

The Corporate Bond Market in Canada

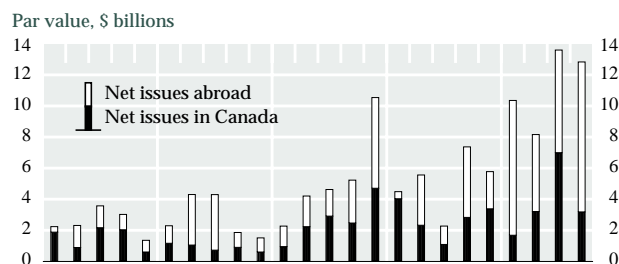
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- *The Canadian corporate bond market has become more active in recent years, against a background of low inflation, reduced public sector borrowing, and low long-term interest rates.*
- *In 1998, net new issues of corporate bonds in Canada exceeded long-term debt issues by the various levels of government for the first time since 1973.*
- *This increased level of activity has been accompanied by the development of new products and greater investor interest in instruments with higher returns and higher credit risk.*
- *While corporate credit spreads appear to peak in periods of weak economic activity, shorter-term fluctuations often reflect changes in investors' preferences for highly liquid securities.*
- *A more dynamic Canadian corporate bond market is a welcome development. It offers borrowers an alternative source of funds, especially firms that have typically relied on the banks and the U.S. bond market.*

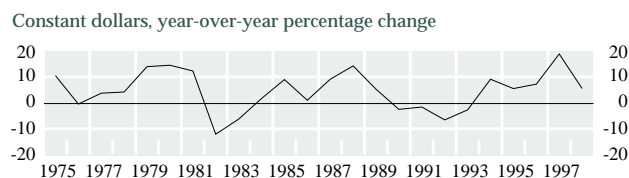
The corporate bond market is an important conduit between savings and investments, enabling borrowers to issue publicly traded debt instruments to finance investment projects and/or spending for general corporate purposes.¹ In Canada, this market dried up in the 1970s and early 1980s as high inflation and the associated volatility in interest rates reduced investor interest in long-term, fixed-rate debt instruments and as borrowers' need for long-term financing declined with the onset of the 1981–82 recession (Charts 1 and 2). Once

Chart 1

Net New Issues of Corporate Bonds by Non-Financial Corporations



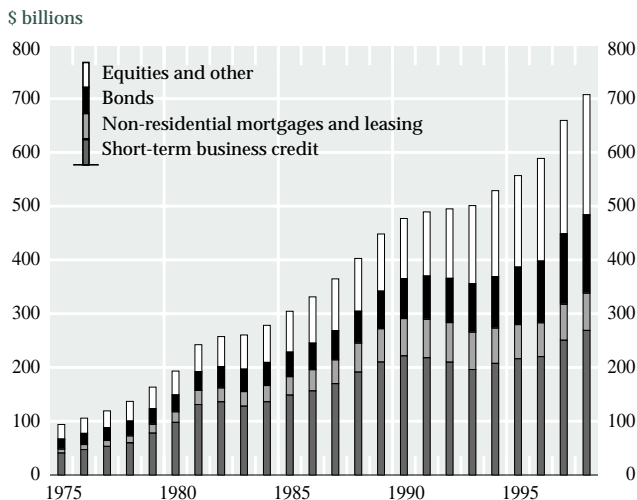
Non-Residential Investment Spending



1. In this article, the term "bond" is used generically to designate a debt issue with a maturity longer than one year.

Chart 2

Total Business Credit



inflation and interest rates began to decline in the mid-1980s, the market revived, as borrowers sought to reduce their reliance on short-term funding, which had exposed them to large, unexpected upward increases in short-term interest rates. Also contributing to the growth in the market over this period was the improvement in Canada's economic prospects, which stimulated a resurgence in non-residential investment spending and thus a need for new corporate bond issues.

Since then, the market has continued to grow, as the improvement in Canada's public finances contributed to a significant decline in the spread between Canadian and U.S. interest rates. In addition, the corporate bond market benefited from the shift in Canadians' holdings of financial assets away from deposits and towards mutual funds, which are major holders of corporate bonds. The brief exception to this trend was the period following the 1990-91 recession, where corporate borrowing requirements declined temporarily with the drop in non-residential investment spending.

