

Financial Developments in Canada: Past Trends and Future Challenges

*Charles Freedman, Deputy Governor, and Walter Engert, Department of Monetary and Financial Analysis**

- *The dominant trends in financing behaviour in the Canadian economy in the 1960s and early 1970s were the rising indebtedness of the household sector and the declining indebtedness of the government sector relative to GDP. As well, through the 1970s, with the rise in inflation and the associated increase in nominal interest rates and uncertainty, the non-financial business sector relied increasingly on bank loans and short-term paper for its financing.*
- *From the mid-1970s to the mid-1990s, driven by government deficits, the share of marketable debt issues as a source of finance increased significantly. Since the mid-1990s, the dominant trend has been a decline in debt issued by government, which has been offset to a considerable extent by rapidly growing capital market financing by the corporate sector.*
- *The current proportion of financing from capital market sources for the non-financial business sector in Canada is broadly similar to what it was thirty years ago.*
- *Despite some increased reliance by the Canadian corporate sector on foreign sources of funds over the last decade, the data do not provide much support for the view that domestic capital markets have been abandoned by Canadian firms or “hollowed out” in recent years.*
- *An efficient regulatory system and ongoing fiscal discipline on the part of Canadian governments are important for the continuing development of the corporate capital market in Canada. As well, recent trends in increased innovation and improved risk assessment in Canadian capital markets need to continue.*

* This article is a revised version of a lecture that was prepared for a conference at the Schulich School of Business at York University and was later presented at the Conference Board Financial Services Research Program. The views expressed in it are those of the authors, and no responsibility for them should be attributed to the Bank of Canada. We thank Sophie Lefebvre for excellent research assistance; Jim Armstrong, Clyde Goodlet, and Ron Parker for comments on previous drafts of this paper; and Ross MacKinnon, Elizabeth Woodman, Zahir Lalani, Sophie Lefebvre, and Christian Calmès, whose work at the Bank of Canada contributed importantly to this study. We also thank Greg Haymes for his assistance with the Statistics Canada data used for part of this work.

The financial sector plays a vital role in facilitating economic growth. Its most important function is to match borrowers who are short of funds for potentially profitable investment projects with lenders or investors who have surplus funds. This intermediation role dates back hundreds of years, but has obviously changed greatly over time. Among the most significant changes are the ways services are provided, the instruments used to provide the services, and the nature of the entities providing them.¹ Today's complex financial landscape, with such instruments as asset-backed securities, interest rate swaps, and credit derivatives, is a far cry from the landscape of the 1950s, for example, and even further removed from the landscape of earlier historical periods.

*Today's complex financial landscape
... is a far cry from ...
the landscape of earlier
historical periods.*

This article focuses on the changing pattern of lending and borrowing in Canada over a fairly long period, including the types of financial instruments used and the relative roles of financial institutions and financial markets. Specifically, it considers developments that have affected the process of transferring resources

1. See Freedman and Goodlet (1998, 2002) for a discussion of these changes.

from lenders to borrowers from several perspectives and, in doing so, poses a number of questions:

- How have the financing patterns of borrowers—non-financial and financial corporations, households, and governments—changed over time? A key aspect that is examined is the change in the relative importance of financial institutions and financial markets in intermediating between lenders and borrowers.
- How have the mechanisms—the instruments available to lenders and borrowers—by which ultimate lenders supply funds to ultimate borrowers changed over time?
- What are the challenges going forward? Is the changing behaviour of banks vis-à-vis large corporate borrowers a cause for concern? Does it matter whether financing takes place mainly through markets, through institutions, or through some combination of the two? Are our financial markets in danger of disappearing because of the size and pre-eminence of U.S. financial markets? What are the implications of such a development, should it occur? Are there legal or regulatory obstacles that lessen the efficiency of our financial markets?

The article takes a long-term view, drawing on data covering the last thirty to forty years.² This enabled us to take a broad perspective on the forces behind the changing financial environment in Canada and helped us to assess some of the important challenges facing the financial sector today.

Major Borrowing Patterns of the Non-Financial Sector

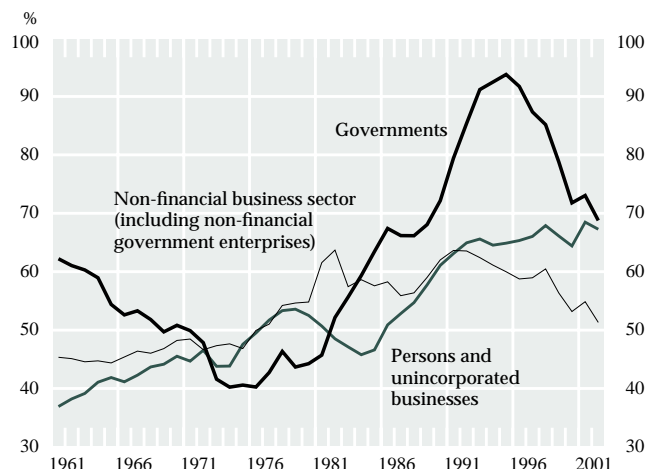
We begin with a broad overview of financing patterns in credit markets over the past forty years, where credit market obligations include loans, mortgages, short-term paper, and bonds, but exclude the equity capital of corporations. Using Statistics Canada data, we classify patterns of borrowing among the various sectors.

2. Because none of the data sources throws light on all the pertinent issues, we used various statistical databases, although we recognize that there are some inconsistencies across them. The primary data sources are Statistics Canada's Balance Sheet and Financial Flow accounts; the Bank of Canada's data on credit, outstanding bonds, and net issues by type of borrower; and data from the Toronto Stock Exchange (TSX).

By type of borrower

Chart 1 shows outstanding debt of domestic non-financial sectors (persons and unincorporated businesses, non-financial private corporations and government enterprises, and governments) as a percentage of nominal GDP.

Chart 1
Outstanding Debt of Domestic Non-Financial Sectors as a Percentage of GDP



These data indicate that, over the period, the debt of persons and unincorporated businesses has increased relative to GDP. While both consumer credit and mortgage credit contributed to this rapid rate of growth, mortgage credit has been more notable in this regard, gradually increasing its share of household debt over most of the period. The only sustained period during which debt in this sector grew less rapidly than GDP was the first half of the 1980s. This was a response to the situation in the late 1970s and early 1980s, when there were extremely high rates of interest associated with inflation, along with a steep recession and a sharp decline in housing prices.

The debt of the government sector declined relative to GDP until the mid-1970s as governments ran budget surpluses or small deficits. Over the next two decades, as governments ran large deficits, the ratio of government debt to GDP more than doubled, rising from about 40 per cent in the mid-1970s to over 90 per cent in the mid-1990s. It subsequently fell back to under 70 per cent in 2002 as governments balanced their budgets or ran surpluses.

