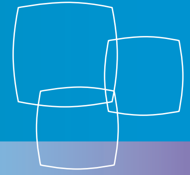
Industry Canada Industrie Canada

Canada



www.ic.gc.ca/SMEresearch/reports

Small Business Access to Financing: Request and Approval Rates, Interest Rates and Collateral Requirements (2000–10)

July 2013

Small Business Branch
Reseach and Analysis Directorate

Daniel Seens

This publication is available upon request in accessible formats. Contact:

Multimedia Services Section
Communications and Marketing Branch
Email: multimedia.production@ic.gc.ca

This publication is also available online at www.ic.gc.ca/SMEresearch/reports.

If you have questions or comments on this research paper, please email
smers-rspme@ic.gc.ca.

Permission to Reproduce
Except as otherwise specifically noted, the information in this publication may be reproduced, in part or in whole and by any means, without charge or further permission from Industry Canada, provided that due diligence is exercised in ensuring the accuracy of the information reproduced; that Industry Canada is identified as the source institution; and that the reproduction is not represented as an official version of the information reproduced, nor as having been made in affiliation with, or with the endorsement of, Industry Canada.

For permission to reproduce the information in this publication for commercial redistribution,
please email droitdauteur.copyright@tpsgc-pwgsc.gc.ca.

Cat. No. Iu188-111/2013E-PDF
ISBN 978-1-100-22461-9

Aussi offert en français sous le titre *Accès des petites entreprises au financement : taux de demande et d'approbation, taux d'intérêt et exigences en matière de garantie (2000–2010)*, juillet 2013.

Contents

I. Introduction **1**

II. Demand-Side Survey Statistics **2**

1. Overall Request Rates *2*

2. Overall Debt and Equity Request Rates *3*

3. Equity Request Rates by Type of Business *5*

4. Debt Request Rates by Type of Business *6*

III. Supply-Side Survey Statistics **7**

1. Overall Approval Rates *8*

2. Debt Financing Approval Rates by Type of Business *10*

IV. Terms of Financing Statistics **12**

1. Financing Costs *12*

2. Collateral Requirements *14*

V. Conclusion **16**

I. Introduction

The Small Business Branch of Industry Canada has compiled and analysed the results of the *Survey on Financing of Small and Medium Enterprises* and the *Credit Conditions Survey* to showcase information on small business financing activities between 2000 and 2010.

Research and analysis based on survey data are important to policy-makers when developing policies and programs to assist Canadian businesses in accessing financing. Information on trends and developments among borrowers and lenders provide insight into future financing activities and capital market efficiencies. The 2007–08 financial crisis and worldwide recession highlighted the importance of continual monitoring of financial market activities, and in particular, given their significance in the Canadian economy,[1] small business financing activities.

Industry Canada conducts regular surveys to gather information on small business financing activities, often in partnership with Statistics Canada. Starting in 2000, the triennial *Survey on Financing of Small and Medium Enterprises* collects information from a sample of small and medium-sized businesses (SMEs) on request rates, approval rates, interest rates and collateral requirements. The survey also collects supplementary information from business owners regarding whether access to financing is an obstacle to business growth. The *Credit Conditions Survey*, which started in 2009, provides complementary information on business financing activities and is done in years when the *Survey on Financing of Small and Medium Enterprises* is not conducted.

This report explains how the surveys were conducted, presents select survey questions and highlights salient points in the findings. It provides a basis for assessing whether access to financing continues to be a challenge for certain groups of Canadian businesses, namely small businesses, young businesses and growth-oriented businesses as was identified in past research.[2] The report is organized in the following five sections: Section I is the introduction; Section II looks at demand-side survey statistics; Section III looks at supply-side statistics; Section IV looks at terms of financing; and Section V presents the conclusion.

Survey on Financing of Small and Medium Enterprises* and the *Credit Conditions Survey

Survey on Financing of Small and Medium Enterprises (now known as the *Survey on Financing and Growth of Small and Medium Enterprises*)

This survey was developed by Industry Canada in partnership with Statistics Canada to measure the demand for, and sources of, financing for Canadian SMEs. It was first conducted in 2000 and is repeated every three years. The survey also gathers information on the financing application process, firm profiles and demographic characteristics of SME ownership. A representative sample of over 10 000 respondents is normally collected.

[1] Small businesses: account for approximately 99.1 percent of the total 2.4 million businesses operating in Canada; represent nearly all of Canada's employers (98.1 percent); employ almost half of Canada's private sector workforce; and represent nearly 86-percent of all of Canada's exporters.

[2] Equinox Management Consultant Ltd. *Gaps in SME Financing: An Analytical Framework*. (2002)

Credit Conditions Survey

This survey was developed by Industry Canada and is commissioned to monitor changes in lending conditions. It was conducted in 2009 and 2010 and will be conducted in years when the *Survey on Financing and Growth of Small and Medium Enterprises* is not conducted. Analysis focuses primarily on debt financing as it is by far the largest source of financing for small businesses. A representative sample of over 3500 respondents is normally collected.

For the purpose of both surveys, a small business was defined as a business that:

- Operates in the manufacturing; retail/wholesale trade; professional, scientific and technical services; accommodation and food services; agriculture; construction, mining; transportation; or other services industries;
- Employs between 1 and 99 employees; and
- Generates between $30 000 and $50 million in annual revenues.

Exclusions from the target populations include sole proprietorships, non-profit and government organizations, schools, hospitals, subsidiaries, co-operatives, and financing and leasing companies.

