



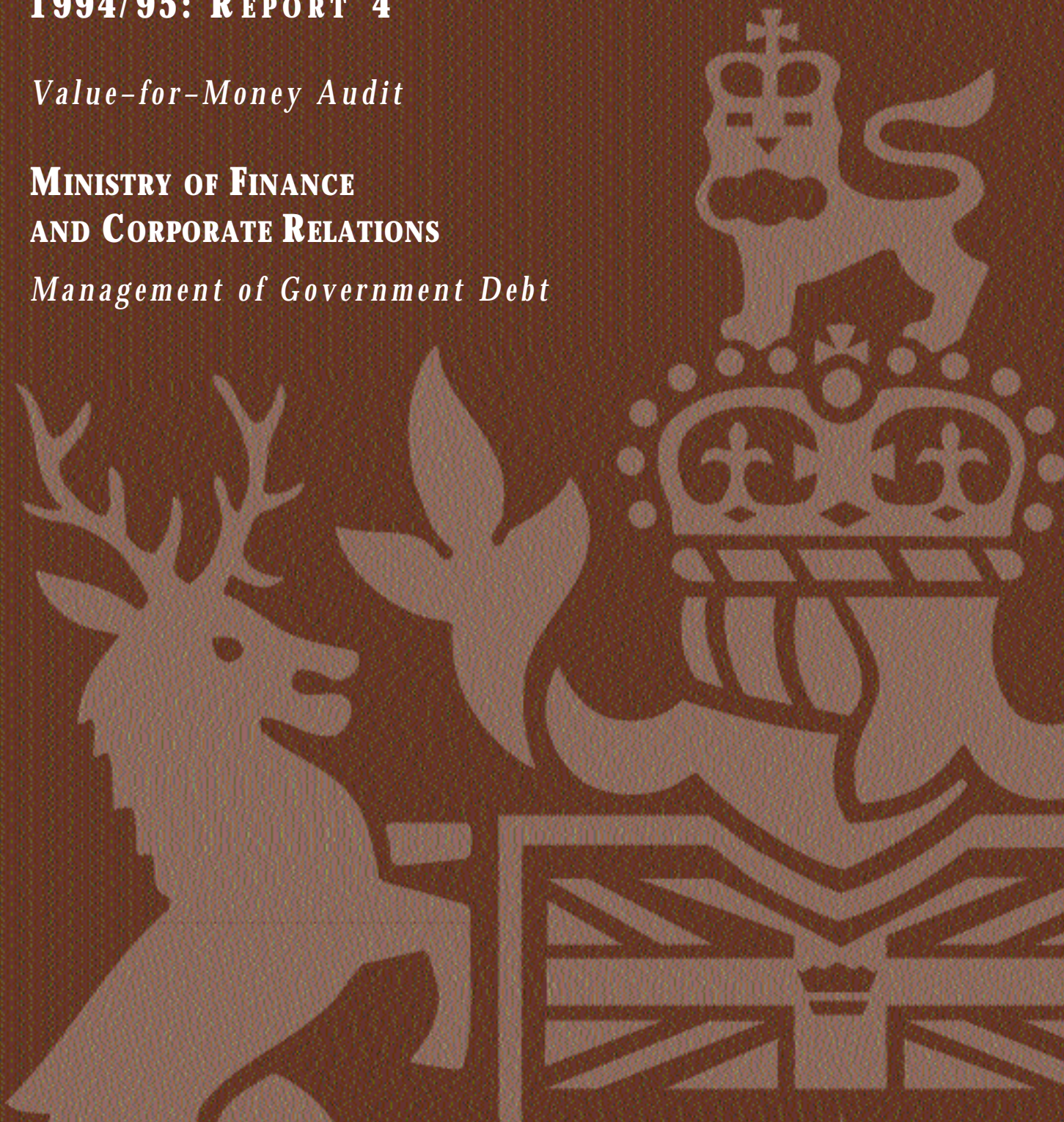
# AUDITOR GENERAL

**1994/95: REPORT 4**

*Value-for-Money Audit*

**MINISTRY OF FINANCE  
AND CORPORATE RELATIONS**

*Management of Government Debt*









## Ministry of Finance and Corporate Relations

***Management of Government Debt*****Contents**

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# ***Auditor General's Comments***









# Auditor General's Comments



This report, my fourth to the Legislative Assembly for the 1994/95 year, contains the results of a two-part value-for-money audit conducted in the Ministry of Finance and Corporate Relations. In the audit, my staff focused on the ministry's Provincial Treasury operations for managing cash balances and borrowing transactions.

Provincial government debt in British Columbia is sizable: \$30 billion in gross debt as at March 31, 1994, offset by \$4 billion in investments set up to pay off maturing debt—about \$7,300 for each person living in the Province. The annual cost of servicing this debt is about \$2 billion—a sizable amount when compared to annual spending for most government programs.

Over the past few years, the public has shown an increased interest in learning about government debt, notably how much there really is and what the government is doing to manage it. I reported on the government's disclosure of total debt in my 1993/94 and 1994/95 reports on the audit of the Public Accounts of the Province. This report looks at how this debt is being managed.

It is important for the reader to note that political decisions that determine the size of government debt are not within my mandate to question. Therefore, I have examined the management of debt from the point of view that government managers should be:

- managing cash balances in a way that minimizes amounts that have to be borrowed; and
- borrowing in a way that minimizes current debt servicing costs without risking higher costs in the future.

Unnecessary borrowing can be avoided if projections of cash requirements are accurate and existing cash balances are used to reduce the need to borrow to a minimum. When borrowing, the ministry faces the challenge of keeping up with changes in financial markets. New means of borrowing are being developed, some of them more risky than others. In selecting from among the



various sources of funding, it is imperative that the costs of borrowing are minimized without taking on undue risks.