Outstanding debt of the non-financial business sector (including non-financial government enterprises) var-

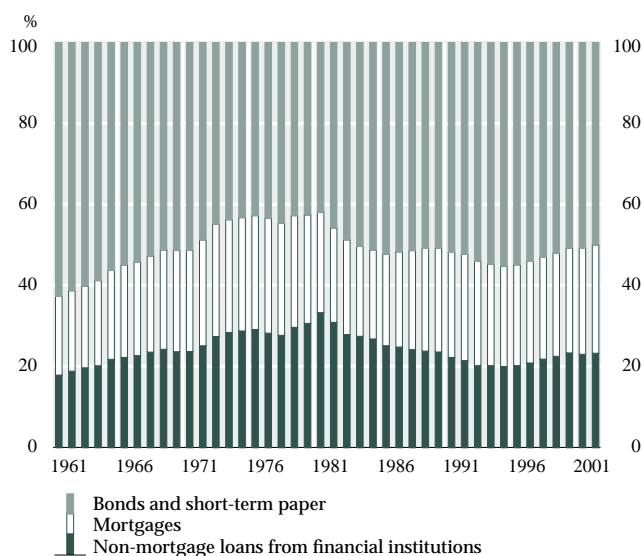
ied between 44 and 49 per cent of GDP in the 1960s and the first half of the 1970s and fluctuated in the 54 to 64 per cent range for much of the following period. This rise in debt relative to GDP is partly accounted for by the relative decline of equity in non-financial private corporations (i.e., a rise in the overall debt-to-equity ratio).

By type of instrument

In Chart 2, we classify outstanding debt by the nature of the credit instrument used—loans, mortgages, and marketable debt (short-term paper and bonds).³ The notable decrease through the 1960s and 1970s in the reliance on marketable debt corresponds to the rise in the use of mortgages and non-mortgage borrowing from financial institutions. This reflects, in part, the declining importance of governments as borrowers, since governments typically fund themselves by issuing marketable debt. At the same time, the rise in the relative importance of borrowing by households tended to increase the amount of borrowing from financial institutions, both mortgage and non-mortgage, since households, lacking access to debt markets, borrow almost entirely from financial institutions.

The third major group, the corporate sector, uses both markets and financial institutions as sources of funds.

Chart 2
Outstanding Debt of Domestic Non-Financial Sectors, Breakdown by Instrument



3. In this database, bonds include Canada Savings Bonds (CSBs), which are not marketable, but are highly liquid. The conclusions would not be affected by the exclusion of CSBs from the bond measures.

Through much of the 1970s, corporations sharply increased their use of bank loans, largely because of the rise in inflation rates over this period and the associated rise in nominal interest rates. Given the great uncertainty during the 1970s about the outlook for future inflation and nominal interest rates, lenders and corporate borrowers were reluctant to lock themselves into longer-term instruments. From the standpoint of the corporate borrower, if the rate of inflation fell, the ex post real rate it would take on by issuing medium- or long-term debt would be punitive. From the perspective of the lender, if inflation and nominal interest rates rose, the ex post real interest rates on longer-term debt would be negative. Under these conditions, corporations principally financed themselves using loans from the chartered banks,⁴ while lenders shifted into short-term instruments, including shorter-term bank deposits.

What distinguished bank loans from bonds was the floating-rate nature of most bank loans (at an interest rate tied to the prime rate). Marketable bonds, in contrast, locked in the interest rate for a longer period. At the time, a floating-rate longer-term bond with interest rates tied to a short-term market instrument that tend to adjust with the rate of inflation was not available in the Canadian market. In the absence of such a bond, corporate borrowers shifted to bank loans to an important extent.

Returning to the overall picture, through the 1980s the share of marketable debt increased significantly at the expense of non-mortgage borrowing from financial institutions. This reflected in part the increase in the relative importance of government borrowing which, as noted earlier, is conducted mainly via bond issues. This tendency was accentuated by the slowdown in the growth of household borrowing from financial institutions in the first half of the 1980s and the reduction through the decade in the relative importance of loans in corporate borrowing. The 1990s saw fairly stable shares of credit financed through the different instruments, since the increasing share of bonds and debentures issued by corporations tended to offset the declining role of governments and the increasing role of households as borrowers. Both of these latter developments acted to increase the importance of financial institutions relative to markets.

An important caveat is that these data are defined in terms of the nature of the originating lender and do

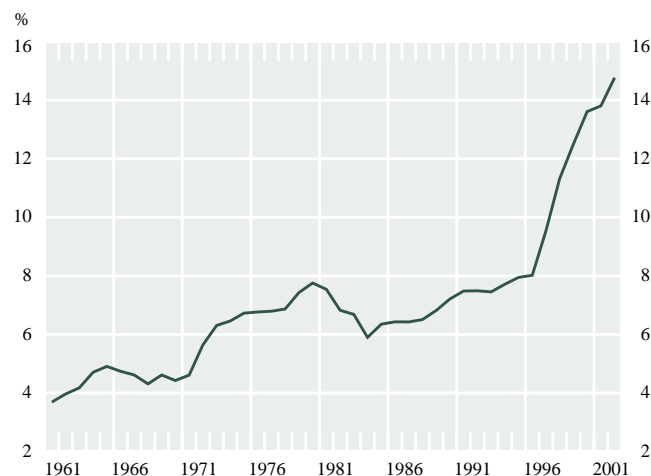
4. During this period there were also large numbers of mergers and acquisitions, which increased the overall demand for funds, particularly bank loans, by the corporate sector.

not take into account subsequent developments. As we shall see, an appreciable proportion of mortgage debt and household credit is now securitized and, for some purposes, should be included with marketable debt. That said, the securitization numbers are not so large as to seriously distort the interpretation of the broad trends set out above.⁵

Borrowing by the financial sector

Chart 3 shows that, in recent years, financial entities have increased their use of credit markets more rapidly than have domestic non-financial borrowers. A key factor in this increase has been the issue of bonds and short-term paper by the providers of asset-backed securities, i.e., the entities involved in securitization.

Chart 3
Financial Entities' Share of Outstanding Debt



The relative roles of financial institutions and markets internationally

In some countries, such as Japan and Germany, loans have dominated the financial landscape. In others, including the United States, the United Kingdom, and Canada, both loans and market instruments have been used extensively to fund ultimate borrowers. Of course, as we have seen, the type of entity that does most of the borrowing has an important influence on the instrument used. Governments in developed countries tend to use bond markets to fund their deficits, while households normally borrow from financial institutions through mortgages or consumer loans of various sorts. Small businesses also use financial insti-

tutions to meet their funding needs. It is the large corporate sector that has differed so significantly across countries in the way it has funded its financial requirements. (We consider this sector in more detail in the following section.)