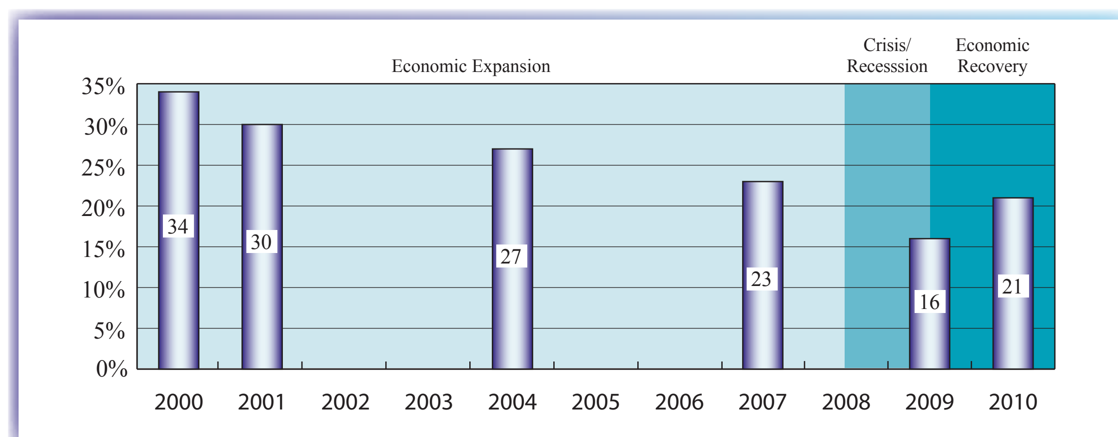
II. Demand-Side Survey Statistics

This section takes a “demand-side” look at small business financing needs. More specifically, the *Survey on Financing of Small and Medium Enterprises* and *Credit Conditions Survey* asked businesses to report whether they requested external financing over the previous 12 months. Responses were aggregated and used to construct “request rate” indicators. The remainder of the section looks at financing request rates for small businesses overall, for debt and equity sources of financing, and for debt and equity sources of financing across various categories of businesses.

1. Overall Request Rates

Figure 1 shows small business financing request rates at the most aggregate level for the six years between 2000 and 2010 where surveys were undertaken. The decade started with request rates at their highest level (34 percent). Request rates fell to 30 percent in 2001 following the dot-com crash and the 9/11 terrorist attacks. Over the next six years (2002–07), economic growth remained strong and small business financing request rates continued to decline, falling to 27 percent in 2004 and 23 percent in 2007. Essentially, small businesses had fewer needs for externally generated funds as growth projects and working capital needs could be more cheaply financed through company profits and retained earnings. Request rates hit a decade low of 16 percent in 2009 following the American and European financial crisis of 2007 and 2008 and ensuing global recession, though the reasons for the low rates are likely different than those during the 2002–07 period. As the economy started to recover in 2010, request rates rebounded to 21 percent, though rates remained considerably lower than at the start of the decade.

Figure 1:
Small business financing request rates (percent)



Sources: Industry Canada *Credit Conditions Survey*, 2009 and 2010; Statistics Canada *Survey on Financing of Small and Medium Enterprises*, 2000, 2001, 2004 and 2007; and Statistics Canada *National Accounts*, 2010.

Overall, this historical profile of changes in small business financing request rates shows that about 25 percent of small businesses, on average per year, requested financing to support their operations. The two most common reasons cited by business owners for seeking financing were to purchase fixed assets, such as land and buildings, and to support working capital needs. The main reason cited by business owners for not seeking financing was that it simply was not needed. Figure 1 also illustrates that overall small business financing demand is sensitive to economic events.

2. Overall Debt and Equity Request Rates

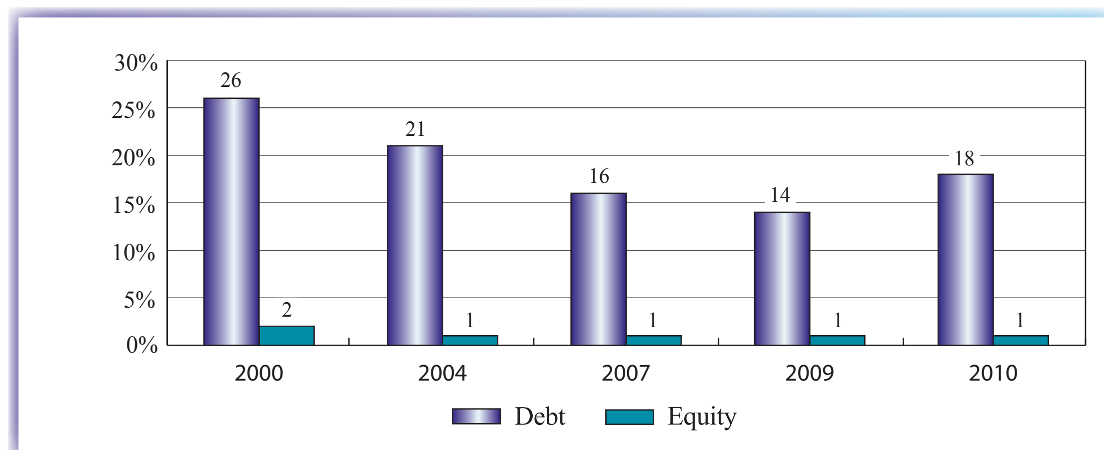
Debt and equity are two main sources of financing available to businesses to fund their operations. Determining which and how much of each to seek depends on the goals of the businesses, the risk tolerance of owners, and the amount of control owners wish to maintain. Figure 2 shows small business debt and equity financing request rates for the five survey years between 2000 and 2010.

Major differences exist between small business debt financing requests rates and equity financing request rates. Debt request rates varied from a high of 26 percent in 2000 to a low of 14 percent in 2009. Equity request rates remained fairly constant at about 1 percent to 2 percent. Small business debt financing requests usually were for amortizing loans with regularly scheduled interest and principle payments. Banks represented the main supplier of debt. Equity financing took the form of funds contributed by investors in exchange for ownership stakes in the companies. Equity funds included the contributions of family, friends and employees, angel capital, venture capital and funds from shares listed on public stock exchanges.

The choice of whether to seek debt or equity is an important decision faced by business owners. Both have advantages and disadvantages and volumes have been written on the topic.[3] One of the main advantages of debt financing is that it also allows business owners to raise financing while at the same time retain ownership control. That is, because debt holders do not own the company, their ability to influence the operations of the business is limited to the extent that they can impose operating or financial covenants on the firm (e.g., require that the business' debt-to-equity ratio remain below a certain threshold). Another advantage of debt financing is that it allows business owners to write-off their annual interest charges against earnings, allowing them to lower their annual tax bills.

