

Recent Initiatives in the Canadian Market for Government of Canada Securities

Nancy Harvey, *Financial Markets Department*

- *The outstanding amount of Canadian dollar government debt declined in absolute terms during the 1997/98 fiscal year, for the first time since 1969/70, as a result of financial surpluses in the past few years.*
- *In light of this significant shift in the government's financial position and the government's strategic objective with regard to the market for its securities, the Bank of Canada and the Department of Finance have taken measures to ensure a liquid and well-functioning market for Government of Canada securities.*
- *Changes have been made to auction rules, to the government bond program, and to the treasury bill program, and the Investment Dealers Association of Canada has adopted a code of conduct for the secondary market.*

With the decline in the federal government's financial requirements, the Bank of Canada, the Department of Finance, and financial market participants have begun to examine and put in place various measures to manage the reduction in public debt, while continuing to enhance the efficiency, liquidity, and integrity of the market for Government of Canada securities. For the government, maintaining a liquid and well-functioning market is a key element in ensuring stable and low-cost financing. Thus, its focus is on the liquidity, transparency, and integrity of the market. For their part, other participants in the domestic market for government debt benefit from an efficient and liquid market, since government issues are used as a benchmark in pricing other fixed-income securities.

This article briefly explains the recent changes in the market for marketable Government of Canada debt, in light of the government's evolving financial position, and discusses initiatives that the various parties involved have taken to cope with these changes and to enhance the market's efficiency and liquidity.

The Financial Position of the Government of Canada and the Market for its Securities

The Government of Canada has recorded a financial surplus in each of the last three fiscal years. (See box on page 28 for the relationship between the financial and budgetary balances.) The financial balance shifted from a deficit of \$33.8 billion in 1991/92 to a surplus of \$10.8 billion in 1998/99 (Chart 1).¹ This financial

1. Department of Finance (1999b). Final data will be available this autumn.

The Relationship between Budgetary and Financial Balances

The budgetary balance and the financial balance are measures of the government's financial situation—deficit or surplus—during a given fiscal year.

The budgetary balance is expressed largely on an accrual accounting basis and relates to changes in government assets and liabilities, regardless of the timing of cash receipts or outlays. The financial balance, on the other hand, is expressed in terms of cash, and represents the difference between cash receipts and cash outlays for government programs and public debt charges. Thus, a deficit in the financial balance means a cash requirement, and this is funded by market borrowing, while a surplus financial balance means a cash surplus and could allow a portion of previously acquired debt to be retired.

To derive the financial balance from the budgetary balance, several adjustments must be made. The most important one is to add or subtract (as appropriate) transactions relating to public sector pension plans. The net change in government loans, investments, and advances must also be added to the budgetary balance, and some of the figures used to calculate the budgetary balance on an accrual basis have to be restated in cash terms. The table below shows the calculations used to establish the budgetary and financial balances for the 1998/99 fiscal year.

Budgetary and Financial Balances for the Fiscal Year 1998/99

\$ billions

Budgetary transactions	
Revenues	155.4
Program expenditures	-105.0
Operating balance	50.4
Public debt charges	-41.4
Budgetary balance	9.0
Non-budgetary transactions	
Specified purpose accounts*	5.2
Loans, investments, and advances	1.2
Other transactions**	-4.7
	1.7
Financial balance (excluding exchange transactions)	10.8

* Includes the Canada Pension Plan account, retirement pensions, and other accounts

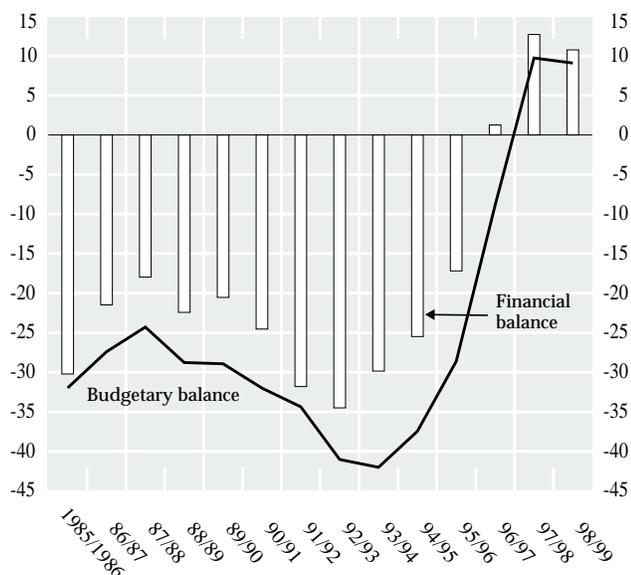
** Includes reconciliation between cash and accrual bases

Note that a \$3 billion contingency reserve is included in the budget plan. This reserve is intended primarily to cover the government against risks arising from (i) inevitable inaccuracies in the models used to translate economic assumptions into detailed budget forecasts, and (ii) unforeseen events. The contingency reserve also offers a safety cushion in case of forecasting errors. If the reserve is not needed, the government is committed to using it to pay down the debt.