Interestingly, in the latter part of the 1980s, following a long period of good performance by the Japanese and German economies, a number of authors argued in various books and articles that the German and Japanese model of bank-led financing was superior to the “Anglo-Saxon” reliance on markets because of its ability to take a longer-term outlook and to support corporations through temporary difficulties. More recently, with the better performance through the 1990s of the U.S. and U.K. economies and the much poorer performance of the German and Japanese economies, some analysts have argued that market-led systems are superior to bank-led systems, since they allocate funds impartially and do not prop up corporations that should be allowed to fail.

In a recent Bank of Canada working paper, Dolar and Meh (2002) surveyed the academic literature and concluded that, rather than being substitutes for each other, bank lending and market financing were complements, suggesting that “the issue is not intermediaries versus markets, but rather the creation of an environment for better-functioning intermediaries and markets.”⁶ Similarly, the increased interest in emerging economies in recent years has led to extensive research on the underpinnings of effective and efficient intermediation and to the formulation of the “law and finance view” of financial development. This perspective emphasizes the importance of an effective and efficient regulatory system, a sound legal environment, and solid arrangements for enforcing contracts in creating a financial services sector that supports economic growth.

A Closer Look at Non-Financial Businesses

We can further examine the behaviour of the non-financial business sector by using Bank of Canada data, which have somewhat different coverage than Statistics Canada data. The data published by the Bank show the estimated amounts of business finance outstanding at major private lenders (including loans to non-bank financial institutions and to government business enterprises) and the securities issued by non-

5. Securitization currently represents almost 7 per cent of total borrowing.

6. For a comprehensive empirical study of this issue that reaches similar conclusions, see Levine (2002).

financial businesses (including federal government business enterprises).

Chart 4 shows the composition of external financing (defined as funds raised from lenders and investors but not retained earnings) based on the Bank of Canada data. Consistent with the earlier discussion, the chart shows the rise in the share of loans in the 1970s and the reversal of this buildup in the 1980s and 1990s. It also shows the increasing importance of short-term paper (bankers' acceptances plus commercial paper) throughout the 1980s. Bonds and debentures fell from about 20 per cent of external financing at the beginning of the 1970s to about 15 per cent at the end of the decade, where they remained through the 1980s, and then rose through the 1990s, reaching about 27 per cent at the end of 2002. Finally, equity issues declined from almost 45 per cent at the beginning of the period to a low of just above 20 per cent in the early 1980s, before recovering more recently to 34 per cent.

Interestingly, these trends mean that, for the non-financial business sector, the proportion of finance from capital market sources (short-term paper, bonds, equity) is currently broadly similar to what it was thirty years ago, with a long period of expansion in

the share of funding from financial institutions followed by an offsetting contraction.

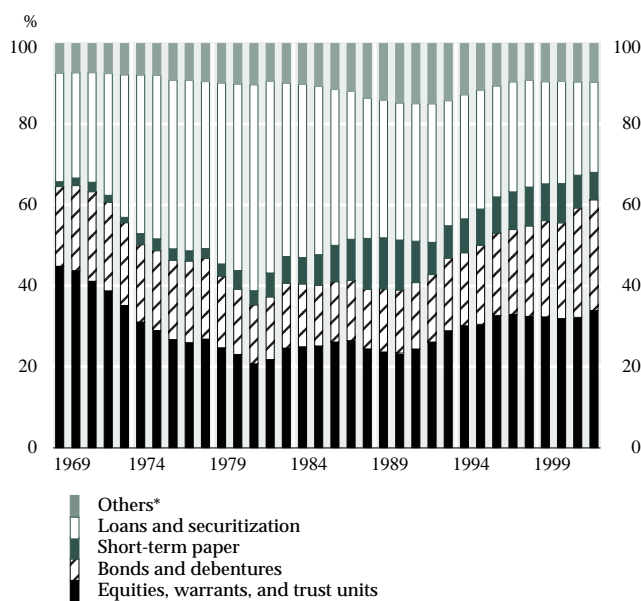
These trends mean that, for the non-financial business sector, the proportion of finance from capital market sources . . . is currently broadly similar to what it was thirty years ago, with a long period of expansion in the share of funding from financial institutions followed by an offsetting contraction.

A recent noteworthy development has been the change in attitude of a number of Canadian banks towards lending to large corporations (Freedman and Goodlet 2002). The banks have publicly announced that they will be reducing the size of their loan book to large companies and concentrating on corporations that undertake other business with them, particularly capital market services such as underwriting. For example, the *National Post* reported (23 October 2001) that the Royal Bank is, "taking an axe to its corporate loan division. RBC Capital Markets lends money to about 1,000 corporate clients. The bank will focus on about 500 'core' clients; the rest will be considered non-essential, and the loans may not be renewed when they come due."

Two related factors appear to be behind the cutbacks to large corporate lending. The first is the sharp increase in losses on such loans over the recent period. The second is the apparent difficulty in pricing the risks appropriately. To quote a senior Canadian commercial banker (*National Post*, 5 April 2002), corporate lending

is a market with little discipline and no real barriers to entry. If it isn't the Swiss, it's the Germans. If it's not the Germans, it's the Americans. The Canadian banks . . . are also far from saints. Somebody is always trying to win market share. . . . In good times, the profitability of this product can only be described as poor. In bad times, it is much, much worse.

Chart 4
Non-Financial Business Sector: Composition of External Financing



* Non-residential mortgages, securitization, leasing receivables

He went on to explain that the reason for lending to large corporations is “collateral revenues,” presumably the fees from underwriting deals and advising on mergers and acquisitions. As a Moody’s (2002) report put it, “for the Canadian banks, the loan syndication market is the entrée into securities underwriting.” Similarly, *The Economist* (11 January 2003) has reported on the steady withdrawal of U.S. banks from lending to companies with which they did not have additional business. That article also reported data (compiled by the Loan Pricing Corporation) that suggest that corporate lending yields significantly less than other instruments used to fund corporations, such as bonds.

