

2018

CRITICAL
PERSPECTIVES
ON SMALL AND
MEDIUM-SIZED
ENTERPRISE (SME)
FUNDING
IN CANADA

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This report offers a contemporary perspective on the state of external funding for small and medium-sized enterprises (SMEs) in Canada. Access to funding is a widely recognized challenge for SMEs, and particularly for more innovative, knowledge-based SMEs, whose intangible assets may not qualify them for traditional financing instruments.

The report draws on data from government surveys, program documents, academic literature and interviews with 17 individuals associated with the provision of funding for SMEs in Canada. The report also examines approximately 20 funding programs identified as key sources of funding for SMEs in Canada (see Figure 1).

The summary of report findings is presented under four sub-headings: Canadian Funding Landscape; Funding Policies; Challenges; and Recommendations.

Canadian Funding Landscape

- Public funding policies for SMEs in Canada share one or more of three objectives: 1) support immediate needs of SMEs seeking to develop and grow; 2) address a less-than-optimal rate of economic growth at the local, regional, national or sectoral level; and 3) positively affect SME access to future funding sources.
- A combination of centralized, top-down policies and programs (e.g., federal), decentralized, distributive programs (e.g., regional), and local policy goals and instruments (e.g., provincial) have made the funding landscape in Canada more differentiated and complex over time, compared to other Organisation for Economic Co-operation and Development (OECD) countries.
- Variations in regional government priorities, local economic conditions and community capacities has resulted in a diversity of programs to support and fund SMEs, most visibly seen in programs delivered through Canada's six Regional Development Agencies (RDAs) and through provincially funded programs.
- 'SMEs', by definition, represents a wide variety of businesses (<500 employees) and the diversity in public funding programs reflects a 'one size does not fit all' approach:
 - Manitoba, for example, advocates broad funding of SMEs, to include lifestyle businesses. Ontario has multiple funding mechanisms to support innovative SMEs in emerging sectors. Alberta has adopted an integrated approach to funding innovative SMEs in non-traditional sectors as part of an economic diversification strategy.
- Every Angel network in Canada has its own model and every network has its own regional type of deal flow. The presence of different financial instruments, such as investor tax credits, sidecar funds, specialized funding programs and available private risk capital, further contribute to the heterogeneous nature of the Canadian Angel landscape. Quebec is the only province with a 'federated' province-wide Angel model (Ange Québec).

Funding Policies

- The federal government plays a prominent role in funding the transformation of research and scientific knowledge and supporting early-stage enterprise in Canada (see Figure 1). This includes the early-stage support structures, funding to support provincial programs and regional seed funds. Various industry sector funding programs also deliver a substantial level of federal funding.
- Canada scores well in starting companies and is particularly strong in research and development (R&D), proof-of-concept and technical validation, and rated 'above average' by international standards (e.g., OECD).
- Funding policies continue to evolve. Increasingly, public policies seek to stimulate flows of risk capital to knowledge-based SMEs, using alternative financing instruments in combination with consultancy services, business advice and incubator facilities. A number of provinces have moved away from grant programming into more equity types of investing, i.e., a 'fund-of-funds' approach.
- While the past decade has seen a significant increase in government venture capital (GVC), government involvement in VC raises a number of concerns. They include the absence of a lead department or agency to oversee multiple VC initiatives; prominence of larger foreign VC funds targeting later-stage deals in Canada; and the level of experience and capabilities of GVC fund managers as they compete with more experienced and larger foreign funds.

Challenges

- Canada has a recognized 'scale-up' issue: the combination of a small and fragmented local market, shortages of experienced business talent, lack of 'at-scale' sources of growth capital, and an aversion to risk on the part of some of Canada's established companies. Canada's startups also have smaller exits and face a longer path to exit than their counterparts in the US.
- An acknowledged structural market challenge affects raising large amounts of external capital to fund capital-intensive SMEs and early-stage growth. The challenge in raising growth capital appears more pronounced in peripheral areas and is exacerbated by low levels of international business or export activity on the part of the SME.
- Sector and size differences influence access to funding. Knowledge-based industries (KBI), such as clean tech, life sciences, and information and communication technologies (ICT), have the lowest financing approval rates in Canada.
 - Larger SMEs are most likely to request external financing and are more likely to innovate, to hold intellectual property (IP), to sell beyond their local markets and to export. Recognition of the value of larger SMEs in KBIs identifies a need to coordinate efforts in the provision of larger levels of growth capital.
- Regional differences influence access to funding. Credit conditions in Atlantic Canada appear less favourable for SMEs compared to other regions. Provinces such as Saskatchewan do not have some financial instruments available in other provinces, such as investor tax credits, a sidecar fund or active venture capital market, potentially limiting risk capital flow to SMEs.

- Targeting smaller SMEs for particular types of public funding support too early may be counterproductive; such companies typically do not have the management resources to execute on those programs. Common challenges for SMEs in accessing public funding include onerous application processes and difficult eligibility criteria (e.g., private capital contributions necessary to leverage public funds).

Recommendations

- More streamlined approach to funding to better align and coordinate different sources of funding. SMEs typically need to show traction between each of their funding sources and, in some cases, need to adhere to government reporting metrics, which can adversely affect their ability to raise Angel or VC funding.
- A national investor tax credit and financial regulations that improve the flow of capital to SMEs. Direct incentives, such as tax credits, are identified as the most capital-efficient way to incentivize and channel Angel support to early-stage companies. Stimulating more co-investing and cross-regional investment and providing larger funding rounds can overcome some of the structural market challenges facing SMEs.
- More corporate 'early-adopter' companies to trial and adopt Canadian innovations. Canadian corporations can do more to assist Canadian SMEs in refining new products, allowing them to grow, scale and progress to the next level, including selling internationally. The risk capital requested is more of 'adoption' versus 'investment'.
- Enhancing sales and growth management capabilities to enhance 'home-grown' talent early in the business lifecycle. Canada needs more SMEs to sell internationally and to learn how to scale up companies between 5 and 15 years old, which requires particular sales and growth management capabilities.
- Less reliance on Angel networks to make companies 'investor-ready'. Angel networks should focus more on ensuring that their members see the best deals, negotiate the best terms and get the best returns. This requires other programs to take more of a role in supporting new enterprises to determine funding requirements, identify the most relevant sources of funding, etc.
- More empirically based research on the Canadian funding ecosystem to inform policy and practice.
 - While anecdotal evidence suggests that public sector funding is 'unlocked' by early-stage private investments, further research is suggested to assess the extent of a leveraging effect of Angel investments on public funding for SMEs (and vice versa).
 - Examining the different effects of financing constraints along the business cycle – and the policy actions to address these constraints to assist R&D-intensive SMEs. Current research is underway in Europe.
 - Examining how different funding instruments affect innovative SMEs differently compared to other SMEs. These instruments include R&D subsidies and tax incentives, grants, loan guarantees, direct lending, equity investment, etc.
 - Understanding the influence of different Canadian regional contexts through measures that track investment and economic performance and account for geographical and socio-institutional context, and structural characteristics of the SMEs and the sectors in which they operate.
 - Undertaking longitudinal study (e.g., tracking information on the same subjects at multiple points in time) to better understand how SME characteristics influence the effects of different funding sources and how different SMEs manage their financial constraints. Such data can facilitate comparative analysis of different regions.

1

INTRODUCTION

1 INTRODUCTION

The ability of innovative and growth-oriented small and medium-sized enterprises (SMEs) to secure appropriate funding and contribute to economic growth is an important policy issue in Canada and in other Organisation for Economic Co-operation and Development (OECD) countries. SMEs dominate the business landscape of OECD countries; in Canada, they represent 99% of private sector companies and 70% of the private sector labour force (approximately 8 million people).¹

The purpose of this report is to offer a contemporary perspective on the state of SME funding in Canada, which describes SME funding patterns and funding activity across the provinces, identifies challenges and offers recommendations to improve the funding ecosystem.

The report is part of NACO's effort to contribute new insights on funding and investment underpinning Canadian innovation. The report acknowledges that the funding landscape for SMEs continues to evolve in Canada, as different government entities introduce new programs and replace or discontinue other programs, and as flows of private capital adjust to changing market conditions.

Methodology

The report draws on recent data from federal, regional, and provincial surveys and documents, relevant academic literature and interviews with 17 individuals representing funding agencies from across Canada. These individuals were identified by NACO as most appropriate for providing an informed perspective on the topic; therefore, this is a purposeful rather than random sample.

Respondents were asked for their views and experiences on SME funding in Canada as well as some questions specific to funding in their own province/region. Each respondent was interviewed via telephone, with interviews taking between 20 minutes and one hour. In some cases, respondents were contacted more than once to clarify original comments.

All interviews were transcribed, with interview summaries sent back to respondents for their review. Original transcript summaries have been provided to NACO.

Report Structure

The report comprises six sections, as described below:

- 1 Introduction: report methodology, definitions, factors affecting funding**
- 2 SME demographics and funding trends**
- 3 Public sources of SME funding**
- 4 Private equity funding**
- 5 International perspectives on SME funding**
- 6 Funding challenges in Canada**

Figure 1 shows the funding programs discussed in the report and the stage(s) of business development that they target. Section 5 includes some relevant international programs for comparison purposes.

¹ Innovation, Science and Economic Development Canada. (June 2016). *Key Small Business Statistics*.

Figure 1: SME Funding Programs and Stage of Support

Source of Funding	Research & Proof of Concept	Scale-up & Piloting	Product & Market Development	Market-Ready Products	Market Growth & Expansion
Innovation, Science and Economic Development Canada (ISED)			Canadian Small Business Financing Program (CSBFP)		
National Research Council (NRC)	Industrial Research Assistance Program (IRAP) Scientific Research and Experimental Development Credit (SR&ED)	IRAP		CanExport Canadian International Innovation Program (CIIP) Business Innovation Accelerator Program*	CanExport CIIP
Crown Corporations			Business Development Bank of Canada (BDC)	BDC Export Development Canada (EDC)	BDC EDC
Regional Development Agencies**: ACOA; CED FedDev; WD	Atlantic Innovation Fund (AIF)	AIF Business Development Programs (BDPs) Investing in Business Growth and Productivity Program (IBGP)	AIF Investing in Business Innovation (IBI) BDPs Western Innovation Initiative (WINN)	BDPs IBI	BDPs
Provincial Government		Micro-voucher (Alberta)	Business Investment Corp (BIC) (Newfoundland and Labrador) Commercialization Support for Business Program (CSBP) (Manitoba) Voucher (Alberta) Commercialization Support for Business Program (CSBP) (Manitoba) Voucher (Alberta)	BIC CSBP MaRS Investor Accelerator Fund (IAF) (Ontario) Product Demonstration Program (PDP) (Alberta)	IAF Investissement Québec (IQ) PDP
Public-Private and Private (equity) Funding	Ag-West Bio (Saskatchewan) I ² Fund (Genomics BC) (British Columbia)	Ag-West Bio I ² Fund	BDC Capital VC Assistance Program (VCAP) IQ (Quebec) NB Innovation Fund (NBIF) (New Brunswick) Angels & Angel Groups	Banks & Credit Unions BDC Capital NBIF Innovacorp (IC) (Nova Scotia) Angels & Angel Groups	Banks & Credit Unions BDC Capital VCAP Angels & Angel Groups Public Markets (IPO)

* Program closed in 2017.

** ACOA (Atlantic Canada Opportunities Agency); CED (Canada Economic Development for Quebec Regions); FedDev (Federal Economic Development Agency for Southern Ontario); WD (Western Economic Diversification Canada).

Definitions

This section defines key concepts used in the report and describes factors that influence SME access to funding.

Small and Medium-Sized Enterprise (SME)

Table 1 shows SME definitions adopted by Canada, with European Union (EU) and United States (US) definitions shown for comparison. Canada's definition is based on employment numbers and financing.

Table 1: SME Definitions – Canada, European Union and United States

Indicator	Micro	Small	Medium	Large
CANADA				
Number of employees	<5	<100 ²	<500	500+
Loan size (financial institution definition)		\$1M	\$1M-5M	\$5M+
Totals in Canada (2015)		1,143,630 (97.9%)	21,415 (18%)	2,933 (0.3%)
EUROPEAN UNION				
Number of employees	<10	<50	<250	250+
Turnover	<\$2M	<\$10M	<\$50M	\$50M+
Balance sheet total	<\$2M	<\$10M	<\$43M	\$43M+
UNITED STATES				
Number of employees		<10	<500	<500M
Turnover (e.g., manufacturing)			<\$100M	

2 Different regions may have different definitions of SME. For example, the Province of BC defines a 'small business' as fewer than 50 employees.

By comparison, the EU and its 28 member states share a common definition of micro, small and medium enterprises (MSMEs), which makes it easier to apply to EU-wide finance and support programs for MSMEs (Recommendation 2003/361). The EU defines MSMEs based on three measures: employment numbers, revenue and balance sheet values.

In the US, the Small Business Administration (SBA) has adopted a size standard for small enterprises, using as a measure the level of revenue (\$ millions) or number of employees. Being defined as “small” in the US allows an enterprise to register and tender for government contracting.

However, the size standard in the US also varies by the activity of the business (i.e., sector) as defined by the North American Industrial Classification System (NAICS). For example, enterprises in the Agriculture, Forestry, Fishing and Hunting sector (NAICS 11) are judged on their revenues, while enterprises in the Mining, Quarrying, and Oil and Gas Extraction sector (NAICS 22) are judged by their number of employees. In addition, while the Canadian and EU definitions have remained unchanged, the US definition is regularly updated.

High-Growth SMEs

High-growth firms, as defined by the OECD, are those with average annualized growth rates greater than 20% per year, over a three-year period, and with ten or more employees at the beginning of the period. Their growth can be recorded in terms of revenue or number of employees. Canada has adopted this OECD definition.

If growth of 20% over three years occurs in the first five years of the enterprise’s existence, the enterprise is defined as a rapidly growing startup: commonly referred to as a ‘gazelle’. High-growth SMEs are not common; between 2009 and 2011, they accounted for 7.7% of all firms in Canada, with gazelles only accounting for 1.0% of all firms. However, high-growth firms employ one million workers in aggregate, including 200k in gazelles. During the 2008 recession, high-growth firm numbers fell substantially but have since recovered.³

SMEs that are growth-oriented and capital-intensive are more likely to have funding requirements that require access to risk capital (i.e., requirements that are beyond the limits of internal or personal financing). Sourcing adequate capital can be a major obstacle to their survival and growth.

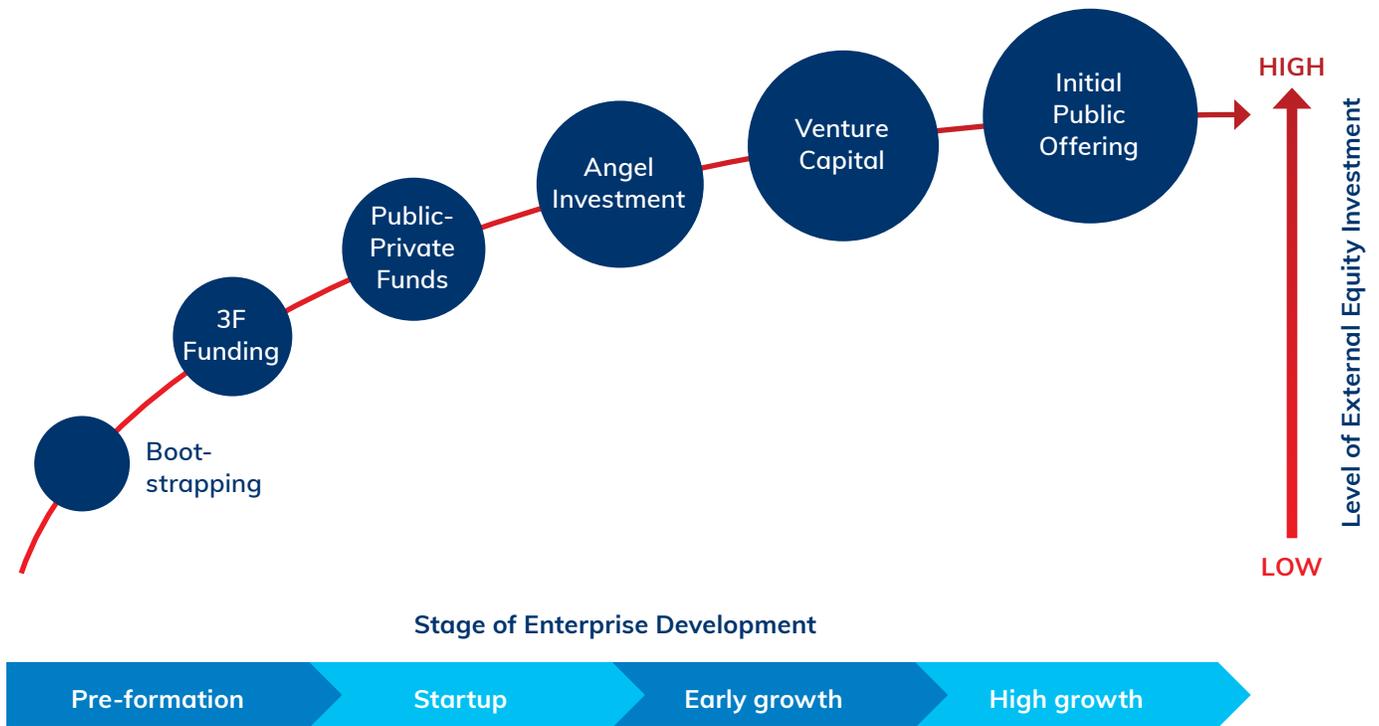
3 Industry Canada. (2013). *The Canadian Provinces. Key Small Business Statistics*, September.

