



Business Development Bank of Canada
Banque de développement du Canada

VALUATION SERIES

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PUBLIC CHOICE ALTERNATIVES

BDC: Blatant Deficiency of Cash flow

A VALUATION OF
BUSINESS DEVELOPMENT BANK OF CANADA

BY IAN MADSEN



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EXECUTIVE SUMMARY

Business Development Bank of Canada, 'BDC', is a major lender and investor in young and growing companies across Canada. It provides venture capital, merchant capital, and is a private equity partner and lender. BDC could be worth as much as \$16B were it divested; or, it could be worthless if unable to fully realize its illiquid assets as cash. As a business, making the very optimistic assumption that it can convert its stated 'comprehensive income' into free cash flow (not proven thus far), its value, on a fully taxed basis (as a Crown corporation, it pays no tax), is estimated between \$4.1–6.6B. Using comparable Canadian financial firms, the range is \$5.4–5.6B. It could attain the highest figure, if re-jigged for cash generation and its operations optimized in best practise of the private sector comparable players.

INTRODUCTION

Business Development Bank of Canada, 'BDC', a Crown corporation owned entirely by the federal government of Canada, loans to, invests in or guarantees loans to Canadian-domiciled or -controlled private corporations, generally small or new ones. This is commonly referred to as venture capital, or funding for new, often innovative companies which find it difficult or intolerably expensive to secure financing from private individuals, institutions, financial institutions, or

other private sector entities. These private sector alternative capital providers could be interested in making a huge return on a successful investment. However, they would be taking on major risk and have their money locked up for what could be several years before a full or partial sale of the investee in a 'liquidity event' such as an initial public offering, 'IPO', on a stock exchange. BDC's clients can avoid those pressures by using its capital and advice.

BUSINESS DEVELOPMENT BANK OF CANADA, A HISTORY

The following is material provided by BDC on its website:

On September 30, 1944, the Canadian Parliament proclaimed the creation of the Industrial Development Bank (IDB)—the first name under which BDC was known. The Federal Business Development Bank (FBDB) succeeded IDB on October 2, 1975. A Management Services division was officially created and FBDB became a venture capital investor. On July 13, 1995, the Parliament of Canada passed the Business Development Bank of Canada Act, which redefined and updated the structure and mandate of FBDB.

The Bank ceased being a “lender of last resort” and began offering services that were complementary to those available at other financial institutions, underscoring the fact that all of its clients would have banking relationships with other private and/or public financial institutions for traditional types of banking services.

The Business Development Bank of Canada (BDC) was asked to fill gaps in the lending market by also focusing on the financial needs of small businesses that were exporting or in the knowledge-based industry, while continuing to support traditional sectors. BDC’s mandate included other areas considered neglected by the private sector (Aboriginals, women and young entrepreneurs). BDC was also required to obtain a return on equity equivalent to the government’s cost of funds.

BDC launched numerous innovative programs in keeping with its new mandate. It reengineered its products and services to provide global solutions at every step of small business development and began offering venture capital as well as growth and business transition capital. The Management Services

Department, renamed the BDC Consulting Group, also upgraded its integrated solutions to increasingly focus on productivity and innovation.

Fiscal 1997 marked a vital step in BDC’s evolution. The bank posted a record profit of \$50.7M and declared the first dividend in its history. In fiscal 2001, BDC created its Aboriginal Banking division, built a network of Aboriginal management consultants and developed consulting services specifically for this market.

Every ten years, the Minister of Industry conducts a review of the provisions and operations of BDC’s Act. The Bank’s mandate was renewed in April 2002, for a period of ten years. A new legislative review started in 2010. In 2010, BDC started a review of the Canadian venture capital industry and BDC’s role in it. BDC started implementing a new VC strategy in 2011. In 2011, BDC launched a series of financing and consulting solutions and started developing free technology tools and resources for entrepreneurs.

Also in 2011, BDC and Export Development Canada (EDC) signed a protocol to ensure that Canadian companies looking to expand their business in global markets have access to the services and financing they need. The Montreal Group, initiated by BDC, was established in 2012 as a global forum of international financial development banks.