This scenario raises a couple of puzzles from an economic perspective. First, why has it proven so difficult to price the risk on loans to large corporations appropriately? Second, and relatedly, the implicit argument behind linking loans to corporations and providing capital market services to them is that corporate lending by itself is a low-return activity (which uses up large amounts of bank capital), while capital market services yield significantly higher returns, such that the overall return on capital to the bank from the combined activity would be satisfactory. Indeed, some dealers not associated with banks complain that they find it hard to compete with the bank-owned dealers because they lack the banks’ capacity to offer lines of credit for corporate lending. However, if corporate lending does not offer a sufficiently high return to cover the cost of the capital needed to support it, why don’t the spreads on such lending widen? Wider spreads would allow a financial service provider to charge lower fees to the companies that use capital market services, since the financial service provider would have less need to cross-subsidize the corporate loans.⁷

Even if the linkage is based on economies of scope (arising, say, from the joint use of information on the company in corporate lending and in underwriting), this would not explain the different rates of return on the two types of activity, only the ability of the joint supplier to undercut separate suppliers. The argument is sometimes made that corporate lending is a low-return activity, since it has become commoditized and can be met by a wide variety of suppliers, but this does not resolve the puzzle. The ability of a company to access lines of credit from a range of financial serv-

ice providers should make it easier, not harder, for the company to use different firms to raise different kinds of funds, and thus make it more difficult for financial service providers to link the different types of services.⁸

Are we moving to an environment in which large corporations become more dependent on market issues and less on bank borrowing?

Other questions can be raised about this change in bank behaviour. Are we moving to an environment in which large corporations become more dependent on market issues and less on bank borrowing? Will large corporations become more closely tied to a single bank and use that bank for all their requirements? (This would be similar to the German *hausbank* or Japanese main-bank model.) How will this affect loan syndications? Will the concern about overconcentrated portfolios lead banks to withdraw further from lending to large corporations and to focus their attention as lenders increasingly on households and small- and medium-sized businesses? What are the macroeconomic implications, if any, of such changes?

Syndicated Lending, Securitization, and Credit Derivatives

Until relatively recently, borrowing was done either through markets (i.e., bonds and short-term paper) or through financial institutions (i.e., loans and mortgages) and the distinctions were very clear. Thus, banks and other financial institutions typically both originated loans and maintained the loan on their balance sheets for its duration. Three elements in the loan process—a positive decision on the loan application, the provision of funds, and ongoing credit exposure—were linked or bundled together. In recent years, financial engineering has allowed these three elements to be unbundled in a variety of ways. In some

7. Anecdotal evidence suggests that this has begun to happen.

8. Another explanation offered for this tendency of borrowers to be more closely linked to a single provider of loans and capital market services is that borrowers prefer to be fully serviced by a single financial service provider. However, this explanation also fails to explain the puzzle related to the pricing of the different components of the financing relationship.

of these ways, including syndicated loans and securitization, the loan instrument becomes similar to a marketable bond. To the two broad categories of borrowing (market issues and financial-institution financing), we could thus add a third: hybrid instruments, such as syndicated loans and securitized instruments, which would fall between loan-type borrowing and bond-type issues.

Syndicated lending

In loan syndications, the originating bank sells most of a loan arrangement to other banks in the syndicate. While the originating bank earns the fees from origination, it provides only a share (and sometimes only a small share) of the financing and assumes a corresponding share of the exposure to losses. A key advantage of syndication to the originating bank is that its loan book does not become overly concentrated (i.e., insufficiently diversified) even though it arranges loans that can be large relative to its capital. Large loan syndications often comprise multiple loan tranches with different terms and features. The shortest maturities are typically targeted at traditional bank purchasers, while the longer-term tranches are aimed at institutional investors with longer-term horizons, such as insurance companies and investment funds. Secondary markets allow participants to adjust their exposures by selling or purchasing shares of the loans following the initial syndication.⁹

The loan-syndication process is most fully developed in the United States. In Canada, with a small number of large banks, loan syndicates still resemble “clubs.” That is, for large corporate loans, the lead bank, which is unwilling to take the full loan into its own portfolio because of concern about the size of the exposure relative to its capital, will invite some or all of the other large Canadian banks to participate in the loan. The syndicated loan typically involves a one-year revolving segment and a term-loan segment with a longer maturity. Unlike in the United States, there does not exist in Canada a liquid secondary market in which exposures can be readily adjusted after the initial transaction.

In Canada, a significant proportion of so-called “corporate” loans, i.e., loans to large corporations, have involved syndication. In contrast, commercial or mid-sized loans are typically held on the books of the originating banks, in part since their smaller size does not result in concerns about the magnitude of the exposure relative to capital for the lending bank.

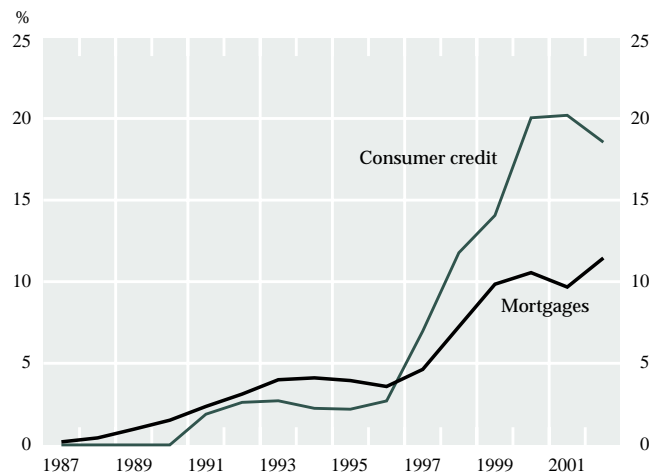
9. For a more detailed discussion of loan syndication, see Armstrong (2003).

Securitization

Securitization of loans—packaging a group of loans and issuing a security or series of securities giving the purchasers a claim on the package of loans—began in the United States in the mortgage-lending area and has since spread to credit card loans, receivables, other household loans, and small business loans. The securitization process typically also involves some form of credit enhancement by the originating institution or other party, which reduces the credit risk to the purchasers of the asset. For example, the underlying mortgage loans may be guaranteed by a government agency, or the loans may be insured against default by an insurance company. In some instruments, there are various loan tranches, ranging from less risky to more risky, and the purchasers can choose tranches that satisfy their appetite for risk and return.

Chart 5 presents the percentage of Canadian mortgages (mostly residential mortgages) that are securitized, which has risen gradually to its current level of over 11 per cent, and the percentage of Canadian consumer credit that is securitized, which has risen more sharply in recent years, to almost 20 per cent. In contrast, about 50 per cent of U.S. residential mortgages and about 35 per cent of U.S. consumer credit are now securitized. The securitization of other loans in Canada appears to be considerably less important than it is for mortgages and consumer credit, amounting to less than 7 per cent of total loans at the end of 2002 (according to Statistics Canada data).

Chart 5
Securitized Credit as a Percentage of Corresponding Total Credit



Differences in the term of mortgage loans and the method of their financing account for the different outcomes in the two countries. In the United States in the 1970s, savings and loan associations and mutual savings banks were the major providers of mortgage financing for households. On the asset side of their balance sheet, they held mortgage loans with a 25- to 30-year term to maturity, while on the liability side they funded these loans with much shorter-term deposits. As long as interest rates were relatively stable, this arrangement functioned reasonably well, and the institutions profited from the spread between longer-term loan rates and shorter-term deposit rates.

