monitor:
Ontario 2016
AUTHORS

ANNA LIS E HUY NH
POLICY ANALYST

Annalise is a Policy Analyst at the Brookfield Institute for Innovation + Entrepreneurship. She is interested in how careful design and design thinking approaches to policy can reach people who wouldn’t otherwise be a part of decision-making processes. In her time at BII+E, she developed a knack for visual design and is interested in how it can be used to effectively communicate complex information. Annalise holds a Bachelor of Arts in Politics and Governance from Ryerson University.

annalise.huynh@ryerson.ca
@hausofhuynh

M A T T H E W L O
FORMER POLICY ANALYST

Matthew Lo was a Policy Analyst at the Brookfield Institute for Innovation + Entrepreneurship from 2016-2017, 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. In his past roles, he has conducted research on the economic impacts of taxation, and the relationship between resource development and economic growth. Matthew holds a Master’s degree in Economics from the University of British Columbia and a Joint Honours degree in Economics and Environmental Studies from the University of Waterloo.

@matthewwylo

V I E T V U
ECONOMIST

Viet is an Economist at the Brookfield Institute for Innovation + Entrepreneurship. Viet is interested in how governments and companies can intentionally design policies and markets to drive human behaviour. He is also fascinated by how the world adapts to the emergence of new types of markets as legal frameworks often lag behind. Viet holds a Master of Science in Economics from the London School of Economics & Political Science and a Bachelor of Arts in Economics with Honours from the University of British Columbia.

viet.vu@ryerson.ca
@vviet93
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.

ISBN: 978-1-926769-81-3

For more information, visit brookfieldinstitute.ca.

/A BrookfieldIIE  
@BrookfieldIIE  
The Brookfield Institute for Innovation + Entrepreneurship

ACKNOWLEDGEMENTS

Charles Davis, Professor, Edward S. Rogers Sr. Research Chair of Media Management, B.A., M.A., Ph.D.

Sarah Doyle, Director of Policy + Research

Peter Josty, Executive Director of The Centre for Innovation Studies
TABLE OF CONTENTS

Executive Summary 2

Introduction 5
   Entrepreneurship in Ontario 5
   GEM: A Global Study of Entrepreneurship 5
      Total entrepreneurial activity: GEM’s measurement of entrepreneurship 7

Objectives 8

Methodology 9

How Ontario Measures Up 11
   Attitudes 12
   Activity 19
      Demographics 24
         Age 24
         Education 27
      Income 29
      Gender 31

   Motives 38
   Sectors 43
   Participation in the Technology Sector 45

   Innovation 50
   Job creation 56
   Exports 62
   Exits 63

Conclusion 65
EXECUTIVE SUMMARY

The Global Entrepreneurship Monitor (GEM) is a longitudinal study of entrepreneurial activity and economic growth that draws on data from over 60 countries. In comparison to other major cross-national studies that place an emphasis on firms—in particular, on their financial metrics—GEM focuses on the entrepreneur as the unit of analysis and describes the culture and circumstance of entrepreneurship.

While this report does not capture the full picture of entrepreneurship in Ontario, it illuminates the lived experience of entrepreneurs, from why they start businesses to why their businesses succeed or fail.
% of respondents aged 18-64 who believe they have the required knowledge/skills to start a business.

Women involved in early-stage entrepreneurship

% of early-stage entrepreneurs who are opportunity-driven

ON 11.3%  CA 13.4%

% of early-stage entrepreneurs who are necessity-driven

ON 3.0%  CA 2.4%

Early-stage entrepreneurs with high job growth expectations

ON 13.6%  CA 12.6%

Early-stage entrepreneurs with more than 50% non-local customers

ON 12.5%  CA 9.9%

Early-stage entrepreneurs that use very latest technology

ON 2.8%  CA 3.9%

% of early-stage entrepreneurs who are necessity-driven
MAPPING THE JOURNEYS OF ENTREPRENEURS IN ONTARIO:

Compared to the 27 comparator countries in this report, including Canada as a whole, individuals in Ontario are equally likely to know an entrepreneur (35.6 percent). They are much more confident in their knowledge and skills to start a business (54.3 percent) and believe that the local conditions for venture creation are favourable (57 percent). Ontarians are less likely to be prevented from starting a business by fear of failure (39 percent). They’re also much more likely to engage in entrepreneurial activity, with 14.8 percent reporting involvement in early-stage entrepreneurship.

Ontarians who do engage in entrepreneurship are slightly older on average (38.7 years old). While there is still a notable gender gap in entrepreneurship participation, entrepreneurs in Ontario are much more likely to be women than in comparator countries (41 percent). They’re also much more likely to be educated and come from all economic backgrounds, though there is a bias towards those in the top income bracket. They start more businesses out of necessity (20 percent) and, when pursuing entrepreneurship out of opportunity, are less likely to cite increased income as the motive (31 percent).

Next to comparator countries, Ontarian entrepreneurs are much more likely to work in consumer services (51 percent), and are more active in the technology sector (11 percent). Ontarian entrepreneurs are less likely to have direct competitors that offer the same product (11 percent). They’re slightly more likely to use the latest technology, with 12 percent of early-stage entrepreneurs using technology released within the last year. In terms of the number of jobs that Ontarian entrepreneurs plan to create, growth expectations are much lower compared to other countries; only 13.6 percent of entrepreneurs expect to hire for more than 10 jobs or 50 percent employee growth (whichever is higher) in the next five years. However, Ontarian entrepreneurs top the rankings in having a high number of non-local customers.

When it comes time to exit, Ontarians are more likely to exit due to problems getting financing (15 percent), and are less likely to have planned the exit in advance (one percent).
In the data presented in the Key Small Business Statistics 2016 report, small businesses are defined as businesses with fewer than 99 employees, plus those operated by the self-employed with no paid employees.

**INTRODUCTION**

ENTREPRENEURSHIP IN ONTARIO

Ontario is a major node of economic activity in Canada, contributing more than a third ($798,484 million) of the country’s GDP. Within Ontario, entrepreneurship is a key factor in economic growth, job creation, and innovation, leading to the creation of high-growth firms as well as main street businesses. According to the Key Small Business Statistics 2016 report, 28 percent of Ontario’s GDP is generated by small businesses.¹

Venture creation is an iterative and nonlinear process. GEM’s conceptual framework recognizes this complexity and the multifaceted nature of entrepreneurial mindsets, including with respect to risk appetite, innovation, growth ambitions, and motivation.

GEM: A GLOBAL STUDY OF ENTREPRENEURSHIP

GEM is a longitudinal study of entrepreneurial activity and economic growth. In comparison to other major cross-national studies that place an emphasis on firms, GEM focuses on the entrepreneur as the unit of analysis, and describes the culture and circumstance of entrepreneurship.

The uniqueness of GEM lies in its focus on the activities, attitudes, and aspirations of individual entrepreneurs, as well as the perceptions of the community at large toward entrepreneurship.

---

¹ In the data presented in the Key Small Business Statistics 2016 report, small businesses are defined as businesses with fewer than 99 employees, plus those operated by the self-employed with no paid employees.
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.

GEM focuses on three main sets of indicators:

+ **Entrepreneurial activity**: How much early-stage and established entrepreneurial activity is occurring among the general population?

+ **Entrepreneurial attitudes**: How positively does the general public perceive entrepreneurship?

+ **Entrepreneurial aspiration**: What do entrepreneurs in the province hope to achieve?

The GEM framework considers the social factors that shape perceptions of and participation in entrepreneurship. It recognizes the interaction of the entrepreneur’s behaviour with the characteristics of their environments.