VALUATION FACTORS

For the purpose of this study, the very optimistic assumption was made that BDC can remain a going concern, despite its apparent inability to fully convert net income into free cash flow, or even operating cash flow, which is normally a key factor in corporate survival and growth. In fact, the company has not merely generated free cash flow for the past five years, it has had negative operating cash flow that was far larger in magnitude than its reported 'comprehensive income' (which was positive and looked substantial). In a normal corporation, over time a moving multi-year average of annual net income will approximately equal a similar average of free cash flow. This is definitely not true of BDC in the past five years, perhaps even more.

This is important for crucial reasons. Companies have floundered when they showed substantial, positive net income, 'profits' in common terms, but were doing so by tallying up revenue which was financed by either short-term or long-term debt of one form or another, or, more rarely, by shareholder capital in the form of common equity injections. BDC is in this situation, not seeming to be able to convert profits into ready cash to pay bills, service debt, or for other uses. Instead, its capital base has increased because it has the backing of the federal government.

INTRINSIC, DISCOUNTED FREE CASH FLOW VALUE OF BDC

An intrinsic value is the value a firm (or an operation such as an agency or department or division which can be characterized or delineated as a firm) has by virtue of generating cash, specifically free cash flow, which is actual cash in the bank after getting cash payment for sales of goods or services and paying for everything in cash, including capital equipment and other long term assets (such as software, intellectual property, structures, vehicles, instruments, devices, real estate, trademarks). As noted above, BDC is unable to generate free cash flow; it has been substantially negative for years, and may continue that way. Therefore, an intrinsic value would also be negative. Using an optimistic assumption that EDC or new management may be

able to convert net income entirely into projected future free cash flows, the corporation's fully taxed value could range from \$4.1B to \$16.4B, with a median value of \$6.6B and a mean value of \$7.5B. For reasons enumerated below, the lowest value is most realistic and conservative.

It must be reiterated that this treatment of BDC's future financial results is very optimistic. If it is not able to convert its reported 'comprehensive income' into actual cash, its value as a cash-generating business would be that much less. For example, if it is only able to convert one half of its comprehensive income into cash, its intrinsic value would be half the estimated value above. It is advisable to use the lowest, most conservative value above as the maximum that could be realized for BDC until its cash conversion capability is radically improved.

Table 1

Intrinsic Value, Using Discounted Free Cash Flow

Valuation Matrix - Presented Value of Discounted Free Cash Flow = Estimated Next Year Free Cash Flow (Required Rate of Return = Growth Rate)

Projected Free Cash Flow (Fully Taxed) for 2018 (\$M): \$ 328.06 (Projected Fully Taxed Net Income is used for Free Cash Flow, making the assumption of full Net Income Free Cash Flow conversion.)

Matrix Values (\$M) g==v; r==>	4.00%	5.00%	6.00%	7.00%	8.00%	9.00%	10.00%
0.00%	\$ 8,202	\$ 6,561	\$ 5,468	\$ 4,687	\$ 4,101	\$ 3,645	\$ 3,281
1.00%	\$ 10,935	\$ 8,202	\$ 6,561	\$ 5,468	\$ 4,687	\$ 4,101	\$ 3,645
2.00%	\$ 16,403	\$ 10,935	\$ 8,202	\$ 6,561	\$ 5,468	\$ 4,687	\$ 4,101
3.00%	\$ 32,806	\$ 16,403	\$ 10,935	\$ 8,202	\$ 6,561	\$ 5,468	\$ 4,687
4.00%	--	\$ 32,806	\$ 16,403	\$ 10,935	\$ 8,202	\$ 6,561	\$ 5,468
5.00%	-\$ 32,806	--	\$ 32,806	\$ 16,403	\$ 10,935	\$ 8,202	\$ 6,561
Mean (Average)	Median	Minimum	Maximum				
\$ 7,496	\$ 6,561	\$ 4,101	\$ 16,403				

MARKET VALUE COMPARISON

VALUATION OF BDC

There are several viable comparison financial firms available for valuing BDC. There are four independent publicly listed non-bank lending and finance companies in Canada. There are also twelve diversified financial firms, and the six large chartered banks.

Several standard market valuation metrics were initially used, including Trailing Price to Earnings ratio and Forward Price to Earnings ratios (P/E); Price to Sales (P/S) ratio; Price to Book Value (P/BV); Enterprise Value to Revenue (EV/Rev), Enterprise Value to Earnings Before Interest, Depreciation and Amortization (EV/EBITDA), and

Price to Operating and Free Cash Flow (P/CF, P/FCF). The corporation's estimated fully taxed value could range from \$3.1B to \$8.4B, with a median value of \$5.4B and a mean value of \$5.6B.

