



Study

Measuring BDC's Impact on Its Clients (2008–2012)

December 2016

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This research was prepared by the Economic Analysis team from Marketing and Public Affairs at the Business Development Bank of Canada (BDC). It is based on public data and special compilations by Statistics Canada that were analyzed and interpreted by BDC. Any error or omission is BDC’s sole responsibility. Reliance on and use of the information herein is the reader’s responsibility.

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Dear Readers,

Statistics Canada's Economic Analysis Division had the pleasure of collaborating with the Business Development Bank of Canada (BDC) to produce *Measuring BDC's Impact on Its Clients (2008–12)*. The production of this report was made possible through its Canadian Centre for Data Development and Economic Research (CDER) program. CDER was established to facilitate approved analytical research using Statistics Canada's holdings of business and economic data in a secure manner. CDER maintains the confidentiality of the information provided by the business respondents (www.statcan.gc.ca/eng/cder/index).

In accordance with Statistics Canada's Directive on Record Linkage (www.statcan.gc.ca/eng/record/policy4-1), a list of firms in the BDC portfolio was linked to data on firm performance and survival at Statistics Canada to create the analytical database used to produce the non-confidential aggregate statistical outputs in this report. Record linkages at Statistics Canada are carried out for statistical purposes only, after satisfying a prescribed review and approval process (www.statcan.gc.ca/eng/record/gen).

The agreed-upon research design for the evaluation was then carried out at CDER in collaboration with BDC. This report was prepared by the Economic Analysis team from Marketing and Public Affairs at BDC. Any error or omission is BDC's sole responsibility. Reliance on and use of the information herein is the reader's responsibility.

Kind regards,

Danny Leung, Director
Economic Analysis Division
Statistics Canada

Canada 

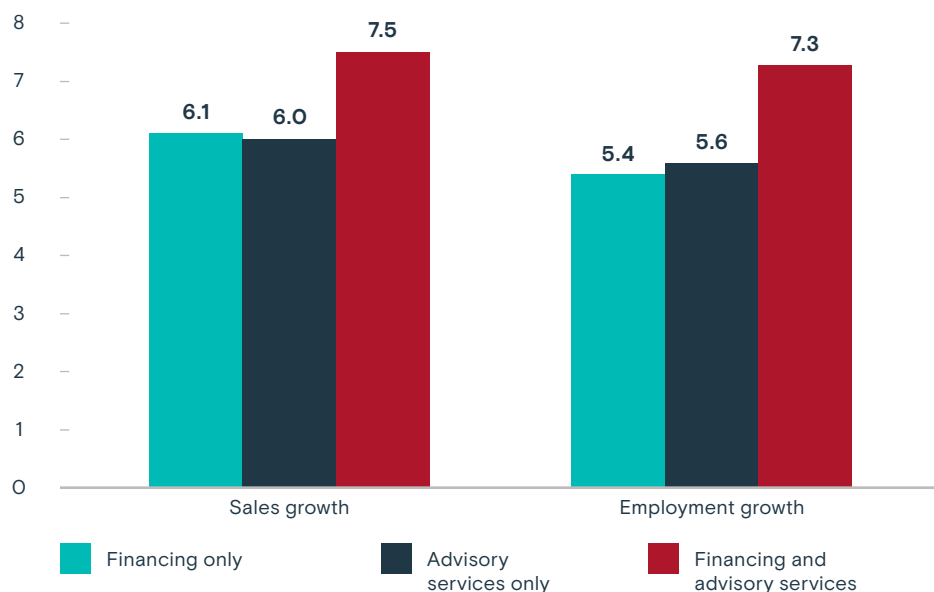
Highlights

BDC had a greater impact on clients that received both financing and advisory services.