The onset of inflationary pressures in the latter part of the 1960s and through the 1970s, however, ushered in much more volatile interest rates. As a result, there was rationing of credit at times of high interest rates when deposit-rate ceilings were in effect in the United States (which inhibited the funding of these institutions). And, with this sort of term mismatch on the books of the specialized mortgage lenders, loan losses followed the removal of the deposit-rate ceilings. These losses eventually led to the sharp contraction of the savings and loan sector.¹⁰ Securitization of mortgages effectively changed the funding of mortgages, from a short-term source (i.e., short-term deposits) to a longer-term source (i.e., longer-term investors in mortgage-backed securities or MBSS) and hence largely eliminated the term mismatch that was the initial source of problems for the savings and loan industry.

Why did the same process not play out in Canada? The answer is that, because of changes in legal arrangements, more risk-averse financial institutions, and perhaps luck, Canadian mortgages in the late 1960s changed from fixed-rate 25- or 30-year instruments to instruments with an interest rate that rolled over every five years (or less). And, crucially important, the trust companies and banks that were the main providers of mortgage financing for households were able to match the 5-year interest rate commitment on their mortgages with deposits that had a 5-year term. Later on, they offered a full range of terms, from floating to five years (and even 7- and 10-year terms), but they were able to match the term of the

10. The full history of the U.S. savings and loan industry would also have to take into account the ability of these institutions to continue to operate in the face of losses because of deposit insurance and forbearance by supervisors, as well as the regulatory broadening of the types of businesses in which they could engage.

assets with that of their deposit or other liabilities. The Canadian financial institutions were thus able to avoid the risk of term mismatch and earn a reasonable profit from the spread between loan rates and deposit rates. There was thus little incentive for the MBS market to develop in Canada in the same way as it did in the United States.

A proportionately much smaller MBS market did develop in Canada in the 1990s for two quite different reasons than in the United States. First, with the increased emphasis on capital, banks chose to limit the growth in capital requirements by moving some of their assets off their balance sheet. By securitizing part of their mortgage portfolio, they were able to slow the growth of the assets against which capital had to be held. Second, with the increased attractiveness of mutual funds, deposit-taking financial institutions found it harder to attract term deposits to match 5-year mortgages. While they were able to use interest rate swaps to lock in 5-year funds or go to the wholesale market for 5-year financing, it turned out to be more profitable in some cases to securitize the mortgages (and earn the fees associated with securitization) than to hold them on their books.

Credit derivatives

While both syndication and securitization have continued to provide banks with ways of limiting and diversifying their exposure to credit risk, a more recently developed form of financial engineering, credit derivatives, has become increasingly important in the last few years.¹¹ This instrument allows a bank to continue to hold a loan on its books while selling part or all of the credit risk to another entity that is willing to sell risk protection in return for a fee. If the event specified in the credit derivative contract takes place, the seller of the credit derivative (i.e., the provider of protection) pays the purchaser of the credit derivative for the loss incurred. For example, if the specified risk is the bankruptcy of the company to which the loan was made and this is the event that triggers payment, the bank originating the loan is protected against the loss associated with the bankruptcy. An important advantage of a credit derivative over a loan syndication is that the borrower is not aware that the bank with which it is doing business has chosen to limit its credit exposure to the borrower.

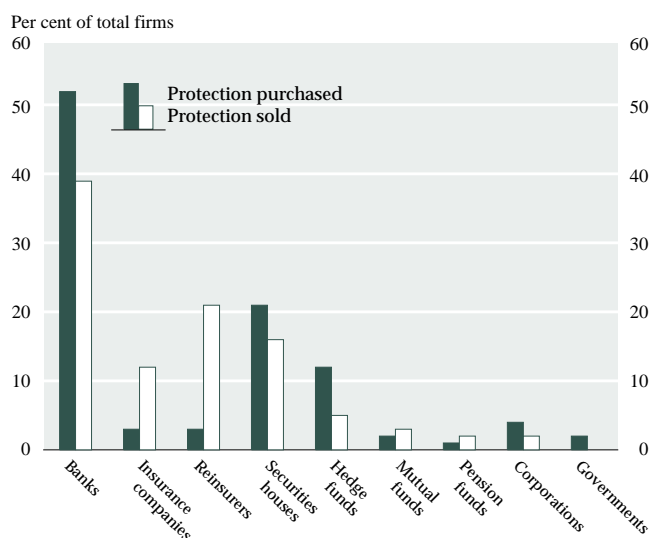
11. For a more detailed discussion of credit derivatives, see Kiff and Morrow (2000).

While both syndication and securitization have continued to provide banks with ways of limiting and diversifying their exposure to credit risk, a more recently developed form of financial engineering, credit derivatives, has become increasingly important in the last few years.

Although banks have been natural buyers of credit derivatives (purchasers of credit protection), they have also sold credit derivatives (provided credit protection). By doing so, they have been able to diversify their credit risks across corporations more broadly than they would have been able to do simply on the basis of the loan holdings in their portfolios. Data from a survey of financial institutions by the British Bankers' Association presented in Chart 6 show that banks, securities houses, and hedge funds were net purchasers of credit protection, while insurance companies and reinsurers were net sellers.

Chart 6
Breakdown of Credit-Derivative Market Participants

Showing protection bought and sold



Source: British Bankers' Association (September 2002)

While credit derivatives have grown rapidly, they are still very small in value compared to other forms of derivatives. Moreover, they have not yet become a major factor in Canadian loan markets, perhaps because of the large size of the major Canadian banks, which enables them to diversify loan risk on their balance sheet much more effectively than smaller banks, and because of the use of syndication to diversify lending risks. However, some Canadian banks have been involved in U.S. credit-derivative markets.

Bond and Equity-Market Developments: The Hollowing Out of Canadian Capital Markets?

With increasing globalization, some observers have questioned the future of the bond and stock markets in countries that are on the periphery. Will they continue to exist and to prosper or will activity increasingly shift to the more liquid, more resilient, and deeper markets in the major countries? In the case of Canada, we know that a significant amount of borrowing by Canadian corporations takes place in U.S. bond markets and that an appreciable number of large corporations are cross-listed on U.S. stock exchanges. Is this a harbinger of a future in which Canadian financial markets become ever less important, or is it a reflection of a longstanding and viable situation in which Canadian corporations make use of both Canadian and U.S. financial markets to conduct their financing?