**Figure 1.1:**
The GEM model. Social values, individual attributes, and entrepreneurial activity

Source: Adapted from the 2015 GEM Global Report

Note: Total Early-stage Entrepreneurial Activity (TEA) and Employee Entrepreneurial Activity (EEA)
TOTAL ENTREPRENEURIAL ACTIVITY: GEM'S MEASUREMENT OF ENTREPRENEURSHIP

The heart of the GEM model is in its indicators of entrepreneurial activity; GEM primarily focuses on the phase just before the creation of a new firm, and the phases directly following a firm’s creation. TEA, or total early-stage entrepreneurial activity, measures those between 18 and 64 years old who fit in one of the two descriptions below:

+ Nascent entrepreneurs, who are actively planning a new venture. These entrepreneurs have done something during the previous 12 months to help start a new business that they will at least partly own. Activities such as organizing the startup team, saving money for the startup, looking for equipment or writing a business plan would all be considered as active commitments to starting a business. Wages or salaries will not have been paid for more than three months in respect of the new business. Many of these people are still in full-time employment.

+ New business owners, who at least partly own and manage a new business that is between four and 42 months old and have not paid themselves salaries for longer than this period. These new ventures are in the first 42 months after the new venture has been set up.3

Figure 1.2: The phases of entrepreneurship

Source: Adapted from the 2014 GEM Global Report
OBJECTIVES

The goal of this report is to offer a helpful overview of entrepreneurship in Ontario. In particular, we aim to:

1. Describe the principal features and trends related to entrepreneurship in Ontario.

2. Compare the entrepreneurship trends of Ontario, Canada, and comparable Organisation for Economic Co-operation and Development (OECD) economies.

3. Highlight potential insights for public policymakers and other stakeholders who are aiming to promote and cultivate entrepreneurial activity in Ontario.

Further to this measure of entrepreneurial activity, GEM measures perceptions of entrepreneurship and their influence on how likely individuals are to take the risks necessary to start or grow a business. While this report does not capture the full picture of entrepreneurship in Ontario, it illuminates the lived experience of entrepreneurs: from why they start businesses to why their businesses succeed or fail.

GEM’s standardized methodology also enables a clearer picture of how Ontario compares to other jurisdictions in terms of entrepreneurial activity and citizen perceptions of entrepreneurship.
METHODOLOGY

THE ADULT POPULATION SURVEY

GEM relies on an adult population survey (APS) for its analysis. The core of the APS is identical in each country: it administers a random survey and asks respondents about their attitudes toward entrepreneurship, their involvement in entrepreneurial activity, and their aspirations for their ventures. The broad focus on both behaviours and perceptions is one reason for GEM’s robustness; GEM’s data on perceptions offers a picture of what drives individual behaviour. The full set of questions in the survey is available at gemconsortium.org.

Sixty-five countries participated in the 2016 APS. Survey respondents were randomly selected and the stratified sample included adults aged 18 to 99. In Canada, 2,186 adults were surveyed, of which 1,114 were located in Ontario. The raw data was then weighted by age and gender to ensure the result formed a representative sample (on age and gender).

Furthermore, for the first time this year, Ontario collected geographical data on sub-provincial regions. While this allows us to examine populations more closely at the sub-provincial level, results should be treated with caution. In some cases, sample limitations prevent meaningful discussions on the differences between sub-provincial areas. For example, an inference about entrepreneurial behaviour and perception from London, Ont., was informed by six entrepreneurs identified from a sample of 78 individuals. As a result, this report will only include discussion on sub-provincial areas where meaningful insights can be obtained.

The confidence intervals for both Ontario (2.93 percent) and Canada (2.1 percent) at the 95 percent confidence level at the worst-case percentage (50 percent) were calculated. The 95 percent confidence interval is where the true population value lies 19 out of 20 times with numerous repetition of the same survey. The worst-case percentage is the percentage with the widest interval; it is when 50 percent of respondents answer “yes” to a yes-no question. Any comparisons that fall within these confidence intervals are therefore problematic; however, there is value in seeing where Ontario and Canada place when differences are more significant. Even then, comparative analysis presented here needs to be interpreted with caution. For some measures, the confidence interval may vary, as the comparison populations could be different.

Throughout the report, we discuss interesting trends and potential explanations for beliefs and behaviours. It is important to note that these are found correlations; where possible, we present a variety of potential explanations for observed trends. We encourage further research into these trends to identify the existence (or lack) of concrete causal mechanisms.

ii In the data presented in the Key Small Business Statistics 2016 report, small businesses are defined as businesses with fewer than 99 employees, plus those operated by the self-employed with no paid employees.
COMPARATOR ECONOMIES

In 2016, 65 economies participated in the GEM study. The comparator countries used for analysis in this report reflect economies that:

1. Are OECD members, and
2. Participated in the 2016 GEM study.

For the purposes of comparison, GEM has adapted the classification of economies by economic development from the World Economic Forum. The comparator countries that appear in this report are organized by this classification in Table 1.1.

Table 1.1:
World Economic Forum classification of comparator economies

<table>
<thead>
<tr>
<th>Factor-driven</th>
<th>Efficiency-driven</th>
<th>Innovation-driven</th>
</tr>
</thead>
<tbody>
<tr>
<td>No factor-driven countries were used as comparators</td>
<td>Chile</td>
<td>Australia</td>
</tr>
<tr>
<td></td>
<td>Latvia</td>
<td>Canada</td>
</tr>
<tr>
<td></td>
<td>Mexico</td>
<td>Israel</td>
</tr>
<tr>
<td></td>
<td>Poland</td>
<td>South Korea</td>
</tr>
<tr>
<td></td>
<td>Slovakia</td>
<td>Austria</td>
</tr>
<tr>
<td></td>
<td>Turkey</td>
<td>Estonia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Finland</td>
</tr>
<tr>
<td></td>
<td></td>
<td>France</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Germany</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Greece</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Italy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Luxembourg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Netherlands</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portugal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Slovenia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spain</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Switzerland</td>
</tr>
<tr>
<td></td>
<td></td>
<td>United Kingdom (UK)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>United States (US)</td>
</tr>
</tbody>
</table>

GEM surveys in other countries focus on adults between the ages of 18 and 64; for the purposes of consistency, this age range is the focus of this report. In published GEM results for other economies, survey responses of “don’t know” or “refused” were excluded from percentage calculations. While we follow this method for comparative purposes, the extent of such exclusions are noted in this report.
**Table 2:**

**GEM Indicator Rankings: Ontario and the world**

*Note 1: 1 indicates the highest percentage, and 28 indicates the lowest percentage.*

*Note 2: For the purposes of this comparison, one key metric from each section is selected. This table shows a ranked list of GEM indicators reflecting positive responses from respondents. For example, the value of 5 under “% involved in TEA” for Ontario means that among the countries considered here, Ontario had the fifth highest rate of people who identified as being involved in early-stage entrepreneurship.*