Risk Capital

In this report, we define risk capital as speculative investment into high-risk, high-reward enterprises, which includes funding sources shown in the lowest row of Figure 1. Risk capital can be described in relation to a “funding escalator” that may begin with small amounts of financing to start the new enterprise and progresses to larger amounts of capital required for growth, potentially leading to raising investment on the public market (i.e., IPO), as shown in Figure 2.

Different public-private and private funding mechanisms provide federal, regional and sector-specific sources of risk capital. Initial sources of risk capital may include ‘bootstrapping’, which describes all personal means available to the SME to fund the business, and 3F funding, which refers to personal financing from family, friends and founders.

Figure 2: Sources of Risk Capital: Funding Escalator⁴



4 Gregson. (2014). *An Entrepreneur's Guide to Business Angel Investment*.

Angels play a critical role in filling regional gaps in the provision of early-stage risk capital, while venture capital typically targets larger and later-stage deals. Section 6 provides further discussion on equity risk capital to follow the discussion on public funding sources in Section 5.

Figure 2 suggests a 'linear' association between progressive sources of finance and stages of SME development. However, in practice, SMEs display high variability in their funding requirements and in how they progress through different development stages. The next section discusses challenges to raising capital.

Factors Influencing Access to Funding

While 'SMEs' by definition represent a broad category of businesses, some observations can be made regarding SME access to funding.

- Most of the 1.17 million SMEs in Canada do not seek 'external' funding, as the vast majority will remain small and not require capital to fuel growth. Those SMEs that can generate early sales and free cash flow may not require external investment.
- Most SMEs are owner-operator businesses relying on 3F funding (founders, friends and family) and funds internally generated by the company to finance business growth.
 - This combination of owner-manager personal savings, family and friends' money (i.e., 3F), and retained earnings is the primary funding source for SMEs and is referred to as **'internal' equity financing**. SMEs may delay seeking external financing until internal funding sources are exhausted. The most common alternative channel for raising capital beyond internal financing is through acquiring debt.
 - Many SMEs display **concentrated ownership and control** through the same owner-manager (or founding team). SME ownership structure not only affects business strategy – as determined by the preference/choice of the owner/founder – but also influences funding options.

- Self-determination is a strong trait of many entrepreneurs and the desire to maintain control may make an SME less likely to seek external funding. Lack of separation between company and owner can affect financing options in the following ways:
 - SME owners may be more likely to withhold or guard information about their business (i.e., the **'information asymmetry'** problem that arises when investors or other parties are trying to ascertain the quality or potential of the business).
 - Asymmetry problems may result when owner knowledge is the SME's primary asset.
 - Control of the business and autonomy over business decisions may change when the SME accepts external funding. This may deter SME owners from pursuing certain types of funding or avoid the introduction of particular behaviours that could bring owners and investors into conflict over control of the business (i.e., the **'agency problem'**).

SMEs are not scaled-down versions of larger firms and differ from large firms in terms of their financial decisions, which can be highly complex and influenced by different social, behavioural and financial factors.

SMEs without sufficient collateral do not have the choice of a broad range of debt financing resources available to large firms. This is particularly problematic for knowledge-based SMEs without tangible assets. In many cases, equity financing is the only mode of external financing available for an SME during the founding phase.

However, SMEs have lower company survival rates than large firms, making them risky investments, and typically possess fewer resources to pursue innovation. Lack of trading history, inexperience of the entrepreneur/owner, and absent or weak channels to customers contribute to the risky nature of early-stage SMEs. Other factors will also influence an SME's ability to access external funding, as described in Table 2.

Table 2: Factors Influencing SME Access to Funding

Company size, age, growth and profitability	A significant positive effect exists between company age and ability to access external financing.
Industry in which company operates	Some industries/sectors will be more or less attractive to particular funders and investors.
Innovativeness of company (compared to others in industry)	SMEs that demonstrate innovative capabilities, or the potential to develop them, are more likely to attract funding from competitive (public and private) sources.
Macroeconomic, legal and regulatory environment	Particular regulations and economic conditions can be more favourable for growing a business, financing a loan or generating a favourable return on investment.

Business 'Lifecycle' Effects

The business 'lifecycle' will also affect SME funding requirements. As an example, a web-based business attracting a large user base may experience rapid growth, supported by external investment (e.g., Angel or VC), while a biotechnology firm that requires clinical trials and further product refinement may take significantly longer to enter the market.

Firm size and firm age are both strong predictors of SME capital structure decisions. Once an SME establishes a track record and is able to provide collateral, this improves the creditworthiness of the firm and reduces risk for potential funders and investors.

In summary, SME financial needs appear strongly influenced by firm age, firm size and factors related to owner ambitions and market, which challenges 'one-size-fits-all' SME funding policies.

SMEs display high variability in how they develop, grow and progress through different stages of the business lifecycle. The result is wide variation in SME funding requirements.

The broad definition of 'SME' – which refers to a wide diversity of business sizes and types – suggests the need for policies and programs that recognize SME diversity.

As SMEs advance through their business lifecycle, they typically adjust their capital structure. For example, further growth may require expansion beyond the local market, which draws in private equity investment and changes the ownership structure.

2

SME DEMOGRAPHICS AND FUNDING TRENDS

2 SME DEMOGRAPHICS AND FUNDING TRENDS

This section presents recent demographic data on Canadian small and medium-sized enterprises (SMEs) and identifies relevant funding trends observed in the data. This information provides further context for perspectives drawn from respondents in the report.

SME Demographics

SMEs are a significant engine of economic growth in Canada, confirmed by data from Statistics Canada, which identify SMEs as comprising:

99% of Canadian private sector companies

40% of Canadian GDP and 55% of all jobs

70% of the private sector labour force (approximately 8 million people):

Of the SME labour force, 76% of people are employed in the service sector, and 24% in the goods sector.⁵

There are over 1.17 million SMEs in Canada, with **micro-enterprises** (<5 employees) constituting the highest proportion (54%). Over 50% of Canada's SMEs are concentrated in Canada's two largest provinces, Ontario and Quebec, and while Ontario and Quebec have the largest total numbers of SMEs, they have the lowest ratios of SMEs per population.

Alberta, Prince Edward Island and the Northwest Territories have more SMEs than other provinces per population, and Western Canada (Manitoba, Saskatchewan, Alberta and British Columbia) has the most active and robust SME community by region (based on factors that include growth, survival rates, startups, etc.). Appendices A and B provide further details of SMEs by province and by sector.⁶

Canadian SMEs are primarily service-oriented (78.5%) compared to the goods-producing sector (21.5%). Over 50% of **small enterprises** (1–99 employees) are distributed across five industries:

1. Retail trade (12.5%)
2. Construction (12.2%)
3. Professional, scientific and technical services (12%)
4. Other services (9.6%)
5. Health care/social assistance (9.2%)

However, distribution of **medium-sized enterprises** (100–499 employees) is different, with manufacturing leading the way (14.6%) followed by retail trade (13.5%); health care/social assistance (10.3%); and waste management and remediation services (7.5%).

Canada Survey on Financing and Growth of SMEs

Survey data, generated by the Small Business Branch of Innovation, Science and Economic Development (ISED) Canada, provide a basis from which to identify SME funding trends. The **Canada Survey on Financing and Growth of SMEs (CSFG)** is undertaken every few years by ISED and includes questions about sources of financing.

The CSFG, 2014 is based on a random sample of approximately 20k SMEs drawn from the business registry of Statistics Canada. To complement the survey data, perspectives from respondents in the Small Business Branch were included.

5 OECD. (2015). *Financing SMEs and Entrepreneurs*.

6 Appendix A shows the breakdown of SMEs by province, including the number of SMEs relative to population size (2015 data). Appendix B shows SME distribution – by size and number of enterprises – in the top 12 industry sectors in Canada (from a total of 20 sectors used to categorize enterprises by Statistics Canada).

Key Findings (CSFG, 2014)

SMEs most often used **personal financing** (84%) and credit from financial institutions (which includes business lines of credit and credit cards) to finance their business startup. Slightly over 50% of SMEs in the survey sought external financing.

The total authorized amount of external financing to SMEs in 2014 was over \$53B. SMEs most often requested **trade credit** (29%) and **debt financing** (28%) among all types of external financing.

SMEs least often requested equity financing from **Angel investors and venture capitalists (VC)** (1.8%). Trends in VC and Angel investing arising from CSFG and other SME surveys are difficult to analyze and interpret, due to the extreme volatility in the risk capital data.

SMEs in construction (63%), primary (61%) and wholesale trade (61%) sectors made the most requests for external financing. Professional, scientific and technical services sector SMEs (40%) made the fewest external financing requests.

Larger SMEs are most likely to request external financing; 72% of medium-sized enterprises (100–499 employees) requested funding, compared to 43% of micro-enterprises (1–4 employees).

Larger SMEs were more likely than smaller SMEs to innovate, to hold intellectual property and to sell beyond their local markets and export.

SMEs wholly owned by men (52%) were more likely to request external funding than those wholly owned by women (43%).

Debt Financing (CSFG, 2014)

Chartered banks were the main suppliers of SME debt financing overall (72%). Request and approval rates for debt financing increase with business size. This is not a surprising finding since over 65% of SME debt financing **was secured by collateral**, with business assets and personal assets being provided as collateral by 51% and 27% of SMEs, respectively.

The Business Development Bank's (BDC) survey of over 1,000 SME leaders in Canada found that nearly one-third (32%) of SMEs report they have difficulty obtaining the financing they need from external sources.⁷

This proportion increases significantly, to 39% for micro-enterprises (1–4 employees) and to 44% for those that are less than ten years old – suggesting a 'liability of smallness and of age' in securing external funding.

Smaller businesses (less than 20 employees) obtained 26% of debt financing from credit unions, compared to larger businesses (100+ employees), which obtained 11% of debt financing from credit unions.

On average, SMEs paid an interest rate of 5% for lines of credit and term loans, and 17% for credit card financing.

SME requests for debt financing were estimated at \$33B in 2014, with **86% of eligible requests approved** (which suggests that \$28.4B of funding was received).

7 BDC. (October 2015). *SMEs and Growth: Challenges and Winning Strategies*.

Equity Financing (CSFG, 2014)

Private equity (all types) was estimated to be 1.8% of all financing requested by SMEs and less than 1% of financing received (CSFG, 2014)

Data from the CSFG makes it difficult to generate a refined assessment of equity financing among Canadian SMEs.

Richard Archambault, Research Manager in the Small Business Branch of ISED, oversees the CSFG survey. He notes that, in previous years, the CSFG attempted to disaggregate the different types of private equity funding sources, including Angels, VC and other types of equity. However, because response rates for these questions were so low, responses were categorized in a single category under equity financing.

Funding Trends

Further analysis of CSFG data and data from other sources identifies a number of SME funding trends, which are discussed below.

Industry

Richard Archambault of ISED suggests that new enterprises and young entrepreneurs have more difficulty securing external financing than older, established firms, due to the higher risk evaluation by financial intermediaries, where lack of collateral, lack of credit history, inexperience, etc., make them riskier investments.

Reducing the financial risks for lenders has resulted in federal intervention through mechanisms such as the **Canadian Small Business Financing Program (CSBFP)**, which provides a guarantee on SME loans (discussed in Section 3).

Knowledge-based industries (KBIs), such as information and communication technologies (ICT), clean tech and life sciences, have the lowest financing approval rates, with food and accommodation sectors also being very low. Financial intermediaries assess a higher risk for KBIs, given the difficulty in evaluating the estimated return on intangible assets such as knowledge and the high risk of failure in new technologies.

Other KBIs, represented by the professional, scientific and technical services sectors (40%) make the fewest external financing requests, according to CSFG data. One explanation is that such services have low capital intensity, rely on professional expertise of founders and typically remain small.

Geography

Access to funding is also influenced by **regional differences**. SMEs in Atlantic Canada (Nova Scotia, New Brunswick, Prince Edward Island, Newfoundland and Labrador) appear to face more difficulty in obtaining business financing than SMEs in other Canadian regions.

- Data from the Atlantic Canada Opportunities Agency (ACOA) shows that 58% of debt or equity financing to Atlantic Canadian SMEs is provided by banks, comparable to the Canadian rate of financing in Atlantic Canada, compared to the Canadian average (6.5%). The difference is partially attributed to the lower rates of credit union financing in Atlantic Canada, which finances 9.7% of Atlantic SMEs.⁸
- The average amount of financing requested by SMEs in Atlantic Canada is also lower than in any other province, with requests more likely to be approved partially instead of fully. The average charged interest rate for debt financing is also higher in the Atlantic region (7.1% vs. 6.7% in Canada overall). This suggests that credit conditions in Atlantic Canada may not be as favourable for SMEs as in other parts of Canada.

SMEs located outside major cities may also face greater difficulties in acquiring external finance, especially long-term debt, compared with their counterparts operating in cities. One reason, suggested by a respondent from Manitoba, is that financial intermediaries outside of major urban centres have less demand to lend to SMEs; as a result, they have fewer staff with SME lending experience, and may shift away from SME lending as a core line of business. Another suggested reason is that larger businesses may tend to relocate to urban centres, where there is greater access to resources and financing.

CSFG data identifies that smaller businesses are more likely than larger businesses to obtain debt financing from credit unions. In Manitoba, for example, credit unions are active funders of SMEs both in and outside of the province's major urban centre, Winnipeg. Further research is suggested to establish whether SMEs outside of urban centres have more difficulty in raising certain types of funding.

The next section examines public sources of SME funding in Canada.

8 Evaluation of the Atlantic Canada Opportunities Agency's Productivity and Growth Sub-Program. (September 2015): http://www.acoa-apeca.gc.ca/eng/Accountability/AuditsAndEvaluations/Pages/ACOA_PG_EVAL_2015.aspx

3

PUBLIC SOURCES OF SME FUNDING

3 PUBLIC SOURCES OF SME FUNDING

Public sources of SME funding in Canada include federal, regional and provincial programs. Over 500 different programs that fund enterprise, technology and/or research development are available.⁹ These programs differ according to criteria that include:

- Program mandate/purpose, which gives eligibility to some SMEs and not others
- Type of financial instrument (e.g., loans, grants, tax credits, contributions)
- Regional eligibility
- Sectoral eligibility

The majority of public funding programs provide **loans** for startup and/or SME business expansion. A lesser number of **grants** are available for supporting SMEs according to regional, sectoral or demographic criteria (e.g., youth, Aboriginal, gender, etc.).

Grants may not require a pay back by the applicant, compared to loans. However, grants may require a financial investment by the applicant – often designed to demonstrate commitment by the applicant – which typically range from 10% to 50% of the requested amount.

For this report, we consider key sources of public funding programs in Canada, with attention given to funding programs for growth-oriented, knowledge-based SMEs more likely to be eligible for risk capital (i.e., from Angels and venture capitalists). The first section will focus on federal programs, followed by programs supported through Regional Development Agencies (which are federally funded) and then provincial funding programs. Insights from respondents related to different programs are also included.

Federal Funding Programs

A common objective of Canadian federal funding programs for SMEs is to stimulate economic benefits through the provision of public investment. In Canada, as in other OECD countries, a variety of different public funding mechanisms have been created in the absence of private funders for early-stage, capital-intensive and technology-based SMEs.

Three prominent sources of federal funding are the agencies listed below:

1. **Innovation, Science and Economic Development Canada (ISED)**
2. **National Research Council (NRC)**
3. **Crown Corporations**

These three agencies/organizations provide different approaches to funding and support, which align with their particular mandates and objectives, as described below.

1 INNOVATION, SCIENCE AND ECONOMIC DEVELOPMENT CANADA (ISED)

Canadian Small Business Financing Program (CSBFP)

The CSBFP provides support for banks and financial intermediaries across Canada to lend to SMEs, which might otherwise not be eligible for traditional loan financing.