Chart 1

Budgetary and Financial Balances

\$ billions



improvement has been due primarily to discretionary measures taken to reduce and restructure program spending and to the positive impact of economic growth on fiscal revenues. It should be noted that because of the high level of interest-bearing debt, interest on the public debt is still the largest single item in federal government spending: in 1998/99, it amounted to nearly \$44 billion. Borrowing must therefore be managed to ensure that the government

has access to a stable source of financing at the best possible price, while protecting it against unexpected interest rate fluctuations.²

The improvement in the government's financial situation has meant that, for the first time since the 1969/70 fiscal year, there has been an absolute drop in the amount of its outstanding market debt. In June 1999, this debt amounted to Can\$450 billion, while in March 1995 it stood at Can\$466 billion. Table 1 shows the outstanding amount of this debt and of its components. The composition of the Canadian-dollar-denominated debt has changed considerably over recent years. The proportion of marketable bonds increased from 56 per cent in March 1995 to 73 per cent in June 1999. During the same period, the proportion of treasury bills dropped from 37 per cent to 20 per cent. The government's strategy of reducing the sensitivity of the public debt to fluctuations in interest rates by increasing the proportion of fixed-rate securities, together with lower government financing requirements, has led to a significant decline in the amount and proportion of treasury bills.³

The improvement in the government's financial situation has meant that . . . there has been an absolute drop in the amount of its outstanding market debt.

Table 1
Outstanding Amount of Government of Canada Market Debt*

Billions of Canadian dollars

	March 1995	March 1999	June 1999
	Amount outstanding	Amount outstanding	Amount outstanding
Securities denominated in Canadian dollars			
Treasury bills	166.1	97.0	84.6
Bonds	252.4	294.9	305.2
CSBs	30.8	28.6	28.1
	449.3	420.5	417.9
Securities denominated in foreign currency			
	16.8	34.9	32.2
Total amount outstanding	466.1	455.4	450.1

* These are the subcategories used by the Bank of Canada to classify Government of Canada debt. They may differ slightly from those in the National Accounts.

As a result of the declining amount of treasury bills, liquidity indicators for this market have deteriorated over the last two years, excluding the turbulent period in the autumn of 1998. Bid-offer spreads have widened, while the volume of transactions and the average coverage ratio at auctions have declined (Charts 2, 3, and 4).⁴ In the bond market, these indicators have

2. Interest-bearing debt consists of internal debt and market debt. Internal debt includes federal public sector pension plan liabilities, the government's current liabilities, and bonds issued to the Canada Pension Plan. Market debt consists of Canadian dollar instruments sold on capital markets (in the form of Government of Canada bonds, treasury bills, and retail non-marketable debt) and foreign-currency-denominated bonds and bills.

3. Fixed-rate debt is defined as debt with a remaining term to maturity of more than one year, or with an interest rate that will not change within the year. For more information, see Department of Finance (1999a).