<table>
<thead>
<tr>
<th>Country</th>
<th>% believe they have the required skills/knowledge to start a business</th>
<th>% involved in TEA</th>
<th>% women involved in TEA</th>
<th>% of active entrepreneurs (early-stage, new and established)</th>
<th>% of TEA and opportunity motive</th>
<th>% of TEA and necessity motive</th>
<th>% of TEA expecting to create any jobs now or in 5 years</th>
<th>% TEA and high job creation expectations</th>
<th>% of TEA and uses latest technology</th>
<th>% TEA and more than 50% non-local customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>7</td>
<td>7</td>
<td>3</td>
<td>8</td>
<td>20</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Canada</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>8</td>
<td>5</td>
<td>22</td>
<td>6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>6</td>
<td>7</td>
<td>4</td>
<td>10</td>
<td>22</td>
<td>7</td>
</tr>
<tr>
<td>Austria</td>
<td>10</td>
<td>13</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>18</td>
<td>18</td>
<td>24</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>Chile</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Estonia</td>
<td>15</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>9</td>
<td>3</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Finland</td>
<td>26</td>
<td>22</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>27</td>
<td>22</td>
<td>21</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>France</td>
<td>25</td>
<td>25</td>
<td>26</td>
<td>28</td>
<td>24</td>
<td>26</td>
<td>25</td>
<td>14</td>
<td>5</td>
<td>26</td>
</tr>
<tr>
<td>Germany</td>
<td>24</td>
<td>27</td>
<td>28</td>
<td>26</td>
<td>28</td>
<td>24</td>
<td>26</td>
<td>17</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>Greece</td>
<td>18</td>
<td>24</td>
<td>24</td>
<td>10</td>
<td>26</td>
<td>11</td>
<td>24</td>
<td>28</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Hungary</td>
<td>23</td>
<td>20</td>
<td>23</td>
<td>21</td>
<td>19</td>
<td>17</td>
<td>12</td>
<td>3</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Israel</td>
<td>20</td>
<td>9</td>
<td>10</td>
<td>16</td>
<td>9</td>
<td>14</td>
<td>10</td>
<td>15</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Italy</td>
<td>28</td>
<td>28</td>
<td>27</td>
<td>25</td>
<td>26</td>
<td>28</td>
<td>21</td>
<td>16</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>South Korea</td>
<td>13</td>
<td>23</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>16</td>
<td>19</td>
<td>13</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>Latvia</td>
<td>9</td>
<td>7</td>
<td>9</td>
<td>5</td>
<td>6</td>
<td>10</td>
<td>6</td>
<td>4</td>
<td>28</td>
<td>9</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>21</td>
<td>15</td>
<td>15</td>
<td>23</td>
<td>11</td>
<td>23</td>
<td>21</td>
<td>19</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Mexico</td>
<td>22</td>
<td>12</td>
<td>7</td>
<td>14</td>
<td>13</td>
<td>13</td>
<td>27</td>
<td>26</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Netherlands</td>
<td>19</td>
<td>10</td>
<td>11</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>23</td>
<td>23</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Poland</td>
<td>2</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>6</td>
<td>9</td>
<td>6</td>
<td>27</td>
<td>18</td>
</tr>
<tr>
<td>Portugal</td>
<td>17</td>
<td>18</td>
<td>17</td>
<td>18</td>
<td>17</td>
<td>18</td>
<td>16</td>
<td>18</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Slovakia</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>15</td>
<td>27</td>
<td>2</td>
<td>14</td>
<td>11</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Slovenia</td>
<td>8</td>
<td>19</td>
<td>22</td>
<td>29</td>
<td>20</td>
<td>17</td>
<td>12</td>
<td>2</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>Spain</td>
<td>12</td>
<td>26</td>
<td>25</td>
<td>25</td>
<td>27</td>
<td>20</td>
<td>27</td>
<td>26</td>
<td>11</td>
<td>28</td>
</tr>
<tr>
<td>Sweden</td>
<td>27</td>
<td>21</td>
<td>16</td>
<td>24</td>
<td>17</td>
<td>28</td>
<td>23</td>
<td>25</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>Switzerland</td>
<td>16</td>
<td>17</td>
<td>20</td>
<td>11</td>
<td>16</td>
<td>22</td>
<td>20</td>
<td>7</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Turkey</td>
<td>5</td>
<td>4</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>UK</td>
<td>11</td>
<td>16</td>
<td>18</td>
<td>18</td>
<td>15</td>
<td>21</td>
<td>15</td>
<td>8</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>US</td>
<td>3</td>
<td>8</td>
<td>6</td>
<td>8</td>
<td>8</td>
<td>9</td>
<td>7</td>
<td>2</td>
<td>19</td>
<td>20</td>
</tr>
</tbody>
</table>
ATTITUDES

Attitudes toward entrepreneurship reflect how Ontarians regard entrepreneurship as a career choice as well as their beliefs in their ability to start a business.

GEM assesses attitudes with four questions in the adult population survey:

+ Do you know someone who started a business in the past two years?

+ In the next six months, will there be good opportunities for starting a business in the area where you live?

+ Do you have the knowledge, skill, and experience required to start a new business?

+ Would fear of failure prevent you from starting a business?

INDICATORS

+ “Knows someone who started a business in the past two years” reflects respondents who say that they have met an entrepreneur within the last two years, and can be indicative of the perceived climate for entrepreneurship.

+ “Good opportunities to start a business in local area in the next six months” measures perceptions of favourable conditions to engage in venture creation, which reflects both attitudes toward entrepreneurship and local economic conditions.

+ “Knowledge/skills to start a business” provides an understanding of whether comfort with entrepreneurship and business literacy are common within an economy.

+ “Fear of failure” reflects respondents who say that fear of failure would prevent them from starting a business. It is primarily an indicator of risk aversion.
Figure 2.1:
Entrepreneur network: Share of respondents who know someone who started a business in the past two years

Note: % of total respondents in Ontario who answered “don’t know” or “refused”: 2.7% (not included in chart total)

Figure 2.2:
Business optimism: Share of respondents with belief in good conditions to start a business in the next six months in their local area

Note: % of total respondents who answered “don’t know” or “refused”: 18.8% (not included in chart total)
Figure 2.3:
Skill beliefs: Share of respondents who believe they have the sufficient skills and ability to start a business

Note: % of total respondents who answered “don’t know” or “refused”: 6.5% (not included in chart total)

Figure 2.4:
Fear of failure: Share of respondents who cited fear of failure as the primary reason for not starting a business

Note: % of total respondents who answered “don’t know” or “refused”: 4.7% (not included in chart total)
UNDERSTANDING THE LIMITATIONS OF ATTITUDE-FOCUSED INDICATORS

It is important to emphasize that results in this section reflect beliefs rather than objective conditions and can be interpreted in more than one way. For instance, the relationship between knowledge to start a business and the likelihood of engaging in nascent entrepreneurship may not be causal. A person may conceive of themselves as having a high level of knowledge without ever testing this in practice. Conversely, someone who reports an insufficient level of knowledge to start a business may find themselves to be a successful entrepreneur who learns throughout the process of engaging in nascent entrepreneurship.

ONTARIANS BELIEVE THEY HAVE THE KNOWLEDGE, SKILLS, AND CONDITIONS TO BE SUCCESSFUL ENTREPRENEURS AND ARE INCREASINGLY COMFORTABLE WITH RISK

A high number of Ontarians believe they have the required knowledge and skills to start a business and that the conditions for starting a business in their local community are good. While these beliefs in Ontario were recorded as marginally lower than in the US (within the confidence interval), individuals in Ontario are more confident in their knowledge, skills and local conditions than individuals in most other comparator countries. This could be due to, for example, the strength of Ontario’s entrepreneurship culture, education system, or perception of entrepreneurship as a viable career path. Alternatively, this could be interpreted as a sign of overconfidence.

In 2015, Ontarians exhibited higher risk aversion, with almost half (46.6 percent) of the sample reporting that fear of failure would prevent them from starting a business. This number improved in 2016; Ontarians reported lower risk aversion than Canadians more generally, and Ontario sits significantly below the median of comparable countries. This could be an encouraging sign for the province if lower risk aversion translates into an increased level of entrepreneurial activity.
ARE ONTARIANS OVERLY CONFIDENT? A CLOSER LOOK AT FEAR OF FAILURE AND BELIEF IN FAVOURABLE BUSINESS CONDITIONS

Figure 2.5: Rational fears: Relating fear of failure with belief in skills and conditions to start business

While the question of whether Ontarians are overly confident is not fully answered here, we provide a proxy using the relationship between fear of failure, belief that conditions to start a business in the next six months are good, and the belief that one has the skills needed to start a business. In this context, fear of failure is understood as the fear that a business will fail leading to a decision to not pursue entrepreneurship.