If the SME fails, then the government will take 85% of the loss and the bank will assume the remaining 15%. This constitutes a government guarantee on SME loans.

9 PriceWaterhouseCoopers. (2011). Response to R&D Review Panel Consultation Questions.

Assessment of the CSBFP finds that it operates at a level of 75%; in other words, if the program did not exist, then 75% of funded SMEs would not have received financing from the banks.

The CSBFP mechanism operates as follows: when an SME approaches a bank, and the bank determines that the risk of a loan is too high, they can recommend the SME to the CSBFP, which is essentially a 'risk-sharing' program. Table 3 describes the program in more detail.

Table 3: CSBFP Overview¹⁰

SME Eligibility	Eligible Expenses	Loan Terms and Costs	Funding Outcomes (2014–2015)
Annual sales of \$10M or less Agricultural, charitable and religious organizations are excluded	Equipment, real property or 'immovables', leasehold improvements, program registration fees Loan amount cannot exceed \$1M Total amount eligible to purchase/improve real property; maximum of \$350k for other allowable expenses, e.g., leasehold improvements, equipment and registration fees	Maximum period of CSBFP loan is 15 years for real property, 10 years for other eligible expenses Registration fee is 2% of loan value Variable or fixed interest rate (e.g., prime lending rate plus 3%)	5,067 SMEs received \$785M in loans Average loan size of \$155k 50%+ loans are to food and accommodation services or retail trade (vs. 37% in 1999–2000)

Further Insights of CSBFP¹¹

CSBFP borrowers, as defined by revenue, are very small. In 2014–2015, approximately 43% of borrowers generated revenue of \$500k, while over 90% generated revenue of \$2M or less. Provincially, Ontario is the largest user of CSBFP loans by number (35%) followed by Quebec (29%) and Alberta (12%).

CSBFP loans have declined for four consecutive years in terms of number and total value. The federal government suggests that this may be the result of structural changes in the financing needs of entrepreneurs and greater diversity in private sector financing products.

Placing the CSBFP in a wider context, the funding total of \$785M is a small proportion of the estimated \$29B of debt funding estimated to flow to SMEs annually in Canada.

¹⁰ http://www.ic.gc.ca/eic/site/061.nsf/eng/h_03004.html

¹¹ Innovation, Science and Economic Development Canada. (March 2016). *SME Research and Statistics*.

2 NATIONAL RESEARCH COUNCIL (NRC)

NRC – Industrial Research Assistance Program (IRAP)

The NRC’s IRAP was established in 1962 with a mission to stimulate innovation in SMEs in Canada, and IRAP engages with approximately 10k SMEs annually. IRAP achieves this mission through two objectives:

1. Support SMEs in the use of innovative technologies to drive their business activities; and
2. Collaborate in initiatives within regional and national organizations that support development and commercialization of technologies by SMEs.

IRAP is delivered through a network of over 400 professionals located in more than 100 communities across Canada, including 250 industrial technology advisors (ITAs). Table 4 provides further details on IRAP.

Table 4: IRAP Overview¹²

SME Eligibility	Sectors Supported	Services Provided	Funding Outcomes ¹³ (2006–2011)
Incorporated SMEs in Canada seeking to grow and profit through innovative, tech-driven new/improved products, services or processes	ICT-digital Aerospace Construction Manufacturing and materials Energy and environment Life sciences and Agriculture	Funding to \$250k; technical assistance Advisory services Business intelligence Network linkages with partners	5k+ SMEs funded in past 4 years Over 8k unique projects funded Average SME is 7 years old with 9 employees Average funding per project is \$45k

¹² http://www.ic.gc.ca/eic/site/061.nsf/eng/h_03004.html

¹³ Evaluation of NRC-IRAP. (2012).

Respondent Perspectives on NRC-IRAP

Respondents actively engaged with NRC-IRAP projects offer further thoughts on the program.

- IRAP is the best source for developing a critical mass of new companies in Saskatchewan, as it supports companies well aligned with companies receiving Saskatchewan Capital Network (SCN) support. These companies include SMEs as well as startups (Marie Savostianik, SK).
- IRAP is one of the government's best support programs for SMEs in Ontario, as it is a 'friendly' project and relevant to a range of companies – from those SMEs with two to three people to those with a few hundred. IRAP is identified as much more than simply R&D money, although considerable management time must be committed by SMEs to the IRAP application process (Pat White, ON).
- IRAP's ITAs are key assets for supporting SMEs, as the majority of them have business backgrounds in addition to their technical expertise (Michael Turner, ON).
- While IRAP seeks to fund projects that are stand-alone 'commercializable', there may be limitations in what the program can achieve, given the structural challenges facing SMEs in British Columbia, e.g., lack of experienced executives, lack of growth capital, small market, etc. (Jim Fletcher, BC).

Canadian Scientific Research and Experimental Development Tax Incentive Program (SR&ED)

The SR&ED tax incentive is the federal government's largest single support program for R&D and is identified as one of the most generous R&D programs among OECD countries.¹⁴ The SR&ED provides over \$4B in investment tax credits to over 18k claimants. Of these, approximately 75% are SMEs.¹⁵

The SR&ED is similar to IRAP in that it encourages more innovative-type activities by SMEs, but SR&ED differs in that it provides a tax credit mechanism and supports a broader base of SMEs compared to IRAP.

SR&ED is also very particular in what kind of work is fundable, where scientific research and experimental development means systematic investigation or research carried out in a field of science or technology by means of experiment or analysis. That is:

1. Basic research, which advances scientific knowledge without a specific practical application in view.
2. Applied research, which advances scientific knowledge with a specific practical application in view, or experimental development, which creates new, or improves existing, materials, devices, products or processes, including incremental improvements.

Funding will cover associated costs related to engineering, design, operations research, mathematical analysis, computer programming, data collection, testing or psychological research that directly supports the above research.¹⁶

Costs associated with things like market research, sales promotion, quality control, and commercial production of new products or processes are not eligible under SR&ED. Most Canadian provinces also offer additional tax credits on qualified SR&ED expenditures.

14 <http://www.oecd.org/sti/inno/2498389.pdf>

15 http://www.hmtrevenuegroup.com/docs/CRA_Overview_SRED.pdf

16 <http://www.cra-arc.gc.ca/txcrdt/sred-rsde/clmng/lgblywrkfrsrdvstmnttxcrdts-eng.html>

Respondent Perspectives on SR&ED

- IRAP has a reputation as a ‘stop-gap’ to SR&ED, but this is not really the case, as it “all comes down to how you structure your IRAP” (Pat White, ON).
- Some companies may find themselves in a position where they cannot claim SR&ED depending on what they have done with IRAP (Michael Turner, ON).
 - IRAP allows a company to bring on additional people, who are eligible to be hired under SR&ED, and allows a company to enter into commercialization, which is not eligible under SR&ED. IRAP provides a shorter reimbursement period than SR&ED and higher coverage of product development costs, but SR&ED covers broader overhead costs (Pat White, ON).
- The required paperwork to apply for SR&ED funding may act as a disincentive for some SMEs that could otherwise benefit from the funding. SR&ED seems to require a similar amount of paperwork to getting FDA (food and drug administration) approval in the U.S.; which challenges many SMEs to secure an award if they apply on their own (Robert Warren, MB).

- The R&D conversion rate in Canada gets much attention, because it is quite weak. Public R&D generates mostly incremental research, and very little of this can be commercialized. Each innovation by itself might be useful to a company (e.g., pharmaceuticals, etc.), but often cannot be commercialized on its own (Jim Fletcher, BC).

Obtaining an R&D grant has been shown to provide a positive ‘certification effect’ that facilitates SMEs’ subsequent access to financing.¹⁷ However, they are not prerequisites for attracting private financing, as public funders and private investors typically pursue different objectives.

More recent federal programs that target innovative SMEs and are delivered through NRC-IRAP are presented in Table 5.

17 Meuleman and De Maeseineire. (2012). *Do R&D Subsidies Affect SME Access to External Financing?*

Table 5: Additional NRC-IRAP Initiatives¹⁸

Program	Objectives	SME Eligibility	Services Provided	Funding
Canadian International Innovation Program (CIPP)	Market expansion and validation with partners from: Brazil, China, India, Israel, South Korea	Engage in collaborative R&D for commercial outcomes with program partners	Support and identification of credible partners via Trade Commissioner Service (TCS) network	e.g., Canada-India Program: 50% of eligible cost up to \$600k
CanExport: NRC-IRAP in association with Canadian TCS	Increase global competitiveness of Canadian SMEs High-growth markets and sectors (i.e., all sectors eligible)	SMEs seeking to develop new export opportunities SMEs with more than \$200k but less than \$50M in revenues	Direct financial support to SMEs 50% matching funding; minimum of \$20k to maximum of \$100k per annum	5-year \$50M initiative (2016–2020) ¹⁹
Business Innovation Access Program (BIAP)	Assists SMEs to solve technical or research-oriented problems or challenges	SMEs with 2 years of incorporation Short-term projects that address a well-defined innovation issue facing the SME	Access to tech expertise, services at higher education institutions, public research centres Maximum of \$50k; covering 50–75% of subcontractor fees	3-year \$20M pilot program (2014–2017) program now closed

The federal government regularly launches ‘pilot’ or time-limited programs to stimulate different economic activity or to determine if a particular program fills a particular market gap, as seen with the CanExport and BIAP initiatives in Table 5.

¹⁸ http://www.ic.gc.ca/eic/site/061.nsf/eng/h_03004.html

¹⁹ <http://www.international.gc.ca/canexport/index.aspx?lang=eng>

3 CROWN CORPORATIONS

Business Development Bank of Canada (BDC)

BDC is a prominent federal funding mechanism to support innovative SMEs and continues to develop new programs to address perceived gaps in SME funding provision in Canada. Most of BDC's funding is in the form of debt to support SMEs in different sectors, which includes asset-backed and unsecured debt instruments. The intention is that the financial instruments offered through BDC are complementary to private sector lenders.

BDC operates 112 business centres across the country and online, and now directly or indirectly supports more than 42k entrepreneurs across Canada. In fiscal 2016, BDC deployed \$5.1B in financing and made 14.6k transactions to SMEs and larger businesses (e.g., an average of \$349k per transaction).²⁰

BDC operates six lines of business, four of which provide SME funding directly or indirectly, as presented below. Table 6 presents further details of recent funding activities.

1. **Financing:** provides entrepreneurs with secured and unsecured term loans and specialized services tailored to develop and expand their markets, invest in intangible assets (e.g., IT), buy equipment to increase productivity or support the transfer of companies to a new generation of owners.
2. **Growth and Transition Capital:** supports high potential, growth-oriented SMEs by providing flexible debt, growth equity and equity-type financing.
3. **BDC Venture Capital:** supports tech-based ventures with strong growth prospects by investing indirectly through external private sector VC funds, undertaking strategic initiatives and making targeted investments.
4. **Venture Capital Action Plan (VCAP):** BDC is investing almost \$400M to increase private sector VC financing through four funds-of-funds and four high performing funds that target high potential, innovative Canadian SMEs.

BDC Advantage is BDC's advisory business service and one of the six lines of business. The focus is on supporting high-impact SMEs in areas that include operational efficiency, international growth and business management.

BDC continues to develop new products and services to support women-owned businesses, social ventures, Aboriginal entrepreneurs, young entrepreneurs and immigrant entrepreneurs.

BDC is also partnered with other organizations in the Canadian entrepreneurship ecosystem to provide more capital to SMEs, which includes partnerships with some of Canada's leading accelerators, incubators and science parks.

²⁰ http://publications.gc.ca/collections/collection_2016/bdc/lu130-2016-eng.pdf

Respondent Perspectives on BDC

- BDC is increasingly involved in **early-stage deals in Canada**, working with accelerators, incubators and Angel funds. This approach is expected to provide a more interactive, shared space where SMEs can progress up the 'funding escalator', e.g., from the Angel stage to the VC stage and upwards (Shane Dolan, ON).
- In **Atlantic Canada**, BDC is not highly active; although they do have a convertible debenture program of \$150k, they do not have a visible VC presence east of Montreal (Ross Findlay, NS). The Atlantic Provinces and BDC put public money earlier into a fund called Build Ventures, a \$50M fund to invest in 12 companies over five years.
- In **Manitoba**, BDC provides some support for startups, as a follow-up to the current Futurpreneur-CIBC funding program that can provide \$15k to entrepreneurs, with \$30k loans available through BDC. BDC (and EDC) interest rates are not low, but are not necessarily out of line with the level of risk (Robert Warren, MB).
- BDC is active in **Saskatchewan** in supplying larger amounts of debt financing to SMEs, but the Saskatchewan Capital Network (SCN) does not get referrals from BDC, so more can be done between SCN and BDC (Marie Savostianik, SK).

Export Development Canada (EDC)

EDC is Canada's export credit agency and assists SMEs and large firms in responding to international business opportunities. EDC data suggests that only 7% of Canadian SMEs have international customers and supply chains.²¹

SMEs comprise 81% of EDC's clients and the agency can provide financing, insurance and bonding, and guarantee products to Canadian exports and investors and, in some cases, to their international buyers. Table 6 presents details of recent (2015) EDC activities.

Much of EDC's business involves partnerships with other financial institutions and through the Government of Canada. Through its **Export Guarantee Program**, EDC encourages Canadian financial institutions to advance pre-shipment loans to Canadian SMEs exporting goods or services, then covers up to 100% of loan value (up to \$10M per customer).

A new initiative to further support SMEs seeking to 'go global' is the EDC **'stretch credit'** approach, under which approval guidelines for credit requests of up to \$50k (for high-risk SMEs) and \$100k (for moderate-risk SMEs) have been simplified. The objective is to increase the number of credit approvals and reduce the turnaround time for Canadian SMEs.²²

21 EDC: <http://www1.edc.ca/publications/2016/2015ar/#/en/creating-opportunities-small-business>

22 OECD. (2015). Financing SMEs and Entrepreneurs.

Table 6: Crown Corporations: BDC and EDC

PROGRAM	Business Development Bank of Canada (BDC) ²³	Export Development Canada (EDC) ²⁴
Date of Origin	1944	1944
Program Background	Mandate: to help Canadian SMEs become stronger and more profitable to compete domestically and internationally	Mandate: to enhance Canada's competitiveness in international markets and assist SMEs and large firms in international business opportunities
Mode of Delivery	6 lines of business: 4 of which provide funding to SMEs: 1. Financing 2. Growth and Transition Capital (GTC) >\$500k 3. Venture capital 4. Venture Capital Action Plan (VCAP)	Financing Insurance (e.g., trade, risk, contract) Bonding and guarantees (e.g., foreign exchange)
Target Beneficiaries	1. Entrepreneurial new ventures 2. High potential, growth-oriented firms 3. VC-oriented technology SMEs 4. VCAP	SMEs with sales under \$50M (key sectors (in order of highest \$ amount below): Infrastructure and environment; Resources; Extractive industries; Transportation; Light manufacturing; ICT)
Funding and Support Provision	1. Secured and unsecured loans 2. Debt and equity-type financing >\$500k 3. Venture capital 4. Leveraging BDC VC alongside private sector VC funds	Direct lending; working capital, buyer or project financing Export Guarantee Program (EGP): provides 100% loan guarantees for working capital for SMEs to expand internationally
Total Investment in Program	\$26B to 42k+ businesses VC portfolio: \$553M in direct investments and \$375M in investments in 55 funds	Use of EDC financial products facilitated \$104B in exports and international investments
Total Annual Funding/Investment	1. Financing: \$4.8B in loans 2. Financing and GTC; total of \$995M, with \$259M directed to new ventures 3. VC: \$253M 4. VCAP: \$391M authorized spending	Facilitated \$67B of Canada's GDP (4% of total) EGP: loans of \$1B
Number of Companies Funded	1. 10,658 (2020 new ventures)	4,280 SME transactions (2015) Supported 5,938 SMEs; conducted \$15.5B in exports; \$633M to business in emerging markets EGP: 630 SMEs
Average Funding per SME	1. Estimated average of \$93k	EGP: estimated average loan of \$1.6M
Other Attributed Program Benefits	GTC recipients: 34% are high-growth firms \$247.4M in loans to majority female-owned businesses 60% of BDC-financed startups survive at least 5 years VCAP: \$1.36B raised: 4 funds-of-funds with BDC commitment of \$391M	

23 http://publications.gc.ca/collections/collection_2016/bdc/lu130-2016-eng.pdf

24 http://www1.edc.ca/publications/2016/2015ar/files/EDC_AR2015_E-Web.pdf

Regional Development Agency Programs

Canada's six Regional Development Agencies (RDAs) provide programs, services, knowledge and expertise to SMEs within a defined geographic area. The RDAs receive funding through the federal government and are expected to address particular regional challenges, resulting in different project objectives, eligible expenses, timelines and contribution amounts, while pursuing a common objective of supporting economic development.