[3] Wheelen, T., J. Hunger. *Strategic Management and Business Policy*. (2002)

Figure 2:
Small business financing request rates (percent)—debt vs. equity



Sources: Industry Canada *Credit Conditions Survey*, 2009 and 2010; Statistics Canada *Survey on Financing of Small and Medium Enterprises*, 2000, 2004 and 2007.

One of the main disadvantages of debt financing is that it can be difficult for certain types of businesses with negative or volatile cash flows to make regularly scheduled interest and principal payments. This can leave these businesses particularly sensitive to economic fluctuations. Too much debt can also be a problem because it increases the financial risk of the business. That is, it increases the risk of default and bankruptcy in a rising interest rate environment.

One of the main advantages of equity financing is that the business owner has flexibility in terms of the repayment of capital and is not obligated to make scheduled payments. This leaves the business less sensitive to economic shocks and unexpected events. One of the main disadvantages of equity is that it requires business owners to give up some of their ownership control. Survey evidence confirms that Canadian small businesses are reluctant to do this. This helps explain why debt financing request rates were so much higher than equity financing request rates. Data from the 2007 *Survey on Financing of Small and Medium Enterprises* shows that, among businesses planning to expand, only about 33 percent of those with 1–4 employees, 35 percent of those with 5–19 employees and 18 percent of those with 20–99 employees would be willing to share ownership interest to fund their expansion. Alternatively, about 86 percent of businesses with 1–4 employees, 89 percent of businesses with 5–19 employees and 98 percent of businesses with 20–99 employees would be willing to fund their expansion with debt.

That being said, the differences in request rates still need to be interpreted cautiously. A large proportion of small businesses in Canada are stable or normal growth firms.[4] These firms generally do not have extreme needs for financing so in most cases might more easily satisfy their needs with debt. However, this might not be the case for all categories of business, namely young firms, growth-oriented firms, or others that have no or low levels of profitability and that might find it difficult to service debt. Data in the next two sections takes a closer look at small business equity and debt financing request rates for different categories of businesses.

[4] Growth for a "normal growth firm" is, on average, in line with nominal gross domestic product growth.

3. Equity Request Rates by Type of Business

Businesses seeking equity typically have higher than average risk and uncertainty; low or negative cash flows; untried market products; and uncertain future prospects. Equity financing is well suited for growth-oriented or young firms as they can have difficulties generating sufficient cash flow to make scheduled interest and principal payments on debt.

As can be seen in Table 1, only a small percentage of businesses sought equity financing the five survey years between 2000 and 2010 (1.4 percent on average in aggregate). Equity request rates varied slightly between firms of different sizes. As expected, equity request rates for younger businesses (≤3 years in operation) were, on average, higher than for older businesses (>3 years in operation). Also, exporter's equity request rates were, on average, about twice as high as non-exporter's equity request rates.

Consistent with expectations, survey results showed that a larger proportion of growth-oriented firms requested equity financing to fund their operations (3.6 percent on average compared to 1.4 percent for other firms). A greater percentage of innovative or research and development (R&D) intensive businesses (those that reinvest more than 20 percent of revenues on R&D) requested equity financing to fund operations and support expansion initiatives.[5]

Survey results are generally consistent with expectations. That is, while only a small proportion of small businesses in Canada request equity financing, among those businesses that do seek equity financing, request rates are highest for the youngest businesses, the most innovative businesses and the most growth-oriented businesses. These findings support the policy position that equity related government assistance be targeted at these types of firms.

Table 1:
Small business equity financing request rates (percent)

Business Category	Year					Average
	2000	2004	2007	2009	2010	
Size of business (number of employees)						
1–4	1.6	1.0	1.0	<1	<1	1.0
5–9	2.5	1.1	1.1	2.8	1.0	1.7
10–19	3.3	2.8	2.1	1.0	1.0	2.0
20–99	3.6	6.4	3.7	3.1	1.5	3.7
Age of business (years in operation)						
0–3	4.0	3.5	2.1	2.2	<1	2.4
4–10	1.6	1.3	1.0	1.6	1.0	1.3
>10	1.2	2.3	1.0	1.1	1.0	1.3
R&D intensity						
R&D expenditure ≤20% of revenues	1.8	1.2	1.2	1.3	—	1.4
R&D expenditure >20% of revenues	11.8	4.8	1.6	3.7	—	5.5
Export orientation						
Exporter	3.5	3.5	2.3	1.9	2.1	2.7
Non-exporter	1.8	1.1	1.1	1.2	<1	1.1
Growth orientation						
Growth-oriented	6.7	2.4	1.6	—	—	3.6
Other	1.9	1.2	1.2	—	—	1.4
Total	2.0	1.3	1.2	1.3	1.0	1.4

Sources: Industry Canada *Credit Conditions Survey*, 2009 and 2010; Statistics Canada *Survey on Financing of Small and Medium Enterprises*, 2000, 2004 and 2007.

[5] It is important to note that many growth-oriented businesses are also R&D intensive businesses.

4. Debt Request Rates by Type of Business

Given the diversity of small businesses, the varying markets in which they compete, and the different financial circumstances in which they operate, it would not be surprising if their needs for debt financing also varied. Table 2 provides a breakdown of small business debt request rates by size of business, age of business, R&D intensity, export orientation, and growth orientation. The aim is to make policy makers aware of common patterns in debt markets so that they are in a position to incorporate such information into analysis and advice.

