# **Chapter 8**

# **Department of Finance**

Managing Canada's Debt: Facing New Challenges

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# **Department of Finance**

Managing Canada's Debt: Facing New Challenges

# **Main Points**

**8.1** Canada's debt management program is a well-run operation overall. But like any program that faces a changing environment, it needs to adjust. We have noted three areas where the Department of Finance needs to review its practices. These include:

- establishing a more complete range of performance measures to ensure that it has a sound basis for assessing how well the program is doing at meeting its objectives. Currently, the Department uses a variety of information internally but reports its performance for only one target the ratio of fixed-rate debt to the total debt, now at two thirds;
- improving transparency to ensure that that there is a public accounting of not only the benefits of decisions on all aspects of debt management but also the costs. In recent years, the government significantly increased the proportion of fixed-rate debt and the level of foreign exchange reserves, and established targets for retail debt all without disclosing the expected costs of these decisions; and
- modifying the management of strategic planning by consulting a range of outside experts to ensure that the Department obtains complete and independent advice.

#### **Background and other observations**

**8.2** At the end of 1998–99, Canada's interest-bearing debt stood at \$595 billion and the annual interest charges on that debt amounted to \$41.4 billion. Managing the debt is the responsibility of the Department of Finance, working in conjunction with the Bank of Canada and the Canada Investment and Savings agency.

**8.3** The principal objective of the debt management program is to provide stable, low-cost funding for government operations while keeping liquid the domestic markets for that debt. Another objective is to ensure that there are adequate reserves in the Exchange Fund Account to moderate volatility in the exchange rate on the Canadian dollar.

**8.4** We found that the people who manage this program are a highly committed group. They closely monitor fiscal and economic developments that could affect debt management operations, and they consult regularly with financial market participants. They use sophisticated modelling techniques to identify debt management risks and to choose appropriate debt strategies.

**8.5** Our audit dealt not so much with the choices debt managers make or the analysis underlying those choices as with the way they measure performance, the information they report, and the governance of the program.

**8.6** Over the last few years, the government has made some major decisions in managing the federal debt. It has increased the proportion of longer-term, fixed-rate debt to two thirds of the total, some 18 percent higher than three years ago. While fixed-rate, longer-term debt makes the government's interest costs more predictable and reduces rollover risk, it generally costs more because long-term interest rates are normally higher than short-term rates.

**8.7** Over the same three-year period, Canada's foreign exchange reserves have more than doubled, to US\$25 billion. A higher level of foreign reserves improves the government's ability to promote stability in the value of the Canadian dollar, and also provides a larger pool of funds that can be used to finance unanticipated needs. But this comes at a cost, because the interest paid on foreign currency borrowing is normally higher than the interest earned on foreign reserve assets.

**8.8** We also looked at retail debt — the sale of Canada Savings Bonds and Canada Premium Bonds. We noted that despite renewed attention to the sale of these bonds and the creation of a special operating agency to market them aggressively, we have seen no conclusive evidence that retail debt is cost-effective. We encourage the government to review the role of the retail debt program and its cost implications. We also encourage the government to disclose the results of this review when it completes it.

The Department's response to our recommendations are included in this chapter. For the most part, the Department accepts the thrust of our recommendations and indicates how it is responding to them.

## Introduction

**8.9** In our November 1996 Report we published a study on federal debt management, which looked at how the government organized and ran its borrowing program. At the time of our study, the federal government had recorded a deficit of nearly \$30 billion for 1995–96. In each of the previous five years, it had recorded a deficit of more than \$30 billion. As the study noted, those years were "a period of rising levels of federal debt and volatile interest rates, and one in which the federal government's credit ratings were lowered."

**8.10** The government's fiscal situation has certainly turned around since then. Today, huge and seemingly intractable deficits have been eliminated. The surplus the federal government expects for the current year will be the third it has recorded in a row. An annual surplus is projected over the next several years as well. Moreover, the ratio of federal debt to GDP fell from a peak of 71.2 percent in 1995–96 to 64.4 percent at the end of 1998–99.

8.11 Despite this dramatic turnaround, there are signs that any undue optimism should be tempered. In 1998 the combined debt-to-GDP ratio of Canadian governments (measured on a national accounts basis) stood at 62.6 percent the second-highest (after Italy) among G–7 countries, which average 48.3 percent. And despite reductions in both the debt and interest rates over the past two years, the stock of debt is still very large; public debt charges remain the largest single item in the federal government's spending. At \$41.5 billion, the debt service charges projected for the current fiscal year represent nearly 26 percent of total federal spending.

**8.12** For government debt managers, the reversal from a growing debt to a declining one has generated a new set of challenges. When debt was rising, new debt issues exceeded retirements, giving debt managers flexibility to adjust the

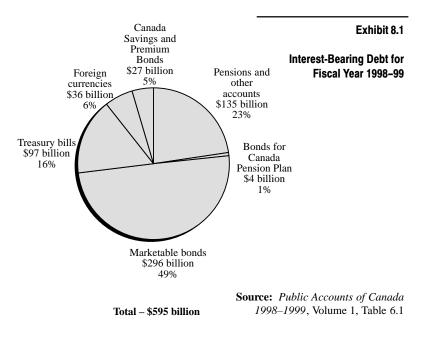
composition of debt through their choice of new issues. In an era of budget surpluses, maturing issues exceed new ones, and the composition of the debt is thus determined largely by the maturity profile of the debt still outstanding. A central concern of debt operations in this environment is how to retire maturing debt with minimum disruption to financial markets.

#### Focus of the audit

**8.13** Debt management does not deal with the *size* of the debt: that is determined essentially by the government's fiscal policy and the effects of that policy on the economy. Rather, debt management relates to the ways the government raises funds to meet its financial requirements, what it decides and does about the composition of the publicly held debt, and how it governs these activities. These decisions and activities were the focus of our audit.

**8.14** At the end of the 1999 fiscal year, the federal government's interest-bearing debt stood at \$595 billion (see Exhibit 8.1). This comprised non-market debt of \$135 billion and market debt of \$460 billion.

For government debt managers, the reversal from a growing debt to a declining one has generated a new set of challenges.



The fundamental objective of debt management is to raise stable, low-cost funding for government operations. **8.15** Most of the government's non-market debt is owed to public service pension plans.

**8.16** Market debt is the part of the debt that the government raises in financial markets. It includes marketable bonds and Treasury bills, Canada Savings Bonds and Premium Savings Bonds, and bonds and bills in foreign currencies.

8.17 Our audit looked at how the government measures the effectiveness of its debt management program. We assessed aspects of the program's management, focussing primarily on the Financial Markets Division of the Department of Finance. Because the Bank of Canada acts as the fiscal agent for operational aspects of debt management, we also reviewed information it provided. The audit also included Canada Investment and Savings (CI&S), the special operating agency responsible for the retail debt portion of federal market debt. Exhibit 8.2 briefly discusses the roles of these three players.