Over \$1B was distributed through the six RDAs in 2015–2016, with \$517M distributed towards business development programs, as shown in Table 7.

Table 7: Regional Development Agency Programs – Total and Business Development Expenditures (2015–2016)

Province, Territory Represented	Regional Development Agency	Total Expenditure (millions)	Business Development Expenditure	% Expenditure for Business Development
NL, NS, NB, PEI	Atlantic Canada Opportunities Agency (ACOA)	\$302	\$172	57%
QC	Canada Economic Development for Québec Regions (CED)	\$259	\$148	57%
ON	Federal Economic Development Agency for Southern Ontario (FedDev):	\$190	\$70	37%
ON	Federal Economic Development Initiative for Northern Ontario (FedNor)	\$39	NA	NA
Nunavut, NWT, Yukon	Canadian Northern Economic Development Agency (CanNor)	\$51	\$26	51%
MB, SK, AB, BC	Western Economic Diversification Canada (WD)	\$160	\$101	*63%

* Funding allotment includes programs related to 'innovation'.

Justification for RDA budgets to the federal government include leveraging additional funding to support regional enterprise. For example, ACOA has reported that the return on every dollar that it invests in Nova Scotia (NS) is \$5.40.²⁵ CED has reported that it has awarded over \$1B in grants and contributions to enterprise and supporting economic development since 2012.

FedDev has reported that, since its establishment in 2009, it has committed more than \$1.6B, which has generated over \$2.4B in additional funds for businesses. A key industry priority has been Ontario's manufacturing sector, to which FedDev has allocated \$462M, which has leveraged an additional \$1.76B for businesses in that sector.

While funding to support business development is a common theme across all RDAs, and represents a sizable proportion of total annual RDA funding, program differences are evident. In the following sections, we examine some key programs delivered through ACOA, CED, FedDev and WD.

Atlantic Canada Opportunities Agency (ACOA)

ACOA was created in 1987 and provides funding support to SMEs as part of a wider strategy to develop regional potential. Spending focuses on innovation capacity in business and communities, human resources and entrepreneurship, and commercialization of R&D from Atlantic Canada universities and research centres.

Key priorities include bringing the knowledge-based economy to traditional resource sectors, and enhancing export capacity through inter-provincial networks.²⁶ As shown in Table 7, ACOA receives the largest share of federal funding of the six RDAs.

Business Development Program (BDP)

ACOA provides funding (less than \$500k per project) through its BDP, which includes two program streams:

1. **Innovation and commercialization funding:** focuses on projects to develop new products, services and processes, skills acquisition, leveraging of additional private sector investments, and commercialization of new ideas. In 2015–2016, \$53M was distributed to 164 projects (average of \$323k per project).
2. **Productivity and Growth Funding:** focuses on projects related to technology acquisition, expansion and modernization, marketing, productivity and business skills, and business support. In 2015–2016, \$67M was distributed to 501 projects (average of \$134k per project).

Atlantic Innovation Fund (AIF)

AIF provides innovation funding to SMEs, large firms, post-secondary institutions, non-government research organizations and provincial Crown corporations, typically between \$500k and \$3M.

AIF differs from the BDP in its additional focus to help grow strategic sectors in Atlantic Canada and stimulate new research and commercialization partnerships. AIF funds up to 75% of total eligible costs for private sector-led projects and 80% for public sector-led projects.

Funding to SMEs and the private sector are conditionally repayable based on the commercial success of a project. AIF project funding ranges from \$300k to \$10M, with an average of \$2.3M.²⁷

26 Bradford. (2010). *Regional Economic Development Agencies in Canada: Lessons for Southern Ontario*.

27 http://www.acoa-apeca.gc.ca/eng/Accountability/AuditsAndEvaluations/Pages/ACOA_IC_EVAL_2015.aspx

Business Investment Corporation (BIC) (Newfoundland and Labrador)

BIC is a provincially funded program, established in 2002, to manage the investment portfolio of the NL Department of Business, Tourism, Culture and Rural Development (BTCRD). BIC's mandate is to "make available and manage investments in small to medium-sized private businesses, cooperatives, community development corporations and other enterprises to create employment opportunities for the people of the province."²⁸

BIC delivers three funding programs, as described below (see Table 8 for further program data):

1. The **Business Investment Program (BIP)** provides term loans and equity investments to SMEs in strategic growth sectors as identified by BTCRD. BIP is also available to SMEs that have export potential and require funding to enter or expand in external markets.
2. The **Business Development Support Program (BDSP)** provides funding for SMEs (>100 employees and >\$10M in sales) to acquire the necessary expertise to pursue new business ideas and new export markets for their product or service. The contribution level is based on 50% of eligible costs, to a maximum of \$100k per fiscal year.
3. The **Fisheries Loan Guarantee Program (FLGP)**, in partnership with the Department of Finance, supports SMEs operating in NL's independent fish harvesting industry by making available a government guarantee (up to 100%, up to \$3M) on loans offered by financial institutions. Funding supports equipment purchasing, business acquisition and loan refinancing.

New Brunswick Innovation Foundation (NBIF)

NBIF is a private, not-for-profit corporation that invests in startup companies and R&D. Their mandate is to bridge the gap that exists between research and enterprise and to focus on accelerating the commercialization of research. NBIF has helped to create over 90 companies and fund 400 applied research projects since its inception in 2003, with a current portfolio of 41 companies. See Table 8 for further data on NBIF.

Innovacorp (Nova Scotia) (IC)

IC is Nova Scotia's early-stage VC organization that focuses on early-stage investments in IT, clean technology, life sciences and ocean technology. IC operates three incubator facilities, with support from ACOA. See Table 8 for further data on IC.

28 BIC 2015/16 Annual Report: http://www.btcrd.gov.nl.ca/publications/pdf/2015_16%20AR/2015-16%20BIC.pdf

Table 8: ACOA-Supported Funding Programs

PROGRAM	Business Investment Corporation (BIC) (NL)	New Brunswick Innovation Fund (NBIF)	Innovacorp (Nova Scotia)
Date of origin	2002	2003	1995
Background	BIC manages 3 funding programs focused on “stimulating economic and business development”	NBIF manages 3 funding programs that provide a “bridge between research and enterprise in NB”	Vision to be “amongst the top 10 startup ecosystems in the world”
Mode of Delivery	1.Business Investment Program (BIP) 2.Business Development Support Program (BDSP) 3.Fisheries Loan Guarantee Program (FLGP)	1.VC Fund (VC) 2.Innovation Voucher Fund (IVF) 3.Startup Investment Fund (SIF)	Nova Scotia First Fund (NSFF) targets 7–10 investments annually and seeks to leverage VC partners from outside NS
Target Beneficiaries	BIP: growth-oriented SMEs BDSP: startup ventures FLGP: SMEs seeking new opportunities in the fish harvesting sector	VC: to transform startups into scale-ups IVF: to spur innovation within established SMEs SIF: to create new startups	Emerging venture-grade tech firms with high-growth potential and attractive risk-return prospects IT, life sciences and clean tech sector focus
Funding Provision	BIP: loans and equity investments up to \$500k per project to max. of \$1M per SME BDSP: up to \$100k/venture FLGP: government loan guarantee with banks, up to \$3M	VC: range from \$25k to maximum of \$1M IVF: up to \$80k to cover 80% of R&D project SIF: \$100k investment per startup	Investments (2014–2015) ranged from \$100k to \$1.76M Investments of \$1.6M into other VC Funds (Build Ventures & Cycle Capital)
Total Investment in Program	Loans of \$20M Equity of \$9.5M 421 accounts	Equity of \$73M 41 active portfolio companies Value of VC exits (2003–2016): \$11M	Equity of \$155M attributed to Innovacorp since 1996
Total Annual Funding/ Investment	BIP: \$6.9M (2015–2016) BDSP: \$3.7M FLGP: \$13M	VC: \$3.9M (2015–2016) IVF: \$1.34M SIF: \$600k	\$5.4M (2014–2015)
Number of Companies Funded	BIP: 33 BDSP: 257 FLGP: 17	VC: 24 (6 new and 18 follow-on investments) IVF: 23 SIF: 6	12
Average Funding/ Investment per Company	BIP: \$209k BDSP: \$14.5k FLGP: \$765k	VC: \$162.5k IVF: \$58.2k SIF: \$100k	\$450k
Additional Funding Leveraged	Uncertain	VC: \$13.2M IVF: \$351k SIF: \$1.1M (SME contribution)	\$12.7M
Leveraging Ratio (of Program Funds)		VC: 1–3.4 IVF: 1–3.8 SIF: 1–1.8	NSFF: 1–2.4
Other Attributed Program Benefits		2015–2016: additional \$6M provided by NBIF to support applied research and talent recruitment at NB universities and research institutes	2014–2015: portfolio companies generated \$26M in revenues and employed 400 people Innovacorp runs 3 incubation facilities (25 clients) with funding support from ACOA

Canada Economic Development for Québec Regions (CED)

CED focuses funding broadly on 'business development' in Quebec, as shown in Table 9. CED's **Business Development Program** mandate includes new enterprise development, business succession and increasing the competitiveness of existing SMEs to enhance performance and increase their survival.

CED supports projects that enable SMEs to modernize, expand, launch or extend their export activities, and strengthen their capacity to innovate, commercialize and establish partnerships.

CED engages directly with SMEs but also reaches them indirectly through non-profit organizations (NPOs) and promotes business development through the Quebec Economic Development Program (QEDP). Table 9 presents further data on CED.

Through its different funding mechanisms, CED contributed to the development of approximately 9k enterprises in 2015–2016, of which:

- 4.5k enterprises received support in exports and commercialization
- 2k enterprises received support for their productivity and expansion projects
- 1.5k enterprises received support in innovation and technology transfer

Investissement Québec Development Capital (IQ)

IQ is a state-owned enterprise whose mission is to contribute to Quebec's economic development by offering different financing products to entrepreneurs, SMEs and larger enterprises. IQ also administers the Economic Development Fund (EDF) and undertakes foreign investment prospecting and strategic financing operations.²⁹

Different financing mechanisms offered by IQ to support SMEs are extensive, and include:

- UNIQ Financing (all stages of business development)
- ECO-FINANCING (specializing in export businesses)
- IMPLIQ Financing (for cooperatives and non-profit organizations)
- ESSOR: Support for Investment Projects (targeting for-profit companies, cooperatives and non-profit organizations)
- Regional Economic Intervention Fund (FIER)

29 http://www.vgq.gouv.qc.ca/en/en_publications/en_rapport-annuel/en_fichiers/en_Rapport2016-2017-IQ.pdf

TABLE 9: CED-Supported Funding Programs

PROGRAM	Canada Economic Development for Québec Regions (CED) ³⁰	Investissement Québec Development Capital
Date of origin	2005	1998
Background	CED provides funding to support: <ol style="list-style-type: none"> 1. Startup projects; renewal of pool of enterprises in Quebec; support for business succession 2. SME business expansion, innovation and export activities 	Supports enterprises at seed, startup, growth or business repurchase stages Provides support and mentoring services and network of contacts Participates in over 80 funds specialized in financing high potential SMEs
Mode of Delivery	CED has spent \$132M to support the implementation of 747 projects to foster enterprises' growth (up to 2015–2016)	<ol style="list-style-type: none"> 1. Project capital: minimum of \$50k 2. Development capital: \$2M plus (between 20% and 30% of shares or debt financing [up to \$100M] either through 1) senior secured loan [with other lenders] or 2) subordinated loan, with or without guarantee) 3. VC: initial investment of at least \$1M
Target Beneficiaries	<ol style="list-style-type: none"> 1. New enterprises; businesses undergoing succession 2. Existing SME seeking to enhance performance for sustainability and growth 	<ol style="list-style-type: none"> 1. SME must be located in Quebec and have an experienced management team 2. Operate in one of the following industries: manufacturing, information technology, life sciences or green technologies 3. Have an expectation of profitability in the short term (usually 24 months), strong growth potential and globally competitive advantages 4. Have sound financial and operating structure
Funding Provision	Repayable contribution, a non-repayable contribution or a grant	Loans: capitalization loans, interest-free loans, loan guarantees Quasi-equity (debentures, subordinated debt) Equity investments Tax measures Venture capital
Total Annual Funding/ Investment	<ol style="list-style-type: none"> 1. \$18M in grants and contributions (2015–2016) 2. \$132M for SME business development 	
Number of Companies Funded	114 new enterprises (2015–2016) 747 SMEs	
Average Funding/ Investment per Company	\$158k/project \$177k/SME	VC: average initial investment of at least \$1M
Leveraging Ratio (of Program Funds)	CED funding leveraged 1–3.1 (i.e., generated an average investment of \$3.10 in QC regions, representing 8% growth over 2014–2015 (\$2.88))	
Other Attributed Program Benefits	CED clients have 4.4% higher survival rate than non-clients after 5 years 99% supported by CED still in operation 3 years after funding ended	

30 <http://www.dec-ced.gc.ca/eng/resources/publications/dpr/2016-2017/338/index.html>

FedDev (Ontario)³¹

FedDev Ontario's mandate is to support economic growth and competitiveness in Southern Ontario. In 2015–2016, FedDev Ontario delivered ten programs and initiatives, which provided \$160M to strategic initiatives to support innovation, growth and economic diversification in Southern Ontario.

Two key funding programs that are part of the Southern Ontario Prosperity Initiatives (SOPIs) are:

- Investing in Business Innovation program (IBI)
- Investing in Business Growth and Productivity program (IBGP)

Together, these two programs accounted for 37% (\$70M) of the total FedDev budget (\$190M) in 2015–2016. See Table 10 for further data on IBI and IBGP.

The Southern Ontario Fund for Investing in Innovation (SOFII)³

SOFII is a FedDev program providing funding for high-growth, innovative SMEs in rural and urban communities in Ontario. Provision is through loans of usually \$150k to \$500k to support and finance SME growth, which covers:

- Late-stage commercialization;
- New product or service development;
- New applications or markets; or
- Development or implementation of new processes or technologies.

31 There are two RDAs for Ontario, as shown in Table 7. **FedNor** addresses the development needs of northern Ontario and oversees community economic development in non-metropolitan areas in southern Ontario. FedNor has concentrated much of its funding on industrial upgrading, economic diversification and connectivity.

32 <http://www.sofii.ca/>

Table 10: FedDev-Supported Funding Programs

PROGRAM	Investing in Business Innovation (IBI) ³³	Investing in Business Growth and Productivity Program (IBGP)
Date of origin	2009	2009
Background	Focused on investor readiness in support of innovative, early-stage enterprises	Focused on economic growth and job creation in Ontario through SME productivity enhancement
Mode of Delivery	3 different funding streams for: 1. Early-stage SMEs 2. Not-for-profits supporting investor-readiness programs 3. Support for Angel networks	Majority of projects support SMEs expanding their manufacturing facilities and capabilities and resulted in increased exports
Target Beneficiaries	Innovative, early-stage enterprise with less than 50 employees Development of early-stage investor ecosystem in Ontario	SMEs with at least 15 employees, sustainable business model, profitable track record, high potential Not-for-profit industry associations that deliver productivity enhancements
Funding Provision	Repayable contribution to a maximum of \$1M per project for up to one-third of eligible costs	Repayable contribution towards eligible costs to a maximum of \$20M per project for up to 25% of eligible project costs
Total Investment in Program	188 companies supported to date (overall target of 250)	
Total Annual Funding/Investment	\$8M per year (2015–2016)	
Number of Companies Funded	14	18 (2015–2016: from 49 applications)
Average Funding per Company	\$1.75M per project	
Leveraging Ratio (of Program Funds)	Rate of 4.99:1 for direct recipients of IBI funding	Rate of 4:1 (for every \$1 contributed by FedDev)
Other Program Benefits	128 projects (\$4M from IBI), which leveraged \$9.5M in private sector funding	

33 FedDev Department Performance Report. (2015–2016): [http://www.feddevontario.gc.ca/eic/site/723.nsf/vwapj/2015-16_FedDev_Ontario_Departmental_Performance_Report-eng.pdf/\\$file/2015-16_FedDev_Ontario_Departmental_Performance_Report-eng.pdf](http://www.feddevontario.gc.ca/eic/site/723.nsf/vwapj/2015-16_FedDev_Ontario_Departmental_Performance_Report-eng.pdf/$file/2015-16_FedDev_Ontario_Departmental_Performance_Report-eng.pdf)

Western Economic Diversification (WD)

The federal government established WD in 1988 to diversify the historically narrow economic base of Western Canada by supporting knowledge-based enterprises, assisting in the modernization of traditional resource-based industries and strengthening community infrastructure.