- Statistics Canada compared the performance of Business Development Bank of Canada (BDC) clients that had received financing and advisory services between 2008 and 2011 with that of similar businesses that were not BDC clients. This analysis paid particular attention to businesses supported during the Great Recession.
- The analysis shows that BDC had an important positive influence on the growth of sales and employment among its clients for all of the years studied. In addition, clients that received both financing and advisory services performed better than those that received only financing or only advisory services.
- On average, clients that received financing and advisory services from 2008 to 2011 saw their annual sales grow 7.5 percentage points more than those of non-clients during the subsequent period from 2009 to 2012. Furthermore, clients that received only financing saw their sales growth exceed that of non-clients by 6.1 percentage points, while those that received only advisory services saw their sales growth exceed that of non-clients by 6 percentage points.
- From 2009 to 2012, BDC clients that received financing and advisory services also saw employment levels grow every year and, on average, exceed growth among non-clients by 7.3 percentage points. Clients that received only financing saw employment levels rise by 5.4 percentage points more than those of non-clients and those that received only advisory services saw growth rise by 5.6 percentage points more than that of non-clients.
- Clients that received support during the recession also performed better than their peers. Average annual sales growth for clients that received financing and advisory services in 2008 was 7 percentage points higher than that of non-clients between 2009 and 2012. This difference was 5.6 percentage points for clients that received only financing and 6.7 percentage points for clients that received only advisory services.

Figure 1 — BDC's positive impact on the sales and employment growth of clients it supported from 2008 to 2011

Difference between the annual growth of clients and non-clients
(percentage points, average difference for the 2009 to 2012 period)



Source: Statistics Canada.

- The same difference was seen in employment. Clients that received both financing and advisory services in 2008 saw annual employment levels grow, on average, by 6.7 percentage points more than those of non-clients from 2009 to 2012. Clients that received only financing saw annual employment levels grow by 4.8 percentage points more and those that received only advisory services saw annual employment levels grow by 6.1 percentage points more than those of non-clients during this same period.
- BDC had a positive impact on its clients' productivity growth during select years, but this was not as widespread as its impact on sales and employment growth.
- The Statistics Canada analysis did not conclusively show that BDC had a significant impact on its clients' profitability growth.

1

Why measure BDC's impact?

BDC wanted to measure the impact of its services on the success of the entrepreneurs it supports across the country.

BDC has a mandate to help Canadian entrepreneurs build robust and competitive businesses, by providing them with a range of financing solutions, as well as advisory services. BDC supports more than 42,000 entrepreneurs across the country through its 112 business centres. At the end of March 2016, BDC's total portfolio was \$26 billion.

To find out whether its services contributed to its client businesses' success, BDC asked Statistics Canada to carry out an independent and measurable evaluation of its impact on the performance of these businesses. In particular, the Bank gave Statistics Canada the mandate to measure BDC's impact on the clients it had assisted in 2008 and 2009—during the Great Recession—and over the two years of recovery that followed, in 2010 and 2011.

This report documents the main results from Statistics Canada regarding the performance of BDC's clients compared with that of similar businesses that were not BDC clients. The report also explains the procedure used to carry out this study, as well as the limitations of the study.



How was BDC's impact measured?

BDC asked Statistics Canada to carry out an independent and measurable evaluation of its impact on the clients it assisted from 2008 to 2011.

The impact analysis was done in three stages.

- ① First, Statistics Canada correlated the list of clients BDC supported between 2008 and 2011 with its own databases, including the Business Register and the National Accounts Longitudinal Microdata File (NALMF). The NALMF contains the files for corporate income tax returns (T2) and employment and payroll (T4, PD7, and the Survey of Employment, Payrolls and Hours (SEPH)). The match rate between BDC's information and Statistics Canada's information reached 79%. This first stage made it possible to set up a longitudinal database for businesses, both clients and non-clients, for the years 2005 to 2012.
- ② During the second stage, Statistics Canada set up comparison groups of non-clients with characteristics similar to those of the Bank's clients in the years before clients received BDC services. These characteristics were age, revenue, assets, liabilities, number of employees, industry and province. Statistics Canada compared the performance of each BDC client with that of at least five businesses that were not BDC clients. It examined the financial performance of three client subgroups: those that received financing only; those that received advisory services only; and those that received financing and advisory services. A comparison group was created for each client subgroup.
- ③ Finally, Statistics Canada carried out regression analyses to determine whether the performance of BDC clients after they received services differed from that of non-clients, and to measure the size of this difference, if any. The financial variables examined included growth in sales, revenue, employment, productivity and profitability. The main results of the impact analysis on these variables are presented in the following section.