# Observations and Recommendations

### **Objectives of Debt Management**

**8.18** The fundamental objective of debt management is to raise stable, low-cost funding for government

operations. A related strategic objective is to maintain a well-functioning domestic capital market for Government of Canada securities. Besides being important to the economy's overall performance, a well-functioning domestic capital market facilitates trading in government securities. This makes it easier for the government to issue debt, and it contributes to lower borrowing costs.

**8.19** The government borrows in foreign currencies to maintain reserves at an adequate level for intervention to smooth fluctuations in the value of the Canadian dollar on foreign markets, and for general liquidity purposes.

**8.20** These objectives are typical of government debt managers the world over and have remained constant over the past decade. But the means of achieving them have varied with changing circumstances.

### General Approach to Debt Management

**8.21** The government issues debt in both domestic and foreign currencies; about 92 percent is in Canadian dollars. In both the domestic and the foreign currency markets, its task is to construct debt portfolios that seek a balance between cost and risk. In the domestic market, the government follows a "strategic" approach to borrowing. It

The government borrows in foreign currencies to maintain reserves at an adequate level to smooth fluctuations in the value of the Canadian dollar on foreign markets.

#### Exhibit 8.2

**Federal Debt Managers** 

The Department of Finance, in conjunction with the Bank of Canada and Canada Investment & Savings (CI&S), the government's retail debt agency, manages federal market debt. The Financial Markets Division of the Department of Finance provides analysis and develops policies and recommendations for the federal government's borrowing programs, including borrowing for official reserves and managing financial risks.

The Division works in partnership with the Bank of Canada, the government's fiscal agent, in all aspects of debt management. As fiscal agent, the Bank of Canada is specifically responsible for the operational aspects of debt management, for example, conducting the auctions of government debt, issuing debt instruments, making interest payments and borrowing in foreign currency. The Bank also has responsibility for monitoring market activities and advising on debt management policy, as well as operating the government's Risk Management Unit.

CI&S has primary responsibility for managing the retail debt portion of federal market debt. It is a special operating agency of the government and is responsible for contributing to the fundamental objective of debt management – stable, low-cost funding. It does this by developing and implementing the retail debt component of the federal government's domestic debt program.

**Source:** Department of Finance, *Debt Management Report*, 1998–99 focusses on cultivating a relationship with the market based on trust and "no surprises" (for example, through a preannounced issue calendar, transparent operations and standardized issues of debt), on the assumption that over the long term this will lead to lower borrowing costs. In contrast, Canada follows an "opportunistic" approach in the foreign currency market. It seeks the lowest possible borrowing cost with each debt issue while maintaining a presence in all segments of the market. Most developed countries follow similar approaches to borrowing.

**8.22** Following a strategic approach does not mean being passive in the market. In our view, the government is active any time it participates in the secondary market — engaging in currency or interest rate swaps or buybacks, for example. Its approach switches from strategic to opportunistic when it tries to act on opportunities in the market, where and when they arise.

**8.23** Key strategic objectives of the government's domestic debt operations include:

• maintaining a prudent maturity structure;

• improving the liquidity and efficiency of the market in government securities; and

• promoting a broad distribution of holdings of government debt.

**8.24** In foreign currency debt operations, the major objectives include:

• maintaining an appropriate level of reserves;

• minimizing the cost of carrying the reserves; and

• managing risk prudently.

#### Debt maturity structure

**8.25** The government issues debt instruments with terms to maturity that range from a few days (for cash management bills) to bonds of 30 years. How to distribute debt issues along this maturity spectrum is a key decision for debt managers, hinging on several considerations. Among these are funding costs, stability of debt service charges and the potential impact on domestic securities markets. What makes the decision particularly tricky is that these considerations all involve trade-offs.

8.26 Long-term debt is generally more costly than short-term debt. However, it makes future funding costs more predictable and reduces rollover (or refinancing) risk — the risk that maturing debt instruments cannot be refinanced within limits acceptable to the borrower. A heavy proportion of short-term debt instruments may increase instability by exposing the borrower to refinancing difficulties. So there is normally a trade-off between low-cost financing, which calls for issues of short-term debt, and stable financing, which requires longer-term debt instruments. In effect, lengthening debt maturity is a way for a government to reduce uncertainty about future funding costs or funding difficulties. The additional cost of longer-term debt can therefore be thought of as an insurance premium: the price paid to insure against undesirable risks. How much insurance to purchase — how much to lengthen the maturity structure of the debt — is a complex question with no one right answer.

**8.27** During the 1980s, Canada experienced large increases in government deficits and debt. The government financed them disproportionately through Treasury bills and short-term bonds. As a result, the proportion of floating-rate debt increased and the average term to maturity of the government's outstanding debt fell from six years in 1980 to four years by the end of the decade. In these circumstances,

In 1995, the government announced a target to increase the proportion of fixed-rate debt from 55 to 65 percent over 10 years. It reached that target in August 1997, much sooner than expected. the sharp increase in interest rates in the late 1980s caused debt service charges to jump considerably, undermining the government's fiscal plans. This sensitized the government to the risk of interest rate shocks, and brought about a policy of increasing over time the ratio of fixed-rate debt to floating-rate debt.

8.28 Since 1990, the government has had a policy of lengthening the maturity structure of the debt. In 1995, it announced a specific target for its debt structure, namely, to increase the proportion of fixed-rate debt from 55 percent to 65 percent over 10 years. In fact, the government reached that target in August 1997, much sooner than expected. In early 1998 it announced a slight increase in the target, to two thirds of gross debt. It reached that target in October 1998, and since then has narrowly maintained the proportion of fixed-rate debt at around that level.

8.29 The improvement in the government's annual financial results and its effect on annual financial requirements since the mid-1990s was the main reason the government reached the fixed-rate target so much faster than it had planned. In 1995, the federal debt on the domestic currency market was projected to increase to \$465 billion by the end of the 1997–98 fiscal year. In fact, the domestic debt at the end of that year was \$440 billion. Issuing bonds as planned in these circumstances implied a significant reduction in short-term debt and a significant lengthening of the maturity of outstanding debt.

**8.30** In deciding to move to this target so quickly, the government had to make a series of choices. Moving to the new target in two years entailed a significant reduction in Treasury bills. This increased borrowing costs because of the higher interest rates on debt issued with a longer term to maturity.

**8.31** At the same time, increasing the proportion of fixed-rate debt would give

the government greater protection against hikes in interest rates. In the wake of the Mexican financial crisis in late 1994 and the unity crisis here at home a year later, the government thought it prudent to take advantage of its improving finances and accelerate the pace toward its target of two-thirds fixed-rate debt. This meant that the government was able to benefit sooner from increased stability of interest costs and reduced risk of rollover. It also brought Canada closer to the OECD average.

8.32 But is two-thirds fixed-rate debt still the right target? The proper maturity balance is largely a subjective choice, depending on the risk preferences of the policy makers. Nevertheless, generally the larger the debt, the greater the impact of unanticipated increases in interest rates and the more the desirable fixed-rate debt then becomes. This was one reason for the government's decision in 1995 to move the proportion of fixed-rate debt from 55 percent to 65 percent. The debt today, while still high compared with other OECD countries, is lower than was anticipated in 1995 and is expected to continue falling for the foreseeable future. As the debt declines, so does the impact of any interest rate change on the cost of servicing the debt.