4. For more information on the effects of a shrinking supply of treasury bills, see Boisvert and Harvey (1998).

Chart 2

Bid-Ask Spread

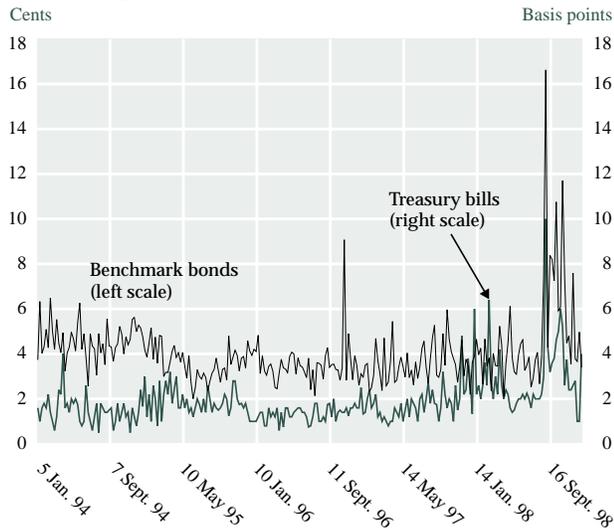
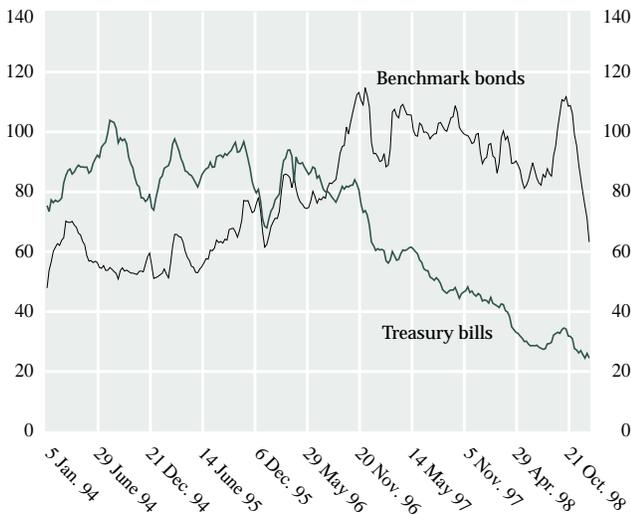


Chart 3

Weekly Volume of Activity

Moving average, 10 weeks
\$ billions



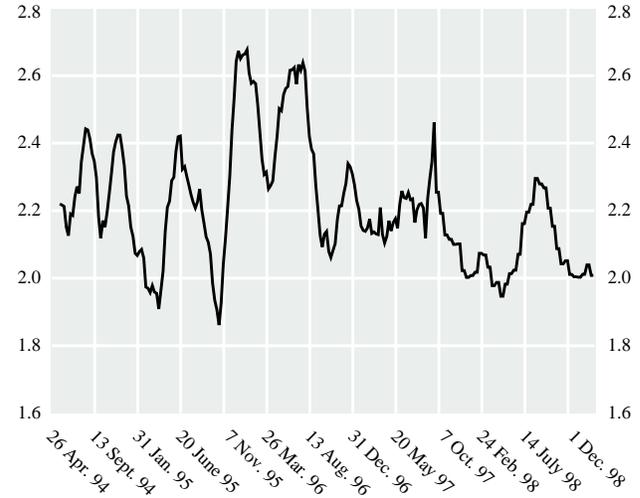
moved differently. Since the volume of bond transactions depends primarily on the effective supply of bonds, the introduction of a benchmark bond issue in 1992/93 and the debt-management strategy followed in recent years by the government have enhanced the

liquidity of this market and have moderated the impact of the government's improving financial situation.⁵ Bid-offer spreads for bonds have widened only slightly since 1997 (Chart 2). The volume of transactions rose sharply from 1994 to 1997 (Chart 3) (Gravelle 1999).

Chart 4

Coverage Ratio

Total bids/Amount auctioned
Moving average, 8 weeks



Recent Initiatives

The major changes that have affected the amount and issuance of government securities, together with the desire to maintain and enhance market liquidity and efficiency, have led to a number of initiatives on the part of the authorities and market participants. Cases of "market squeezes"—gaining control of an issue at the time of auction and subsequently restricting its supply on the cash and repo markets—aroused concerns about rules and practices in the primary and secondary markets. If a market is vulnerable to manipulation, the price-discovery process could be undermined, destroying public confidence in the efficiency and integrity of the market.

Among the measures taken are changes to the auction rules for treasury bills and their oversight by the Bank of Canada, as well as the guidelines adopted by the Investment Dealers Association of Canada (IDA Policy No. 5). In addition, the Bank of Canada and the

5. Effective supply equals the supply offered minus the stock of securities held by investors who expect to keep them to maturity.

federal government have modified the bond program by creating a pilot bond buyback program and have adjusted the treasury bill program, in order to maintain the supply of benchmark issues.

The auction process: Regulation and supervision

Since 1996, concern had been growing about the effectiveness of existing auction guidelines, at a time when the supply of securities was shrinking and the financial services sector was becoming larger and more integrated. There was a potential risk of manipulation in the system, since participants were in a position to acquire control of an issue through the when-issued market and the tendering process, even if such behaviour was contrary to the principles underlying the rules. Moreover, there was no actual limit on the amount of securities that a single customer could acquire.

In a system operating under the threat of such squeezes, intermediaries would be reluctant to take short positions on the when-issued market and to engage in other market-making activities, or to participate in auctions and in the secondary market. Investors would also face a less-liquid and less-efficient market, and would be less active at auctions and in the secondary market. In addition, financing costs could rise for many issuers, including the federal government and others whose securities are priced against government benchmark issues.