Some metrics had to be discarded due to insufficient information on either the comparator companies or BDC, or the inapplicability of the ratio to either the comparators or BDC, or negative or otherwise anomalous results. Four ratios were ultimately used: trailing P/E (price-to-earnings [earnings are net income or 'profits']), forward P/E, P/S (Price to Sales) and P/BV (Price to Book Value [book value is total assets minus all debt and other liabilities]). The results are in Table 2.

Table 2

Market Comparison Based Valuation of BDC

Valuation metrics as applied to EDC (Market value of common equity)		Forward Trailing P/E Market Value to Net Income	P/E (Market Value to Est. Net Income)	Price to Sales	Price to Book
Average Seven Canadian Insurance Holding Co.	As Is (Fully Taxed)	\$ 5,010	\$ 3,813	\$ 4,619	\$ 8,731
Average Twelve Canadian Private Equity or Diversified Finance Companies	As Is (Fully Taxed)	\$ 8,162	\$ 4,988	\$ 2,079	\$ 6,989
Average Six Large Canadian Chartered Banks	As Is (Fully Taxed)	\$ 4,919	\$ 3,476	\$ 4,092	\$ 11,146
Average of Canadian Insurance and Diversified Finance Companies Averages	As Is (Fully Taxed)	\$ 7,261	\$ 4,561	\$ 2,756	\$ 7,424
Average of All the Above	As Is (Fully Taxed)	\$ 6,559	\$ 4,178	\$ 3,138	\$ 8,439

CONCLUSION AND RECOMMENDATIONS

The decision on whether or not to keep or sell off all, most, or part of a Crown corporation is up to the citizens and taxpayers of the province, or in this case, of all of Canada, usually via their elected representatives in the House of Commons. Given Canada's expanding national debt and other priorities for spending, proceeds for such a sale could come in handy at present, and in the near future.

When it comes to BDC, it appears to fill a useful role, but it is by no means clear that other institutions or companies would not be able to serve in its capacity in providing venture capital at either the inception stage or in growth stages required by Canadian companies. It is cause for concern that it seems chronically unable to convert reported profits into actual cash, and appears to be papering over this deficiency by effectively increasing its debt.

It is difficult to know how to address this issue without being privy to the actual ways the company conducts business. Whether or not BDC ultimately is divested, it is in its own survival interests and that of the federal government and the taxpayers who are on the hook for any insolvency that BDC could experience, it is logical that the company should take steps to make its assets more liquid and to ensure that it is able to convert revenues into actual cash.

The venture capital, 'VC', or private equity, 'PE', aspect of the company's operations cannot be the only reason that revenues and assets are not being turned into cash. Even in those realms, there are established ways of making such investment liquid, such as selling stakes to outside investors, selling entire client companies, receiving debt proceeds by securing loans from outside entities against the assets of the VC or PE clients.

In some cases, initial public offerings in these companies can be issued, so that BDC can cash out entirely by selling on a stock exchange. There may already be some, perhaps even many, of these liquidity events as they are called, but they are not translating into adequate cash inflow.

It is far better that private investors take on the risks that BDC is incurring. The government should initiate a plan to make BDC a more normal, commercial, cash profit-generating financial firm, and then optimize its operations further to make it appealing to either individuals in the public via an initial public offering, sale to institutional investors, shrewd corporate acquirers, or some combination of those. One possibility is that a consortium of large chartered banks or other Canadian financial firms invest in BDC for market, industrial sector, product and geographic diversification that they might find attractive.

Whatever course is taken, BDC is not truly as profitable as it initially appears, and is a risk that may not be palatable in the future, however worthy its economic, political, or social mission may be purported to be. Owing to the illiquidity of its investments, planning outward for its eventual divestment needs to start at the earliest possible time, as, due to the nature of its business and its illiquid (and opaque) assets, its sale, whether partial or whole, cannot be done easily or quickly.

APPENDIX 1:

RATIONALE FOR DIVESTITURE OR PRIVATIZATION

While it is up to the people through their elected representatives to decide if a Crown corporation or other government agency or entity should be sold or otherwise privatized and the proceeds used for the benefit of all citizens and taxpayers, there are some established reasons to embark on such a path, some or all of which are cited for divestiture of such enterprises but may not be applicable in any single, specific case.