Table 2:
Small business debt financing request rates (percent)

Business Category	Year					Average
	2000	2004	2007	2009	2010	
Size of business (number of employees)						
1–4	24.2	19.1	13.5	10.4	15.5	16.5
5–9	29.3	20.0	18.9	15.6	20.9	20.9
10–19	35.6	28.9	24.4	19.3	23.3	26.3
20–99	35.0	32.1	26.9	26.9	24.0	29.0
Age of business (years in operation)						
0–3	31.8	27.2	20.0	30.0	22.6	26.3
4–10	27.3	21.5	16.9	17.5	20.5	20.7
>10	21.0	20.9	15.0	12.1	17.1	17.2
R&D intensity						
R&D expenditure ≤20% of revenues	26.1	21.2	15.8	14.6	—	19.4
R&D expenditure >20% of revenues	43.0	42.1	26.0	13.4	—	31.1
Export orientation						
Exporter	38.6	32.2	24.5	17.5	20.8	26.7
Non-exporter	24.8	20.7	15.2	13.8	18.4	18.6
Growth orientation						
Growth-oriented	43.8	28.1	19.7	—	—	30.5
Other	26.2	18.1	15.8	—	—	20.0
Total	26.4	21.3	16.2	14.2	18.4	19.3

Sources: Industry Canada *Credit Conditions Survey*, 2009 and 2010; Statistics Canada *Survey on Financing of Small and Medium Enterprises*, 2000, 2004 and 2007.

Survey findings are generally consistent with the view that debt financing needs are positively related with the size of the business. Evidence also shows that a greater percentage of young businesses tend to request debt. This is not surprising as most young businesses need some form of external financing to purchase new assets, materials, develop new products and to cover day-to-day operating expenses. Also, as they progress from young start-up businesses to initial growth, they frequently require significant capital to fund expansion and acquire new technologies. Older businesses tend to be better established and financially secure.

Similarly, a greater percentage of R&D intensive businesses tend to request debt compared to low or non-R&D intensive businesses. This could suggest a greater desire for growth.[6] It could also reflect the more rapidly changing nature of the sectors in which they operate and the inherent need to spend more on market research, product development and testing to remain competitive.

Survey results also provide evidence of greater financing requests among export-oriented and growth-oriented businesses.[7] Survey data shows that,

[6] Data from the 2004 *Survey on Financing of Small and Medium Sized Enterprises* revealed that about 73 percent of R&D intensive SMEs had intentions to grow versus 38 percent of non-R&D intensive SMEs.

[7] It is important to note that in some cases growth-oriented businesses are also export-oriented businesses.

on average, about 27 percent of exporters and 31 percent of growth-oriented firms requested debt financing in the five survey years between 2000 and 2010. This compared to non-exporters and businesses with less growth orientation where approximately 18.6 percent and 20 percent of companies requested debt financing. Though not shown here, survey evidence on request rates across sectors suggests that small businesses in capital intensive sectors—manufacturing, agriculture and transportation—have greater debt needs than businesses in more labour intensive sectors.

In summary, Canada's larger businesses, younger businesses, R&D intensive businesses, export-oriented businesses and/or growth-oriented businesses had the greatest requests for debt financing.

Discouraged borrowers

Discouraged borrowers are borrowers that have a need for financing but do not actively seek financing because they believe, correctly or not,[8] that their requests will be turned down. This belief can stem from a variety of factors, including:

- The rejection of past requests;
- A shortage of capital in the region or industry sector;
- Discrimination;
- Poor, or lack of, credit history;
- Lack of equity;
- Lack of collateral to pledge as security; and
- Lack of expertise and/or managerial skills.

In the 2010 Industry Canada *Credit Conditions Survey* it was determined that approximately 3 percent of small businesses that did not apply for financing chose not to do so because they thought their request would be turned down. Therefore, in assessing the financing request rates presented above, it is important for policy makers to note that businesses' true financing needs are most likely underestimated.

III. Supply-Side Survey Statistics

This section takes a "supply-side" look at small business financing activities. That is, the *Survey on Financing of Small and Medium Enterprises* and *Credit Conditions Survey* asked businesses to report whether their request for financing over the last 12 months was approved, which gives supply-side insights into the presence of "financing gaps." Responses were aggregated and used to construct indicators of small business financing approval rates. This section looks at debt and equity financing approval rates for small businesses overall, and debt financing approval rates across various subcategories of businesses.

[8] Evidence produced by Chandler (2010) suggests that many discouraged borrowers have better information on themselves and on their financial institution, making them more realistic borrowers. Consequently, their decision not to apply for financing could be rational and efficient.

1. Overall Approval Rates

There is a broad array of small businesses in Canada, varying in size, industry, region and growth intention. Some are highly innovative and driven by growth, while others want to generate a steady stream of income. Depending on the competitive nature of a business, its resource base, the stage of development, the degree of industry competition and the overall economic climate, small business financing needs and the available supply of financing are likely to vary.

A common concern among policy makers in Canada is that small businesses face a "financing gap." However, no generally accepted definition of a gap exists. In practice, researchers attempt to measure gaps by trying to ascertain the percentage of businesses that "need" financing and are "deserving" of financing but are unable to access it from financial institutions. Another approach is to try to measure, among business applicants who appear to be identical, the number approved for financing and the number refused financing.[9] Alternatively, researchers measure the number of businesses that are refused financing regardless of what interest rates they are willing to pay.

Due to its simplicity, the most common method of measuring gaps is to compare the percentage of businesses that sought financing and the percentage that were approved. Questions regarding project risks or the credit worthiness of borrowers are not addressed in this approach. Data on small business loan requests and approval rates presented here look at gaps from this perspective. A complementary measure based on the ratio of funds authorized to funds requested is also presented where data permits.[10] Both approaches provide an objective basis for gauging the percentage of small businesses, and value of financing requests, left unserved by the market. Findings are presented in Table 3.

Table 3:
Financing request rates, approval rates, and ratio of value of funds authorized to value of funds requested (percent)—by instrument type

Year	Equity			Debt		
	Request	Approval	Authorized/ Request	Request	Approval	Authorized/ Request
2000	2.0	79.1	26.2	26.4	83.5	82.5
2004	1.3	51.3	—	21.3	87.5	89.1
2007	1.2	80.4	—	16.2	94.4	88.3
2009	1.3	85.3	61.3	14.2	79.0	72.1
2010	1.0	85.3	37.8	18.4	88.0	87.3

Sources: Industry Canada *Credit Conditions Survey*, 2009 and 2010; Statistics Canada *Survey on Financing of Small and Medium Enterprises*, 2000, 2004 and 2007.