A Global Perspective on the Canadian Corporate Bond Market

The close proximity of the U.S. corporate bond market has contributed considerably to the development of the Canadian market. Most of the U.S. market's structures, practices, and institutional arrangements have been replicated in Canada. As a result, the market for bonds issued by non-financial corporations in Canada is relatively large by international standards (Table 1).

Table 1
The Fifteen Largest Private Sector Bond Markets in 1998

Size in billions of U.S. dollar equivalents

	Total	Financial institutions (ranking)	Non-financial corporations (ranking)
United States	4,125	2,148 (1)	1,977 (1)
Germany	1,098	1,093 (2)	5 (13)
Japan	1,017	492 (3)	525 (2)
France	312	272 (4)	40 (5)
Italy	270	264 (5)	6 (12)
Denmark	191	172 (6)	19 (9)
South Korea	174	72 (10)	102 (4)
United Kingdom	133	30 (13)	103 (3)
Switzerland	130	96 (7)	34 (6)
Belgium	106	82 (9)	24 (8)
Sweden	103	92 (8)	11 (11)
Austria	70	66 (11)	4 (14)
China	67	63 (12)	4 (14)
Canada	62	28 (14)	34 (6)
Spain	39	26 (15)	13 (10)

Source: Bank for International Settlements, *International Banking and Financial Market Developments, Quarterly Review* (June 1999)

Note: These data exclude bonds issued by non-residents in a given country's local currency (foreign bonds) and foreign currency bonds issued in any country by both residents and non-residents (eurobonds).

In contrast, most European domestic bond markets have historically served as a source of wholesale funding for large financial institutions.² Non-financial companies in those jurisdictions have tended to rely on financing from financial institutions rather than issuing bonds in their market. Thus, until a few years ago, bond markets serving a broad range of borrowers were mainly a North American and Asian phenomenon.

The market for bonds issued by non-financial corporations in Canada is relatively large by international standards.

The size of the U.S. market is quite striking when compared with those in other countries. Several factors help to explain why the U.S. corporate bond market has flourished, while corporate bond markets in most other countries have developed only in the last two decades (IMF 1998). First, the fragmented banking system in the United States encouraged companies to

2. Data for the United Kingdom are misleading. While there is not a large domestic market for corporate debt, London is the key financial centre for the US\$4.1 trillion eurobond market.

access capital markets directly rather than rely on commercial banks for financing. In contrast, companies in many other countries were more inclined to rely on bank financing because of nationwide banking systems that offered a wide range of services. As a result, large and well-capitalized investment banks and securities dealers were quick to emerge in the United States and were supported by a large base of institutional investors.

The U.S. corporate bond market has also been aided by a well-developed infrastructure that includes a deep and liquid money market for corporate securities, effective and uniform supervisory and regulatory systems, and a long history of corporate credit analysis.³ More generally, one could argue that the development of a corporate bond market in the United States has benefited indirectly from that country's risk-taking, entrepreneurial business culture.

Canadian borrowers regularly raise funds outside of Canada.

Influences Shaping the Market

Despite the presence of a domestic corporate bond market, Canadian borrowers regularly raise funds outside of Canada, primarily in the United States (Chart 3).^{4,5} This is not surprising. Canadian and U.S. financial markets have been closely linked for many years, giving Canadian borrowers easy access to U.S. markets. This has been particularly advantageous for borrowers with weaker credit ratings, since the United States has a much more developed market for bonds with higher credit risk. Moreover, many Canadian

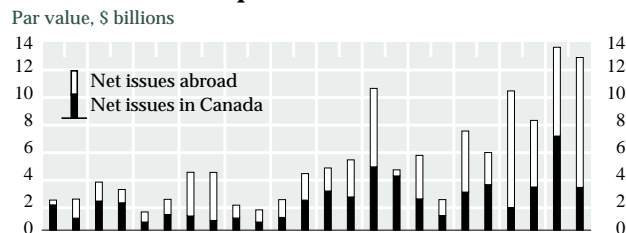
3. The U.S. credit rating agencies Moody's and Standard and Poor's have been assigning credit ratings to borrowers since 1909 and 1923, respectively.

4. A few investment banks in the United States have even created U.S. dollar bond sub-indexes of Canadian issuers to help investors assess the relative investment performance of this sector of the U.S. corporate bond market.