There are no clear relationships between the three mapped variables. However, it could be hypothesized that belief in favourable conditions to start businesses paired with high confidence in knowledge/skills should result in lower levels of fear. The graph is divided into four quadrants, with the axes being the mean belief in the existence of positive conditions for starting a business (x-axis) and fear of failure leading to a decision not to start a business (y-axis). The size of each point reflects the level of belief in survey respondents’ knowledge/skills to start a business. One would expect a higher fear of failure to correlate with lower confidence in positive conditions (top left quadrant) and/or lower confidence in personal knowledge/skills (smaller dot size).

Note: Larger dots represent greater confidence in the knowledge/skills to start a business.
Ontarian entrepreneurs appear to be “rightly optimistic”: higher confidence in good conditions and knowledge/skills to start a business is accompanied by a low fear of failure. On the other hand, Canada as a whole has a higher than average level of fear despite relatively high confidence in favourable conditions and knowledge/skills to start a business. Canadian entrepreneurs could therefore be considered “needlessly pessimistic”.

However, further analysis would be needed to fully assess the risk of overconfidence among Ontarian entrepreneurs. Interestingly, Koellinger, Minniti, and Schade (2007) demonstrated a high negative correlation between confidence in skills and the rate at which businesses survive, using GEM data up to 2006.
When the Ontario sub-provincial regions are explored in more detail, Toronto and Ottawa observe (statistically significant at a 95 percent level) higher levels of risk aversion compared to other regions, including the Hamilton–Niagara Peninsula and Northwest Ontario.

This trend could be driven by a number of factors such as increased competition in larger cities, or different perceptions of the type of business that can be started in different regions. Network effects could also be relevant, as exposure to more entrepreneurs, and perhaps to more stories of failure, could affect risk aversion.
In GEM’s adult population survey, Ontarians were asked about their involvement in various stages of entrepreneurship:

+ Are you, alone or with others, currently trying to start a new business, including any self-employment or selling any goods or services to others?
+ Has the new business paid any salaries, wages, or payments in kind, including your own, for more than three months?
+ Are you, alone or with others, currently trying to start a new business or a new venture for your employer as part of your normal work?
+ What was the first year the founders of the business received wages, profits, or payments in kind from this business?
+ Over the past 12 months, have you done anything to help start this new business?
+ Did the founders of this business receive any wages, profits or payments in kind from this business before January 1, 2013?
+ Will you personally own all, part, or none of this business?

Source: Adapted from GEM Manual: A report on the design, data and quality control of the Global Entrepreneurship Monitor'
INDICATORS

+ The “total early-stage entrepreneurial activity (TEA) rate” refers to the total rate of early-stage entrepreneurial activity among the adult population (aged 18 to 64 years, inclusive). In some instances, this rate is less than the combined percentages for nascent and new business owners. This is because in circumstances where respondents qualify as both a nascent and a new business owner, they are counted only once.

+ “Nascent entrepreneurs” are those actively planning a new venture. These entrepreneurs have done something during the previous 12 months to help start a new business that they will at least partly own. Activities such as organizing the startup team, saving money for the startup, looking for equipment, or writing a business plan would be considered active commitments to starting a business. Wages or salaries will not have been paid for more than three months in respect of the new business. Many of these people are still in full-time employment.

+ “Owner or manager of a new business” are entrepreneurs who at least partly own and manage a new business that is between four and 42 months old, and have not paid themselves salaries for longer than this period. These new ventures are in the first 42 months after the new venture has been set up.

+ “Owner or manager of an established business” includes those who have set up businesses that they have continued to own and manage and which have paid wages or salaries for more than 42 months.
Figure 3.2:  
Entrepreneurship activity: Share of respondents who are at an early stage of starting a business (<42 months with owners not being paid yet)

Figure 3.3:  
Entrepreneurship trends in Canada and Ontario: Share of respondents engaged in early-stage entrepreneurship activity over the years
PARTICIPATION IN EARLY-STAGE ENTREPRENEURSHIP IN ONTARIO IS GROWING

In 2016, Ontario was one of the highest performing economies in early-stage entrepreneurial activity. While this is an encouraging sign, Canada as a whole still surpasses Ontario in TEA rate. This points to higher performance in other provinces—for instance, the 2016 TEA rate in Alberta is recorded at 17.3 percent (in comparison to Ontario’s 14.8 percent). Ontario’s TEA rate has continued to grow over 2013 to 2016, although its rate of growth slowed in between 2015 and 2016.

LIMITATIONS OF TEA AS AN INDICATOR

As an overall measure of entrepreneurial behaviour in an economy, TEA is first and foremost a participation rate, reflecting the number of people involved in the early stages of venture creation rather than the number of ventures.

---

 iii Some caution is required in the interpretation of these results: a business count by Statistics Canada from December 2016 listed 1.2 million businesses nationwide. According to Statistics Canada’s Entrepreneurship Indicators Database, about 78,000 businesses were created in 2013. Even on the lower end of the confidence interval, extrapolating GEM results imply that roughly 3.6 million Canadians were engaged in setting up a firm or owned a young firm in 2016. Notwithstanding the fact that multiple people may be involved in any one venture, this number seems high. This could be interpreted a number of different ways; one possible explanation is a high rate of failure for early-stage entrepreneurs who are setting up or running a young firm, or delays in getting up and running. Potential flaws in the data collection process may also have led to skewed results, inhibiting population inferences. Finally, there is a possibility that some entrepreneurs choose not to register their businesses.
Figure 3.4:  
Stages of early entrepreneurship: Share of respondents who own a young firm/are nascent entrepreneurs

Figure 3.5:  
Enterprise activity: Share of respondents who own/manage an established business (>42 months)
GOOD CONDITIONS FOR NEW BUSINESS OWNERS/MANAGERS

In terms of its rate of nascent entrepreneurship, Ontario performs well relative to comparator economies, but lags behind Canada.

Ontario has a high number of new business owners, but again falls behind Canada as a whole; Ontario and Canada rank fourth and third respectively among comparator economies. Ontario’s ratio of new businesses to nascent businesses suggests that a relatively high proportion of nascent businesses in the province succeed in getting off the ground. The ratio puts Ontario and Canada in the upper third of comparator economies, at 10th and 13th respectively.

On established businesses, Canada and Ontario seem to perform moderately. When these results are taken in the context of previous extrapolations, they suggest that while businesses in Canada are relatively well able to start up and survive in the short to medium run (up to 42 months), there are fewer businesses that survive for longer. This may point to a scale-up challenge faced by Canadian entrepreneurs, with Ontario faring slightly better than Canada as a whole.

DEMOGRAPHICS

AGE

GEM studies focus on five age ranges. Respondents are asked:

What is your current age (in years)?

Respondent data is then grouped into the following ranges:

- 18 to 24
- 25 to 34
- 45 to 54
- 55 to 64
Figure 3.6:
Age and entrepreneurship: Share of respondents who are early-stage entrepreneurs by age category

Age
- 55–64 not involved in entrepreneurship
- 55–64 involved in entrepreneurship
- 45–54 not involved in entrepreneurship
- 45–54 involved in entrepreneurship
- 35–44 not involved in entrepreneurship
- 35–44 involved in entrepreneurship
- 25–34 not involved in entrepreneurship
- 25–34 involved in entrepreneurship
- 18–24 not involved in entrepreneurship
- 18–24 involved in entrepreneurship
**Figure 3.7:**
Youth engagement with entrepreneurship across time: Share of 18 to 24-year-olds involved in early-stage entrepreneurship

Canada shows the highest rate of participation in entrepreneurship in the 25 to 34 age range, at 22.3 percent, and shows consistently high rates across age groups relative to comparator economies. Ontario also excels in participation rates across age ranges, but only outperforms Canada in the 18 to 24 range. Within this age range, participation of Ontarians in early-stage entrepreneurship has rapidly grown from 2014. This could speak to a positive environment for youth entrepreneurs.
This narrative changes when examining the proportion of Ontarians aged 18 to 24 who own or manage established businesses—in this indicator, Ontario sits at 1.1 percent. The result for Canada as a whole places it well above Ontario and other comparator countries such as the US, with 4.8 percent of Canadians aged 18 to 24 owning or managing established businesses. In all other age groups, however, Ontario outperforms Canada.