3

Main results of the impact study

The clients that received BDC support from 2008 to 2011 showed higher sales and employment level growth than non-clients.

At our request, Statistics Canada estimated BDC's impact on the clients the Bank supported between 2008 and 2011. In this section, we present the main results.

3.1 BDC's impact on the clients it supported between 2008 and 2011

Statistics Canada's analyses reveal that the clients BDC supported from 2008 to 2011 saw a more significant increase in sales and employment than non-clients did in the years after they received services—that is, between 2009 and 2012.

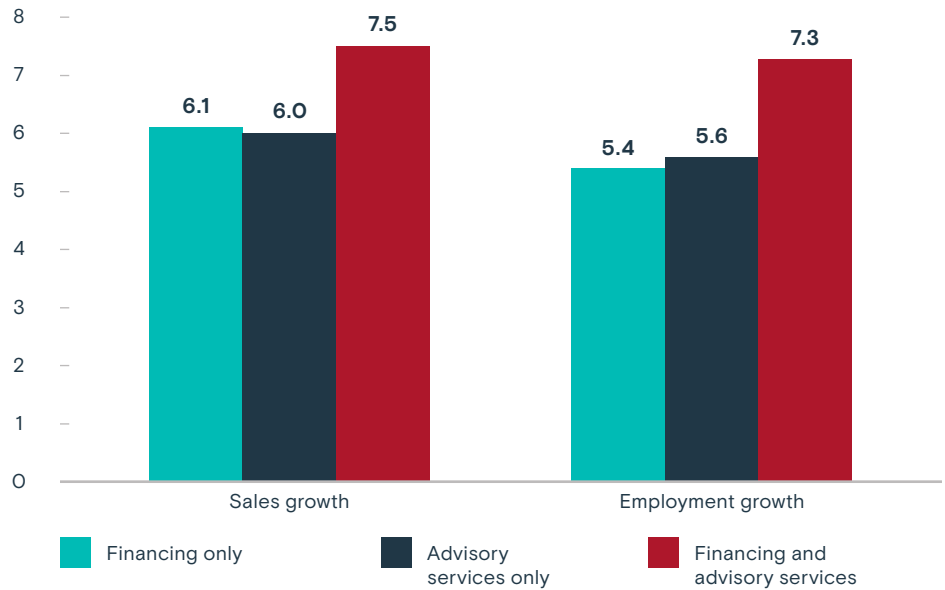
On average, the annual sales growth of clients that received financing services was 6.1 percentage points higher than that of non-clients. Among clients that received advisory services, this difference was 6 percentage points. Clients that received both financing and advisory services saw even higher sales growth. On average, the difference between these clients' sales growth and that of non-clients was 7.5 percentage points.

BDC's positive impact was also seen in employment growth. From 2009 to 2012, clients that took out a loan saw their annual employment levels increase, on average, by 5.4 percentage points more than those of non-clients. Among clients that received advisory services, average annual employment levels exceeded those of non-clients during the same period by 5.6 percentage points. For clients of both financing and advisory services, employment growth exceeded that of non-clients by 7.3 percentage points, on average. Figure 3.1 shows the results of BDC's impact on its clients' sales and employment growth compared with that of non-clients.

BDC had a greater impact on clients that received both financing and advisory services.