Bond markets

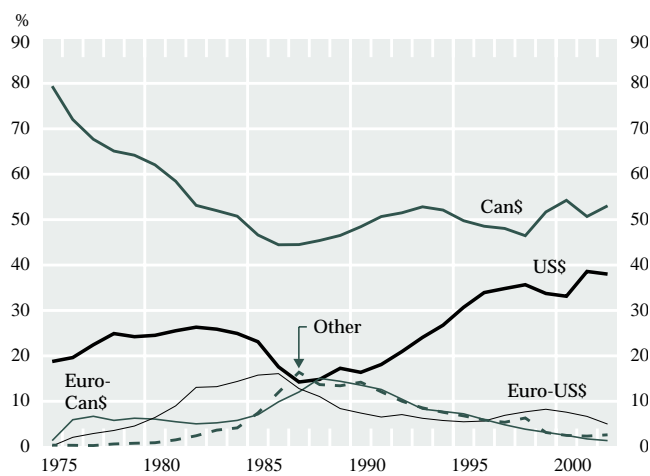
To begin to address these questions, it is useful to examine the borrowing behaviour of Canadian corporations over the past 25 years. We do this using Bank of Canada data that divide corporate bond issues by currency of denomination and country of issue.

Chart 7 shows the percentage distribution of outstanding bonds issued by Canadian corporations, both non-financial and financial (as well as government enterprises), including issues of asset-backed securities related to securitization.¹² Over the first decade covered by the data (1975–1985), a declining share, but well over half, of the outstanding issues were in Canadian dollars and issued in Canada. This ratio has remained at around 50 per cent since the

12. Excluding asset-backed securities from these data does not materially change the conclusions provided here.

Chart 7

Per Cent Distribution of Outstanding Bonds Issued by Canadian Corporations



mid-1980s. Euro-Canadian, Euro-U.S.-dollar, and other currency issues all rose through the 1980s and fell back in the 1990s.¹³ Corresponding to these developments, during the 1990s, the share of outstanding bonds denominated in U.S. dollars and issued in U.S. markets increased and captured the share of issues that were no longer going into the latter types of instruments.

Chart 8 combines Canadian-dollar and Euro-Canadian-dollar issues, and similarly combines U.S.-dollar and Euro-U.S.-dollar issues. Clearly there has been a very gradual decline in Canadian-dollar issues over much of the 1990s, while U.S.-dollar issues have risen over the same period. However, considering that the measurement of the foreign currency component is inflated by the depreciation of the Canadian dollar over this period, it is noteworthy that the Canadian-dollar share more or less maintained its level.

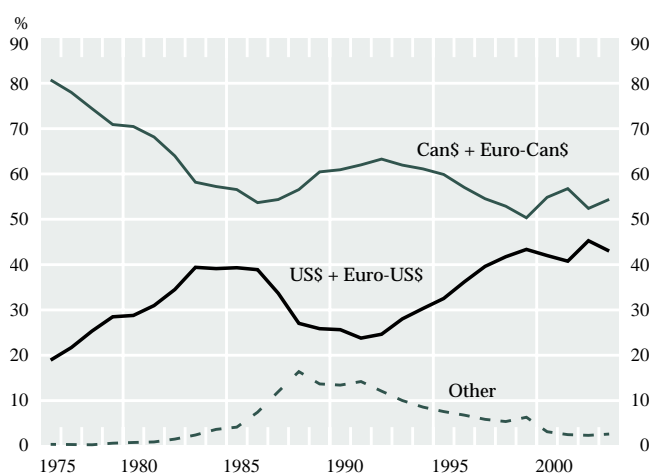
It is also worth noting that corporate bond issues as a whole, both non-financial and financial, grew very rapidly in all markets in the 1990s, as did the Canadian-dollar component of these issues. When account is taken of the low rate of inflation and, hence, of the relatively low growth of nominal GDP over the period, the growth rates are striking. As a percentage of GDP, Canadian-dollar corporate bonds outstanding rose from 9.0 per cent in 1991 to 10.0 per cent in 1996 to

13. Euro-Canadian securities are Canadian-dollar issues placed outside Canada; Euro-U.S.-dollar securities are U.S.-dollar issues placed outside the United States.

Chart 8

Per Cent Distribution of Outstanding Bonds Issued by Canadian Corporations

Without regard for placement



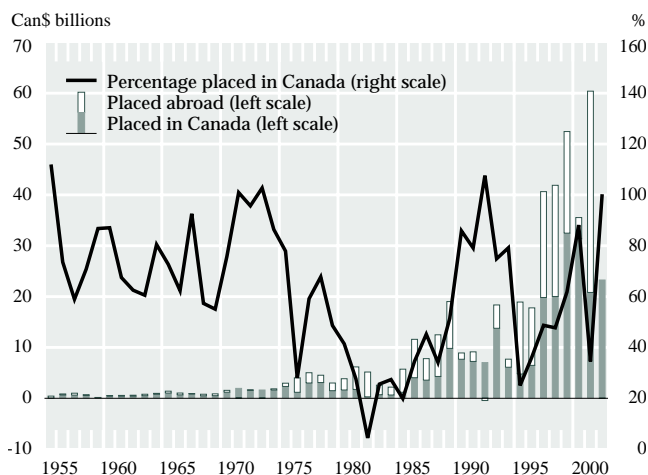
16.5 per cent in 2001. Thus, virtually all of the increase came in the second half of the period (1996–2001) when the federal government was moving into a budget surplus and reducing its demands on the Canadian bond market.

Over the same period (1996–2001), when federal government debt denominated in Canadian dollars was declining in absolute value, provincial governments were shifting from foreign currency debt to Canadian-dollar debt, and term debt issued to finance securitizations increased rapidly. Thus, over the five years, Canadian-dollar debt excluding federal government debt increased by 55 per cent, while total Canadian-dollar debt (i.e., including federal government debt) rose by 28 per cent, similar to the growth of nominal GDP. “Crowding in” of non-federal debt was very much at work over the period.

Another, slightly different perspective can be gained by examining net new issues over the period (Chart 9) rather than levels outstanding. While choppy, these data show that for all corporations, the proportion of bonds issued in Canada over the last 15 years, although lower than the proportion seen before the mid-1970s, has, on balance, remained at about half the total.

Why do Canadian corporations choose to borrow in foreign markets? A number of factors may affect their behaviour, although there is little empirical evidence regarding their relative importance. First, the size of issues clearly plays a role, with the average size of

Chart 9
Total Net New Bond Issues: All Corporations



issues in the deeper U.S. market clearly larger than in the Canadian market. Corporations trying to raise large amounts of funds in the bond market are thus more apt to issue bonds in the U.S. market than in the Canadian market. In 2001, for example, the average size of U.S.-dollar issues of Canadian corporate borrowers was more than three times that of Canadian-dollar issues. Second, longer terms to maturity are available in the U.S. market than in the Canadian market.