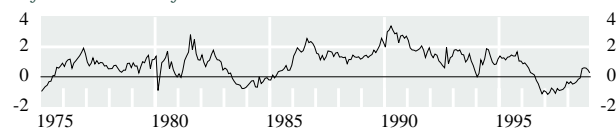
5. Canadian entities have also issued bonds denominated in currencies other than U.S. or Canadian dollars. However, such borrowings are undertaken mainly by banks and corporations with global operations. Moreover, their exposure to the fluctuations in these currencies is often minimized through the use of financial derivatives such as cross-currency swaps, which convert the obligations into U.S. or Canadian dollars.

Chart 3

Net New Issues of Corporate Bonds by Non-Financial Corporations



Per cent, 3- to 5-year Canadian government bond yield minus yield on 5-year U.S. Treasury notes



companies have sizable operations in the United States and/or sell products whose prices are denominated in U.S. dollars—e.g., most primary commodities. By raising funds in U.S. dollars, these companies have been able to naturally hedge the foreign exchange risk embedded in their U.S. dollar-denominated cash flows. Any exchange rate-induced fluctuations in their U.S. dollar cash flows would be offset by exchange rate-induced movements in their debt service costs.

Impact of the spread between Canadian and U.S. interest rates

Corporate Canada's reliance on U.S. markets also fluctuates to a certain extent with movements in the spread between Canadian and U.S. interest rates and corporate treasurers' expectations regarding the future behaviour of the exchange rate. For example, Canadian borrowers actively raised funds in the U.S. market in the late 1980s and early 1990s when interest rates were lower in the United States than they were in Canada. At first glance, this might seem counter-intuitive because in efficient markets the spread between Canadian and U.S. interest rates should reflect expected movements in the exchange rate, and borrowers would not differentiate between raising funds in Canada or the United States. However, it is conceivable that Canadian interest rates in the late 1980s and early 1990s included risk premiums due in part to the deterioration that was taking place in

Canada's public finances at that time (Clinton 1998). Thus, borrowers may have thought that the interest rate spread during that period overstated the expected depreciation of the exchange rate, implying that borrowing in U.S. dollars would be more cost-effective than raising funds in Canada. Conversely, the improvement in Canada's public finances since 1996 has been accompanied by reduced risk premiums in Canadian interest rates and, hence, lower spreads between Canadian and U.S. interest rates. (Until recently, Canadian interest rates have been lower than those in the United States for all maturities.) As a result, Canadian borrowers have been more inclined to issue bonds in Canada. Indeed, in 1997 the volume of net new corporate bond issues in Canada surged to record levels.

Impact of public sector borrowing

It is also worth noting that the recent increase in activity in the Canadian corporate bond market has taken place in a period marked by a striking decline in public sector borrowing (Chart 4). In 1998, for the first time in more than 25 years, the private sector issued more bonds on a net basis in Canada than the public sector. This situation is likely to persist in coming years, given the improvement in public sector finances.

In addition to the economic argument outlined above, one could also postulate that, in the late 1980s and early 1990s, the combination of a large current account

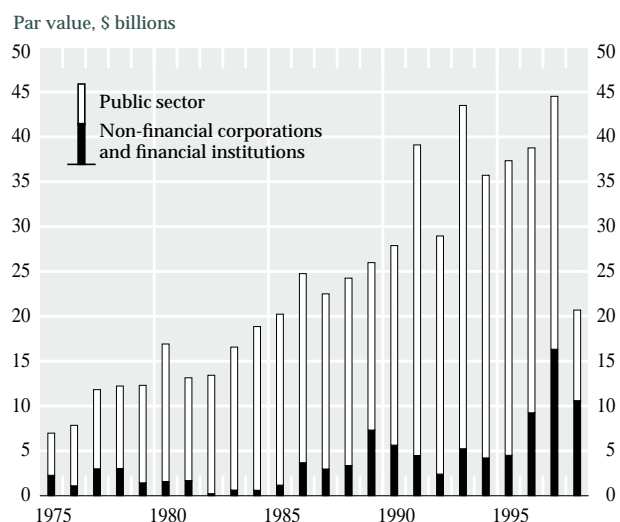
deficit and the public sector's preference for financing most of its deficits in Canadian capital markets led Canadian private sector borrowers to enter the U.S. corporate bond market. They likely felt that it might be more efficient (and, hence, cheaper at the margin) to seek out foreign capital at its source through the U.S. market mechanism rather than try and entice foreign investors into the much smaller Canadian corporate bond market. The results for Canadian interest rates would be largely the same since, either way, foreign capital ends up in Canada.⁶ The main difference is the location where the intermediation of funds takes place. Now that the current account deficit has shrunk and Canadian governments are placing fewer demands on domestic savings, the attractiveness of issuing bonds in Canada increases at the margin because a larger pool of domestic capital is available to private sector borrowers.