Through a number of different programs, WD provides funding to assist SMEs to develop and grow, expand their markets, increase their exports, and become more innovative and productive. This mandate aligns with business development programs in some of the other RDAs.

The Western Innovation Initiative (WINN) is a five-year \$100M program (2013–2018) that provides repayable contributions to SMEs to support the commercialization of knowledge-based products, services and processes. A key objective of WINN is to assist Western Canadian SMEs in accelerating the commercialization process and stimulate greater private sector investment into innovative SMEs. Table 11 provides further information on WINN.

Table 11: WD-Supported Funding Program: WINN

PROGRAM	Western Innovation Initiative (WINN)
Date of origin	2013
Background	A 5-year, \$100M funding initiative that attempts to address the commercialization gap in the Western Canadian innovation process To assist SMEs in Western Canada to move their new and innovative technologies from the later stages of research and development to market
Mode of Delivery	Repayable contributions up to 50% of total eligible costs, to a maximum of \$3.5M per project 'Repayable contribution' for specific set of expenditures to support technology commercialization activities identified in the application Applicant has 6 years to pay back loan
Target Beneficiaries	SMEs seeking to commercialize innovative technology-based products, processes, services SMEs must demonstrate plans to commercialize new technology within 3 years of funding start date
Funding Provision	20% of WINN funding directed to small projects requesting \$500k or less; remaining 80% directed to large projects over \$500k Up to \$3.5M per project to commercialize technology-based products, processes and services Maximum funding limit of \$10M per recipient over the 5-year period
Total Investment in Program	\$100M over 5 years
Total Annual Funding/ Investment	Total investment (2013–2017) is \$97M
Number of Companies Funded	85 projects
Average Funding per Company	\$1.4M
Leveraging Ratio (of Program Funds)	Private sector contributions in excess of \$145M

Provincial Funding Program

Provincial funding programs, compared to federal programs, are more oriented to each provincial government's economic and policy priorities, although Regional Development Agency (RDA) funding supports a number of provincial programs that align with RDA priorities.

In this section, we describe two programs to highlight different approaches to provincial funding support for SMEs: the Commercialization Support for Business Program (CSB) from Manitoba and the Alberta Innovates Integrated Program.

Three other provincial programs are included to highlight how provincial governments may prioritize particular industry sectors and leverage other funding sources. Ontario's MaRS Investment Accelerator Fund (IAF) targets innovative SMEs and seeks to leverage additional private sector funding from local Angel investor groups. Ag-West Bio (SK) and Genomics BC are sector-focused programs that also receive funding contributions from WD.

MANITOBA

Commercialization Support for Business Program (CSB)

Manitoba's government policy is to support SMEs across all sectors, including support for lifestyle businesses. This approach acknowledges the traditional diversified nature of the Manitoba economy and differs from other provinces that prioritize support for particular sectors.

The CSB is a provincially funded program established in 2009 to support SMEs at different stages of enterprise development. Market validation is a key expected outcome of the CSB, but there is also an emphasis on measuring program success over time. Table 12 provides further information on the CSB.

The CSB is a first 'port of call' for many SMEs in Manitoba and involves a two-step process plus a third trade component:

1. CSB1 is the entry-level program, designed for SMEs to build a prototype, register intellectual property (IP) and pay for required certification.
2. Upon completion of CSB1, SMEs can apply for CSB2, which supports company scale-up into the market.
3. SMEs successful in securing CSB2 funding will have demonstrated a product-market fit, and are eligible for the trade component of CSB, which supports funding to enter new markets outside of Manitoba.

With the policy of supporting early-stage SMEs across all sectors in Manitoba, CSB has been relatively successful, with creation and survival of new businesses in the top quartile of Canadian provinces.

Return on investment from public funds in support of Manitoba SMEs is not the key success measure at the provincial level. Other metrics used to assess program success include the number of new companies, new employment and wider economic benefits back to the province.

A small proportion of new enterprises supported through CSB will grow into larger companies. These are typically four- to five-person firms. It is the next level up, beyond the startup and early-stage SMEs, where there are critical challenges (Jim Kilgour, MB).

ALBERTA

Alberta Innovates

Alberta has developed an integrated approach to supporting high potential, growth-oriented technology/knowledge-based SMEs, through the provision of five funding programs delivered by Alberta Innovates, a public agency corporation that is arm's length from the Government of Alberta (also see Table 12).

1. The micro-voucher, under \$10k, assists new companies in first engagement with the market; this typically involves market research, business planning or a feasibility study. The micro-voucher funds up to 75% of the project, and has a quick assessment and approval process (usually in two weeks).
2. The voucher, between \$10k and less than \$100k, supports SME technology development in the mid-to-late developmental stages to advance the technology closer to commercialization. The voucher funds up to 50% of the project, and has an assessment and approval process of approximately six weeks.
3. The Product Demonstration Program (PDP) focuses on more advanced technology development. Funding typically ranges from \$100k+ to \$300k and funds up to 50% of the project. The PDP supports SME activities in an end-user environment, i.e., to help with first sales, and therefore may follow previous research activities eligible for support through other programs that include IRAP and SR&ED.
4. The Industry Associate program supports SMEs to hire and cover salaries for a technical/scientific expert, typically graduates from a master, doctoral or post-doctoral program (\$55k per year for two years), with the company expected to top up with \$10k or more.
5. The Industry Associate program supports SMEs to hire and cover salaries for a business expert, typically a mid- to senior-level businessperson (\$65k per year for two years), with the company expected to provide an additional \$10k, although many companies will double this contribution.

Many SMEs will use a combination of these five programs, e.g., a voucher and an Industry Associate, a voucher and PDP, etc. The intention of having a single agency, Alberta Innovates, to oversee these programs is to ensure a systemic strategy that acknowledges the influences of different programs on company outcomes (Alex Umnikov, AB).

Assessment of the programs is through a 'Technology Commercialization Scorecard', which ties investments to projects. Alberta Innovates will stay in touch with the SME for five years, and request their financial statements each year. These are compared to the financial statements before the project.

Government performance reporting suggests that the voucher program has generated a \$5 increase in revenue per year for every \$1 spent through the voucher program. The voucher program has also demonstrated evidence of leveraging private sector investment into those SMEs receiving vouchers.

Table 12: Provincial SME Funding Programs: Manitoba and Alberta

PROGRAM	Commercialization Support for Business Program (Manitoba)	Alberta Innovates Entrepreneurial Investments (Alberta)
Date of origin	2009	2009
Background	Delivered by Manitoba Growth, Enterprise & Trade to support product and process commercialization and business development in all sectors and regions of the province	Delivered by Alberta Innovates as a 'suite' of small business investment programs to develop knowledge-based industries
Mode of Delivery	<ol style="list-style-type: none"> Stream 1: Product Development: 3rd party product and market validation, registration of IP, working prototype; obtaining product certification Stream 2: Commercialization: transition from prototype to market-ready product Stream 3: Market Development: supports expansion into markets outside of MB 	Five integrated funding programs: <ol style="list-style-type: none"> Micro-voucher Voucher Industry R&D associates Industry Commercialization associates Project Demonstration Program (PDP)
Target Beneficiaries	SMEs engaged in product and process commercialization and business development SMEs in all sectors and regions	High potential, growth-oriented technology, knowledge-based SMEs
Funding Provision	<ol style="list-style-type: none"> Stream 1: maximum grant of \$50k and requires a matching funding component (i.e., requires a \$100k project) Stream 2: maximum grant of \$250k Stream 3: maximum grant of \$30k 	<ol style="list-style-type: none"> Micro-voucher: maximum of \$10k, to fund 75% of project Voucher: maximum of \$100k, to fund 50% of project Industry R&D associates: \$55k for up to 2 years (company expected to top up salary with \$10k or more) Industry Commercialization associates: \$65k for up to 2 years (company expected to top up salary with \$10k or more) Product Demonstration Program (PDP): no upper limit, but projects average \$300k, to fund 50% of project
Total Investment in Program	188 companies supported to date (overall target of 250)	Total spend (2009–2017) over \$40M
Total Annual Funding/ Investment	SMEs limited to a \$250k lifetime limit under CSB	Approximately 120 micro-vouchers funded annually Approximately 40 vouchers funded annually Between 5 and 10 PDPs funded annually Annual budget of voucher program of approximately \$8M Annual budget of Industry Associate program approximately \$5M

ONTARIO

MaRS Investment Accelerator Fund (IAF)

IAF is supported by the Province of Ontario and delivered through MaRS and is focused on early-stage technology companies. IAF can invest up to \$500k in any one company, and is able to provide follow-on funding to bridge these companies from seed stage to the next round of VC financing.

Because companies typically require more than \$500k, IAF actively engages in syndicating (Barry Gekiere, Manager of IAF). This includes engaging with local Angel groups that include G10, York Angels and others, in order to pull together a larger level of funding that is typically between \$1M and \$1.5M.

IAF has invested approximately \$49M in over 120 companies, which have attracted over \$600M of follow-on investment. IAF has returned 40% of investment capital (\$20M) through exits, etc. Table 13 provides further information on IAF.

SASKATCHEWAN

Ag-West Bio

Ag-West Bio was created in 1989 and is funded by the Saskatchewan Ministry of Agriculture along with Agriculture and Agri-Food Canada's Growing Forward II program, with support from WD and NRC-IRAP.

The mandate of Ag-West Bio is to strengthen and support the bio-economy industry in Saskatchewan through efforts to move research to market and grow bio-businesses. It also acts as Saskatchewan's bioscience industry association.

Ag-West Bio Commercialization Fund provides early-stage, repayable investment capital and helps secure matching funds for eligible startups and SMEs. Financing ranges from \$20k to \$300k and targets innovative initiatives where a clear pathway to commercialization can be demonstrated (see Table 13).

Ag-West Bio also provides smaller (less than \$50k) shorter-term investments in promising companies that are closer to commercialization but still not ready for traditional financing or venture capital.

BRITISH COLUMBIA

Genome BC I² Fund

Genome BC was launched in 2001 with an initial investment from the federal government, as part of a commitment of \$136M to support 22 large-scale research projects and technology platforms at five Genome Centres across Canada. Additional funding is provided through WD, the Province of British Columbia, and other public and private sources.

Genome BC's I2 Fund provides commercialization support for companies developing innovative life science technologies in BC. Life sciences includes the biological aspects of industry challenges in the key economic sectors of Agriculture, Energy and Mining, Environment, Fisheries and Aquaculture, Forestry, and Human Health.

The I2 Fund also supports digital health and other technologies that will further move the concept of precision medicine into clinical practice. The I2 funding is repayable and targets promising technologies (products, processes or services) at the early stages of commercial development. A key objective of the Fund is to stimulate further risk capital from other public or private funding sources.

Table 13: Examples of Provincial Funding Programs for Technology-Intensive SMEs

PROGRAM	MaRS Investor Accelerator Fund (IAF) (Ontario)	Ag-West Bio Commercialization Fund (Saskatchewan)	I ² Fund (Genome BC)
Date of origin	2005	1989	2001
Program Background	Delivered by MaRS, for Province; part of Ontario Network of Excellence Leverages resources of Regional Innovation & Accelerator Centres	Business planning input and investment, designed to propel promising bioscience technology companies toward leveraged capitalization, development milestones and commercialization	Purpose of Fund is to provide risk capital that is concurrently matched by other public or private funding sources
Mode of Delivery	VC-oriented multi-stage evaluation process Approval of independent Investment Committee of experienced VCs and Angels	Target 2–4 investments annually, matched with business plan assessment, advisory input, networking, and connections to funding and partners	Work with companies to link them to other investors in the industry
Target Beneficiaries	Early-stage tech companies close to commercialization Product built, early market traction, but no significant revenue or investment IT, health and clean tech, with min. market size of \$100M	Promising bioscience technology companies that are scaling up their technology and focused on commercialization	Innovative life science technology-based products, processes or services Digital health, other tech that transform precision medicine into clinical practice SMEs with clear pathway to commercialization can be demonstrated
Funding Provision	Convertible secured debenture: 12- to 36-month maturity terms; up to 1% equity/\$100k committed May convert to equity and include share price discount	Interest bearing loan, plus royalty, ranging from \$25k to \$300k with a minimum leveraging requirement, advanced in milestone attainment tranches	Repayable growth capital; business must be less than 500 employees From \$100k to \$1M per company Can be debt, equity and royalties A royalty obligation is added to Genome BC funding; allows Genome BC to receive a low, single-digit royalty payment if technology generates significant revenue Cumulative royalty payments capped at 2x the amount of I2 funding. Early repayment of loan with 3 years of disbursement will trigger reduction of royalty cap to 1x
Total Investment in Program	126 companies	\$2.9M principal investments in 14 companies in current portfolio	Equity of \$155M attributed to Innovacorp since 1996
Total Annual Funding	\$7M per year	\$300k	
Number of Companies Funded	10–12 per year (from 300+ applications)	\$13.25M investments in 60 companies since inception in 1989	38 companies
Ave. Funding per Company	\$500k investments	\$220k	
Additional Funding Leveraged	71% of companies (n=90) have attracted \$652M in follow-on investment (average of \$7.2M)	\$292M since inception in 1989	\$780M since inception in 2001
Leveraging Ratio of Program	22 exits, secondaries and repayments	4x	
Other Attributed Program Benefits		Investments have assisted in creating estimated 3,539 person yrs. of employment; \$1.1B total aggregate GDP impact in SK since 1989	

Perspectives on Public Funding

The federal government plays a prominent role in supporting early-stage enterprise in Canada, as described in this section. This includes the early-stage support structures, which include IRAP, BDC, provincial programs and regional seed funds. Various sector-specific funding programs also deliver a substantial level of federal funding.

Some Canadian provinces have moved away from grant programming into more equity types of investing. The 'fund-of-funds' approach can be seen in BC, through the Genome I2 Fund, and in Ontario, with the MaRS IAF. A key premise behind the fund-of-funds approach is the presence of a local fund manager and expectations that a certain proportion of the funds are invested locally (government venture capital (GVC) will be discussed further in Section 4).

A number of provinces offer specialized support to stimulate university-industry collaboration in addition to the commercialization of new technologies. For example, Ontario and Alberta have an integrated province-wide system that coordinates regional innovation activities and provides specialized services to innovative SMEs on a geographical basis.³⁴ Further discussion of these programs is beyond the scope of this report.

Further perspectives on public funding from respondents in Atlantic Canada, Quebec, Ontario and Western Canada are presented below.

Atlantic Canada

1. **Challenge of SMEs raising private funds to be eligible for public programs.** In order to access some public funding sources, the SME needs to raise private investment to leverage the program. There may be opportunity costs for companies waiting to get into a government program and they can lose some momentum in developing their business (Ross Finlay, NS).
2. **Acceptance that SMEs requiring larger capital sources may need to relocate from the Maritimes.** Although it may concern public policy makers, from a private investor perspective, SMEs that require larger capital may need to relocate, emphasizing that it is more about the success of the company. Ross Finlay quotes OpenText Founder, Tom Jenkins, who suggests, "Canada is a great place to start a business but it is 300 million people short of a market."
3. **Improving administrative efficiencies of federal funding programs.** One suggestion is that SR&ED and IRAP could be more aligned to reduce the overhead for government and improve program efficiencies. Both programs are described as 'white-coat' type programs but they do not appear to share much information between the two parent organizations – NRC and Canada Revenue Agency (CRA), the latter of which has a rule that it is independent of everyone in government (Gerry Pond, NB).
4. **Improving investor-readiness of SMEs through public programs.** Early-stage enterprises in Atlantic Canada receive a broad range of support in the form of incubators, accelerators and business programs. However, the biggest challenge is their ability to access capital when they emerge from these programs. Although Atlantic Canada has a large supply of people and agencies supporting SMEs, not all support programs are adept at getting entrepreneurs 'investor-ready' (Ross Finlay).

34 Ontario Regional Innovation Centres (RIC): <https://techalliance.ca/regional-innovation-centres/> Alberta Regional Innovation Network (RIN) <https://albertainnovates.ca/>

5. **Stimulating further lending from financial intermediaries to knowledge-intensive SMEs.**

More could be done to shore up Canadian banks' willingness to lend to knowledge-intensive SMEs, which are challenged by the demand for sufficient collateral (e.g., tangible or traditional assets) to underwrite debt financing and the requirement to demonstrate a track record of recurring years of profitability. This limits funding opportunities for promising Canadian SMEs in knowledge-intensive sectors, such as software, ICT and clean tech (Gerry Pond).

Quebec

1. **Quebec may have a wider range of funding instruments for SMEs than any other region of Canada** (Louis Saint-Jacques, QC). Federal data suggests strong support for SME funding through CED and Investissement Québec, with financing options that include repayable and non-repayable contributions, grants and venture capital.