**EDUCATION LEVEL**

In GEM’s adult population survey, respondents were asked:

*What is the highest level of education you have completed?*

+ Some secondary or lower
+ Secondary degree
+ Post-secondary degree
+ Graduate experience
Figure 3.9: Scholastic Entrepreneurs: Entrepreneurship participation by education level

<table>
<thead>
<tr>
<th>Education level</th>
<th>Non-entrepreneurs with a graduate degree</th>
<th>Non-entrepreneurs with a secondary degree</th>
<th>Early-stage entrepreneurs with a graduate degree</th>
<th>Established business owner with a secondary degree</th>
<th>Non-entrepreneurs without a secondary degree</th>
<th>Early-stage entrepreneurs without a secondary degree</th>
<th>Established business owners without a secondary degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario</td>
<td>8.5% 16.1% 75.4%</td>
<td>11.1% 17.8% 71.1%</td>
<td>6.4% 17.3% 76.3%</td>
<td>10.2% 22.3% 67.5%</td>
<td>8.3% 4.6% 87%</td>
<td>5.8% 12.6% 81.6%</td>
<td>4.9% 6.7% 88.5%</td>
</tr>
<tr>
<td>Canada</td>
<td>4.9% 6.7% 88.5%</td>
<td>6.6% 13.6% 79.7%</td>
<td>6.4% 17.3% 76.3%</td>
<td>10.2% 22.3% 67.5%</td>
<td>4.9% 6.7% 88.5%</td>
<td>6.6% 13.6% 79.7%</td>
<td>6.4% 17.3% 76.3%</td>
</tr>
</tbody>
</table>
As the education level increases, so does involvement in early-stage entrepreneurial activity; this trend was also exhibited in the 2015 results. The same trend does not apply to established businesses.

This result may require further investigation to unpack, as it is not corroborated by other studies, which have generally suggested that entrepreneurial activity is related to parental educational attainment but not to an individual’s educational attainment. This relationship may vary, however, depending on factors such as the nature of an entrepreneur’s motives or the nature of their business.

---

**INCOME**

In GEM’s adult population survey, respondents were asked to identify with provided ranges of incomes:

*Which of these ranges best describes the total annual income of all the members of your household, including your income, as one combined figure?*

GEM studies divide income ranges into tertiles which are classified as:

+ Lowest household income tertile
+ Middle household income tertile
+ Highest household income tertile

---

iv A preliminary analysis using the Barro-Lee educational attainment dataset showed no correlation between country-level educational attainment and higher TEA involvement in the surveyed countries. In addition, recent research (Aghion et. al., 2016) points to a correlation between parental educational attainment and entrepreneurial activity while showing a lack of correlation with the entrepreneur’s level of education. A meta-analysis also shows that there is neither a positive nor negative relationship between educational attainment and entrepreneurship (van der Sluis et al, 2003).

v This more granular analysis is not possible given sample size limitations for GEM Ontario data.
Figure 3.10:
Those more fortunate: Entrepreneurship participation by income groups

<table>
<thead>
<tr>
<th>Income level</th>
<th>Ontario</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-entrepreneurs in top third income group</td>
<td>14.8%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Early entrepreneurs in top third income group</td>
<td>18.5%</td>
<td>18.5%</td>
</tr>
<tr>
<td>Established business owners in top third income group</td>
<td>66.8%</td>
<td>69.7%</td>
</tr>
<tr>
<td>Non-entrepreneurs in middle third income group</td>
<td>5.7%</td>
<td>6%</td>
</tr>
<tr>
<td>Early entrepreneurs in middle third income group</td>
<td>14.3%</td>
<td>17.8%</td>
</tr>
<tr>
<td>Established business owners in middle third income group</td>
<td>80%</td>
<td>76.3%</td>
</tr>
<tr>
<td>Non-entrepreneurs in bottom third income group</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Early entrepreneurs in bottom third income group</td>
<td>14.8%</td>
<td>14.4%</td>
</tr>
<tr>
<td>Established business owners in bottom third income group</td>
<td>66.8%</td>
<td>78.4%</td>
</tr>
</tbody>
</table>

% of respondents in each group

Australia
Austria
Canada
Chile
Estonia
Finland
France
Germany
Greece
Hungary
Latvia
Mexico
Netherlands
Ontario
Poland
Portugal
Spain
Sweden
Slovenia
Slovakia
Poland
Hungary
Israel
Italy
Latvia
South Korea
Mexico
Brazil
US
Canada
Australia

Income level
- Non-entrepreneurs in top third income group
- Early entrepreneurs in top third income group
- Established business owners in top third income group
- Non-entrepreneurs in middle third income group
- Early entrepreneurs in middle third income group
- Established business owners in middle third income group
- Non-entrepreneurs in bottom third income group
- Early entrepreneurs in bottom third income group
- Established business owners in bottom third income group
In general, both Ontario and Canada exhibit a high rate of participation in early-stage entrepreneurship at the highest income tertile; this is consistent with 2015 GEM results. While high-income households in Ontario and Canada have the highest early-stage entrepreneurship rate, participation levels have decreased from 2015. This could be linked to the corresponding decrease of opportunity-driven entrepreneurship.

The high rate of participation from high-income households may indicate that it is easier to start a company with a greater household income. This would suggest that income supports or incentives could help to drive rates up. Conversely, it could also be that entrepreneurship is contributing to high incomes; however other evidence corroborates the first interpretation.9

GENDER

Respondents were identified as women or men in GEM’s adult population survey.
Figure 3.11:
Mind the gap: Early-stage entrepreneurship rates for men and women

- Early entrepreneurship rate of men
- Early entrepreneurship rate of women

Note: Male - Ontario: 17.3%, Canada: 20.3. Female - Ontario: 12.5%, Canada: 13.3%

Figure 3.12:
The divide: Percent difference between men and women early-stage entrepreneurship rates

Note: Male - Ontario: 17.3%, Canada: 20.3. Female - Ontario: 12.5%, Canada: 13.3%
Table 3.3: 
**Attitudes toward entrepreneurship in Ontario, by gender**

<table>
<thead>
<tr>
<th></th>
<th>Knows someone who started business in past two years</th>
<th>Believes there are good conditions to start business in the next six months in their area</th>
<th>Has required knowledge/skills to start business</th>
<th>Fear of failure would prevent starting a business</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
<td>37.8%</td>
<td>55.6%</td>
<td>61.6%</td>
<td>34.2%</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>33.4%</td>
<td>58.3%</td>
<td>47.2%</td>
<td>43.0%</td>
</tr>
</tbody>
</table>

Table 3.4: 
**Rates of opportunity and necessity motives among early-stage entrepreneurs (Ontario)**

<table>
<thead>
<tr>
<th></th>
<th>TEA and necessity motive</th>
<th>TEA and opportunity motive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
<td>3.1%</td>
<td>13.7%</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>3.0%</td>
<td>9.0%</td>
</tr>
</tbody>
</table>

**There is a need for greater support for women in entrepreneurship**

Ontario has one of the highest women entrepreneurship rates amongst comparator countries. While Canada slightly outperforms Ontario in participation of women in entrepreneurship, Ontario displays better gender parity; however, it is notable that neither Ontario or Canada perform particularly well on gender parity.