**8.33** Rather than revising its 1995 decision, the government seems to be taking the view that the financial protection it had against risk in the mid-1990s was inadequate. That is, having to refinance (or roll over) \$32 billion in debt each month was too risky. While a decline in the size of the debt would reduce the rollovers per month, the government believed that this windfall of an unexpected improvement in its finances offered it an opportunity to reduce this risk even faster.

**8.34** Our concern is not the decision to reduce the rollover risk by increasing the proportion of fixed-rate debt, nor is it the quality of the background work that led to the decision. Rather, we are concerned

that the costs of this decision were not transparent. This is particularly important given the size of the debt: even a relatively small change in the maturity structure of the debt can have a significant financial impact. To illustrate, assuming a difference of 100 basis points (one percent) between long-term and short-term interest rates (roughly the average over the last 30 years), a five-percent shift from fixed-rate to floating-rate debt could be expected to generate an annual saving of around \$250 million. A different spread would have a different impact.

8.35 The Department of Finance should review its debt structure target to determine whether, in light of changed fiscal and economic circumstances, that target still remains valid.

**Department's response:** Each year, the Department reviews the federal debt structure, taking into account the fiscal and economic environment. In determining the target debt structure, a number of factors are taken into account, including the appropriate degree of protection against changes in interest rates, the desire to limit costs and refinancing needs, and the desire to maintain a well-functioning market for Government of Canada securities. An important benchmark of best practices is comparability with other major sovereign borrowers. In addition, more sophisticated analytical tools to aid in debt structure planning and monitoring are continually being developed.

Prudent and effective debt management is required to ensure that debt service costs and the government's exposure to unexpected changes in interest rates and rollover risk are kept low. Greater cost stability has been achieved over the past several years by increasing the share of the government's interest-bearing debt issued at fixed rates from about 50 percent in 1992–93 to about two thirds currently. In the early 1990s, the impact of a 100-basis-point increase in interest rates was estimated to raise public debt charges by \$1.8 billion in the first year. Today, the same increase in interest rates would increase debt charges by only \$0.9 billion in the first year.

Canada's structural target and the actual debt structure are disclosed semi-annually in the Debt Management Strategy and Debt Management Report. In addition, the monthly changes in the federal debt structure are publicly available.

8.36 The Department of Finance should disclose publicly both the expected costs and the expected benefits of choosing a particular debt structure target. It should also disclose the assumptions used to calculate those costs and benefits.

**Department's response:** The Department has been very transparent about all aspects of debt strategy and management in its annual debt management publications (Debt Management Report and Debt Management Strategy). These publications are now required by law to be tabled in Parliament on a timely basis.

The Department agrees that increased public disclosure would be beneficial, and we are making progress in finding ways to present the information in a clear and meaningful manner that will be both of interest to and understandable by ordinary Canadians.

# Indicators to guide domestic currency debt management

**8.37** As already noted, the fundamental objective of debt management is to obtain "stable, low-cost funding." Stated in these terms, the objective is too general to guide debt operations. What is "stable" funding? How much variability or risk in debt service costs is the government prepared to accept for lower costs? How is this primary objective constrained by subsidiary goals of debt management,

Our concern is not that the government decided to reduce the rollover risk by increasing the proportion of fixed-rate debt, but that the costs of this decision were not transparent.

> such as supporting liquid capital markets? What are the costs of plausible interest rate scenarios for a given set of portfolio strategies? How sensitive is a debt portfolio to changes in interest rates? How well are debt managers managing risks and moving toward the cost objectives?

**8.38** In pursuing their debt strategies, governments increasingly use a variety of "indicators" to guide debt management operations and evaluate debt managers' performance. These include such indicators as:

• **Fixed-rate to floating-rate debt** — the proportion of gross debt that is maturing or being repriced in more than 12 months to the proportion being repriced in less than 12 months.

• Average term to maturity (ATM) — the average lapse time, usually in years, when debt is maturing or being repriced.

• **Duration** — a measure used to assess the interest sensitivity of bonds (the longer the duration, the greater the sensitivity).

• **Cost at Risk (CaR)** — a measure of the probable variability of debt charges the government could experience in the event of a change in interest rates in a given year.

For a more detailed discussion of these indicators, see Exhibit 8.3.

**8.39** These indicators represent only some of the techniques available to assess the performance of debt managers and help guide them in managing a debt portfolio. The key is to not rely on any one piece of information but to establish a range of targets; even though the information they provide may overlap, they all contribute to managing the debt more efficiently. We also believe it is essential that both the targets and the extent to which they are met be reported regularly to Parliament.

8.40 In our 1996 Report, we observed that the government needed to develop appropriate methods to assess whether it has achieved its debt management objectives. We wrote, "...it is essential that credible information be developed on a timely basis to show clearly whether debt management objectives are being met." Progress in this area appears to be limited. For example, the government now looks at a variety of information internally, but publicly reports its year-end results for two indicators, the fixed-rate debt ratio and the average term to maturity. But only for the former is the target transparent.

8.41 The Department of Finance should establish a range of targets for managing the debt portfolio that would serve as a basis for measuring performance. The Department should report these targets and its performance toward them in the spring *Debt Management Strategy* report and the fall *Debt Management Report*.

**Department's response:** The Department has been expanding the range and sophistication of the performance indicators it uses for debt management, and is at the forefront of such research among comparable sovereign borrowers. Work is also ongoing to determine best ways of disclosing targets and reporting on performance, with the goal of enhancing current practices.

# Liquidity and the market for government securities

**8.42** As already noted, maintaining a well-functioning domestic capital market is a core strategic objective of the government's debt management program. Creating deep and liquid markets for domestic securities is the government's basic strategy for achieving cost-effective borrowing.

**8.43** Key features of this strategy include a calendar of regular bond issues to improve their transparency and certainty, and large benchmark issues to

We believe it is essential that the targets for debt management and the extent to which they are met be reported regularly to Parliament.

#### Exhibit 8.3

#### **Basic Indicators for Debt Management**

**Fixed/Floating Ratio:** A target fixed/floating ratio is one of the measures most commonly used to guide a debt management operation. Canada's fixed-rate proportion of total debt went from 63 percent in 1994 to two thirds – close to the OECD average of 71 percent – in October 1998.

However, basing an operational target solely on the ratio of fixed to floating debt is too narrow an indicator of performance to guide debt management operations effectively. Since government bonds can vary in maturity from one to 30 years, the ratio of fixed-rate debt to total debt tells us very little about the maturity profile of the debt or the risks associated with it. Consequently, the average term to maturity of the portfolio also must be considered.

Average Term to Maturity: The average life span of the debt instruments a portfolio comprises.

The government reports its performance on ATM at around 6 years for 1998–99, up from 4 years in 1990. However it does not compare its ATM target with those of other countries. The OECD reports that for 1997, Canada's ATM at 5.8 was higher than those of the United States (5.2), Italy (4.7) and Belgium (4.4), and lower than the UK (9.7) and France (6.2).