1. The government has no mandate to own or run a commercial enterprise. The provision of citizens' safety, security and justice is the government's primary role, and its involvement in the economy should generally not extend beyond this.
2. Regulation can usually accomplish any public policy reason for direct involvement in an industry. If regulation is not easily feasible, then a direct contract or subsidy to any affected individuals, entity or entities may be more efficient or effective and less economically disruptive or costly.
3. If a government-controlled or sponsored enterprise has a monopoly position, near-monopoly, or effective monopoly in a line or lines of business or businesses, then opportunities are lost in one or more commercial or potentially commercial sectors for entrepreneurs and investors to try to create and grow businesses to enrich and sustain themselves, employees, suppliers, and others.
4. A monopoly, near-monopoly, or effective monopoly market position by a government-owned or sponsored entity could result in far higher prices for customers, the general public, or a section of the public, than would be the case in a fully competitive marketplace for the industry involved.
5. A government-owned or -sponsored enterprise may compete directly against private sector firms, which are owned by or employ citizens, or against individual citizens, all of whom the government is supposed to serve, not disadvantage.
6. The government-owned or -sponsored enterprise may compete unfairly against its private sector rivals in that it had or has access to lower-cost government-sourced and -guaranteed capital (debt). It may have a much larger debt component in its capital versus that which would be tolerated in the private sector. Thus, it may not have to meet high standards for profit and cost control, allowing it to offer lower than true free market-based competitive pricing.
7. Government-owned firms may not need to pay provincial or federal income taxes. This can allow such firms to supply goods or services more cheaply than the private sector companies they are competing with.
8. Government-owned or -sponsored enterprises may not have any kind of profit orientation or target, may be used as public policy vehicles and may be given preference in their activities or even in their transgressions, such as labour or environmental abuses.
9. Government-owned or -sponsored enterprises, by virtue of being public sector vehicles overseen by bureaucrats and politicians, may be places where favoured individuals find employment, particularly at management levels.
10. Since profit is a secondary goal of a government-owned or -sponsored enterprise, it is difficult to evaluate the effectiveness, efficiency or productivity of the enterprise or its employees. Consequently, these employees and assets may not be very productive or effective.

11. Government-owned or sponsored enterprises are often creations of certain time-fixed circumstances and outlive whatever use or public policy role their creators may have conceived. Often, advances in technology; the modernization of transport, telecommunication or information technology; the evolution of the economy and available products and services and the increasing standard of living make these enterprises potentially obsolete. In the private sector, firms and individuals must adapt and evolve, or decline.
12. Government-owned or -sponsored enterprises perpetuate their possibly obsolete existences by virtue of the constituencies that build up around them: employees, managers, directors and bureaucrats, customers, suppliers and associated advocates or consultants. They can lobby to keep the enterprise going, despite dysfunction or losses. They are far more motivated to do so than are the taxpayers, whose average cost is much less per person and may be indirect, hidden or difficult to calculate.
13. Because they are not profit-oriented, government-owned or -sponsored enterprises are usually less efficient, and thus they lower the overall efficiency of the entire economy. This can make a whole nation less competitive than its global rivals are, whether nations or individual companies. The effects are worse the greater the government involvement in the economy. When taken to its most extreme, as happened in 20th-century communist nations, the countries were unable to compete against capitalist companies, despite their immense direct and indirect subsidies, government support and the lack of profit requirement.
14. Funds tied up in the capital of government-owned or -sponsored enterprises could be used to reduce government debt or lower taxes on individuals or corporations, which they could then spend or invest as they freely choose, and thus they could inject money back into the economy in more-lucrative and -constructive ways.
15. Governments, generally, have a poor record of picking winners, or creating or owning enterprises that have market-competitive profitability, or attractive returns on assets, equity, or even returns that exceed governments' own cost of debt service. If, rarely, they actually do, it generally turns out that they have been provided unusually good market, operational, regulatory, or other conditions not available to other, investor-owned firms.
16. The greater the number and size of government owned or government sponsored enterprises in an economy, the greater the size and power of the government, which is usually the largest single entity in society, increasing the dangers of abuse of power, including injuring individual citizens, companies, or groups. Effective capacity of opposition or recourse against this power diminishes as the portion of the economy the government occupies increases.