Across measures of attitudes toward entrepreneurship, the rate of positive responses from men tend to be higher. There is a notable gap between men and women respondents with respect to confidence in having the skills and knowledge to start a business. This is perhaps influenced by fewer contacts with entrepreneurs and a higher fear of failure.

While the rate of necessity-driven entrepreneurship is roughly the same between men and women, women are less likely to engage in opportunity-driven entrepreneurship.

If gender parity with respect to entrepreneurship is a goal, attention should be paid to factors that may influence women participation. The data presented here suggests a need for further efforts to ensure that women have access to training, networks, and sources of social encouragement. Ontario’s upcoming strategy on women’s economic empowerment, which is being developed by the Ministry of the Status of Women, may seek to tackle some of these issues.
HOW GENDER, SELF-ASSESSED SKILLS, AND ACTUAL INVOLVEMENT IN TEA INTERACT

Figure 3.13 plots knowledge to start a business against TEA rate, broken out by gender. There appears to be a similar relationship between these variables for women and men; however, consistently fewer women assess themselves as having enough knowledge to start a business. To design measures aimed at lowering barriers to entrepreneurship for women, consideration should be given to exploring whether self-assessed levels of knowledge are equivalent to actual levels of knowledge, and potentially whether they correlate to entrepreneurship education and training targeted to women.

The middle section of the graph, where the slope for both groups are well-defined, seems to indicate that at least locally, the trends for men and women are similar. This could suggest that given the same level of belief in ability, women will have a comparable level of entrepreneurial activity compared to men. However, this interpretation cannot be made definitively, as it is unclear whether such similarity will hold for either the high or the low ends of knowledge self-assessment. Reverse causality could also be present, with women’s self-assessment of their ability based on their own networks and success within those networks.

Figure 3.13:
Gender differences in beliefs in skill and entrepreneurship participation

Note: Local linear regression, band represents 95% confidence interval.
Within Ontario, the Kitchener-Waterloo-Barrie region and Toronto region exhibit a clear difference in skill confidence on a gender basis, in line with the trend for the province as a whole. The difference for other regions is less clear based on the data, as it falls within the confidence intervals.
ENTREPRENEURIAL EMPLOYEES (INTRAPRENEURSHIP)

The adult population survey asked respondents about their activities in the workplace:

In the last three years, have you been involved in the development of new activities for your last employer?

And are you currently involved in the development of such new activity?

INDICATORS

- **Entrepreneurial employee activity (EEA)** measures employee entrepreneurial activity internal to a business, and is also commonly referred to as “intrapreneurship.” Intrapreneurs are employees who develop new products/services or set up a new business entity for their employer. This does not include, for example, work on optimizing internal operations of a firm. This indicator parallels early-stage entrepreneurial activity, although EEA and TEA populations can overlap.
Figure 3.15:
Intrapreneurs: Share of employed respondents who lead or have led employee entrepreneurial activity in the past three years

Figure 3.16:
Intrapreneurs: Share of employed respondents currently leading employee entrepreneurial activity
While Canada as a whole is not an intrapreneurial leader based on APS results, Ontario seems to have relatively high levels of employee entrepreneurship. It is possible that Ontario has a higher proportion of employees with a tendency to lead new initiatives in the workplace; however, opportunities to engage in EEA also depend on the innovation strategies of businesses, as well as openness to opportunities for employee leadership from employers.

**MOTIVES**

In GEM’s adult population survey, Ontarians were asked about their motivations for starting a venture:

*Are you involved in this startup to take advantage of a business opportunity or because you have no better choices for work?*

- Which of the following do you feel is the most important motive for pursuing this opportunity?
  - Greater independence
  - Increase personal income
  - Just to maintain income
  - Other

**INDICATORS**

GEM distinguishes between two motives for starting a venture:

- **“Opportunity-driven entrepreneurs”** are people who establish their businesses because they have identified a viable business opportunity that could lead to substantial benefits. Within the proportion of entrepreneurs that identify as opportunity-driven, GEM further disaggregates the reasons for pursuing opportunity entrepreneurship:
  - “Independence as a reason for opportunity motive among early-stage entrepreneurs,” which indicates the proportion of opportunity-driven entrepreneurs naming independence as a primary reason for establishing a business.
  - “Increased income as a reason for opportunity motive among early-stage entrepreneurs,” which refers to the proportion of the population pursuing entrepreneurship with the aim of significantly increasing incomes.

- **“Necessity-driven entrepreneurs”** establish businesses because they cannot identify other viable employment opportunities.
Figure 4.1:
Motive dive: Share of early-stage entrepreneurs by motive type

Note: In no case do the bars in Figure 4.1 add up to 100% because “other” responses were not graphed.

Figure 4.2:
Motive dive (opportunity): Share of opportunity-driven early entrepreneurs citing independence as a reason

Note: % of total respondents who answered “don’t know” or “refused”: None
Figure 4.3:
Motive dive (opportunity): Share of opportunity-driven early entrepreneurs citing increased income as a reason

Note: % of total respondents who answered “don’t know” or “refused”: None

Figure 4.4:
Change in motives: How the share of respondents motivated by necessity or opportunity has changed over time in Ontario

vi Data for 2014 was not available.
More than half of opportunity-driven entrepreneurs in Ontario are motivated by independence

Ontario performed well in the participation of opportunity-driven entrepreneurs in 2016; its levels are comparable to economies such as the US and Australia. While the level of opportunity-driven entrepreneurship in Ontario is high compared to many comparator countries, Canada’s higher level reflects that provincial differences within Canada seem to be significant.

In 2015, 51.9 percent of early-stage entrepreneurs in Ontario reported that they started a business motivated by a desire for more independence; in 2016, this figure rose to 54.8 percent. Within the range of comparator countries where independence as a reason for opportunity-driven entrepreneurship is measured, Ontario and Canada fall roughly in the middle. Comparator economies such as the US and Australia score lower than Ontario and Canada, while others such as France, Germany, and the Netherlands score higher. This could be a positive sign, implying alignment between the flexibility offered by entrepreneurship and personal goals for over half of early-stage entrepreneurs in Ontario.

Increased income as a reason for engaging in early-stage entrepreneurship is an illustrative indicator; it sheds some light on the perceived profitability of entrepreneurship within an economy. While it could be argued that this indicator can be misleading—for instance, in cases where people turn to entrepreneurship during recessions to increase their incomes—its link to opportunity-driven entrepreneurship focuses this indicator on profitability, rather than survival (which is linked to necessity-driven entrepreneurship). In 2016, Ontario ranked well below the median in this indicator. This could be a discouraging sign, with the implication that entrepreneurship presents fewer financial incentives in Ontario.

Higher numbers of Ontarians are turning to entrepreneurship out of necessity

While the percent of early stage entrepreneurs driven by necessity in Ontario is low relative to those motivated by opportunity, it is high compared to other countries. The province ranked third among comparator economies in 2016, in absolute numbers. The implication is that these Ontarians are turning to entrepreneurship because they see no other viable options for employment. This could be a symptom of broader labour market disruption or individual barriers to employment. There is research, however, that suggests that a high necessity motive has no negative consequences for economic growth. This is further contextualized on the following page.
HOW DOES ONTARIO’S RATIO OF NECESSITY- AND OPPORTUNITY-DRIVEN ENTREPRENEURS COMPARE TO OTHER COUNTRIES?

Although Ontario ranked high in necessity-driven entrepreneurship relative to other countries, it is important to contextualize this by looking at the proportion of opportunity-driven and necessity-driven entrepreneurs around the world.