**Duration:** Duration is a measure of the interest sensitivity of the portfolio. It is the weighted average term to maturity of a bond's cash flows, where the weights are the present value of each cash flow as a percentage of the bond's prices. It takes into account the current market value of future cash flows. Hence, the issuance of debt instruments at lower interest rates will translate into a longer duration. A portfolio with a longer duration is more sensitive to changes in interest rates. Two portfolios with identical maturities but different coupon payments will provide different cash flows and different sensitivities to interest rate changes. Alternatively, two portfolios with differing maturities but identical coupon payments will also provide different cash flows and different sensitivities to interest rate changes. Absent any other differences, the shorter the term to maturity and the higher the interest rates, the less sensitive a portfolio is to a one percent change in interest rates. Duration takes into account opportunity gains and losses and thereby recognizes the implicit economic benefits/costs of debt management decisions.

Duration is commonly used in conjunction with a benchmark or hypothetical debt portfolio where a target duration is established that reflects the policy makers' preferred trade-off between risks and costs. A benchmark portfolio can be used both to guide debt market operations and to evaluate the performance of the debt management program. Countries such as Australia, Belgium, Denmark, Ireland, Finland and Sweden, to name a few, are using benchmark portfolios as one of many tools with variants of duration to guide them in managing their portfolios. Changes in the issuance program, buybacks, swaps and other techniques can be used to maintain the portfolio within acceptable bounds of duration target established for the benchmark. Performance can then be assessed by comparing with the benchmark the results achieved over a period.

Department of Finance officials have indicated that the government considers it a priority to develop such concepts. They are beginning to consider the kind of information that duration measures try to capture. To date, however, the Department has not established, based on the information duration captures, any benchmark portfolio that would serve as a guide for either managing the portfolio or judging the performance of the managers.

According to a recent report by the OECD, Canada in 1997 had a duration of 5.1, well above four of the five reporting countries (UK, the exception, came in at 6.5).

**Cost at Risk (CaR):** CaR is an indicator used to measure market risks. It is one technique within a set of highly sophisticated mathematical methods that assesses the variability of debt service charges (in the event of interest rate changes) within a given confidence interval over a certain time horizon. It can be interpreted as a probability that debt service charges will not exceed a given threshold in a given year. When assessing different debt portfolio hypotheses, the Department uses CaR to assess the risk/cost trade-off.

> improve market liquidity. Exhibit 8.4 discusses the significance of liquidity. (For a more detailed discussion, see our 1996 Report, Chapter 21.) In addition, the government has supported the development of a domestic market in bond futures and a computerized screen-based information system on secondary market trades in government securities. By facilitating trade in government securities and improving its transparency, these initiatives help create a well-performing market for government debt. Because investors use government securities for hedging purposes and as benchmarks for pricing private debt, well-performing markets for government securities promote the overall efficiency of domestic financial markets as a whole.

The government has taken a number of measures to mitigate the impact of shrinking borrowing requirements on financial markets.

8.44 The borrowing environment for government debt has changed dramatically over the past few years with the elimination of the deficit and the consequent reduction in the government's financial requirements and debt. In 1994–95, its financial requirements were \$26 billion (excluding foreign exchange transactions); since 1996-97 it has recorded a surplus each year, and expects to do so in each of the next several years as well. Ongoing financial surpluses mean continuous declines in market debt and, barring changes in the debt structure or significant repurchases of debt, a shrinking volume of securities to be issued. In this environment, an important challenge for debt managers is how to maintain liquid and efficient markets.

**8.45** Volume is a key determinant of liquidity in financial markets. Other things being equal, the more securities there are outstanding in any particular market, the

more will be traded and the more confidence investors will have that they can convert their asset into cash without losses. There can be exceptions, but generally volume and liquidity go hand in hand.

8.46 The government has taken a number of measures over the past few years to mitigate the impact of shrinking borrowing requirements on the liquidity or efficiency of financial markets. It has replaced the weekly Treasury bill auction with a two-week cycle, reduced the frequency of 30-year bond issues from four times a year to twice, eliminated the three-year benchmark issue, and initiated a pilot program of buying bonds back from the secondary market. The purpose of the buyback program is to repurchase bonds that are not being actively traded, before they mature. This is to help maintain the volume of bonds outstanding and thereby contribute to liquidity in the market for new issues. These initiatives have helped cushion the impact of declining debt issues on the depth and liquidity of the bond market.

8.47 Other debt management actions have had the opposite effect, however. In particular, the government's policy of increasing the fixed-rate portion of its debt has reduced the stock of instruments available in the Treasury bill market. The outstanding stock of Treasury bills fell from \$166 billion in 1993–94 to \$97 billion in 1998–99. This reduction in the supply of Treasury bills has had a significant effect on trading activity in the Treasury bill market. The quarterly turnover ratio (trading volume in a quarter to outstanding stock) fell from nearly 7 in 1995 to 3.6 in the second quarter of 1999, and spreads between the bid prices and

#### Exhibit 8.4

Liquidity and Its Significance for Borrowers

Liquidity refers to the ease with which a financial security can be traded without affecting its price. Since the ability to convert an asset into cash without loss is an attractive option, investors are prepared to accept lower interest rates for a liquid security than for one less liquid. This means that borrowers – the issuers of securities – can raise funds at a lower cost.

offer prices quoted by dealers widened. Along with outstanding volume of financial instruments, high turnover ratios and tight bid-offer spreads are key indicators of market liquidity. The effects we have described therefore indicate reduced liquidity in the Treasury bill market.

8.48 We believe that there is room for more aggressive use of buybacks to enhance liquidity in the markets for government securities. A recent Bank of Canada study noted that for the size of its market, Canada has a larger number of issues outstanding than the U.S. has, reflecting a more fragmented market for government securities. Consolidating this large number of relatively small issues into a smaller number of larger issues could improve the liquidity of government securities markets and lower the costs of borrowing. Given the size of the public debt, even a small decline in interest rate yields would translate into big savings. A reduction in yields by a mere basis point (0.01 percentage point) could reduce borrowing costs by some \$50 million annually.

**8.49** An enhanced buyback program would also provide an opportunity to change the maturity profile of the debt, should the government choose to do so.

**8.50** In considering the benefits of expanding the buyback program, debt managers would need to compare the cost of buying back outstanding debt with the cost of issuing new debt. They would also need to assess the market's capacity to absorb the interventions of such a large player.

8.51 The Department of Finance should consider the potential benefits of more active buyback operations to adjust the maturity profile of government debt and support liquidity in government securities markets.

**Department's response:** A prudent and appropriate debt structure is currently in

place, and is being maintained at two thirds in fixed-rate debt instruments, as announced in the recently released Debt Management Strategy. This structure and overall debt strategy are reviewed annually to take into account the changing fiscal and economic environment, and Canada's relative position compared with its peers. Feedback obtained from participants in the market for Government of Canada securities is also incorporated.

Regarding bond buybacks, the evaluation of the pilot phase has been completed and a program will be instituted on an ongoing basis. As supported by discussions with market participants, the buybacks have a positive effect on liquidity maintenance in the Government of Canada bond market, and may also be helpful for cash management purposes.