- In 2015–2016, CED supported 633 projects, providing \$114M in financial assistance to sustain the prosperity and competitiveness of Quebec enterprises.

2. **New enterprise creation is a policy priority.** CED data suggests that the number of entrepreneurs in Quebec is declining, owing to the aging of the population, among other reasons. During the period 2008–2014, the number of entrepreneurs fell by 10% (from 186k to 167k).³⁵ Quebec's entrepreneurial deficit is identified as a major issue affecting the level of business startups.

- In response, CED supported startup projects to renew the pool of new enterprises. In 2015–2016, CED funded 114 projects, for a total of \$18M, to stimulate the creation of enterprises.

3. **A strong government role to stimulate private risk capital is observed in a province-wide Angel network and sidecar fund.** Quebec has taken a different path to supporting Angel investing, compared to, for example, Ontario, where the provincial government there decided to fund numerous Angel groups, which introduced competition among groups (Louis Saint-Jacques).

By contrast, Quebec adopted a federated model for Anges Québec (AQ), with a centre in Quebec City, Montreal and in Sherbrooke. This approach has extended the reach of Angels across the province, to areas in the province where there are fewer investors.

- Government acknowledgement of a funding gap for early-stage SMEs is reflected in strong support for AQ and creation of a sidecar fund. CED funding attempts to address funding requirements between \$50k and \$100k. The other gap, for larger investment, has been filled by the ability of AQ to undertake deals of up to \$2M, which is close to VC Series A levels.

4. **Enhanced funding for SMEs has drawn in venture capital.** Access to different funding instruments in Quebec and the active role of AQ suggests a more integrated 'funding escalator' for financing SMEs. SMEs also receive support at the executive level, with one or two Angels typically taking board seats on each investee company and on the executive committee.

- This approach has attracted interest from venture capitalists (VCs) and there is now a healthy relationship between Angels and VCs, which was not the case 10 or 15 years ago (Louis Saint-Jacques).

35 CED Department Performance Report: <http://www.dec-ced.gc.ca/docs/dpr-2015-2016-eng.pdf>

Ontario

- SMEs are not able to take full advantage of funding programs that could be beneficial, due to factors that include lack of awareness, onerous application processes and difficult eligibility criteria.**
 - EDC provides support, but this tends to favour larger or high-growth SMEs. For example, one program requires a minimum threshold of approximately \$300k monthly recurring revenues (MRR), which greatly reduces the number of eligible companies.
 - BDC provides support for SMEs, some in the form of convertible notes that they can put in place if there are some other funds. For some companies that go through an incubator program, BDC can offer \$100k–150k, but this program is only for a select few applicants.
 - As companies grow and secure further investment, they can also access other public funding sources, which include FedDev, and can provide 50% of matching funding to support investments from accredited investors, up to \$1M (with the average being \$750k).
- Targeting smaller SMEs for particular types of funding support too early may be counterproductive; such companies typically do not have the management resources to execute on those programs** (Pat White, ON).
 - Public funding programs, such as Ontario Centre of Excellence (OCE) programs, Mathematics of Information Technology and Complex Systems (MITACs), National Sciences and Engineering Research Council (NSERC)'s Engage Grants, and MaRS IAF, should target SMEs only when they have a certain maturity and certain size.
 - Wesley Clover International (WCI)³⁶ will not recommend some funding programs to their clients because the applications are burdensome, non-responsive or inadequate. For example, OCE may be more relevant for companies over 50 people, because of the amount of management time and overhead required to dedicate to the application process.
 - Similarly, MITACs would be a more beneficial program for an SME with a strong relationship back to a university professor or research centre.
 - SMEs already generating revenues can work through the Ontario Chambers of Commerce to get access to export dollars to attend a trade show, rent a booth and do various networking activities. However, the application process for applicants can be onerous (Pat White).
- VCs and Angels often expect SMEs to be tapping into available public funding.** Sophisticated investors will ask entrepreneurs if they are taking advantage of IRAP and SR&ED. Angels in Ontario would also ask if the company is taking advantage of the MaRS Investor Accelerator Funds, as these funds can provide companies with a longer run-rate (Michael Turner, ON).
- Public programs are active in stimulating risk capital investment.** With the FedDev Investment in Business Innovation (IBI) program, companies find an interested Angel investor who is prepared to invest and then work together with the IBI program to get an additional top-up in the form of a 0% loan with a very favourable repayment clause (in essence, a debt instrument). This is particularly favourable for the Angel, as there is no dilution (Pat White).

36 WCI, based in Ottawa, has helped to found or fund over 100 enterprises and deploys a management model that supports early incubation startups, through to first-product firms in the accelerator phase, and established companies that trade publicly. <http://www.wesleyclover.com/>

Western Canada

Manitoba

1. **Funding programs in Manitoba need better promotion and selling to SMEs, as the take-up could be stronger** (Jim Kilgour, MB). The existence of public funding programs (e.g., Commercialization Support for Business), Manitoba investor tax credit and the sidecar fund suggests different funding options for SMEs.³⁷ However, smaller companies tend to come back for public financing more often than the government would like. Angel investments are small, typically \$50k or less, which makes larger equity placements difficult (Jim Kilgour).
2. **More assistance for SMEs facing succession challenges.** In recent years, many family-owned SMEs have merged or been acquired and relocated outside of Manitoba. More assistance for these companies is suggested, such as a regional (i.e., Prairie) level pooled regional equity fund targeting succession situations (Jim Kilgour). A number of public funding programs available to Manitoba SMEs are directed more to startups (Jeff Hodge, MB).
3. **While credit unions are active funders of SMEs in Manitoba, the extent of financing is strongly influenced by the executives who lead each credit union** (Robert Warren, MB). CSFG data (2014) shows that smaller enterprises (<20 employees) are more frequent users of credit unions compared to larger enterprises. The government acknowledges a demand for larger funding to support high-growth 'gazelles' and to address a funding gap of around \$10M–20M (Jim Kilgour).

4. **Manitoba is lacking experienced managers capable of building knowledge-based SMEs to scale** (Robert Warren). Although Manitoba and Canada in general, creates many great technologies, the real value in building a business will come from the management team, not from the technology. Two options are suggested to improve management capabilities: 1) import management, which is in short supply across Canada; and 2) send Canadian executives to locations where there is stronger management, where they can gain valuable experiences and then hopefully return to Manitoba.
 - In some cases, the SME may be better served if it relocates to access such managerial talent. Although this approach is less favourable for policy makers who favour economic development and local job creation, it may increase the chances for business success. Option 1 has not met with much success to date and option 2 must be part of a longer-term strategy (Robert Warren).

Saskatchewan

1. **A fair amount of risk capital exists in Saskatchewan, but many SMEs are not ready to access it.** Deal flow is a problem in Saskatchewan, given the province's size and lack of a large deal-flow funnel. Entrepreneurs typically come to the Saskatchewan Capital Network one at a time and "there is not the luxury of choosing the best of the best" (Marie Savostianik, SK).
 - As an example, one Saskatoon-based incubator runs a business plan competition and works with 10–15 startup ventures. However, there is no critical mass of startups progressing through the incubator at the same time, ready to pitch competitively to investors (Marie Savostianik).

37 Manitoba's **sidecar fund** will co-invest with an Angel group for up to \$500k. A key requirement for sidecar funds is to ensure that investment occurs alongside knowledgeable and experienced investors to increase the probability of a successful return and establish appropriate contractual arrangements that influence management.

2. **Fewer financial instruments are available to Saskatchewan SMEs compared to other provinces that offer an investor tax credit, sidecar fund and local venture capital.** There are only two VC firms in Saskatchewan: Westcap Management and Prairie Financial Management. Both operate a labour-sponsored VC fund, but are not active in funding early-stage SMEs.

Alberta

1. **Alberta is addressing the issue of startup and growth funding for knowledge-based SMEs** through programs that include the Alberta voucher program, product demonstration funding and investor tax credits, which complement federal programs such as IRAP and SR&ED. The challenge is to make the system 'perform as a system' to achieve results (Alex Umnikov, AB).
2. **Alberta's funding strategy is not to provide grant funding.** The recommendation of vouchers was to provide non-diluted funding for early-stage startups and SMEs, including larger funding to support product demonstrations. The government has adopted an ethos that it is 'not in the business of business'; thus, vouchers are essentially a coupon for services, so SMEs do not receive funding directly, but receive funding to pay for services they procure from service providers. The Alberta government reviewed different voucher programs in Ireland, Bavaria, the Netherlands and Belgium, which informed development of the Alberta voucher program.
3. **Alberta needs to generate better deal flow and identify promising projects while helping SMEs grow and realize value** (Shaun Peddie, AB). Better deals need to be relevant to the Alberta economy and leverage or extend existing supply chains. This includes finding big corporate players that have a challenge that could lead to significant commercial opportunities that are relevant to Alberta, where, ideally, an Alberta-based SME can solve this challenge.

4. **Further efforts are required to support SMEs in the health care industry, where Alberta spends approximately \$20B per year.** Procurement is identified as an issue, typically favouring safe, off-the-shelf purchases, where there is little room for innovation/experimentation, and where there is greater success in connecting Alberta innovators to multi-national firms than to the Alberta health care system. Smaller Alberta health care companies often move to Toronto and Montreal, or to Vancouver, in order to access existing supply chains, customers, suppliers, headquarters, decision makers, talent, etc. (Alex Umnikov).

British Columbia

1. **BC is a good location for SMEs to raise external risk capital** because of the 30% tax credit, which has the benefit of reducing risk by 30% or increasing the amount of money Angels will invest. These are important incentives when faced with a structural disadvantage in accessing capital compared to the US (Jim Fletcher, BC).
 - However, SMEs face a fundamental structural market issue that affects raising larger amounts of risk capital. While there is no shortage of smart, young entrepreneurs, there is a lack of mentor capability, so these companies tend to be underfunded.

4

PRIVATE EQUITY FUNDING

4 PRIVATE EQUITY FUNDING

This section considers the role of private equity – venture capital (VC) and Angel investment – in the funding of SMEs in Canada. Although equity funding was earlier identified as providing only a small percentage of financing for SMEs (e.g., Canada Survey on Financing and Growth, 2014), equity investment is an important source of funding for knowledge-based, growth-oriented enterprises. More in-depth analysis of private equity activity in Canada is available in other NACO reports.³⁸

Venture Capital (VC)

The past decade has seen a significant increase in public provision of VC in Canada, or government venture capital (GVC). At the federal level, the Business Development Bank of Canada (BDC) has a VC portfolio of over \$1B and is the single largest VC fund in Canada.³⁹ BDC also manages the \$1.35B Venture Capital Action Plan (VCAP), of which \$400M comes from the federal government and the governments of Ontario and Quebec. Export Development Canada is also an active provider of VC, as shown in Table 14.

Table 14: Government Venture Capital Initiatives⁴⁰

Initiative	Amount Allocated	Origin
Business Development Bank of Canada	\$1.178B (as of March 2016)	
Export Development Canada	\$831M (includes VC, other investment)	
Venture Capital Action Plan (VCAP)	\$300M from federal government (plus \$50M to four individual funds); \$50M from Quebec; \$50M from Ontario	2012
Sustainable Development Technologies Canada (SDTC)	\$915M for SD Tech Fund	
Tax Credits for Retail Investors into Labour-Sponsored VC Corporations	\$815M estimated federal tax expenditure cost: 2015/16 to 2020/21	Quebec, 1983 Federally, 1998
Teralys 1 (Quebec)	\$700M, fund-of-funds and direct investment	2009
Ontario Emerging Technologies Fund	\$250M, co-investment vehicle	2009
Ontario Venture Capital Fund	\$90M, direct investments and into funds	2008
New Brunswick Innovation Foundation	\$70M	2002
Build Ventures (Atlantic Canada)	\$65M, direct investments	2014
Alberta Investment Management Corporation (AIMCo)	\$540M for high potential firms	2015
Alberta Enterprise Corporation	\$150M	2008
Farm Credit Canada	\$194M	
AVAC	\$129M, direct investments and into funds	1997
BC Tech Fund	\$100M	2016
BC Renaissance Fund	\$90M	2008

38 <https://www.nacocanada.com/naco-academy/research/angel-activity-reports/>

39 Remillard, R. (2017). *Government Intervention in Venture Capital in Canada*, C.D. Howe Institute.

40 Ibid, p.4.

The active provision of VC at the provincial level, as shown in Table 14, highlights different local funding priorities and funding mechanisms. Some provinces have established seed-capital funds, which operate similarly to a small VC fund. There is also provincial and regional VC, which operates at a level similar to a VC Series A funding level, with some examples presented below:

- AIMCo in **Alberta**, the province's pension-plan investment entity, set aside up to \$540M for investments in 'fast-growing' Alberta companies.⁴¹
- **British Columbia** established the \$90M BC Renaissance Fund and, in 2016, committed a further \$100M to the BC Tech Fund (BCTF), which focuses investment on SMEs in the life sciences/health care, digital media, ICT and clean technology sectors.⁴²
- **Ontario** followed up on its \$90M Ontario Venture Capital Fund with the \$250M Ontario Emerging Technologies Fund (OETF), which, similar to BCTF, focuses investment on clean technology, life sciences, advanced health technologies, ICT and digital media sectors.⁴³
- **Quebec** supported formation of the \$700M Teralys Fund 1 with \$200M contributed from Investissement Québec. Teralys 1 is the largest innovation-focused fund-of-funds in Canada, targeting high-growth SMEs across the country in the IT, life sciences, clean technology and industrial innovation sectors.⁴⁴

- In **Atlantic Canada**, the \$65M Build Ventures fund launched in 2013, with contributions from Nova Scotia, New Brunswick, Prince Edward Island, Newfoundland and Labrador (NL), BDC and EDC.⁴⁵ Venture NL is a smaller VC fund supported by the province (\$10M) and BDC (\$2M), and is managed by Pelorus Venture Capital Ltd.⁴⁶

Venture capital activity in Canada grew by 41% in 2016 compared to 2015 (\$3.2B from \$2.3B) and is the highest on record since 2001.⁴⁷ Average deal size was \$6.1M, with ICT leading with \$2B invested (330 deals), followed by life sciences with \$730M invested (103 deals).

41 http://www.aimco.alberta.ca/AIMCo_AR_2016/index.html

42 <http://www2.gov.bc.ca/gov/content/employment-business/investment-capital/venture-capital-programs/bctech-fund>

43 http://www.ocgc.gov.on.ca/index_en.php?page=ontario-emerging-technologies-fund

44 <http://www.teralyscapital.com/en/>

45 <http://buildventures.ca/>

46 <http://www.pelorusventure.com/>

47 <https://www.cvca.ca/research-resources/industry-statistics/2016-market-overview/>

Perspectives on Venture Capital

Government venture capital (GVC) initiatives are led by a variety of different federal departments that include Innovation, Science and Economic Development (ISED), Finance, International Trade and Immigration, in addition to Crown corporations (e.g., BDC, EDC), as well as by different provincial governments, as shown in Table 14.

The federal government appears active in the so-called 'equity gap' space of \$2M–10M (e.g., VC series A–B) through the Venture Capital Action Plan (VCAP), regionally and provincially, and through labour-sponsored funds that involve federal and provincial support.

At the same time, policies related to GVC continue to evolve. With VCAP set to expire (\$400M in public funds, which reportedly attracted over \$900M in private capital), in 2017 the federal government announced a similar Venture Capital Catalyst Initiative (to be managed by BDC, with \$400M to target late-stage VC over three years).⁴⁸

GVC activity may be motivated beyond only maximizing financial returns, which may be different from private sector investors. Other factors deemed satisfactory in terms of return for risk may include significant social payoffs or localized public benefits, such as economic growth, job creation, or retaining talent in a specific region or sector. Further study is suggested to determine the extent to which GVC is stimulating investment in peripheral and economically lagging regions that lack local venture capital.⁴⁹

Government involvement in VC has raised a number of issues:

- One issue relates to the multiple agencies involved in VC funding and how the absence of a lead department or agency to oversee VC initiatives may affect efficient capital management and flow of investment to Canadian SMEs.
- Another issue relates to different motivations and return expectations of GVC program stakeholders, as noted earlier. Lessons from previously unsuccessful attempts at GVC at the provincial level include the inefficiencies that can arise from public politics, poor decisions and inexperience in running a private equity fund.
- Recognition of different capital requirements is also necessary when considering the current GVC emphasis on life sciences and clean technology compared to sectors already successfully attracting VC, such as ICT (e.g., longer time to grow and to exit for the former).
- Although more GVC is being committed to technology-based, high-growth SMEs, as suggested in Table 14, concerns have been raised regarding the limited role played by corporate Canada in financing and partnering with smaller companies, compared to the US.⁵⁰ This topic is discussed further in Section 6.
- Approximately 40% of all VC investment funds in Canada are foreign, primarily from the US. Larger foreign VC funds tend to target later-stage deals, while Canadian VC funds typically invest in earlier-stage deals, which raises concerns about the potential migration of portfolio companies to other countries.⁵¹ For example, early-stage deals comprised half of all Canadian VC investments in 2016 (\$1.6B over 261 deals).⁵²

48 <http://www.budget.gc.ca/2017/docs/themes/innovation-en.html>

49 Colombo et al. (2016). *Governmental venture capital for innovative young firms*.

50 Remillard, R. (2017). *Government Intervention in Venture Capital in Canada*.

51 Thomson Reuter. (2014). *US VC Investors Make Largest Investments: Canada's Venture Capital Market in Q3*.

52 <https://www.cvca.ca/research-resources/industry-statistics/2016-market-overview/>

Finally, the VC landscape is experiencing significant change with the entry of 'non-traditional' players. In the early-stage market, this includes Angels and Angel networks, crowdfunding entities, Family Offices, corporate players (e.g., Wesley Clover), incubators and accelerators.