Figure 4.5:
Mapping motives: How Ontario’s composition of motives compares with other regions

The ratio between necessity and opportunity motives is fairly consistent across economies—with outliers such as Poland, Slovakia and Sweden—at about 1.3 to 1.7 necessity to opportunity with an average of 1.5.4. Ontario’s ratio is slightly above the average, at 1.37, while Canada’s ratio is below, at 1.5.8. Though Ontario’s ratio between necessity motive and opportunity motive is higher than average, the overall entrepreneurship rate in Ontario is also high.
SECTORS

GEM divides reported businesses into four sectors:

+ Extractive (including oil, mining, and agriculture)  
  *(Typically termed primary sector)*

+ Transforming (including manufacturing)  
  *(Typically termed secondary sector)*

+ Business-oriented services *(Typically termed tertiary sector)*

+ Consumer-oriented services *(Typically termed tertiary sector)*

In the GEM APS, respondents are asked an open-ended question:

*What kind of business is this?*

Respondents are expected to provide a statement that clearly describes the nature of the product or service, as well as their primary customer base. From this statement, the nature of the business is determined: whether its products are manufactured, extracted through mining, created in construction, or traded in retail or wholesale; if its services fall under categories such as medical, educational, repair, financial, or social services. These descriptions are then used to code to the four-digit level of the international standard industrial classification codes (ISIC), which are then grouped into four sectors.
Most early-stage entrepreneurs have businesses in the consumer-oriented services, followed by business-oriented services, the transforming sector and the extractive sector.

Figure 5.1: 
If there were 100 businesses: Share of early-stage entrepreneurs in Ontario by sector

- Consumer-oriented services (50%)
- Business-oriented services (26%)
- Transforming sector (19%)
- Extractive sector (5%)
Ontario’s and Canada’s sector breakdown closely resembles that of a more developed nation, where the majority of businesses are in the service sector. In the following section, we further contextualize this by looking at participation in the technology sector.

**PARTICIPATION IN THE TECHNOLOGY SECTOR**

Participation of businesses in the technology sector, as defined by the OECD, is measured with the same open-ended question used to determine sectors.
Figure 5.3:
The young tech sector: Share of early-stage entrepreneurs in the technology sector

Figure 5.4:
Changes in the tech sector: Trends in the share of early-stage entrepreneurs in the tech sector in Ontario and Canada
**Figure 5.5:**
The established tech sector: Share of established businesses in the tech sector

### Strong Early-Stage Entrepreneur Participation in the Technology Sector

Ontario performed well with respect to the participation of early-stage entrepreneurs in the technology sector in 2016, and while it sits slightly below Canada, it was ranked well above the median relative to comparator economies. The proportion of early-stage entrepreneurs active in the technology sector has also been growing in recent years. This suggests a dynamic technology sector where entrepreneurs see new business opportunities. This is an encouraging sign, particularly for technology-focused regions such as Toronto and Kitchener-Waterloo.

In comparison to early-stage entrepreneurs, there is a much lower proportion of established businesses in the technology sector. Ontario falls close to the median when compared to other OECD economies.
At the early stages of entrepreneurship, there appears to be a correlation between the proportion of opportunity-driven entrepreneurs motivated by a desire for independence and the proportion of entrepreneurs participating in the technology sector. Ontario falls close to the trendline for comparator countries.
On the contrary, there is a negative relationship between the participation of opportunity-driven entrepreneurs motivated by a desire to increase income and the proportion of entrepreneurs operating in the technology sector. One potential explanation is that the technology sector could be home to a higher concentration of high-risk ventures in which people are less likely to shy away from lower incomes during the early stages. Ontario is very close to where the trendline would be, and has a smaller share of entrepreneurs that reported increased income as a motivation for engaging in entrepreneurship, even with the same rate of technology sector involvement as compared with the rest of Canada.
**INNOVATION**

GEM measures innovation by considering the delivery of new products and processes that constitute a value-add to the market. This is assessed along three dimensions:

+ The extent to which similar products or services are offered by competitors
+ The degree to which the products or services offered by a firm are new to markets
+ The use of new technologies

GEM measures these dimensions with the following questions in its adult population survey:

*Will all, some, or none of your potential customers consider this product or service new and unfamiliar?*

*Right now, are there many, few, or no other businesses offering the same products or services to your potential customers?*

*How long have the technologies or procedures used for this product or service been available? Less than a year, between one and five years or longer than five years?*

**INDICATORS**

*“Product differentiation”* refers to the proportion of businesses that offer products that no other competitors offer.

*“New market combination”* refers to the proportion of businesses who indicate that they are introducing new products to new markets.

*“Products new to all customers”* reflects the proportion of entrepreneurs who are producing products that are new to all customers.

*“New technology”* refers to technology that has been available for one to five years.

*“Very latest technology”* refers to technology that has only been available for less than one year.
Figure 6.1:  
New products: Share of early entrepreneurs offering products that are new to the market

Note: % of total respondents who answered “don’t know” or “refused”: 2.3% (not included in chart total)

Figure 6.2:  
New products: Share of established business offering products that are new to the market

Note: % of total respondents who answered “don’t know” or “refused”: none
Figure 6.3:
Unique products: Share of early entrepreneurs offering products no other business offers

Note: % of total respondents who answered “don’t know” or “refused”: none

Figure 6.4:
Unique products: Share of established businesses offering products no other businesses offer

Note: % of total respondents who answered “don’t know” or “refused”: none
Ontario’s early-stage entrepreneurs measure up well in offering unique products and services, and place above their Canadian counterparts. However, Ontario’s edge over Canada is diminished when it comes to measuring established businesses’ perceptions of how innovative their products are. One interpretation could be that while many Ontario entrepreneurs are able to develop new products and services and to distinguish themselves from competitors early on, they—or their unique products and services—do not necessarily thrive into the long term. Among established businesses, this could also point to room for growth in the areas of research and development (R&D) and commercialization.

Figure 6.5:
Cutting edge: Share of early-stage entrepreneurs who use the very latest technology (available less than one year) in their products

Note: % of total respondents who answered “don’t know” or “refused”: 1.8% (not included in chart total)
Figure 6.6:
Paradigm shifts: Share of early-stage entrepreneurs using the very latest technology (available less than one year) over time

<table>
<thead>
<tr>
<th>Year</th>
<th>Ontario</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>7.1</td>
<td>7.8</td>
</tr>
<tr>
<td>2014</td>
<td>3.7</td>
<td>6.7</td>
</tr>
<tr>
<td>2015</td>
<td>12.0</td>
<td>12.2</td>
</tr>
<tr>
<td>2016</td>
<td>12.3</td>
<td>16.9</td>
</tr>
</tbody>
</table>

Figure 6.7:
Riding the trend: Share of early-stage entrepreneurs using new technology (available one to five years) over time

<table>
<thead>
<tr>
<th>Year</th>
<th>Ontario</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>22.4</td>
<td>22.0</td>
</tr>
<tr>
<td>2014</td>
<td>27.5</td>
<td>21.7</td>
</tr>
<tr>
<td>2015</td>
<td>18.8</td>
<td>18.9</td>
</tr>
<tr>
<td>2016</td>
<td>27.1</td>
<td>24.4</td>
</tr>
</tbody>
</table>
ONTARIO ENTREPRENEURS’ TECH ADOPTION REMAINS STAGNANT

After experiencing an increase in the early-stage entrepreneurs using the very latest technology from 2014 to 2015, Ontario’s rate remained virtually at the same level between 2015 and 2016. However, Canada’s level has risen as compared to last year, which indicates an increase in use of the very latest technology among entrepreneurs in other provinces and territories in Canada.

This corresponds to a plateau in the level of early-stage entrepreneurship in Ontario between 2015 and 2016, while the level for Canada as a whole increased. Although this could be explained by the confidence interval alone, it could be that growth in other provinces’ early-stage entrepreneurship was related to use of the very latest technology. Further research may be warranted to explore the relationship between new business formation and technology use.