The Bank and the government were seeking to ensure that the auction process is free of, and is seen to be free of, manipulation.

In December 1996, the Bank of Canada produced "Discussion Paper 1" drawing attention to these problems and setting out a number of suggestions for reinforcing the integrity of the auction process by reducing opportunities for manipulation (Bank of Canada 1996).⁶ The Bank invited market participants to submit their views on the proposed rules and sur-

6. In developing these new rules, the Bank of Canada and the Department of Finance drew upon models used in other countries, particularly the United States, and adapted them to the specific features of the Canadian market.

veillance measures. In April 1998, a second document restated the proposals on the basis of the comments received (Bank of Canada 1998a). Once again, participants were invited to comment. In August 1998, the Bank of Canada published a document entitled "Revised rules pertaining to Government of Canada securities and the Bank of Canada's surveillance of the auction process" (Bank of Canada 1998b). These new rules went into effect on 14 October 1998. The interested reader can find this document on the Bank's Web site (www.bank-banque-canada.ca).

By taking these steps, the Bank and the government were seeking to ensure that the auction process is free of, and is seen to be free of, manipulation. The new measures should assure participants that investors and intermediaries will not be able to acquire excessive amounts of Government of Canada securities at auction. They will also serve to draw the market's attention to the fact that the Bank, on behalf of the government, oversees the various aspects of the auction process in the public interest. In this way, public confidence in the auction process can be maintained and investor and dealer participation enhanced. The revisions contain a new classification of government securities distributors, a definition of a bidding entity, new bidding limits for distributors, and separate bidding limits for their clients. They also require participants to report certain information to the surveillance authorities. The following is a very brief summary of the main components of the new rules.

- **New classification of entities**

The new classifications for entities eligible to participate directly in the tender process reflect the changes in their roles in recent years. Primary distributors are now called *government securities distributors*, and a subgroup of this broad class, those that maintain a certain level of activity on the primary and secondary markets, will be called *primary dealers* instead of *jobbers*.

- **New definition of a bidder**

The new definition of a bidder restricts the ability of affiliated entities to bid in concert in order to manipulate the auction process.

- **Bidding limits for distributors and clients**

Under the new rules, bidding limits for government securities distributors apply

only to bids on their own behalf. Customers bid separately through distributors and under their own bidding limits. The main reason for introducing these separate bidding limits is the need to reduce the risk of abuse of the bidding process by those seeking to squeeze certain issues. The new limits also take account of each bidder's net position in the when-issued market and its holdings, if any, of outstanding amounts of the particular security.

- **Reporting requirements**

Under the new reporting rules, all participants wishing to bid at auction must report to the Bank of Canada their positions in the when-issued market and in outstanding securities, so that the Bank can adjust the participants' bidding limits for these holdings.

IDA Policy No. 5

In September 1998, the Investment Dealers Association of Canada, in consultation with the Bank of Canada and the Department of Finance, adopted a set of guidelines to promote public confidence in the integrity of Canadian debt securities markets and to enhance liquidity, efficiency, and the maintenance of active trading and lending in those markets. Since the government is responsible for the integrity of only the primary market for Government of Canada securities, the IDA was responsible for developing a code of conduct for the secondary market.

Policy No. 5 describes standards and procedures for transactions in the domestic debt market.⁷ The policy is intended to supplement laws, government regulations, rules, and codes of conduct for exchanges and self-regulatory organizations. In the event of any inconsistency between the terms of the policy and any other rules of the association, the new guidelines will prevail. The policy applies to members of the association and to all related companies of members or their

7. By "domestic debt market," the IDA means "an over-the-counter, wholesale debt market in which Members participate as dealers on their own account as principal, as agent for customers, as primary distributors or jobbers as approved by the Bank of Canada or in any other capacity and in respect of any debt, fixed income or derivative securities issued by any government in Canada or any Canadian institution, corporation or other entity . . ." (IDA 1998, 3).

affiliated companies, and incorporates standards and procedures applicable to firms, criteria relating to transactions with customers and with counterparties, and rules of market conduct. The following paragraphs offer a brief summary of the main provisions. More complete information can be obtained by consulting the official IDA document.

- **Policies and procedures for member firms**

According to the guidelines, member firms should have written policies and procedures relating to their operations in the domestic debt market. These should be approved by the board of directors and should be made available for review by the IDA. Members must ensure that all their personnel are aware of the policies and procedures, that they conduct their trading activities in accordance with them, and that all market dealings with customers and counterparties are confidential.