A third factor may be the natural hedge that Canadian exporters have when borrowing in U.S. dollars. With the increase in Canada-U.S. trade in recent years, this factor may have increased in importance. Similarly, Canadian corporations that are considering direct investments in the United States will take into account the natural hedge from denominating their borrowing in U.S. dollars.

A fourth factor relates to the growing role of the high-yield market in financing high-tech and telecom companies, companies without a long track record, and other companies with lower credit ratings, and to the very limited size of the high-yield market in Canada. The Canadian high-yield market is very much in its infancy and is characterized by a small number of issuers and a low value of outstanding debt. After a hesitant start, it peaked in 1997, when it accounted for an estimated 6 to 7 per cent of total corporate debt issues. The market stalled the next year in the aftermath of the Asian financial crisis and the subsequent Russian debt default and near-collapse of Long-Term Capital Management (LTCM). It has since accounted

for 3 per cent or less of annual corporate debt issuance in Canada. High-yield Canadian borrowers thus meet almost all of their financing requirements in the United States, where a deep and liquid high-yield market exists.¹⁴ This high-yield debt accounted for roughly 40 to 50 per cent of the value of U.S.-dollar debt issued by Canadian firms in recent years.

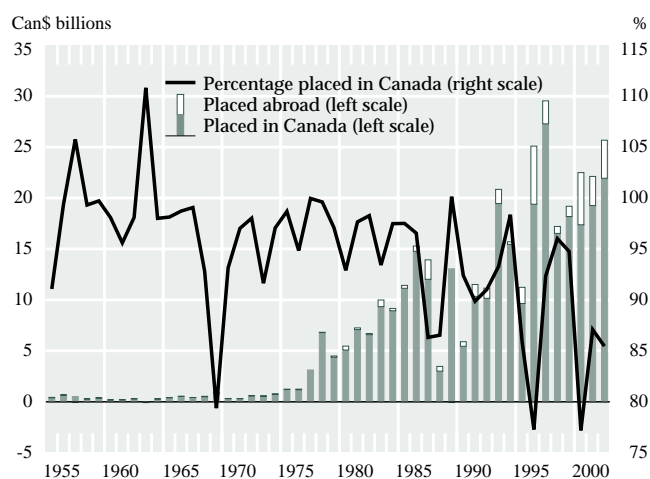
Finally, at times when the federal government was a large borrower in the Canadian bond market, it crowded out other borrowers, which then turned to foreign bond markets, most notably the U.S. bond market.

Equity markets

In the last 15 years, there has been increased reliance on foreign placements of net new equity issues. Nevertheless, the share of foreign placements of new issues—although volatile—seems relatively small, averaging about 12 per cent in the last five years (Chart 10). Thus, while the share of net new equity issues placed abroad has tended to increase in recent years, the vast majority of such issues are still placed in Canada.¹⁵

In the 1990s, the number of Canadian-based issues listed on both U. S. and Canadian exchanges increased sharply. Scaling these data by the number of stocks listed on the Toronto Stock Exchange shows that the

Chart 10
Total Net New Stock Issues: All Corporations



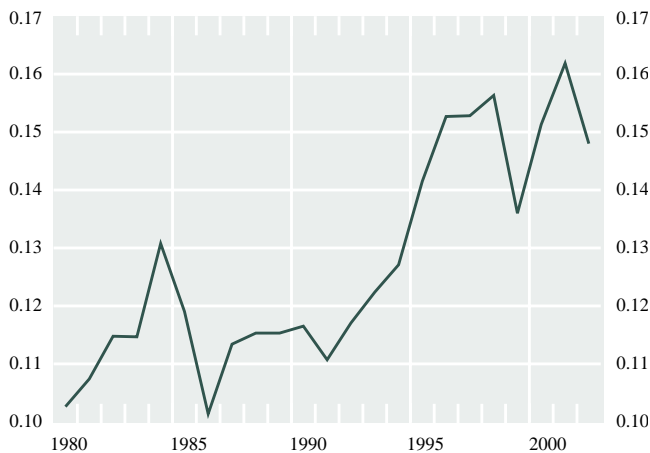
14. Canadian lenders wishing to purchase high-yield debt also tend to go to the U.S. market, which offers the possibility of more diversification than the narrower Canadian market.

15. Although these data include income trusts, their exclusion would not materially change the conclusions reached here.

Chart 11

Proportion of Interlisted Shares on the TSX: 1980–2002

Number of Canadian-based issues interlisted on U.S. exchanges/number of companies listed on TSX