Table 3 shows that only a small percentage of debt requests were turned down. On average, about 86 percent of debt financing requests were approved and about 84 percent of the value of funds requested were authorized. These results suggest that, at the aggregate, a gap in the debt financing market does not exist. Financing issues for sub-sectors of firms is addressed in the next section.

Low approval rates for equity requests (76 percent on average) and a low authorized/requested ratio (42 percent on average) may imply a financing gap,

[9] Organisation for Economic Co-operation and Development. *The SME Financing Gap (VOL I): Theory and Evidence*. (2006)

[10] The ratio would equal 100 percent if the full value of financing sought by businesses was supplied by the market and 0 percent if the market refused to supply businesses with any financing at all.

or a "partial financing gap," in the small business equity financing market. This result is not surprising. Investors are generally more reluctant to make equity investments than debt investments. Various factors could explain this, including:[11]

- *Liquidation risk*: Equity investors have a secondary claim on company assets in the event of default. This increases the risk of making equity investments.
- *Payment uncertainty*: In exchange for lending, debt investors receive legally contracted principal and interest payments that must be paid regardless of the state of the economy or profitability of the business. In contrast, equity investors have only a residual claim on company cash flows after all debt servicing expenses are made. Thus, unlike the certainty associated with fixed and stable payments received by debt investors, equity investors may not receive any return on their investment.
- *Illiquidity*: Equity investments in small businesses are primarily "private equity investments." That is, shares cannot be traded on public stock exchanges. This makes them a relatively illiquid form of investment.
- *Investment and operational knowledge*: Equity investors in small businesses frequently require extensive operational knowledge and management skills. Investors that do not have these skills often avoid making equity investments.
- *Limited information*: Equity investors often demand more information than what is supplied to debt providers. Small businesses are sometimes unwilling to supply this information. This can put investors in high-risk positions whereby they are unable to assess the true value and future prospects of the borrower.

In addition, "exit" via buyout or initial public offering (IPO) is a primary concern of small business equity investors. By its very nature, equity investments in small businesses require investors to commit to a horizon of several years. This means that investors do not have a quick path to profits. Selling their equity stakes depends on the ability of the business to create buyout opportunities. The business' inability to do so or a weak IPO market might require investors to commit their capital for even longer periods of time. Because many investors are averse to committing capital for long periods of time, it is not surprising that there are situations in which a large amount of equity requests are rejected.

Equity financing gaps in international markets

In 2006, the Organisation for Economic Co-operation and Development (OECD) conducted an international survey on SME financing gaps. Policy experts were asked to report "if" and "where" a financing gap existed. Of the 20 countries that participated, only 30 percent indicated a financing gap in debt markets. About 75 percent identified gaps in their equity markets with various reasons cited, including:[12]

- Asymmetric information between borrowers and investors;
- Lack of institutional investors;
- Unwillingness of businesses to share control with another party; and
- Conservative nature of capital market participants.

[11] Solnik, Bruno, Dennis McLeavey. "Alternative Investments," Level I Program Curriculum, CFA Institute. (2007)

[12] Organisation for Economic Co-operation and Development. *The SME Financing Gap (VOL I): Theory and Evidence*. (2006)

2. Debt Financing Approval Rates by Type of Business

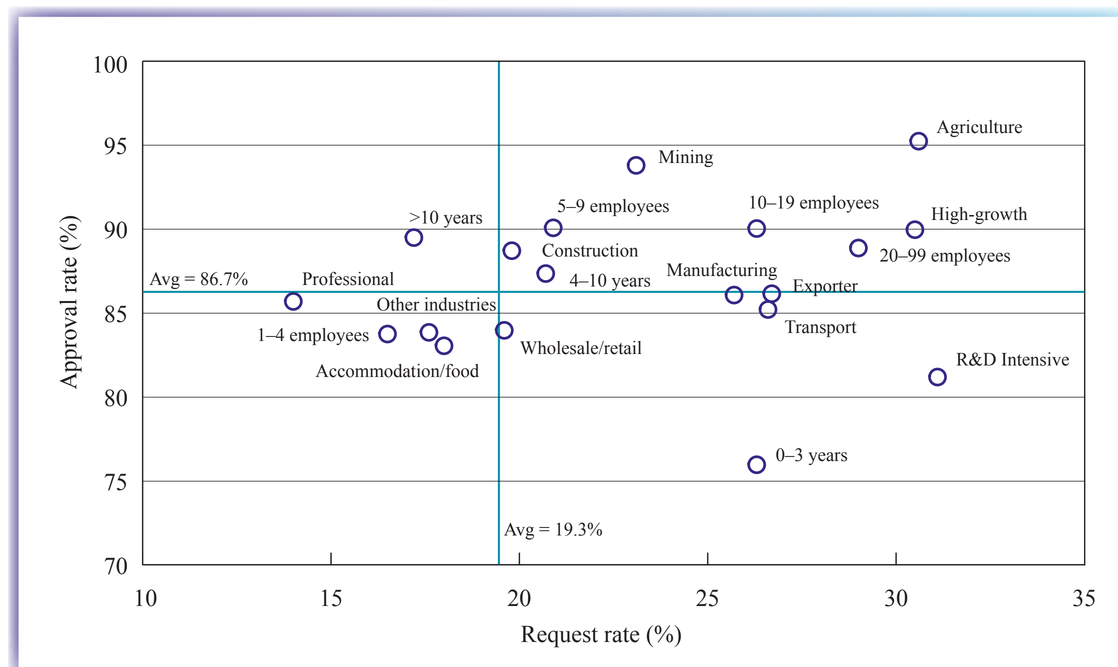
This section builds on the previous section by presenting debt financing approval rates on a firm level basis.[13] Findings show that for access to debt financing the size of the firm can matter. In 2010, debt approval rates were 84 percent for businesses with 1–4 employees, 88 percent for businesses with 5–9 employees, 93 percent for businesses with 10–19 employees and 97 percent for businesses with 20–99 employees. A similar relationship based on average approval rates over each of the five survey years between 2000 and 2010 is shown in Figure 3.