While Ontario lags behind Canada on the use of cutting-edge technology, it is comparable to Canada in terms of the use of new technologies among early-stage entrepreneurs. This could point to room for improvement in translating research and development into commercial applications.
**JOB CREATION**

In GEM’s adult population survey, Ontarians were asked about how many jobs they expected to create:

*Not counting owners, how many people, including both present and future employees, will be working for this business five years from now?*

**INDICATORS**

“High job expectations” indicate that early-stage entrepreneurs or business owners/managers expect to hire for more than 10 jobs or over 50 percent of current jobs within the next five years.

---

**Figure 7.1:**
Growing when young: Share of early-stage entrepreneurs who expect high job growth

Note: % of total respondents who answered “don’t know” or “refused”: 22% (not included in chart total)
Figure 7.2: Change in growth expectations: How the share of early-stage entrepreneurs with high job growth expectations changed over time

Figure 7.3: Growing when old: Share of established business that expect high job growth

Note: % of total respondents who answered “don’t know” or “refused”: 1.7% (not included in chart total)
MODEST JOB CREATION EXPECTATIONS COULD POINT TO A LACK OF ASPIRATION TO SCALE UP

High job expectations among early-stage entrepreneurs are a measure of the growth aspirations of entrepreneurs and can act as a barometer for measuring intent to scale. In some cases, this indicator can also point to the potential future economic impact of an entrepreneurial venture. Ontario outperforms Canada in this area, although both fall below the median relative to comparator countries. For instance, Australia sits above the median and the US is ranked second.

Relatively low rates of growth aspiration among early-stage firms in Ontario could point to barriers to scaling within the province’s entrepreneurial ecosystem, to a relative lack of motivation or confidence to scale among Ontarian entrepreneurs, or to a higher concentration of new businesses with limited scaling potential. This merits further investigation as well as policy attention to unlock latent growth entrepreneurship potential in the province.

Businesses do not necessarily exist along a spectrum from small to large, and success is contextual; running a small business with no significant growth plans and a prioritization of self-employment could be considered success depending on the motivation of the entrepreneur. However, on a larger scale, a low overall rate of growth expectation may be concerning given the potential of growth entrepreneurship to contribute to employment and GDP. A low growth aspiration could perpetuate a scale-up gap in Ontario, restricting the positive economic impacts associated with high-growth firms.

However, owners of established businesses in Ontario are more optimistic than in comparator economies, displaying relatively higher growth aspirations, even while absolute levels remain low. Ontario sits above the median among comparator countries, and its ranking is comparable to economies such as Australia. Ontario also significantly outperforms Canada, which falls well below the median. This could point to a more stable and supportive business environment for existing businesses in Ontario, compared to other regions.
HOW SECTORAL PARTICIPATION AND CONFIDENCE IN SKILLS INTERACT WITH JOB CREATION EXPECTATIONS

Figure 7.4: Growing a service company: Share of consumer service firms and expectation of job growth for early-stage entrepreneurs
The sectoral composition of a country’s entrepreneurship ecosystem appears to be related to expectations of job growth. For instance, countries reporting a higher number of early-stage firms in the consumer-oriented services sector have lower expectations of job growth on average. Ontario enjoys a higher than average expectation of job growth compared to its percentage of consumer-oriented services. In contrast, as a country’s proportion of early-stage firms in the secondary sector (e.g. manufacturing) increases, so do job creation expectations. Ontario fits this trend, with a lower level of early-stage firms in the secondary sector and lower job creation expectations.

This may be explained by the fact that secondary sector firms are generally more likely than service-based firms to produce mass market goods, creating higher potential for growth. Economic activity in the secondary sector tends to be more prevalent in countries with lower labour costs, which appears to be borne out by Figure 7.5. However, as firms across sectors increasingly adopt labour-saving technologies, these trends may shift.
There seems to be a relationship between confidence in knowledge/skills to start a business and a region’s expectation of job growth. Despite a high level of confidence in knowledge and skills, however, both Ontario and Canada exhibit a lower than expected level of job growth expectations, even controlling for sector composition. This supports the conclusion that there are other barriers to growth in Ontario and Canada, or a lower level of motivation or confidence to scale.
EX宗RTS

In GEM’s adult population survey, respondents were asked:

What percentage of your annual sales revenues will usually come from customers living outside your country? Is it:

+ More than 90 percent
+ More than 75 percent
+ More than 50 percent
+ More than 25 percent
+ More than 10 percent, or
+ 10 percent or less?

INDICATORS:

A “high level of exports” refers to businesses or early-stage entrepreneurs with more than 50 percent of a customer base that is outside of the country.
Figure 8.1: International outlook: Share of early-stage entrepreneurs with more than 50 percent of customers from outside Canada

Note: % of total respondents in Ontario who answered “don’t know” or “refused”: 2.4% (not included in chart total)

Ontario and Canada are top performers in exports

According to GEM data, Canada and Ontario are the two top performing economies among comparator countries when it comes to exports (in percentage of customers). They compare well with Australia and Israel, which are exemplars of entrepreneurial economies relying on market reach. This indicator does not, however, reflect gross exports and does not capture export diversity; notably, a majority of non-Canadian customers are likely to be in the US.

Exits

In GEM’s adult population survey, respondents were asked:

Have you, in the past 12 months, sold, shut down, discontinued, or quit a business you owned and managed, any form of self-employment, or selling goods or services to anyone?

- Did the business continue its business activities after you quit?
- What was the most important reason for quitting this business?
+ “Exit” refers to an owner’s exit followed by the business being continued by others.

**Figure 9.1:**
If there were 100 businesses: Share of respondents who have exited a business by exit reason

LACK OF PROFIT AND BARRIERS TO ACCESSING FINANCE ARE AMONG TOP REASONS FOR EXITS

The top three reasons for exiting a business in Ontario, from early-stage ventures to established businesses, include: a business not being profitable, family or personal reasons, and problems in obtaining finance. This could point to the precarity of entrepreneurship, and potentially—though not definitively—to limited capital.
This report sought to take a closer look at Ontario’s entrepreneurs, focusing on how individual entrepreneurs operate in a complex ecosystem with numerous overlapping factors affecting their motivations, aspirations, experience, and success. On the whole, GEM results show that Ontario is performing well in matters of advancing entrepreneurship, and that Ontarian entrepreneurs view the province as a good place to start and build their ventures. In particular, participation in early-stage entrepreneurship is strong among younger Ontarians, which is an improvement from past results.

There are some areas, however, where Ontario falls short, and where policy attention may therefore be needed—notably, women participation in entrepreneurship and the growth aspirations of entrepreneurs. More research is needed to empirically assess these and other trends explored in this report, and more importantly, to develop evidence-based strategies and programs to address them.

Understanding the perspectives of entrepreneurs can help us understand the levers that will allow Ontario—and Canada as a whole—to continue to promote a culture of innovation, build awareness of entrepreneurship as a career choice, and ultimately support diverse and successful entrepreneurs.

The Brookfield Institute will continue to investigate Canada’s innovation ecosystem from the perspective of entrepreneurs, drawing on a range of data sources and insights.
ENDNOTES


We would also like to thank Keenan Mathura, Designer, and Jacky Au Duong, Special Projects Coordinator at Ryerson University’s Centre for Communicating Knowledge for their tireless work in creating a visual identity to bring this report to life, as well as Annalise Huynh for her visualization guidance.

Finally, we’d like to express our gratitude to our communications team, including Coralie D’Souza and Erin Hesselink, as well as the team at FIZZZ Design Corp., who were invaluable in the creation and roll-out of this report.