- **Dealings with customers and counterparties**

The guidelines require that members know their customers to ensure that their recommendations are appropriate for their customers' investment objectives. Members must avoid conflicts of interest in their dealings with customers, counterparties, and with the public.

- **Market conduct**

The code of conduct requires that members observe high standards of ethics and professional conduct. They must act fairly, honestly, and in good faith in their dealings, and their conduct must not be detrimental to the public interest. They must not engage in any manipulative practices, nor act in any manner that contravenes the Criminal Code or applicable regulations, and they must abstain from offering bribes or other inducements to clients. Finally, members should use clear and unambiguous language in their dealings with their customers and ensure that clients understand the unique features of the relevant markets and products. Members

should not abuse market procedures or conventions, deliberately or otherwise, to obtain an unfair advantage over, or unfairly prejudice the interest of, their counterparties or customers.

- **Surveillance**

Since the domestic debt market is an over-the-counter market that is not generally subject to the rules or disciplines of organized markets or stock exchanges, members are expected to monitor both their own conduct and that of affiliates, customers, and counterparties. It is the responsibility of members to report breaches of the policy promptly to the IDA or to any other relevant authority, including the Bank of Canada. The association will also co-operate with other authorities and regulatory agencies in connection with the monitoring and regulation of domestic debt markets. Periodically, at the request of the Bank of Canada or whenever there is concern that the integrity of the market is in jeopardy, the IDA will ask its members to report their positions in Government of Canada securities.

A wide range of sanctions may be applied against members and their employees who breach the rules, including fines, reprimands, suspension, or expulsion. In addition, authorities such as the Bank of Canada, the Department of Finance, or provincial securities commissions may, at their discretion, impose formal or informal sanctions. In the case of Government of Canada securities, these include the suspension or removal by the Bank of Canada of eligible bidder status for auctions of such securities.

Changes to the treasury bill and bond programs

The Bank of Canada and the Department of Finance have also taken steps to lessen the effect of declining government debt on the market and to maintain and enhance the liquidity and efficiency of both the bond and money markets. To this end, they have consulted regularly with market participants on the structure of the treasury bill and Government of Canada bond programs.

A number of changes have been made as part of the continuous and progressive restructuring of the bond

program. For example, in April 1997, 3-year bond issues were discontinued because of the diminishing size of the bond market. In April 1998, the frequency of 30-year bond issues was reduced from quarterly to semi-annually.

With respect to the treasury bill program, the issuing cycle for 6-month bills was changed in July 1996. Since then, initial issues of 6-month bills have been reopened at the next regular treasury bill auction. This measure is similar to the one introduced in 1993 for 1-year treasury bills. In September 1997, after consultation with market participants, further revisions were made to the issuing cycle for 3-, 6-, and 12-month treasury bills. The weekly auction schedule was replaced with a biweekly cycle, to allow higher amounts to be auctioned at each session. In addition, maturity dates were revised to make different issues fungible (Department of Finance 1997 and Boisvert and Harvey 1998).

In the spring of 1999, market participants were again consulted, to assess the new treasury bill program and to discuss the need for further changes. It was subsequently agreed that no further changes to the program's structure were needed for the time being (Department of Finance 1999c).

Buyback operations for Government of Canada marketable bonds

With the sharp reduction in government financing requirements, the size and structure of benchmark bond auctions could not be maintained on the basis of the government's financial position alone. The reduced size of these issues, however, threatened to significantly affect market liquidity and integrity. As the supply of securities declined in relation to demand, there was a risk of an increasing concentration of securities held by a few participants and of a negative impact on the liquidity of the secondary market. It was therefore considered desirable to maintain the size of benchmark issues as far as possible, despite the reduction in marketable debt. One way to support such issues is to repurchase issues of non-benchmark bonds before they mature, with funding obtained from benchmark issues.

In 1998, after consulting market participants and releasing the first discussion paper, the Bank of Canada launched a pilot program on behalf of the federal government to buy back marketable Government of Canada securities (Gravelle 1998). This program will continue during the 1999/2000 fiscal year. This Canadian initiative comes in the wake of

buyback programs in other countries, where they have proven increasingly popular. Several countries (the United Kingdom, Australia, France, Belgium, New Zealand, and Italy) have implemented buyback programs for various reasons over the past 10 years. Other countries have established trade-up programs that allow investors to exchange one or two less-liquid bonds for a benchmark bond.