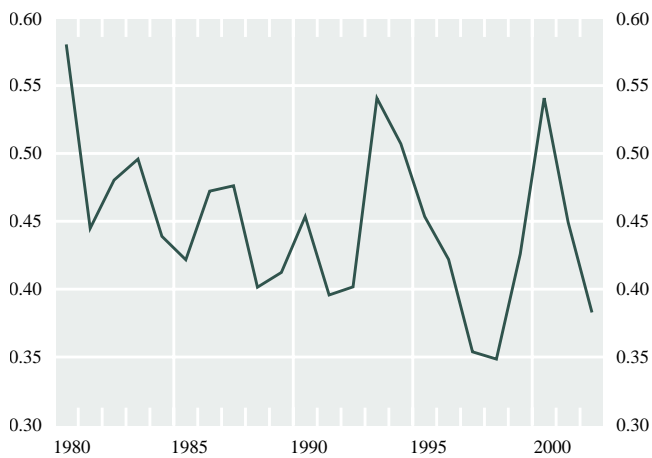


Source: TSX Review

Chart 13

U.S. Exchanges' Share of Trading in Canadian-Based Interlisted Issues: 1980–2002

Value of trading on U.S. exchanges/total value of trading

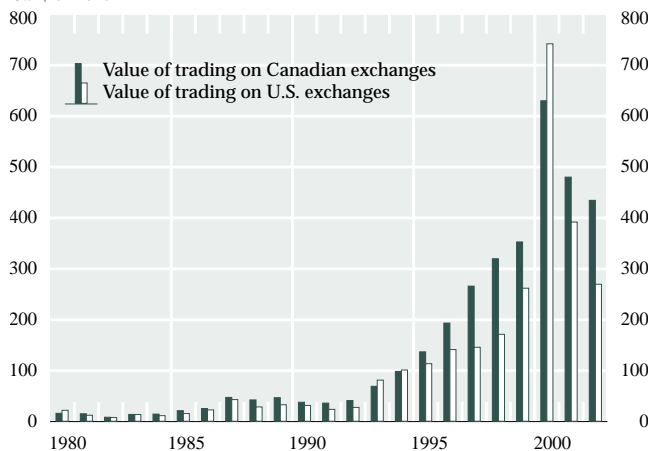


Source: TSX Review

Chart 12

Value of Trading in Canadian-Based Interlisted Shares: 1980–2002

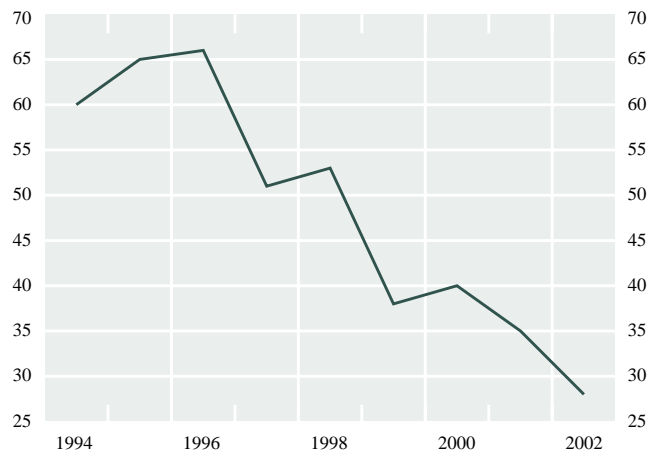
Can\$ billions



Source: TSX Review

Chart 14

Number of Canadian Issuers Solely Listed in the U.S.*: 1994–2002



* NYSE, Nasdaq National Market, Nasdaq Small Caps, Nasdaq Amex
Source: TSX Review

percentage of interlisted firms increased modestly in the last 15 or so years, from about 12 per cent in the mid-1980s to about 15 per cent more recently (Chart 11).¹⁶

Although the absolute volume and value of trading of interlisted stocks on U.S. exchanges has also increased

(Chart 12), there has been little change since the mid-1980s in the proportion of the value of these stocks traded on U.S. exchanges. About 40 to 50 per cent of total trading in interlisted stocks is on U.S. exchanges, which has been the case for some time (Chart 13). Finally, the number of Canadian-based firms listing exclusively on U.S. exchanges declined steadily from the mid-1990s through 2002 (Chart 14).

16. Measuring this by market capitalization would likely indicate a larger interlisted presence.

Have Canadian markets been hollowed out?

What are the implications of this analysis of bond- and stock-market issues by Canadian corporations? The main findings from the data are as follows:

- The corporate sector has had a large appetite for foreign sources of fixed-income finance since the early 1980s.
- The share of total corporate bonds issued in Canadian dollars (and placed in Canada) has nevertheless remained fairly steady, at about half, over the past 15 or so years.
- While Canadian equity issuers are turning more to foreign markets, the extent of that reliance is currently small.
- The percentage of Canadian-based firms interlisting on U.S. exchanges has increased only modestly in the last decade, to about 15 per cent. And there has been little change since the mid-1980s in the percentage of trading of interlisted stocks on U.S. exchanges.
- There has been a downward trend in the number of firms listing exclusively on U.S. exchanges.
- In sum, despite somewhat increased reliance on foreign sources of funds over the last decade, the data reviewed here do not provide much support for the view that domestic capital markets have been abandoned by Canadian firms or have been hollowed out. But other observers have reached more pessimistic conclusions and are concerned about future developments.

The data reviewed here do not provide much support for the view that domestic capital markets have been abandoned by Canadian firms or have been hollowed out.

Looking forward, what factors are likely to influence the decisions by Canadian firms on whether to finance themselves in domestic or foreign markets? First, as

noted earlier, U.S. capital markets are deeper and more liquid, which might allow easier access to cheaper capital for some Canadian firms (and also attract Canadian investors). Second, the breadth of instruments available for hedging credit risk contributes to the structuring and placement of more risky transactions abroad.

Third, it is possible that regulation of Canadian financial markets is less efficient than it could be, which in effect taxes capital market activity in Canada. While, broadly speaking, easy access by Canadian firms to foreign sources of fixed-income and equity capital is positive for these firms, the possible inefficiency of capital market regulation in Canada remains a policy concern.¹⁷ In response to this concern, both federal and provincial authorities and market participants are working to increase the efficiency and effectiveness of Canadian financial markets and thereby facilitate the financing of Canadian corporations in Canada.

Fourth, a key factor of continuing importance concerning the ability of the corporate sector to finance itself in Canadian markets will be the crowding in permitted by the absence of large net government issues of bonds in Canada as governments balance their budgets or run only small deficits.

Finally, a somewhat theoretical point. As long as Canadian residents wish to hold Canadian-dollar assets—and there is no reason to believe that they will not for the foreseeable future—such assets will be in demand, thereby providing an incentive for governments and domestic firms to supply such securities, including corporate bonds and equities. On this basis, we would therefore expect a Canadian capital market to continue to exist and to grow.

What would help Canadian markets to flourish?

- An efficient regulatory system
- Continuing fiscal discipline on the part of Canadian governments—just as large fiscal deficits crowded out private borrowers in earlier decades, fiscal consolidation will encourage their participation in the future, and
- Recent trends in increased innovation and improved risk assessment in Canadian capital markets need to continue.

17. For an overview of issues and of possible regulatory models, see Harris (2002) and MacKay (2002).

Literature Cited

- Armstrong, J. 2003. "The Syndicated Loan Market: Developments in the North American Context." Bank of Canada Working Paper No. 2003-15.
- DeCloet, D. 2002. "Canadian Banks Will Likely Never Be in the Big Leagues." *National Post*, 5 April.
- Dolar, V. and C. Meh. 2002. "Financial Structure and Economic Growth: A Non-Technical Survey." Bank of Canada Working Paper No. 2002-24.
- Economist, The*. 2003. "Loss Leaders." 11 January 2003.
- Freedman, C. and C. Goodlet. 1998. *The Financial Services Sector: Past Changes and Future Prospects*. Technical Report No. 82. Ottawa: Bank of Canada.
- . 2002. *The Financial Services Sector: An Update on Recent Developments*. Technical Report No. 91. Ottawa: Bank of Canada.
- Harris, A. D. 2002. "A Symposium on Canadian Securities Regulation: Harmonization or Nationalization?" Toronto: Capital Markets Institute, University of Toronto.
- Kalawsky, K. and D. DeCloet. 2001. "Royal to Cut Staff, Sell Assets." *National Post*, 23 October.
- Kiff, J. and R. Morrow. 2000. "Credit Derivatives." *Bank of Canada Review* (Autumn): 3-11.
- Levine, R. 2002. "Bank-Based or Market-Based Financial Systems: Which is Better?" NBER Working Paper No. 9138.
- MacKay, H. 2002. "Report to the Minister of Finance on Canadian Securities Regulation." Ottawa: Department of Finance. Available at <<http://www.fin.gc.ca>>
- Moody's Investors Service. 2002. *Canadian Banks and the Global Loan Syndication Business: Special Comment*. New York: Moody's Investor Service Inc.