Range of borrowers in the Canadian corporate bond market

Until very recently, private sector issuers of bonds in the Canadian corporate bond market were mainly well known, highly rated domestic entities such as financial institutions, utilities, and the largest industrial companies with credit ratings of single A or better.⁷ Of course a bond's credit rating can change after it is issued, since rating agencies regularly reassess a borrower's financial situation. Thus, most issues that are currently rated BBB (the lowest credit rating for "investment grade" debt) or less were downgraded after they were issued because of a deterioration in the issuer's financial situation.

Financial institutions have been active issuers of bonds in Canada in recent years. An important reason for this is that Canadian regulators include debentures (a type of bond) in the definition of a deposit-taking institution's Tier 2 capital base. Canadian regulators have also encouraged Canadian deposit-taking institutions to hold a cushion of capital in excess of the minimum regulatory requirements. As a result, many institutions have found debentures to be a cost-effective form of long-term financing. Consequently, many institutions have issued debentures to obtain

Chart 4
Net New Issues of Bonds by the Private and Public Sectors in Canada



6. In the 1980s and 1990s, the attractiveness of issuing bonds in the U.S. corporate bond market would have been enhanced by the innovations taking place in markets generally, which enabled borrowers to hedge or eliminate any exchange rate risk associated with borrowing offshore.

7. Foreign issuers have been few and far between. This is not too surprising since Canada has traditionally been a net importer of capital.

long-term financing to help fund loan growth rather than taking steps to boost the growth of their deposit base. For similar reasons, they have also sponsored issues of bonds backed by pools of loans from their balance sheets (“asset-backed bonds”) in order to move these assets off their balance sheets and keep their capital requirements to a minimum. Partly as a result, many households have moved their savings from deposits to mutual funds in order to take advantage of the attractive returns generated by these funds in recent years. As will be noted later, these funds are large holders of corporate bonds.

Smaller companies . . . have issued bonds in the Canadian corporate bond market over the last three years.

There is anecdotal evidence that a broader spectrum of borrowers is becoming active in the Canadian market. These include lower-rated entities such as smaller companies that are active in the forest and communications industries—West Fraser Timber and Tembec in the forest industry and Rogers Cantel and Clearnet in the communications industry are examples of smaller companies that have issued bonds in the Canadian corporate bond market over the last three years. The development of a high-yield market in Canada is particularly encouraging, since it might offer an alternative source of domestic funds for small and medium-sized firms that have typically relied on the Canadian banking system and the U.S. corporate bond market for financing. More innovative financing structures are also appearing in the bond market, including a trend towards public/private sector partnerships for infrastructure-related financing. A broader diversity of structures (as in the United States) may emerge in the future to accommodate these new types of financing. However, the development of a high-yield market will take time since credit analysis is less developed in Canada than in the United States. Moreover, the Canadian market is dominated by a few large institutional investors, most of whom are restricted in their ability to invest in lower-rated corporate bonds because of constraints imposed by either regulators or governing prospectuses, or contained in their internal investment guidelines. Nonetheless, some Canadian institu-

tional investors have begun to explore the possibility of taking on more credit risk in order to increase the returns on their investment portfolios.

Holders of Canadian corporate bonds

Corporate bonds in Canada are held mainly by institutional investors such as life insurance companies, pension funds, deposit-taking institutions, and mutual funds.⁸ Life insurance companies have traditionally been the largest holders of corporate bonds (Table 2). However, their demand for corporate bonds has moderated as sales of their insurance and annuity products have tapered off. Meanwhile, deposit-taking institutions and mutual funds have become major buyers of corporate bonds. In the case of the latter, this partly reflects a shift by households from holding corporate bonds directly to holding them indirectly through mutual funds.