The Bank of Canada conducts buyback operations on behalf of the government within a 7-day period following a bond auction. Planned buybacks and the targeted bonds are announced at the same time as the amount of bonds to be auctioned. The maximum size of the operation is also announced at that time. Government securities distributors are eligible to participate in the buyback program. Bonds in the current benchmark issue and the two preceding benchmark issues, as well as bonds in the CGB and CGF futures deliverable baskets, are excluded from the pilot project. Buyback transactions are settled on a cash basis, and the repurchased bonds are subsequently cancelled.

Since 1 December 1998, the Bank of Canada has undertaken three buyback operations for Government of Canada marketable bonds. It should be noted that the Department of Finance reserves the right to accept or reject any or all offers, in whole or in part. It also reserves the right, without limitation, to accept less than the maximum amount specified in the call for tenders.

The first and third operations related to 5-year bonds, while the second was for 10-year bonds. In the case of the first operation, the buyback took place five days after the auction of a benchmark bond with a maturity comparable to that of the buyback bonds. In order to reduce the risk of a change in the term structure of interest rates, the second and third buyback operations were conducted on the day following the auction of the benchmark bond.

Other measures to enhance market integrity

The Bank of Canada and the government also intend to enhance market liquidity and efficiency by supporting private sector initiatives in the market for fixed-income securities. In particular, they have been working with the Montreal Stock Exchange and in financial circles to develop a futures market for government debt. They have also helped to increase the transparency of market prices by assisting the Investment Dealers Association and the Inter-Dealer Brokers Association to establish an open screen-based infor-

mation system on prices and trades in the secondary market for Government of Canada securities.

The Bank of Canada and the government also intend to enhance market liquidity and efficiency by supporting private sector initiatives in the market for fixed-income securities.

The Impact of Recent Initiatives

The initiatives taken by the Bank of Canada, the Department of Finance, and the IDA appear to have had a positive effect on the market for Government of Canada securities. It is difficult to quantify the impact, however, because it is somewhat subjective and the observation period is too short. Informal discussions with market participants have, nonetheless, helped identify certain effects.

The new auction rules seem to have helped restore confidence in the auction process for government securities. Yet after such a short observation period, we cannot use the usual measures of market liquidity and efficiency to determine just what impact the new auction rules have had on the primary market. For example, while the coverage ratio for treasury bills has risen slightly since October 1998, this improvement might be related to certain seasonal or temporary factors (Chart 4).

The bond buyback program has been well received by the market, and participation to date suggests a fair degree of interest. The changes in the treasury bill program have also been welcomed, since they reflect consultations held with all interested parties and the joint work that went into them.

Conclusion

In the context of a swiftly evolving market and a surplus in the federal government's finances, the Bank of Canada and the Department of Finance are continuing their search for ways to maintain and enhance the efficiency of the market for Government of Canada securities.

Literature Cited

- Bank of Canada. 1996. "Proposed revisions to the rules pertaining to auctions of Government of Canada securities and the Bank of Canada's surveillance of the auction process." Discussion Paper 1, 19 December.
- . 1998a. "Proposed revisions to the rules pertaining to auctions of Government of Canada securities and the Bank of Canada's surveillance of the auction process." Discussion Paper 2, 8 April.
- . 1998b. "Revised rules pertaining to auctions of Government of Canada securities and the Bank of Canada's surveillance of the auction process." Final Report, 11 August.
- Boisvert, S. and N. Harvey. 1998. "The declining supply of treasury bills and the Canadian money market." *Bank of Canada Review* (Summer): 53–69.
- Canada. Department of Finance. 1997. "Government Announces Measures to Enhance Liquidity in the Treasury Bill Market." News release, 5 August.
- Canada. Department of Finance. 1999a. *Debt Management Strategy 1999–2000*. March.
- . 1999b. "Highlights of financial results for March 1999." *The Fiscal Monitor*. May.
- . 1999c. "Current Structure of the Government of Canada Treasury Bill Program to be Maintained." News release, 18 May.
- Gravelle, T. 1998. "Buying Back Government Bonds: Mechanics and Other Considerations." Bank of Canada Working Paper No. 98–9.
- . 1999. "Liquidity of the Government of Canada Securities Market: Stylized Facts and Some Market Microstructure Comparisons to the United States Treasury Market." Bank of Canada Working Paper No. 99–11.
- Investment Dealers Association of Canada. 1998. *Policy No. 5 Code of Conduct for IDA Member Firms Trading in Domestic Debt Markets*. September.