Possible reasons why smaller businesses faced greater challenges could include:[14]

- Greater year-to-year fluctuations in sales and earnings;
- Higher loan default rates;
- Fewer assets to pledge as collateral; and
- Shorter credit histories.

Smaller businesses might also be characterized by greater agency, opacity, and asymmetry of information problems. This could make it more difficult for lenders to assess the financial and operational risk of the businesses and monitor their activities once funds have been supplied. Businesses that are larger typically have longer credit histories, operate in more predictable markets, and have greater assets to pledge as collateral. Lenders are more able to assess the nature of the risks of these businesses.

Figure 3:
Average small business debt financing request and approval rates, 2000–10



Sources: Industry Canada *Credit Conditions Survey*, 2009 and 2010; Statistics Canada *Survey on Financing of Small and Medium Enterprises*, 2000, 2004 and 2007.
Note: Given data availability, four year and three year averages are presented for R&D intensive businesses and growth-oriented businesses respectively. Five year averages are presented for all other categories.

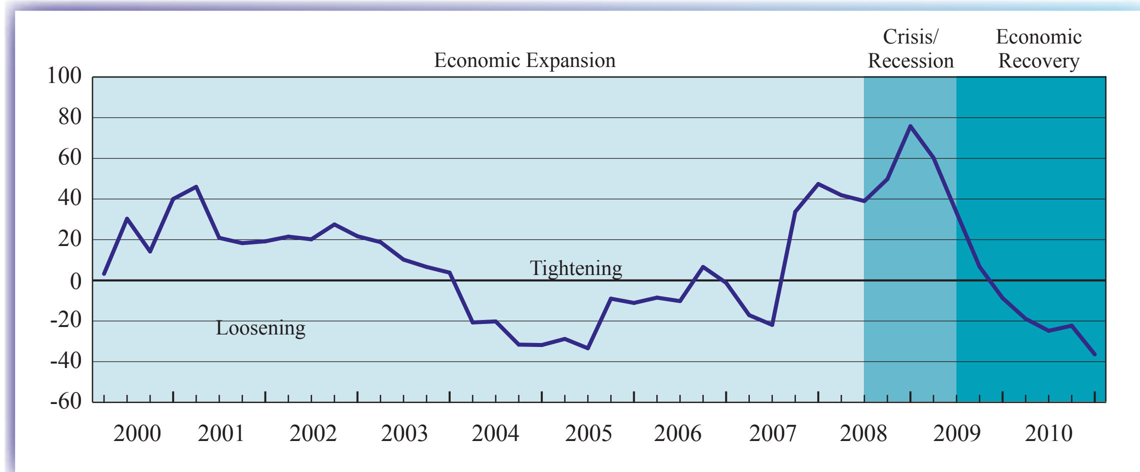
[13] Data is not sufficient to identify potential gaps in the equity financing markets on a firm level.

[14] Reasons cited are based on standard industry conclusions drawn from the financial literature. See: The Economist Intelligence Unit. *Surviving the drought: Access to finance among small and medium-sized enterprises*. (2009); The Conference Board of Canada, *Decreasing Demand for SME Debt Financing? Debt Financing for SMEs at the End of the 20th Century*. (2001); CPA-Australia, CGA-Canada, ACCA. *Access to Finance for the Small and Medium Sized Enterprise Sector: A CGA-Canada Supplement*. (October 2009); Organisation for Economic Co-operation and Development. *The SME Financing Gap—Theory and Evidence (VOL I)*. (2006); Statistics Canada. *Financial and Taxation Statistics for Enterprises*. (2010); Statistics Canada. *Survey of Suppliers of Business Financing*. (2008)

By size of business, access to debt financing also appears partially cyclical, as illustrated in Figure 4. That is, approval rates increased positively in the 2004 and 2007 stages of the business cycle, reversed during the recession of 2009, and rebounded strongly with the economy in 2010.

This is consistent with the Bank of Canada *Senior Loan Officer Survey*, which points to loosening in credit conditions between 2004 and early part of 2007, tightening in 2009, and loosening again in 2010.

Figure 4:
Overall business lending conditions—balance of opinion



Source: Bank of Canada, *Senior Loan Officer Survey*, 2000–10.
Note: The balance of opinion is calculated as the weighted percentage of surveyed financial institutions reporting tightened credit conditions minus weighted percentage reporting eased credit conditions.

Of course, even when the economy is expanding, some small businesses are still unsuccessful at raising funds. Survey results determined that young businesses experienced greater difficulties accessing debt than older firms. This is likely because they have shorter track records, younger and less experienced management teams and higher default risks.

Canada's small R&D intensive businesses appear to have faced greater challenges accessing debt. Key sources of capital for R&D intensive businesses are retained earnings and the personal savings of business owners. These sources are far less predictable and cannot be relied on long-term to support their ongoing needs. Access to financing for these businesses could be limited because of a higher rate of cash-burn and/or potentially higher default rates. It could also be that these businesses cannot satisfy the financial covenants of lenders or pledge sufficient collateral to secure loans.

Therefore, these findings support the theory that partial gaps in financing for specific types of businesses exist, namely among Canada's smallest businesses, youngest businesses and most R&D intensive businesses.

A less than 100 percent approval rate does not immediately imply the existence of a financing gap

A less than 100 percent approval rate does not immediately imply the existence of a financing gap. Concluding whether there is a gap requires a deeper investigation of the reasons why businesses are refused financing. Businesses declined financing because they are unwilling to pay a proposed interest rate should not be mistaken for a gap. This merely reflects market clearing forces at work. Interest rates that are incommensurate with business risk, a lender's unwillingness to negotiate rates, or internal policies restricting lenders from approving loans above a certain risk level could imply the existence of a gap. Additional efforts should be made in later surveys to improve government's understanding of the reasons why businesses are refused financing.