### **Management of Retail Debt**

**8.52** Retail debt includes non-marketable securities like Canada Savings Bonds (CSBs) and Canada Premium Bonds (CPBs), as well as marketable securities that are held by individual Canadians. Discussion of retail debt in this chapter refers to CSBs and CPBs, the instruments for which Canada Investment and Savings has direct responsibility.

**8.53** In the early post-war decades, this retail sector was a major component of the market for government debt. As recently as the late 1970s, Canada Savings Bonds, the main retail debt instrument, accounted for about a third of the federal government's outstanding market debt. Since then, the share of retail debt has been falling steadily. Today, CSBs and CPBs account for roughly six percent of the government's outstanding market debt.

**8.54** In 1995 the government established a special operating agency, since renamed Canada Investment and Savings (CI&S), to manage the retail debt program. Its purpose was to give Canadians a greater opportunity to invest

The reduction in the supply of Treasury bills has reduced liquidity in the Treasury bill market.

We believe there is room for more aggressive use of buybacks to enhance liquidity in the markets for government securities.

The total cost of managing the retail debt portfolio was \$137.4 million in 1998–99. Payments to the Bank of Canada for administrative services account for around 48 percent of the retail program's total expenses.

The size of these payments has been a matter of debate between the Bank and Canada Investment and Savings (CI&S).

We believe there is a conflict between mandate of the CI&S and the overall objectives of the government's debt management program. in Canada, thereby reducing the government's reliance on foreign lenders and stopping the downward trend in the retail share of total debt. The agency no longer emphasizes reduced reliance on foreign lenders, but stopping the decline in retail debt remains a key objective.

**8.55** The agency has taken a number of initiatives to make retail debt more attractive and accessible to Canadians. It introduced a new product, the Canada Premium Bond, which offers a higher interest rate than the traditional Canada Savings Bond but is less cashable. On a pilot basis, the agency increased the length of the sales period from three weeks in the fall to six months. It also redesigned its Payroll Savings Program, making it more flexible for employees and easier for employers to administer.

**8.56** These initiatives have helped somewhat to stem the erosion of the customer base for retail debt. Canada Savings Bonds outstanding (including Canada Premium Bonds) have totalled about \$30 billion over the past five years; and the proportion of retail debt is projected to remain around its current level, just over six percent of total market debt. The agency also claims to have achieved significant efficiencies and savings through innovative marketing and distribution of retail debt.

#### The cost of administering the program

**8.57** The total cost of managing the retail debt portfolio was \$137.4 million in 1998–99, up from \$126.6 million in 1997–98. This included direct expenses of CI&S, commission fees to sales agents and payments to the Bank of Canada. As fiscal agent for CI&S, the Bank provides operational and systems support for the retail debt program, including record keeping, interest calculation and payment for some five million CSB holders. Payments to the Bank for those services account for around 48 percent of the retail program's total expenses.

**8.58** The size of these payments has been a matter of debate between the Bank and CI&S. The agency has contested the way the Bank allocates indirect and overhead costs to the retail debt program. This disagreement has been a major hurdle in efforts by the Bank and CI&S to arrive at a memorandum of understanding (MOU) that clearly states their respective roles, responsibilities and costs in managing the retail debt. An MOU was to have been ready by the fall of 1997 but was still not in place by the end of 1999.

**8.59** To manage the retail program effectively, CI&S needs to have clear working arrangements with the Bank of Canada, the program's administrator. It also needs to know the costs of running the program.

8.60 Canada Investment and Savings, the Bank of Canada and the Department of Finance should conclude an agreement that clearly specifies the services the Bank is expected to provide and the method of determining the costs of those services.

**Department's response:** All parties agree with this recommendation.

# Role of retail debt within overall debt management objectives

**8.61** At a more fundamental level, we believe there is a conflict between the agency's mandate to reverse the downward trend in retail debt and the overall objectives of the government's debt management program — to raise stable, low-cost funding and maintain liquid financial markets.

**8.62** Retail debt consists mostly of Canada Savings Bonds, redeemable on demand. A product that is cashable at any time the investor chooses exposes the borrower to unpredictable funding risks. This is difficult to reconcile with the objective of stability in funding costs. Whether retail debt helps diversify the government's debt portfolio and thereby lowers interest rate and rollover risks is

open to question, according to a study done for the agency. That study shows a high correlation between the cost of retail debt and the cost of all the government's wholesale debt instruments, such as Treasury bills and government bonds.

**8.63** The promotion of retail debt appears to be timed particularly poorly today, when declining debt makes it difficult for the government to maintain adequate liquidity in financial markets. CSBs are non-marketable instruments. The more of them the government succeeds in selling, the lower will be the volume of Treasury bills and other marketable government bonds. This compounds the adverse effect of declining new issues on market liquidity.

**8.64** Aggressive marketing of retail debt could perhaps be justified if it were a cost-effective means of government borrowing, but the evidence on this is mixed at best. Given the way retail debt is priced, cost effectiveness is not assured. To be cost-effective, yields on CSBs must be sufficiently below yields on equivalent wholesale debt (Treasury bills and marketable bonds) to take into account the higher administration costs of the retail debt program and the additional risk posed by the redemption option in CSBs.

8.65 At present, Canada Investment and Savings estimates the cost-effective yields of CSBs and CPBs by using wholesale debt as the benchmark. But to meet their quantity targets it prices them at, or close to, the yields on Guaranteed Investment Certificates (GICs) sold by private financial institutions. This means that CSBs will be cost-effective only when the interest rates on GICs are sufficiently below the rates on government wholesale debt. This will not be the case if the gap between GICs and wholesale debt narrows. To ensure that retail debt is cost-effective, retail debt issues would have to be priced and sold strictly with reference to the government's wholesale debt — not to private sector alternatives,

such as the GICs. However, were the government to operate on that basis, it could not simultaneously pursue quantity targets for retail debt. It would have to be satisfied with whatever quantity of retail debt could be issued at that price.

**8.66** When CSBs were first introduced over 50 years ago, they met a clear need for a safe, liquid investment, accessible to ordinary Canadian households. Given the widespread introduction of other savings outlets in recent years, however, that need is less clear today. To the extent that the government considers it still desirable to offer a risk-free investment to retail investors, we question why it needs to do so by marketing CSBs aggressively in competition with private financial institutions. Having the option available would satisfy the purpose.

**8.67** To ensure that retail debt is cost-effective, it would have to be priced against wholesale issues of government debt. Alternatively, if the government wanted Canadian households to have a particular stock of retail debt, it ought to be prepared to report the associated costs.

**8.68** We understand that the Department of Finance is currently undertaking a review of various aspects of the retail debt program.

8.69 The Department of Finance should clarify the role of the retail debt program in the context of the overall objectives for the management of the public debt. If retail debt is to be cost-effective, it should be priced strictly with reference to the government's comparable wholesale debt, without reference to the rates offered by private sector alternatives. If the Department chooses to set a quantity target for retail debt, it should report the costs of meeting that target.