In later-stage deals, Canadian VCs are competing with larger foreign funds, corporate venture funds, financial institutions, public pension funds and buyout funds.⁵³ One question relates to the level of experience and capabilities of GVC fund managers as they compete with more experienced and larger funds from the US, Europe and Asia.

Angel Investment

Angel investors are a significant source of local risk capital for growth-oriented SMEs in Canada and in other OECD countries. Estimates of the number of Angels in Canada vary between 20k and 50k, with an estimated annual level of investment between \$500M and \$1B.

The National Angel Capital Organization (NACO) undertakes an annual survey that provides data on the investment activities of its members, with 2016 data presented below:

- NACO's 32 Angel group members (representing 1,650 investors) completed 283 investments for a total of \$134M in 2016. Average deal size was \$1.16M, with 75% of investment deals being syndicated, involving capital from outside the Angel group.
- Most Angels (67%) are located in Ontario and Quebec, with 28% in Western Canada and 5% in Atlantic Canada. Most Angel deals (71%) in Canada involved Ontario and Quebec.

- Investments are primarily in two sectors (63% of deals): ICT and Life Sciences.
- Of 12 positive investment exits recorded, six were mergers and acquisitions (M&A), two were an initial public offering (IPO), and four were sales to new or existing shareholders.

Perspectives on Angels

Canada's Regional Development Agencies (RDAs) are actively involved in supporting Angel groups. For example, in Ontario, FedDev provides support to Angel groups through its IBI program (Table 10), which also funds SMEs on the condition that the company has a term sheet from an Angel or VC. Western Economic Diversification Canada (WD) also has a program to support Angel groups in the four western provinces. Various sidecar funds are also operating across Canada, in Ontario, Quebec, the Maritimes and, more recently, in Manitoba.⁵⁴

Access to capital is a challenge in Atlantic Canada, which represents approximately 7% of Canada's population but only 2% of the VC. Although there is a generous investor tax credit in the Maritimes to support Angel investing, **recruiting high-net-worth individuals** to become Angels is a continuous challenge (Ross Finlay, NS).

Government policies relevant to Angels continue to evolve. In Alberta, the collapse of oil prices has raised efforts to diversify the economy and stimulate risk capital flow into non-traditional sectors. The recently launched Alberta investor tax credit program, designed to attract capital into those sectors, had been recommended by a Technology Commercialization Task Force back in 2008 and rejected by the Conservative cabinet at the time, but has been subsequently adopted by the New Democratic Party (NDP) government in 2017.

Section 6 provides further discussion and perspectives on Angel investing.

53 Remillard, R. (2017).

54 OECD. (2012). *Financing High Growth Firms: The Role of Angel Investors*.

5

INTERNATIONAL PERSPECTIVES ON SME FUNDING

5 INTERNATIONAL PERSPECTIVES ON SME FUNDING

This section provides an international perspective on SME funding and describes some different international funding programs, from the European Union, Germany and Israel, which are relevant comparators for Canada. Further suggestions on research related to SME funding is included.

SME financing is a high policy priority for many countries in the OECD, with evidence showing that a number of countries have introduced loan guarantees, direct lending and interest rate subsidies to mitigate the effect of the bank credit crisis on SMEs.⁵⁵

In addition to stimulating the use of alternative financing instruments from the capital market (also a policy strategy for Canada), financing is increasingly aligned with the provision of consultancy services. OECD data suggests that funding support is most successful when combined with consulting services, business advice or network opportunities, or with financial education more generally, as these services address the underdeveloped financial skills of many entrepreneurs.⁵⁶

In Europe, R&D subsidy programs, in the presence of R&D tax credits and wage subsidies for scientific and technical personnel, have proven effective. Benefits include speeding up projects, increasing project scale and scope, and inducing increased R&D activity.⁵⁷ SMEs most in need of policies to reduce their costs of financing are younger, smaller enterprises operating in technology-intensive sectors.

Competitiveness of Small and Medium-Sized Enterprises (COSME): European Union

SMEs represent over 99% of businesses across the 28 member states of the European Union (EU), which is the same proportion as Canada. The EU definition of Micro, Small and Medium enterprises (MSMEs), which applies across the 28 member states, makes it easier to apply EU-wide finance and support programs for MSMEs (SME definitions were discussed earlier, in Section 2).

COSME provides over €1.3B to support SME funding across the EU. The expectation is that these funds will leverage an additional €25B in financing from other financial intermediaries to support up to 330k SMEs.⁵⁸ COSME commenced in 2014.

COSME supports two financing instruments, briefly described below:

1. Loan Guarantee Facility (LGF):

- Funds guarantees and counter-guarantees for financial intermediaries to provide more loan and lease financing
- Target of 300k SMEs
- Total expected value in lending: €21B (e.g., €70k per SME)

2. Equity Facility for Growth (EFG):

- Provides VC and mezzanine finance targeting expansion- and growth-stage SMEs
- Target of 500 SMEs
- Total expected investment: €4B (e.g., €8M per SME)

55 OECD. (2017). Financing SMEs and Entrepreneurs 2015: An OECD Scorecard.

56 Ibid.

57 Hall et al. (2016).

58 <http://ec.europa.eu/growth/smes/cosme/>

The LGF program is similar to the Canadian Small Business Financing Program (CSBFP), but provides a lower average (estimated) level of funding compared to CSBFP: \$155k versus \$105k (€70k).

The EFG program equivalent in Canada would appear to be Business Development Bank of Canada (BDC) Venture Capital, which allocated \$1.18B in 2016. Inclusion of other Canadian federal VC funds, including Export Development Canada (which provides VC and other investments) and Venture Capital Action Plan (VCAP) raises VC investment to approximately \$2.46B (see Table 14, which presents Canadian VC funding sources).

The estimated EFG average funding per SME (€8M) appears to provide more funding than Canadian equivalents.

Germany

Canada's focus on supporting innovative, technology-based SMEs through different public and public-private funding mechanisms identifies Germany as an appropriate comparator. Germany's low innovation expenditure by SMEs is similar to Canada, with high innovation costs and lack of internal and external financing identified as the most widespread obstacles to innovation.⁵⁹

Table 15 describes four different federal programs in Germany to support R&D-intensive SMEs, which includes funding for SME engagement with German research institutes.

Table 15: German Federal Funding for R&D-Intensive SMEs⁶⁰

Program	BMW ⁱ * (IGF, INNO-KOM-Ost)	ZIM	KMU-innovativ	Specialized Programs
Target Group	Research institutes or not-for-profit external industry research institutes	SME	SME (and firms up to 1k employees and turnover of €1M annually)	Open (SME-focused)
Funding Limit	None (IGF) €500k (INNO-KOM-Ost)	€209k (€380k maximum eligible costs)	None	None
Number of SMEs Funded per Year	240 (IGF) 220 (INNO-KOM-Ost)	2.9k SMEs (additional 1.4k projects from research institutes)	280 SMEs (additional 220 projects from research institutes)	2.6k SMEs (out of 13k total projects)
Total Program Funding/Year	€140M (IGF) €60M (INNO-KOM-Ost)	€320M (plus €190M to cooperating research institutes)	60M (plus €50M to partner research institutes)	€480M
Average Funding per SME	€583k (IGF) €273k (INNO-KOM-Ost)	€110k	€224k	€185k

* BMWⁱ refers to the Federal Ministry for Economic Affairs and Energy; IGF promotes scientific-technical R&D projects, while INNO-KOM-Ost promotes R&D activities for external industry research institutes.

59 Institute for Mittelstand Research: <http://en.ifm-bonn.org/>

60 EFI. (2016). *The Contribution of SMEs to Research and Innovation in Germany*: <https://rio.jrc.ec.europa.eu/en/library/efi-report-research-innovation-and-technological-performance-germany-2016>

Unlike Canada and other European countries, Germany has not used indirect instruments in addition to direct public funding of R&D expenditure. Such instruments include fiscal support measures that grant tax credits or tax exemptions, depending on the level of R&D spending.⁶¹ Germany relies on a mix of different programs, which includes incentives to engage with German research institutes.

Israel

Israel's government has played a major role in economic growth through development of its industries and technologies. The Israeli 'business model' is described as being founded on intensive R&D, on product innovation, on foreign Initial Public Offerings (IPOs) and on acquisitions by US companies.⁶²

Similar to Canada, the federal government is prominent in support for R&D, but Israel's prolific level of startups to commercialize R&D outputs has been influenced by an aggressive public technological incubator program that commenced in the early 1990s.⁶³ A privatization process of most incubators has resulted in an increase in participation of private investors, with over US\$4B invested in incubator companies by 2013.⁶⁴

Companies receive generous support within the incubator program, through two years of grants, and must develop their new idea with export potential. There is recognition that Israeli SMEs must be globally oriented, given the small size of the Israeli market. Licensing of intellectual property (IP) is also strongly encouraged, with Israel among the global leaders in patent filing.

Israel's VC model has also influenced the country's startup success and technological leadership. The Yozma program, created in 1993 with a US\$100M government-owned fund-of-funds, invested \$80M in ten private VC funds, with \$20M in the Yozma Venture Fund owned by the government.⁶⁵ An important goal of the Yozma program was to provide Israeli fund managers with experience and knowledge through partnerships with foreign VCs. As such, it differs from countries such as Canada, which has adopted more of a government venture capital (GVC) model.

Further Research on SME Funding

A number of suggestions for further research on SME funding arise from the comparative literature. One suggestion is to examine how different financial instruments affect innovative SMEs compared to non-innovative SMEs. Another is to examine different effects of financing constraints along the business cycle of R&D-intensive SMEs.⁶⁶ Longitudinal study (e.g., tracking information on the same subjects at multiple points in time) is also suggested – to better understand how SME characteristics influence the effects of different funding sources and how SMEs manage their financial constraints.

Research that examines the influence of different regional contexts could identify how financing constraints affect investment and economic performance differently, depending on the specific geographical and socio-institutional context, the structural characteristics of the relevant firms, and the economic sectors in which they operate.⁶⁷

61 EFI. (2016).

62 Breznitz. (2007). *Innovation and the State, Political Choice and Strategies for Growth in Israel, Taiwan and Ireland*.

63 Avidor. (2011). *Building an Innovation Economy: Public Policy Lessons from Israel*.

64 Israel Innovation Authority: http://www.matimop.org.il/about_authority.html

65 Teubal. (2013). *Promoting High Tech Entrepreneurial Systems: Reflections on the Israeli Experience*.

66 Hall et al. (2016). *Financing constraints, R&D investments and innovative performances: New empirical evidence at the firm level for Europe*.

67 Dosi. (1990). *Finance, innovation and industrial change*.

6

FUNDING CHALLENGES IN CANADA

6 FUNDING CHALLENGES IN CANADA

The final section offers perspectives on seven challenges identified in this study, which, if addressed, could improve access to funding for growth-oriented SMEs in Canada:

1. **Scale-up challenge**
2. **More active role by corporate Canada**
3. **Better organized capital**
4. **Investor tax credits**
5. **Sidecar funds and secondary funds**
6. **Financial regulations**
7. **SME education on funding**

Scale-up Challenge

Different respondents share the view that Canada has a 'scale-up,' – not a 'startup' – issue that needs to be addressed. **A number of factors contribute to the scale-up challenge:**

- Combination of a small and fragmented local market, shortages of experienced business talent, a lack of 'at-scale' sources of growth capital, and an aversion to risk on the part of some of Canada's established companies.
- Canada's startups have smaller exits and face a longer path to exit than their U.S. counterparts. A survey of exit events in Canada and the U.S. since 2000 found that only 1% of Canadian exits occurred with a valuation of more than \$500M; this is compared with 10% of exits in the U.S. This lack of scaling has affected Canadian competitiveness: the country had 18 global industry leaders in 1990, while in 2015 it had just five.⁷⁰

- An identified funding gap in Canada is post-Series A (i.e., between series A and B), where traction and revenues and having a global reach are key investment criteria. Companies must prove that they can move beyond \$2M–3M revenue per year to \$50M–100M revenue per year.
- There is not enough private sector money or funding support in Canada to fill adequately the funding gap. "Anything that allows capital to become more comfortable in this space is a good thing" (Gerry Pond, NB). While there is increased government venture capital (GVC) activity in Canada, as described in Section 4, a number of issues were identified related to return expectations, level of later-stage investment, etc.

Debate continues over Canadian startups selling too early, given the absence of larger sources of capital to do big deals. In addition to investors with deep pockets, lessons from successful tech regions identify other factors necessary for scaling up, which include a large, available market, a critical mass of 'been there, done that' executives, and a dense, interconnected network of support services that the venture can draw upon to grow the business (Jim Fletcher, BC).

The case of Radian6, acquired five years after its inception by Salesforce.com, suggests different spillover benefits arising from an 'early' sale, depending on the nature of the acquisition.

68 <http://www.budget.gc.ca/aceg-ccce/pdf/innovation-2-eng.pdf>

69 Yaletown Partners. (2016). *Canada's Technology Investment Gap: Unlocking the sector's key growth opportunity*.

70 Advisory Council on Economic Growth. (2017). *Unlocking Innovation to Drive Scale and Growth*.

Salesforce.com acquired Radian6 in New Brunswick (NB) for approximately \$325M in 2011, with a number of positive effects from the sale suggested.⁷¹ First, the deal rewarded a group of local Angels, who reinvested their returns in other companies, and allowed an early institutional investor to invest more in NB. The sale helped to finance the regional accelerator Propel ICT and drew new tech entrepreneurs into the local startup scene. The acquiring company, Salesforce.com, established a presence in Atlantic Canada, and Radian6 continued to grow as part of Salesforce.com. In 2012, Salesforce.com acquired another regional company, Golnstant from Halifax, NS, for over \$70M. Radian6 Co-founder Marcel LeBrun described the Radian6 sale as having a “generational effect” on entrepreneurship in the region.

While recognizing that scale-up is a challenge, Canada needs to continue to generate a large amount of grassroots activities, as it is difficult to predict when or where the next great company will come from. Such grassroots activities, as previously discussed, receive strong public support in Canada and cases such as Radian6 demonstrate the positive spillover benefits that can arise from the sale of early-stage enterprises.

More Active Role by Corporate Canada

Related to the scale-up challenge are concerns that new ventures attract little attention from the corporate sector in Canada. Large corporations need growing companies to service their business, and the finance sector is similarly reliant on successful new companies as new clients.

Corporate sponsors could improve domestic productivity and help a Canadian startup at the same time. However, this is a judgment call that is not being made by many executives of corporate Canada and leaving the job of growing the economy through new ventures to the government is not only unfair, but also unwise (Gerry Pond, NB). Corporate Canada needs to step up and “everyone needs to park their agendas, to collectively solve the challenges of growing and financing SMEs” (Jim Kilgour, MB).

Lack of high-quality opportunities and insufficient quality deal flow are among the reasons given for lack of corporate investment. This leads to a wider perception in the market that returns from funding new ventures are not good.

Suggestions for a more active role by corporate Canada include:

- Canada needs more corporate ‘early-adopter’ companies that not only trial and adopt a new product with a small risk on it, but actually embed it into their processes; in other words, embracing Canadian technology as a mainstream solution to running their businesses.
- These early-adopter companies can stay with the program as the new product company grows and scales – to help them to the next level. This might include staying with young companies long enough for them to flourish internationally, which may require longer-term, patient support and corporate leaders willing to invest in Canadian innovation.

71 Entrevestor Intelligence. (2016). *The Deal that Changed Everything*.

- Canadian corporations might not directly fund these SMEs, but they can help them by buying their product early and/or helping them to refine and perfect their product. This demonstrates corporate investment in a solution, suggesting “risk capital of adoption versus investment.”