In this vein, it is important for policy-makers to remember that efficient lending is not about approving every business for a loan that requests one. The competitiveness of the small business sector in particular and more generally the economy at large depend on an efficient allocation of financial resources and a healthy balance between capital demand and capital supply. If lender underwriting standards are too loose, borrowers could take on more debt than what they could comfortably service when interest rates rise or the economy slows. In deciding whether to approve a business for a loan, lenders must carefully weigh expected risks against expected returns. Many businesses are simply non-credit worthy and regardless of what interest rate they claim to be willing to be pay, they will not be able to do so. The refusal to approve some businesses for loans must at times be accepted as the correct decision.[15]

However, the refusal to approve a business' request for financing becomes a concern when the refusal decision results in an underallocation of financing to credit worthy businesses or when certain categories of businesses are systematically denied access to capital. Such occurrences could signal a major, and potentially chronic, inefficiency in the small business financing market and would justify the continued need for government intervention through such mediums as the Business Development Bank of Canada (BDC) and the Canada Small Business Financing Program (CSBFP). Information above should provide an objective starting point for discussions about such concerns and refinements to policy responses.

IV. Terms of Financing Statistics

The *Survey on Financing of Small and Medium Enterprises* and *Credit Conditions Survey* asked businesses to report interest rates paid on loans and whether collateral was required. These questions provide additional insights into price and non-price financing activities and lender perception of borrower risk. This is the focus of this section.

1. Financing Costs

Table 4 presents average interest rates paid on loans of various terms for different categories of businesses.

Because smaller businesses tend to exhibit greater year-to-year fluctuations in earnings[16] and the default

[15] Organisation for Economic Co-operation and Development, *The SME Financing Gap (VOL I): Theory and Evidence*. (2006)

[16] For example, data from the Statistics Canada *Financial and Taxation Statistics for Enterprises* database produced a coefficient of variation for small business earnings (standard deviation of earnings divided by average earnings) over the 2000–10 period of 0.49. This compared to 0.40 for medium-sized businesses and 0.29 for large businesses.

rate for small businesses is notably higher than that for medium and large businesses,[17] it is reasonable to expect smaller businesses to pay higher interest rates than larger businesses. Comparing businesses with fewer than 20 employees with businesses with more than 20 employees revealed that this was the case. Specifically, the interest differential between businesses with less than 20 employees and businesses with more than 20 employees was 1.2 percent on loans of duration of more than 5 years. This suggests that the higher rates paid by smaller businesses reflect the default risk premiums charged by lenders to compensate for the added risk that the businesses might default on the loan.

Table 4:
Average interest rates—by loan term (years), 2000–10

	Term (years)		
Business Category	Less than 2 years	Greater or equal to 2 years and less than 5 years	Greater than 5 years
Size of business (number of employees)			
1–4	6.7	7.0	6.3
5–9	6.8	6.8	6.5
10–19	6.6	7.2	6.5
20–99	5.9	6.4	5.2
Age of business (years in operation)			
0–3	6.7	7.5	6.6
4–10	6.7	6.8	6.3
>10	6.2	6.7	6.0
R&D intensity			
R&D expenditure ≤20% of revenues	6.9	7.3	6.6
R&D expenditure >20% of revenues	7.3	7.4	6.2
Export orientation			
Exporter	6.1	7.1	5.9
Non-exporter	6.7	6.9	6.3
Growth orientation			
Growth-oriented	7.7	7.1	—
Other	7.5	7.0	—

Sources: Industry Canada *Credit Conditions Survey*, 2009 and 2010; Statistics Canada *Survey on Financing of Small and Medium Enterprises*, 2000, 2004 and 2007.
Note: Given data availability, four year and three year averages are presented for R&D intensive businesses and growth-oriented businesses respectively. Five year averages are presented for all other categories.

There were other cases of higher interest rates being paid by certain categories of businesses. For instance, the interest differential for young businesses (those that have been in operation for less than 10 years) compared to businesses that have been in operation for more than 10 years was 0.5 percent on loans regardless of duration of the loan. This is consistent with expectations as young businesses, like small businesses, are perceived as riskier.

[17] Statistics Canada *Survey of Suppliers of Business Financing* showed that small businesses (those with loan authorization levels below $1 million) were about four times as likely to default on their loans in a given year compared to large firms (those with loan authorization levels above $5 million).

The interest differential charged to growth-oriented businesses, a category of firm sometimes deemed "risky," was only slightly higher than for businesses without a high growth orientation. Specifically, a positive differential of 0.2 percent and 0.1 percent was paid on loans of duration of less than 2 years and between 2 and 5 years respectively. Similarly, R&D intensive businesses, another supposedly "risky" group of businesses, paid an average interest differential of 0.4 percent and 0.1 percent on loans of duration of less than 2 years and between 2 and 5 years respectively.

In conclusion, Canada's smaller businesses, younger businesses, R&D intensive businesses and/or growth-oriented businesses bore the highest financing costs between 2000 and 2010. This is consistent with other survey findings and suggests that, not only do these categories or businesses face relatively greater difficulties accessing financing, they face relatively higher costs for that financing.

2. Collateral Requirements

In a world of perfect information, lenders would be able to fully assess the risks that borrowers presented them and would be able to command an appropriate risk-adjusted interest rate on their loans. In reality, however, lenders have imperfect information regarding borrower riskiness or limited tools to process available information into default projections. Consequently, interest rates are not relied on exclusively to mitigate risks. Lenders impose collateral requirements on borrowers to ensure that they will be repaid or recover as much as possible in the event of default. For some businesses, being approved for a loan without sufficient collateral is simply impossible, regardless of what interest rate they are willing to pay. Table 5 presents categories of small businesses that faced the strictest collateral requirements in each of the five survey years between 2000 and 2010.