**Department's response:** The retail debt program contributes to a diversified investor base and the investment needs of Canadians. Given recent changes in the financial requirements, and the changing To ensure that retail debt is cost-effective, retail debt would have to be priced and sold strictly with reference to the government's wholesale debt — not to private sector alternatives, such as Guaranteed Investment Certificates.

> competitive marketplace, further work needs to be done on how the government should proceed in maintaining a costeffective and competitive retail debt program that provides Canadians with access to Government of Canada securities.

#### Management of Foreign Currency Debt

**8.70** As we have noted, all funding required for government operations at the federal level is raised on domestic markets, in Canadian dollars. The government borrows in foreign currencies only to fund Canada's foreign exchange reserves. These are used to support stability in Canada's exchange rate and to bolster the government's overall general liquidity.

**8.71** Canada's foreign exchange reserves rose sharply in the late 1980s, when the Canadian dollar was under significant upward pressure and the government intervened to moderate volatility in the exchange rate. In the early 1990s they were allowed to decline substantially, as the Canadian dollar came

| Total foreign currency liabilities | 33.8 |
|------------------------------------|------|
| Cross-currency swaps               | 10.0 |
| Total foreign currency debt        | 23.8 |
| Foreign currency bonds             | 13.0 |
| Euro Medium-Term Notes             | 3.3  |
| Canada Notes                       | 0.8  |
| Canada Bills                       | 6.7  |

Foreign currency liabilities report government borrowing in non-Canadian currencies while foreign currency reserves report the investment of these funds in high-quality, non-Canadian assets. The difference between the cost of borrowing and the return on investment is about 10 to 20 basis points. under downward pressure. In 1996, the government announced plans to increase Canada's foreign reserves to take into account the increased flows in foreign exchange markets and to bring them more into line with comparable countries. Consistent with these intentions, foreign reserves have more than doubled in recent years — from US\$12 billion at the end of 1995–96 to US\$25 billion at the end of 1998–99 (and to US\$28.6 billion at the end of calendar year 1999).

8.72 Foreign currency liabilities (used to fund these reserves) increased from US\$14.2 billion to US\$33.8 billion over the same period (Exhibit 8.5 shows the structure of these foreign currency liabilities). See Exhibit 8.6 for an explanation of foreign currency reserves and liabilities and a key cost of holding such reserves. The difference between reserves and liabilities reflects the impact of foreign exchange intervention. In the wake of the East Asian financial crisis in 1997 and the ruble crisis in 1998, the Canadian dollar came under substantial downward pressure. Significant amounts of Canada's foreign currency reserves were used at the time to shore up the foreign exchange value of the Canadian dollar. These reserves will be repurchased with domestic currency over time as market conditions permit, thereby bringing foreign assets and liabilities back into balance.

**8.73** In recent years, foreign currency reserves were held almost exclusively in US dollars, and foreign currency borrowing was essentially confined to US dollars as well. Exchange Fund Account guidelines adopted last year indicate that the government is now prepared to hold a proportion of its reserves in other currencies, primarily Euro but also yen. As a result, borrowing in these other currencies is likely to become more important in Canada's foreign debt portfolio.

**8.74** Key operational objectives in foreign debt management are to minimize

#### Exhibit 8.5

Foreign Currency Liabilities at 31 March 1999 (US\$ billions)

**Source:** Department of Finance, *Debt Management Report*, 1998–99

#### Exhibit 8.6

Foreign Currency Liabilities and Assets the cost of carrying reserves and to manage the associated risks prudently.

**8.75** Risks associated with foreign borrowing are managed through a variety of strategies. To minimize exchange rate and interest rate exposures, reserves are managed to ensure as far as possible that the assets match the liabilities in currency and maturity. As with domestic debt, rollover risk is reduced by issuing debt over a wide spectrum of the yield curve to a broad investor base, and by limiting the proportion of short-term debt.

8.76 To minimize the cost of carrying the debt, debt managers monitor markets closely and act on borrowing and investment opportunities where and when they arise. In doing so, the government times and tailors issues to suit investors' preferences, subject to funding needs and taking into account the desire to maintain Canada's standing in the market as a successful borrower. The instruments used vary widely (see Exhibit 8.7). Bills and bonds in US dollars have traditionally been the basic funding sources, and they are still major sources today. More recently, however, cross-currency swaps and Euro Medium-Term Notes (EMTN) play an increasingly important role.

8.77 Swaps are agreements between counterparties to exchange obligations over a specific period. In a cross-currency swap, the government exchanges debt in Canadian currency and interest payments on that debt for foreign-currency debt and interest payments. A swap is often a less costly means of raising foreign funds than direct borrowing, given the comparative advantage the government enjoys in domestic capital markets. Cross-currency swaps outstanding have grown over the past three years, from US\$1 billion at the end of 1995-96 to US\$10 billion in 1998-99.

**8.78** The EMTN program was introduced in March 1997. EMTNs are issued in a variety of currencies to meet investors' preferences. If they are issued in other than US dollars they are then normally swapped into US dollars, the primary currency in Canada's foreign exchange reserves. The program makes possible low-cost borrowing through opportunistic issues in non-core currencies (currencies other than the US dollar, Euro or yen). At the end of the 1998–99 fiscal year, Canada's liabilities under the EMTN program stood at US\$3.3 billion.

**8.79** The cost of swapped debt and EMTN debt has been considerably lower than the cost of global bonds with similar

| Instrument                          | Description  | Public/Private                       |
|-------------------------------------|--|--------------------------------------|
| Canada Bills                        | Short-term notes (less than 9 months) issued in US dollars in the United States  | Public offering                      |
| Canada Notes                        | Longer-term notes (at least 9 months) issued in US dollars in the United States  | Public offering                      |
| Euro Medium-Term<br>Notes (EMTNs)   | Medium-term notes, issued outside the United<br>States and Canada in a variety of currencies and<br>less than \$1 billion. | Public offering or private placement |
| Global and other bonds<br>and notes | Generally larger issues in a variety of currencies<br>that are not classified in any of the above groups                   | Public offering                      |
| Currency swaps                      | Swaps are used to convert debt issued in a non-US currency and needed in US dollars.                                       | Private placement                    |

#### Exhibit 8.7

Debt Instruments Used for Foreign Currency Borrowing

> cost of Canada Bills (notes issued in the U.S. in US dollars), which are issued with a maximum term to maturity of only nine months. The use of cross-currency swaps and EMTNs has therefore been a cost-effective means of diversifying and lengthening the maturity of Canada's foreign currency debt.

maturity and, on average, even below the

8.80 Like domestic borrowing, foreign currency borrowing follows a plan that is established annually, before the beginning of the fiscal year, and approved by the Minister of Finance. The plan sets funding targets and risk management objectives, and identifies strategies for achieving them. The discussion accompanying these plans is thorough and the analysis behind them sophisticated and of high quality. However, from documents that we have seen, expectations for these objectives are not sufficiently quantified and the process lacks specific criteria for measuring performance.