Figure 3.1 – BDC’s positive impact on the sales and employment growth of clients it supported from 2008 to 2011

Difference between the annual growth of clients and non-clients (percentage points, average difference for the 2009 to 2012 period)



Source: Statistics Canada.

The deviations in the previous graphic, expressed in percentage points, represent the difference between clients’ average annual sales growth and that of non-clients. For example, the average annual sales growth of clients supported from 2008 to 2011 through financing and advisory services was 4.1% from 2009 to 2012, while that of non-clients was -3.4%. As a result, the difference between the average annual growth rates of both groups stood at 7.5 percentage points (4.1% minus -3.4%) from 2009 to 2012.

The clients BDC supported during the Great Recession showed higher sales and employment level growth than non-clients.

3.2 Impact on the 2008 cohort during the recession

Impact on sales and employment growth

The analysis from Statistics Canada also reveals that the clients BDC supported during the Great Recession showed higher growth in their sales and their employment levels than non-clients did, over most of the four years after they received services.

For example, clients that received financing and advisory services in 2008 reported average annual sales growth that was 7 percentage points higher than that of non-clients between 2009 and 2012. In addition, their average annual employment growth exceeded that of non-clients by 6.7 percentage points during the same four subsequent years. Based on the results, BDC had a greater positive impact on clients that received both financing and advisory services than on those that received only financing or only advisory services. These results are illustrated in the graph below.

Figure 3.2 — BDC’s positive impact on sales and employment growth for clients it supported in 2008, during the Great Recession.

Difference between the growth of clients and non-clients
(percentage points, average difference for the 2009 to 2012 period)



Source : Statistics Canada.

Results for clients supported in 2009 show the same trends as those for clients supported in 2008.

3.3 Impact on financial variables other than sales and employment

Impact on productivity growth

BDC's impact on its clients' productivity growth was positive only for some cohorts and for some years. For example, productivity growth among clients that received financing and advisory services in 2008 was 3.6 percentage points higher than that of non-clients in 2010 and 3.8 percentage points higher in 2011. For the years 2009 and 2012, there was no difference between the performance of clients and non-clients in this regard. In this study, productivity was calculated by dividing sales by the number of employees.

Impact on profitability growth

The Statistics Canada analysis did not conclusively show that BDC significantly influenced its clients' profitability. Analysts studied two profitability variables: net profit growth (before and after taxes) and profit margin growth (before and after taxes). For some groups, profitability growth was lower than that of non-clients after they received financing or advisory services. On the other hand, this effect was generally temporary and disappeared over the following years. This could be explained by the fact that sales and employment growth increase operating costs, on top of costs related to additional debt. This often impedes short-term profitability growth.

4

Certain characteristics of the study

This study is based on a rigorous and comprehensive approach. However, it may still contain certain non-measurable biases.

This study had all the key elements of a rigorous impact analysis process. First, it was carried out by an independent third party, Statistics Canada. Second, the indicators selected to evaluate BDC's impact were those typically used to measure business performance, and they were related to BDC's goal of promoting the success of robust and competitive businesses. In addition, the databases used were reliable and complete. Statistics Canada had enough information on the businesses to carry out longitudinal analyses, as well as enough data to set up comparison groups that were sufficiently close to the client groups. Finally, Statistics Canada used sophisticated statistical tools to determine whether BDC clients performed better than non-clients did and, if so, to what extent.

However, like all studies, this one had certain limitations. It had two types of selection bias. One was that although clients and non-clients have similar characteristics, it is possible that some non-clients did not make a request for financing during the period covered by the study. Also, BDC selects its clients; therefore, it is possible that certain businesses had requested financing or advisory services but were not able to benefit from them. These two types of bias could have had the effect of boosting the performance of BDC clients. In addition, as mentioned in the methodology section, only 79% of BDC clients were matched to the Statistics Canada data; the results would have been different if all the client businesses had been included in the analyses. In this case, we cannot tell whether this placed a positive or a negative bias on the results.

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