Table 2
Major Holders of Corporate Bonds Issued in Canada
Holdings in millions of dollars

	Life insurance companies	Pension funds	Deposit-taking institutions	Mutual funds
1985	12,716	7,798	5,938	328
1990	24,294	14,364	12,275	1,244
1995	34,654	17,388	15,538	5,988
1998	38,444	29,294	29,577	14,587

Source: Bank of Canada and Statistics Canada

Since corporate bonds are mainly a buy-and-hold investment for most institutional investors, secondary market activity does not provide much insight into the inner workings of the market. Secondary market trading of corporate bonds is quite thin and generally represents a small portion of bond market trading in Canada. As a result, the level of liquidity is low and transaction costs are typically higher than for government bonds.

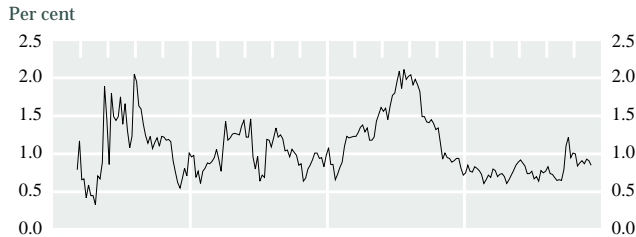
Corporate Credit Spreads

Corporate bonds are priced in terms of yield differences over government bonds of similar maturities. The yield spread on a corporate bond compensates the investor for the expected risk of default and investor preferences for liquidity (government bonds are more liquid than corporate bonds). Chart 5 shows the

8. When investing in Canadian dollar-denominated securities, non-resident investors have preferred to hold highly liquid Government of Canada and provincial government issues. Consequently, they have not been major participants in the Canadian corporate bond market.

Chart 5

Credit Spread*



* Mid-term ScotiaMcLeod Corporate Bond Index yield minus yield on 5-year Government of Canada bonds

Output Gap



Source: Bank of Canada *Monetary Policy Report*

evolution of credit spreads for 5-year corporate bonds against Government of Canada issues of comparable maturities.

Various suggestions have been offered to explain movements in credit spreads (Dialynas 1988). The “quality spread” explanation maintains that spreads move broadly in line with the business cycle, rising when the economy weakens, and falling when business prospects improve. The “portfolio approach” ties credit spreads to the supply of securities available for different risk classes. In Chart 5, one can see that credit spreads do tend to peak in periods when the economy is weak; however, they are also fairly volatile. It is not readily apparent whether this volatility reflects changing investor perceptions regarding default risk or

fluctuations in investor preferences for more highly liquid government bonds.

The recent introduction of a market for credit derivatives sheds some light on this issue because prices for these instruments tend to move in line with the perceived risk of default. Although the market for credit derivatives is in its infancy, prices in this market generally change very slowly and in line with fundamental changes in the underlying asset’s credit quality. This suggests that most of the short-term fluctuations in corporate credit spreads are mainly associated with changes in investors’ preferences for highly liquid securities. The spike in credit spreads in the autumn of 1998 is a good example in this regard. Investors preferred to hold highly liquid government bonds rather than their more thinly traded corporate counterparts, as markets adjusted to the fallout from the default of Russia and the collapse of the hedge fund, Long-Term Capital Management.

Conclusion

With the improvement in Canada’s economic fundamentals, its corporate bond market appears to have a promising future. Borrowers should be able to access a larger pool of capital domestically. The development of credit-analysis skills in Canada and more widespread use of credit derivatives might also contribute to the market’s development and may result in more optimal allocation of capital in the economy. That said, Canadian companies will likely continue to issue a significant portion of their bonds outside Canada because of their need for foreign currency and the relative ease of access to the deep and active corporate bond market in the United States.

Literature Cited

- Clinton, K. 1998. “Canada-U.S. long-term interest differentials in the 1990s.” *Bank of Canada Review* (Spring): 17–38.
- Dialynas, C. P. 1988. “Bond Yield Spreads Revisited.” *Journal of Portfolio Management* (Winter): 57–62.
- International Monetary Fund. 1998. *Fixed-Income Markets in the United States, Europe, and Japan: Some Lessons for Emerging Markets*. December.