Table 5:
Collateral rates (percent), 2000–10

Business Category	Year					**Average**
	2000	2004	2007	2009	2010	
Size of business (number of employees)						
1–4	55.7	62.1	45.2	53.0	63.1	55.8
5–9	69.6	64.4	37.7	72.1	68.8	62.5
10–19	73.6	73.6	66.6	56.9	72.9	68.7
20–99	76.3	78.0	51.7	66.4	73.5	69.2
Age of business (years in operation)						
0–3	57.4	59.8	72.5	39.3	68.5	59.5
4–10	61.0	59.3	24.0	63.7	72.5	56.1
>10	65.6	70.0	56.6	61.1	65.2	63.7
R&D intensity						
R&D expenditure ≤20% of revenues	59.3	66.1	48.6	62.8	—	59.2
R&D expenditure >20% of revenues	61.2	37.2	48.0	73.0	—	54.9
Export orientation						
Exporter	64.3	66.5	46.2	65.4	66.0	61.7
Non-exporter	60.4	63.7	48.9	61.2	66.8	60.2
Growth orientation						
Growth-oriented	83.5	75.1	48.0	—	—	68.9
Other	60.6	62.4	48.6	—	—	57.2
Total	61.2	63.9	48.5	61.5	67.5	60.5

Sources: Industry Canada *Credit Conditions Survey*, 2009 and 2010; Statistics Canada *Survey on Financing of Small and Medium Enterprises*, 2000, 2004 and 2007.

A greater percentage of larger businesses are asked to pledge collateral to secure their loans. A greater percentage of older businesses (>10 years in operation) are also required to pledge collateral. It should be noted that for smaller and younger firms requests for collateral may be low simply because the lender knows the firms do not have assets to pledge. Though not shown here, this contrasts with the percentage required to provide co-signers. That is, in years where data was available, on average 16 percent of businesses that had been in operation for less than four years were required to provide a co-signer compared to 10 percent for businesses that had been in operation for between 4 and 10 years and 6 percent for businesses that had been in operation for more than 10 years.

Firm growth has a bearing on the collateral requirements of small businesses as well. In years where data was available, about 69 percent of growth-oriented businesses were required to pledge collateral compared to 57 percent for less growth-oriented businesses. This reflects the perceived risk inherent in financing such firms. Surprisingly, the collateral requirements of R&D intensive businesses, which are also perceived as being of higher risk, were not statistically significantly different than those of non-R&D intensive firms.

In conclusion, Canada's larger businesses and older businesses faced the greatest collateral requirements as well as Canada's most growth-oriented small businesses.

The diminished importance of the loans officer and the business plan

A concern that developed over the last 10 years relates to the diminished importance of the business plan and role of the lender in the lending process and what that means for certain groups of borrowers. For instance, in the past, the decision to approve a loan was left largely to the discretion of the lender, and the lender's decision depended heavily on the borrower's business plans. Today, business plans are less important. Data from the 2000, 2004 and 2007 *Survey on Financing of Small and Medium Enterprises* revealed that, on average, only 21 percent of businesses were asked to provide a business plan when applying for a loan. Also, fewer than 4 percent of businesses that were refused financing were denied because their plans were unacceptable. Today, what lenders are most concerned with is the borrower's credit score. These are computer generated scores that provide a proxy for the financial health of a business.

In a 2006 report on SME financing gaps, the OECD stressed that the continued automation of the loan approval process based on a credit score approval framework might decrease the ability of certain types of businesses to access financing, namely young and small businesses. This is because these businesses frequently have unproven track records, short credit lives, and minimal tangible assets and frequently cannot meet the approval criteria built into mathematical scoring systems.[18] These businesses are more reliant on lenders to perform a subjective review of their personal characteristics and business plans. Credit scoring tools may be more prone to rejecting these businesses, even when they might be deserving of financing as judged by human assessment.[19]

[18] Organisation for Economic Co-operation and Development, *The SME Financing Gap (VOL I): Theory and Evidence*. (2006)

[19] See also, Spence, Rick. *Now you know the score*, The Entrepreneur, Money Sense, March 2007.

V. Conclusion

The *Survey on Financing of Small and Medium Enterprises* and the *Credit Conditions Survey* provide useful demand-side and supply-side information on financing activities from the perspective of small businesses in Canada. This information is particularly relevant to evidence-based policy-makers seeking to analyse financial market developments and identify potential market gaps. Results of the surveys showed that:

- Between 2000 and 2010, about 25 percent of small businesses sought external financing per year, on average, to support their operations.
- Requests for debt financing significantly outweighed requests for equity financing.
- Among businesses that did seek equity, request rates were highest for the youngest businesses, the most innovative businesses and the most growth-oriented businesses.
- Small business debt financing request rates were positively related with business size; export orientation; growth orientation; and degree or R&D intensity. Small business debt financing request rates were negatively related with the age of the business.
- Partial gaps in financing specific types of businesses exist for the smallest businesses, youngest businesses and most R&D intensive businesses.
- Canada's smaller businesses, younger businesses, R&D intensive businesses and growth-oriented businesses bore the highest financing costs.
- Canada's larger and older businesses faced the greatest collateral requirements. Canada's growth-oriented businesses also faced relatively stricter collateral requirements.

In addition to assessing topics on small business financing demand, access to financing, interest rates and collateral requirements, an overarching topic that remains is whether access to financing—debt and/or equity—has been an obstacle to small business growth. This was assessed in the 2004 and 2007 iterations of the *Survey on Financing of Small and Medium Enterprises*. Respondents were asked to report whether it was a serious problem and rank it among other obstacles. About 20 percent indicated that access to financing was a serious obstacle to growth. However, among six obstacles listed, access to financing ranked 5th. Qualified labour (50 percent), insurance rates (38 percent), instability of consumer demand (34 percent) and government regulations (32 percent) all ranked higher as obstacles. Consistent with other findings in this report, situations in which larger numbers of small businesses reported that access to financing was a growth obstacle were found among younger businesses, growth-oriented businesses and/or R&D intensive businesses.

This report concludes that, while small businesses have substantial financing needs and have been successful at raising the necessary funds overall, certain categories of small businesses in Canada continue to face relatively greater difficulties accessing financing. This conclusion refers to equity financing overall and debt financing for smaller businesses, younger businesses and R&D intensive businesses. Such businesses are key drivers for economic activity and job creation in Canada. This provides evidence supporting the need for public policy action to improve access to financing for these types of firms so that they might thrive and reach their full potential.

Acknowledgements

The author wishes to thank Richard Archambault and Laura Morin for valuable contributions and insights. A special thank you also goes out to Andrea Pierce for her much appreciated programming work.