8.81 We have been advised that the Department of Finance and the Bank of Canada have started to develop a more explicit portfolio management framework for foreign currency reserve assets and liabilities. This framework would take into account the targets for reserves and their composition, as well as the objectives for foreign debt (cost, diversification, maturity, for example). We view this as a move very much in the right direction and consistent with best practices in other jurisdictions. We also believe that once developed, the framework should be made public, with the possible exception of commercially sensitive information. Such disclosure is necessary if the framework is to serve not only as an internal management tool but also as a means for Parliament and the public to hold debt managers to account. Making the framework public would improve transparency and strengthen accountability for the foreign debt management program.

8.82 The Department of Finance should proceed with the development of a portfolio management framework for foreign currency assets and liabilities, and, once developed, the framework should be publicly disclosed.

**Department's response:** The Department's activities in foreign currency asset and liability management are already governed by a rigorous framework. The Department continues to develop enhancements and follows emerging best practices, and will strive to increase the transparency of foreign currency operations. Currently, a great deal of detail on the government's foreign currency operations is provided annually in the Exchange Fund Account Annual Report, which includes financial statements audited by the Office of the Auditor General of Canada. Full public disclosure of all aspects of operations may not be possible, due to the commercially sensitive nature and possible market impact of some of the information.

# Risk Management and Corporate Governance

#### A changing environment

8.83 With the surge in the stock of debt and in the debt-to-GDP ratio in the late 1980s and early 1990s, governments became painfully aware of the financial cost of borrowing money. They realized the importance of techniques that were being developed to minimize costs and risks. More recently, with the globalization of markets and the expanding array of financial instruments and techniques for managing portfolios, a new dimension has been added to the complexity of debt management. Today, many governments have begun to develop risk management capabilities and many have reorganized their debt management structures.

**8.84 Risk management.** Risk is composed of two elements — the likelihood that an event will occur, and the

The Department of **Finance and the Bank** of Canada have started to develop a more explicit portfolio management framework for foreign currency assets and liabilities. Making the framework public would improve transparency and strengthen accountability for the foreign debt management program. consequences if it does. A debt manager faces risks that the market itself generates — interest rate and exchange rate risk and risks from outside the market, particularly operational risk, counterparty risk and rollover risk.

8.85 To manage risk, debt managers want to make choices that either minimize costs given the risks, or minimize risks given the costs. Their goal is to construct a debt portfolio that best reflects those choices. Where their objective is to maintain deep and liquid domestic markets, debt managers try to devise a strategy that best meets that objective without aggravating rollover risk. Where government borrowing in the domestic market plays a less prominent role (where borrowing is predominantly in foreign markets), debt managers can take a more opportunistic approach to borrowing cost-effectively. Canada does both. In the domestic markets it takes a strategic approach and tries to construct a portfolio that meets its liquidity and cost objectives while protecting against rollover risk. In the foreign currency markets, without the constraint of maintaining liquidity it can be more aggressive.

8.86 In 1997, the Bank of Canada established a Risk Management Unit (RMU) to monitor all risks in the foreign currency reserve portfolio. This includes counterparty risk (the risk that the recipient of the investment will not pay in full at maturity) and currency risk (the risk associated with a fluctuating dollar). The RMU is also responsible for monitoring credit and market risks for other government business (gold transactions and government deposits, for instance, not just foreign currency risks). The Risk Management Committee (RMC) oversees the work of the RMU and is made up of senior officials from the Department of Finance and the Bank of Canada.

**8.87** The RMU measures and monitors risk using sophisticated computerized models. The technical expertise for

managing this activity resides with four highly specialized professionals, whose skills are in demand in the financial industry. In fact, the unit's turnover in the last year was 100 percent. Three of the specialists left for private industry.

**8.88** The RMU's task is not only to measure and monitor risks but also to report each quarter to the RMC. Its reports are improving in clarity but are highly technical and very complex. Because of the newness of the operation and the complexity of the work, the RMC devotes considerable effort to building up its knowledge base so it can monitor and supervise this risk management activity effectively.

**8.89** We believe that the key to this effort is continuity in the staff of the unit. It is important that the Bank and the government be able to attract and keep skilled and qualified people to run the RMU, and provide oversight through the RMC as well.

8.90 We commented earlier in the chapter on the need for the government to develop a set of performance targets for its entire portfolio of domestic market debt. We also indicated that in the face of a falling debt stock and a declining debt-to-GDP ratio, there will be a need to consider playing a more active role in maintaining a portfolio that meets the program's objectives for cost, stability and liquid markets. Currently, the Department evaluates the risks associated with domestic currency debt using similar techniques as those it uses for foreign currency debt.

**8.91** These domestic risks are not defined explicitly as the responsibility of the RMU or RMC. They are under the direct responsibility of the Department, with input from the Bank of Canada. Yet apart from maintaining deep and liquid markets, the objectives of domestic debt management are similar to those of foreign currency debt management, and the risks are alike in both kinds of borrowing. We believe that the risk

It is important that the Bank of Canada and the government be able to attract and keep skilled and qualified people to run the Risk Management Unit.

We believe that the risk management approach followed in managing foreign currency debt could be applied to domestic debt management as well.

> management approach followed in managing foreign currency debt would appropriately be applied to domestic debt management as well.

8.92 The Department of Finance should work with the Bank of Canada to expand the role of the Risk Management Unit and Risk Management Committee beyond their current responsibilities for foreign currency debt. This should include monitoring, reporting, and generally advising on risk management issues for the domestic currency debt portfolio.

**Department's response:** The Department emphasizes that, although not under the umbrella of the Risk Management Committee (RMC), the risks associated with the domestic liability portfolio are carefully and rigorously reviewed and monitored on an ongoing basis. The Department agrees that a review of the possible role for the RMC within domestic debt management could be useful, and has already taken steps to start the review.

#### Governing Canada's debt management

8.93 In Canada, the model for developing debt management strategies has been followed for 10 to 15 years. During that time, Canada's debt grew dramatically while its ability to repay worsened, making managers and policy makers acutely aware of the trade-off between short-term borrowing to minimize the cost of servicing that debt and the increased risk this strategy entailed. While Canada's fiscal prospects have improved considerably since then, choosing an appropriate strategy has certainly not become any easier. If debt continues to decline, keeping the market liquid will represent a new challenge. Also, managers are facing markets that are considerably more complex and global than even five years ago. At the same time, techniques for assessing risk and strategies for managing them have improved.

**8.94** Canada is not unique in the choices it faces; debt managers throughout the G-7 are grappling with similar issues as they try to keep borrowing costs and risks to a minimum. Many countries have developed, to varying degrees, a risk management capacity to manage the strategies they use; Canada is one of them.

**8.95** Some countries have reorganized their debt management operations by establishing separate agencies. Examples are Austria, Australia, Belgium, Ireland, New Zealand, Portugal and Sweden. As an IMF working paper notes,

...an efficient, transparent and accountable debt management policy necessitates an organization structure independent of political influence, with clearly defined objectives and performance criteria, and run ... according to sound risk management principles.