Most purchasing departments of large companies will not approve sales from a small company with \$1M in sales. Purchase orders typically require \$25M or \$50M in sales from these companies. These are more ‘preservation rules’ that do not support or stimulate further development and sales from Canada’s early-stage technology sector. In the current model, large companies sell to large companies, and typically, in Canada, this involves US-based companies (Gerry Pond).

- The federal government could use its influence to generate more engagement and support from corporate Canada. The existing federal government program to purchase early-adopter products could be improved, as it is identified as time-consuming and overly bureaucratic, which reduces its effectiveness.

Better ‘Organized’ Capital

A key challenge facing SMEs is the need for them to **show traction between each of their funding sources**. “This is where many entrepreneurs fall apart” (Robert Warren, MB). As an example, a company may raise an Angel round that is \$300k of startup funding and then must work very hard the following year to raise another \$500k. Meanwhile, something similar in the US might raise a few million in their first round, and a couple million in the next round, and go to market bigger and faster.

A related challenge in raising public funds is government reporting metrics, which are typically quantitative in nature, such as number of jobs created, so company staff counts may be completely out of line with company revenues, since the company has traded on the staffing to get funded. An Angel looking at such a company will see this misalignment and, even when acknowledging that expenditures always lead revenue, “will realize that there is something wrong here” (Robert Warren).

SMEs seeking capital require a more streamlined approach to funding, where different funders could align their money in a way that encourages those organizations that receive and distribute funding to work together (Marie Savostianik, SK). This approach could fund promising, high-growth companies through to their development stages to become global players. Companies need to have the confidence that they can raise the investment needed to grow and develop (Sandi Gilbert, AB).

While such an approach may involve competition among particular funders to secure the company as a client, aligned funding is possible. This could include sharing a single template for all these organizations to apply for funding, so that they do not have to write multiple proposals every year.

Not all investment opportunities for SMEs are covered under the current funding system (Sandi Gilbert). For example, further equity funding provision to smaller fund managers could allow more fund distribution at the ‘ground level’ – as simply handing money to a fund manager, who gives money to another fund manager, who makes money on the process, limits the level of risk capital flowing to growth-oriented SMEs.

Raising larger investment could benefit from greater alignment of effort across the provinces. In many provinces, Angel deals tend to be small and to undertake sizable deals requires a larger number of Angels. Larger SMEs are looking for investment right across the country, not just in their province (Jim Kilgour).

'National' Investor Tax Credit

A number of respondents raised the topic of a national investor tax credit. Tables 16 and 17 summarize the tax credit regimes for the seven provinces offering investor tax credits (Ontario, Quebec and Saskatchewan currently do not offer tax credits for individual and corporate investors).

Table 16: Atlantic Provinces: Investor Tax Credit Regimes

	NL Direct Equity Tax Credit	PEI Share Purchase Tax Credit	NB Small Business Investor Tax Credit	NS Equity Tax Credit
Tax Credit (%)	20%; 35% (two tax credit rates)	35%	15%; 50% (two tax credit rates)	35%
Description	Max. credit claimed per year is \$50k; fundraising cap of \$3M per eligible company 20%: where investment is undertaken within North East Avalon; 35%: where investment is undertaken outside of North East Avalon	Max. credit claimed per year is \$35k	50%: for individual investors – max. personal income tax credit of \$125k per year (for investments to \$250k)	Max. credit claimed per year is \$17.5k (to a max. annual investment of \$50k)
Tax Credit Carry Over	Yes Can be carried forward 7 years or back 3 years		Yes Can be carried forward 7 years or back 3 years	Yes Can be carried forward 7 years or back 3 years

Table 17: Western Provinces: Investor Tax Credit Regimes

	MB Small Business Venture Capital Tax Credit Program	BC Small Business Venture Capital Program	AB Alberta Investor Tax Credit (AITC)
Tax Credit (%)	45%	30% (for individual investors and for corporations)	30%
Description	Max. credit claimed per year is \$67.5k (for investments to \$450k) Eligible investors must invest min. of \$20k during an approval period	30% refundable tax credit for individual investors; max. claimed per year is \$60k 30% non-refundable tax credit for corporations; no annual tax credit limit	3-year program (to Jan. 2020); non-traditional sectors: digital media and animation, proprietary technologies, tourism activities
Tax Credit Carry Over	Yes Can be carried forward 10 years and back 3 years	Yes Can be carried forward 4 years	Yes Can be carried forward 4 years

We identify two recurring arguments in favour of a national investor tax credit. The first relates to supporting Angel investing in the high-risk, early-stage market. Angels are well placed to serve the early-stage market and direct incentives, such as tax credits, are identified as the most capital-efficient way to incentivize and channel Angel support to early-stage companies (Barry Gekiere, ON).

Seed capital is difficult because most risk capital funding sources do not want to do smaller deals, as it takes as much time and effort to undertake a \$500k investment as it does to undertake a \$5M investment. There is also a great deal of time and effort required by investors to work with early-stage companies, in some cases more time and effort than in working with later-stage companies.

The second relates to stimulating more co-investing and cross-regional investment by Canadian Angels. Angels typically invest in their own backyard, and want to invest in opportunities in their regions, but a harmonized tax credit would stimulate further investments between provinces (Ross Finlay, NS). This would allow, for example, New Brunswick investors to be able to receive a tax credit if they invest in a Nova Scotia company that is just a short distance away.

The local nature of Angel investing challenges co-investment between distant regions of Canada, and Canada's large urban centres are often far from each other (Louis Saint-Jacques, QC). Under the current system, it is difficult to develop alliances between Angel groups across the country or a strong sense of being able to work together. It is also difficult to have a common view of Angels and aligned support when each province has its own economic development agency.

While a national investor tax credit would strengthen the Angel community across Canada, the relationship between Angels is critical. Co-investment by Angels across different regions would require high confidence and trust between investment partners.

An investor tax credit would be expected to attract new investors into the Saskatchewan Capital Network, and a tax credit should be 'rebranded' to emphasize its benefit as a policy for increasing capital for entrepreneurs and not simply a tax relief for investors (Marie Savostianik, SK). In the case of Manitoba, a federal tax credit, to supplement the existing provincial tax credit, could substantially increase investment into larger SMEs (Jim Kilgour, MB).

Discussion over a national investor tax credit also raised some concerns. One is that different provincial instruments may be important in stimulating more local investment and economic development, particularly in areas outside of the major urban centres (Shaun Peddie, AB).

A second concern relates to the administration of the tax credit. If the Canada Revenue Agency (CRA) administers the tax credit, this could affect how company data is shared. There is high value in knowing which companies are 'in the queue', helping to promote those firms who are seeking investment and giving such firms greater exposure to potential investors.

While some privately held capital firms in Alberta (e.g., through family trusts, etc.) may not want to advertise their existence as capital providers – preferring to use more information-intensive and personal networks – these 'touch points' are very valuable in generating flexible local knowledge on those seeking investment and those seeking to invest (Shaun Peddie).

A further concern relates to the length of time and amount of red tape that may arise with additional layers of programs, which is particularly challenging for smaller firms with limited resources. In the case of Alberta's Investor Tax Credit (AITC), each firm seeking to raise equity investment is assigned a program officer, who remains with the firm as long as it engages in the programs. The objective is to facilitate a high level of trust and information sharing between parties. With a larger federal model, it is uncertain if that personal touch point and level of support to the firm would be available.

Sidecar Funds and Secondary Funds

Respondents offer different perspectives on sidecar funds to improve SME access to funding. Dispersing investment risk with a portfolio approach through a sidecar fund allows investors into deals that they typically may miss when attempting to invest small amounts of money. A sidecar fund is beneficial where the entrepreneur seeks to participate in larger investments or lower the threshold of risk.

The sidecar fund can be viewed as a 'trigger fund', where there will not be any decision making by the people in the fund. A sidecar fund would allow new investors, or those who have not made an investment, to invest without the responsibility of doing their own deal and be exposed to more deals than they could do on their own.

The chances of a new investor making a successful first investment and committing all of his/her money into the deal are very low (Marie Savostianik, SK). For example, most Saskatchewan Capital Network (SCN) investors are not looking at doing \$100k deals on their own; they are looking to do small deals and spreading their investment over a number of deals. The deal sizes per investor are typically in the \$10k–25k range. SCN's sweet spot investment is between \$100k and \$200k.

A sidecar fund would be very useful in the Maritimes in mitigating much of the risk for individual Angels and anything that can add more capital to the mix would be welcome. Many regions in North America, outside of major centres such as Toronto, Montreal, Vancouver, San Francisco, New York or Boston, all share similar problems regarding access to capital and larger funding opportunities from VCs (Ross Finlay, NS).

However, concerns are also raised over use of public funds to top up Angel investments through mechanisms such as sidecar funds (Gerry Pond, NB). Similar concerns are identified regarding government venture capital (GVC), as discussed earlier.

In addition to sidecar funds, secondary funds are another mechanism suggested to support growth-oriented SMEs. A secondary fund would invest in an SME once it attains a certain level of activity, and would need, for example, \$10M to \$20M of growth capital, to buy back some shares of the founders and early-stage investors (e.g., Angels and family members).

While secondary funds exist in the US, they are absent in Canada. This absence, it is suggested, is an important missing part, or gap, in the Canadian funding ecosystem, and one consequence of this gap is the selling of Canadian 'gazelles' to foreign interests in the US or elsewhere (Louis Saint-Jacques, QC).

However, establishing a secondary fund would require strong investment management capabilities. In the case of announcing such a new program into the government's budget, and setting aside, for example, \$150M, there would be a request for proposals (RFP), and any provider would need to demonstrate that they could find investment from other sources. This is a more transparent approach, instead of favouring particular special groups. One question is whether NACO could play a role in supporting a secondary fund (Louis Saint-Jacques).

Financial Regulations

Financial regulations influence private equity investment into SMEs. One identified issue is that each jurisdiction or province has its own set of regulations, in terms of who can invest, how much they can invest and what types of investment they can make. While regulations seek to protect those investing, different regulations affect the flow of capital to entrepreneurs and companies.

Another issue with regulations is the regulatory burden on investors seeking to make smaller investments, which may reduce the flow of such investments to early-stage ventures.

Crowdfunding is an example of how regulations influence the market for investment (Sandi Gilbert, AB). In the UK, the online crowdfunding market was allowed to develop and get a head start, with the financial authority regulators taking a step back to see how the market would develop. The regulators then came in and provided regulations that had been initially informed by how the market was developing.

In Canada, by comparison, the regulators first established rules for the crowdfunding market before the market was able to develop and evolve. With regulations now in place, the market is evolving, and the question remains as to how the regulations will affect this market. For example, Canadian regulations require intermediaries involved in crowdfunding to undertake suitability requirements for very small investments, which may constrain such investments.

Modifications to other regulatory policies are suggested. For example, Alberta Enterprise has a fund whose mandate is to invest in other venture funds. However, they are limited to only investing in companies that have more than \$60M under management. Aside from the resource sector, there are very few venture funds at that level in Alberta.

The government could also further legitimize the critical role played by Angels in the economy, which includes clarifying the Security Commission's rules on high-net-worth individuals or private investors. These rules appear to be tightening up, rather than going the other way, and there are some regulatory issues on investor definition that can be improved (Gerry Pond).

SME Education on Funding

Perspectives on improving SME funding include three themes related to the topic of SME education. The first is that Canada needs to do a better job in selling internationally and learning how to scale up companies between 5 and 15 years old, which requires particular sales and growth management capabilities. This includes offering more sales training in post-secondary institutions and in more degree programs to elevate sales as a professional vocation (Gerry Pond).

International sales are described as the 'Achilles heel' for Canadian SMEs, with the need for more training, which includes education and mentorship. Canada already has excellent universities, highly educated graduates and strong public R&D capabilities, but it should not rely on Xerox, HP, IBM and other US-based large technology companies to do all the sales training. Some Canadian post-secondary institutions offer courses in sales taught by instructors often recruited from these large US companies; further contributing to Canada's inability to provide the proper training and education for the sales profession (Gerry Pond).

A second theme relates to further engagement between SMEs and post-secondary institutions. It is often difficult for entrepreneurs and SMEs to get access to the capabilities within these institutions. First point of contact is typically through an institutional administrator, but key project opportunities may be unknown at this first point of contact. For many entrepreneurs who 'have a problem to fix', it is unclear where they go (Shaun Peddie).

There is also a need for an incentive system that better engages post-secondary institutions with SMEs and for interface mechanisms, such as searchable databases on research centres and faculty. Another challenge relates to intellectual property (IP), where claims by universities on IP may make it difficult for the SME to use or further develop IP. This limits the use of local IP as a key asset in support of economic development.

A third theme relates to investor-readiness education. It is suggested that enterprises seeking Angel investment are increasingly challenged to present themselves differently from other companies. This is because many entrepreneurs use similar templates for their financials or templates for their business plans, receive similar support on how to pitch to investors, and use similar jargon on slides in their presentation. This is "making the haystack bigger, and makes it more difficult for Angels to find the needle" (Ross Finlay).

Respondents express further concerns regarding the education of enterprises seeking equity risk capital. While many Angel networks provide additional advice and support for companies seeking to better understand the investment process and raise capital, it is not the mandate of Angel networks to make companies investable or to be 'entrepreneur-friendly'. Rather, Angel networks exist to be 'Angel-friendly', to make sure that Angels see the best deals, negotiate the best terms and get the best returns (Ross Finlay). Other programs could further support investor-readiness.

In closing, SME funding programs and related government policies continue to evolve in Canada, as suggested by the report. Further study and analysis is required to better understand and inform how to improve policy and practice for Canada's growth-oriented SMEs.



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APPENDIX

APPENDIX

APPENDIX A: Number of SMEs by Province⁷²

Province, Territory	Small (1–99)	Medium (100–499)	Large (500+)	Total	No. of SMEs per 1,000 population
BC	176,014	2,623	329	178,966	45.2
Alberta	165,792	3,076	437	169,305	50.0
Saskatchewan	40,453	644	88	41,185	45.5
Manitoba	37,776	829	107	38,712	37.3
Ontario	407,175	8,437	1,189	416,801	36.3
Quebec	235,075	4,301	590	239,966	34.7
Nova Scotia	29,298	556	68	29,922	37.3
New Brunswick	25,002	443	64	25,509	40.0
Nfld./Labrador	17,174	307	45	17,526	39.1
PEI	5,838	83	14	5,935	48.7
Yukon	1,723	34	0	1,757	45.2
NWT	1,606	51	1	1,658	48.5
Nunavut	704	31	1	736	29.6
CANADA: Total	1,143,630	21,415	2,933	1,167,978	39.2
Percentage	97.9%	1.8%	0.3%	100.0	

72 Key Small Business Statistics. (June 2016). Innovation, Science & Economic Development Canada.

APPENDIX B: SMEs by Sector (showing top 12 of 20 sectors)⁷³

Industry Sector	Total	1-4	5-9	10-19	20-49	50-99	100-199	200-499	Large 500+
Retail Trade	145,556	53,060	41,987	26,914	15,049	5,555	2,115	779	107
Construction	141,246	85,701	28,494	14,314	8,578	2,546	1,059	412	142
Professional, Scientific and Tech Services	138,375	103,809	16,342	9,365	5,799	1,845	758	343	114
Other Services	110,233	69,795	23,400	10,768	4,579	1,068	424	156	43
Health Care and Social Assistance	107,423	60,206	20,621	13,923	7,546	2,567	1,442	758	360
Accommodation and Food Services	79,693	19,347	18,960	18,313	17,053	4,721	950	292	57
Transport and Warehousing	63,629	44,399	7,493	5,065	4,075	1,405	712	351	129
Wholesale Trade	60,184	25,458	13,467	10,671	7,339	2,133	741	315	60
Admin and support; Waste and Remediation	52,800	27,466	10,778	6,538	4,449	1,762	976	634	197
Manufacturing	50,902	17,768	10,119	8,202	7,842	3,558	1,987	1,134	292
Real Estate, Rental, Leasing	49,068	33,990	7,365	4,194	2,392	694	263	122	48
Finance and Insurance	42,762	20,853	6,589	5,857	7,531	1,003	444	325	160

73 Key Small Business Statistics. (June 2016). Innovation, Science & Economic Development Canada. The remaining sectors, including information and cultural industries, education services, public administration and utilities, have smaller numbers of SMEs and are dominated by larger enterprises.

This report is produced by the National Angel Capital Organization.

The National Angel Capital Organization accelerates a thriving, early-stage investing ecosystem in Canada by connecting individuals, groups, and other partners that support Angel-stage investing. NACO provides intelligence, tools and resources for its members; facilitates key connections across networks, borders and industries; and helps to inform policy affecting the Angel asset-class.

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