**8.96** Other countries, like the U.S. and France, do not have separate agencies but recognize the need for high-level, independent advice on debt market operations. France recently announced the creation of two committees that, together with the primary dealers, will be in a position to provide complete and independent advice to the government on the main features of its debt strategy:

• a Market Committee, chaired by the Permanent Head of the Treasury, will include among its members' top bond executives from French and foreign primary dealers to advise on operational issues.

• a Strategic Committee, made up of recognized people with varied backgrounds (banking and financial professionals, investors, economists, academics), will advise on the key principles of the debt issuing policy.

**8.97** Canada's debt managers, too, need complete and independent advice in designing strategies to manage the debt. But the process of obtaining this advice is

The process of obtaining complete and independent advice is flawed to the extent that the advice seems to focus not on overall strategies but on the technical day-to-day concerns.

flawed to the extent that the advice seems to focus not on overall strategies but on the technical day-to-day concerns like the frequency of auctions. While such concerns are important, addressing them is not enough. Delivering the most efficient and effective program under a given strategy is valid and should be encouraged, but it still begs the question as to whether the strategy is appropriate.

**8.98** Developing a strategy means developing a portfolio structure that is consistent with the government's willingness to accept risk and its need to minimize and stabilize costs and maintain liquidity in the market. It would also mean obtaining advice on the choice of indicators and appropriate targets for them. For example, is the current target for fixed-rate debt appropriate, given current financial conditions and existing market and political risks?

8.99 The Department of Finance should undertake a high-level strategic review of its governance of debt management and consider alternative ways to obtain the independent and complete advice needed by debt managers today.

8.100 That review should include reviewing the relationships among the Bank of Canada, Canada Investment and Savings and the Department and assessing whether they continue to meet the needs of effective debt management.

**Department's response:** The Department believes that the existing Canadian debt management governance framework functions very well. However, given changing borrowing environments worldwide, coupled with technological advances, we will continue to monitor and keep abreast of best practices in this area. We will review the governance frameworks of comparable sovereign borrowers and determine if there are best practices that are relevant for Canada.

# Conclusion

**8.101** The purpose of this chapter was to assess the degree to which the Department of Finance measures the effectiveness of its debt management activity and to assess its overall governance.

**8.102** We found that this is a well-run program overall. The people who manage it are a highly committed group who are devoted to delivering an effective program. They are aware of the changing tools available to them and the changing economic and fiscal environment that affects debt management.

8.103 Like debt managers in many other countries, the Department of Finance and the Bank of Canada have in place or are developing the sophisticated modelling techniques needed to manage effectively Canada's \$460 billion in market debt. This means being able to offer policy makers the information needed to choose the most appropriate debt strategies given existing constraints, and to monitor and deliver the program against appropriate performance standards. We noted particularly that despite Canada's improving economic and fiscal performance, the government's strategy is to move the debt portfolio in a direction that is more risk-averse than it was in 1997. Driving this risk-averse strategy are the concerns that although the economy is improving, the debt stock remains large; the debt-to-GDP ratio, while declining, remains high; national unity concerns remain; and the rating agencies whose role it is to keep investors informed have not upgraded Canada's rating.

**8.104** The government has continued to raise a higher proportion of its debt in instruments with longer terms to maturity, and at an accelerated pace, despite the swing from deficits to surpluses sooner than anticipated. This decision is clearly outside the scope of our audit, but it is within our responsibility to comment on

Despite Canada's improving economic and fiscal performance, the government's strategy is to move the debt portfolio in a direction that is more risk-averse than it was in 1997.

> the lack of transparency about the costs of that decision. While the benefits have been reported, the expected costs have not. We encourage the government to be transparent about not only the benefits of its decisions but also the costs.

**8.105** To the extent that the government has performance indicators with targets, it does measure and report its performance against them. But its range of targets is too narrow. We suggest that the government expand its range of indicators or performance measures to guide its management of the debt, and monitor its performance against them. For accountability, we encourage the government to be transparent about them as well.

**8.106** We also believe that performance measures such as the kinds discussed in this chapter are applicable in both the domestic currency market and foreign currency markets. We recognize, however, that while the overall objective of raising funds in both markets is to obtain stable, low-cost funding, in the domestic market the government also has a responsibility to help keep the markets liquid.

**8.107** The government also raises money in the domestic retail debt market from individual Canadians, through Canada Savings Bonds and Canada Premium Bonds. We understand that the government hopes to keep retail debt at a constant share of overall debt and that this market has the same objective of stable, low-cost financing. However, notwithstanding the renewed attention given to retail debt and the creation of a special operating agency to market it aggressively, we have seen no conclusive evidence that the program does raise

cost-effective debt. We are concerned that the objective of cost effectiveness may conflict with the objective of maintaining the targeted share of retail debt in the total debt stock. We also understand that the government is undertaking to review various aspects of the retail debt program. We encourage it to include in this review an assessment of the consistency between cost effectiveness and a quantity target. We also encourage the government to disclose this information publicly when it completes its review.

**8.108** We believe that risks in the entire market debt portfolio should be managed in a similar way, through the kind of process currently used for the foreign currency component of the debt. This should not be interpreted as a negative comment on risk management for domestic debt, but rather as encouragement for the Department to take advantage of a process that seeks the broadest independent advice on managing those risks.

**8.109** We were concerned about the Department's ability to obtain complete and independent advice to guide the design of its debt management strategies. We believe that the process for seeking this advice is flawed because those who provide the advice are not sufficiently independent of the process. There are examples of alternatives among other countries, and we encourage the government to look at them.

**8.110** Finally, we recognize that Canada has a large debt, and the management of it needs to be transparent to the markets. Changing direction will take time and good planning. That is the essence of the approach we are proposing.



# About the Audit

### Objectives

Management of the federal market debt is the responsibility of the Department of Finance, working in conjunction with the Bank of Canada and Canada Investment and Savings. Three years ago, we published a study meant to inform members of Parliament and others about how the federal government raises and manages its market debt. The present audit looked more closely at certain key features of the debt management program. More specifically, the objectives of the audit were to:

- assess the adequacy of the governance/control approach to managing risk in light of the changing way debt management is conducted; and
- determine whether the Department systematically reviews the performance of its debt management practices against the objectives set for the program.

### Scope

As with our earlier study, the focus of the audit was the part of federal debt raised directly by the government in financial markets. Thus, it did not include liabilities to public service pension plans, liabilities of Crown corporations and other contingent liabilities.

## Approach

We built on the knowledge base established during our study of the debt management program. We reviewed academic literature on debt management, studied debt management practices in other jurisdictions, both in Canada and other countries, and consulted experts on financial markets and debt management. We examined project files and reviewed departmental analyses and Department-commissioned studies on debt management issues. We also interviewed officials with the debt management program of the Department of Finance, the Financial Markets Department of the Bank of Canada and with Canada Investment and Savings, the agency established in 1997 to manage Canada's retail debt.

### Criteria

To assess the program's governance framework and performance measurement practices, we looked for evidence that senior management establishes clear objectives and performance expectations, identifies the significant risks associated with the program, ensures that capabilities appropriate to the mission and objectives of the program are in place, monitors operations, evaluates results and reports on performance.

### Audit Team

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