In the first part of the audit, we examine how the ministry manages government cash balances so that borrowing is minimized. In the second, we assess how the ministry borrows so that debt servicing costs are minimized.

I greatly appreciate the cooperation shown to my audit staff by the ministry's executive and staff in the course of the audit.

George L. Morfitt, FCA  
Auditor General

Victoria, British Columbia  
March 31, 1995





# *Management of Government Debt*









Ministry of Finance and Corporate Relations

# *Management of Government Debt*

***An audit of how the ministry manages cash balances and borrowing transactions***

The Ministry of Finance and Corporate Relations is responsible for managing cash balances and ensuring there is sufficient cash available to meet central government needs. To provide funds for capital investments, and for operating deficits when they occur, it issues short- and long-term debt. The way cash balances and borrowing transactions are managed can have a significant influence on the costs of servicing debt.

## **Audit Purpose and Scope**

We conducted this audit to assess whether the Ministry of Finance and Corporate Relations is properly managing government cash balances and borrowing transactions. To do this, we first examined how the ministry reduces the need to borrow by managing cash requirements for central government. Next we examined how, in managing financing transactions for both new and existing debt, it minimizes debt servicing costs for central government and Crown corporations. In addition, we examined whether sufficient, appropriate information is being provided to the Legislative Assembly and public about the result of debt management activities.

We focused on Provincial Treasury processes for planning, managing, and reporting on cash surpluses and overdrafts, cash requirements information, borrowing arrangements, and existing debt. As part of this, we reviewed its processes for preparing and coordinating the information it receives from other agencies both within the ministry and outside the ministry.

The question of how much debt to incur is largely a political decision that is not within the Office's mandate to review. Consequently, we did not examine how spending for capital investments or operations is decided. Also, we did not examine the adequacy of policies or systems used by ministries for ensuring prompt collection of revenue and receivables or for delaying, as may be deemed appropriate, the payment of expenditures or payables.





The audit examined activities taking place from April 1993 to October 1994 and, as well, considered the impact of initiatives that were underway during the audit. Our examination was performed in accordance with value-for-money auditing standards recommended by the Canadian Institute of Chartered Accountants, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

## Overall Conclusion

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We concluded that the ministry is properly managing government cash balances and borrowing transactions.

The Banking and Cash Management Branch is managing government cash balances in a way that helps to minimize borrowing requirements. Branch staff track cash flows so that surpluses and shortages are kept to a minimum. They also transfer funds so that surpluses earn maximum interest and shortages are covered with borrowing at the best available rates.

The Debt Management Branch maintains continuous contact with financial markets and borrows through a wide variety of programs. Its staff, when making financing and debt management decisions, give due consideration to the need for minimizing debt servicing costs within existing risk guidelines.

Although the ministry provides much information to the Legislature about borrowing activities, this material needs to be consolidated in a single reference about government debt. This should include all pertinent information about debt management, such as the strategies used to manage borrowing and the results achieved.

## Key Findings

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### Cash Balances Are Managed to Minimize Borrowing Requirements

The Ministry of Finance and Corporate Relations monitors over \$400 billion in annual cash flows for central government. To do this, ministry staff are efficiently forecasting cash receipts and disbursements and managing bank balances so that there is only sufficient cash on hand to make required payments. In this way they avoid borrowing unnecessarily and increasing total government debt and related costs.



## All Government Bank Balances Are Consolidated to Save Money by Offsetting Overdrafts with Surpluses

The ministry further minimizes debt servicing costs for day-to-day cash requirements by consolidating all ministry and Crown agency bank account balances in each of the six major banks used. While the ministry does not have authority to actively manage cash for Crown agencies, banking agreements have been set up so that the bank balances of all provincial government entities at each bank are totaled when interest to be paid is being calculated. In this way, accounts that have negative balances can be offset by those with positive balances, and the payment of bank interest charges thereby reduced.

## Debt Managers Have Considerable Autonomy

Debt managers in British Columbia have a high degree of autonomy and flexibility in managing the total debt portfolio of \$30 billion—provided through the wording of the *Financial Administration Act* and through the authorization of annual borrowing in a number of comprehensive Orders in Council. This means that legislative approval is not required for individual borrowings, as it is in most other provinces. With the increasing use of financing programs where timely reactions to market conditions are vital, this policy makes good business sense. However, since it removes the opportunity for members of the Legislature to debate individual borrowing issues, it increases the need for compensating controls to ensure that authority for borrowing activities is not exceeded and that results of borrowing activities are disclosed.

Ministry management does have a number of ways of checking that this autonomy has not been misused: a Risk Committee reviews borrowing activities and strategies, and a properly segregated group within the Debt Management Branch ensures that borrowing authority is not exceeded before borrowing agreements become legally binding. In addition, details of borrowing transactions are available to the public and Legislature in monthly reports that are filed with the Ministry of Attorney General. However, we think control could be improved by including representatives external to the ministry on the Risk Committee, and by providing senior government decision-makers with minutes of committee meetings and written reports detailing borrowing transactions.



## Centralized Government Borrowing Reduces Debt Servicing Costs

The ministry conducts financing transactions for all government ministries and Crown agencies. By centralizing and coordinating borrowing activities, it is able to take maximum advantage of its credit rating, at this time the highest of all Canadian provinces. It can also respond in a timely way to changes in market conditions without running the risk of market competition from its own agencies at the time of borrowing.

The ministry works with representatives from other ministries, who request borrowing to assist with the building of schools, colleges, universities and hospitals, and from Crown agencies, to decide how to finance funding requirements. Most of the time this interaction works well, but, in dealings with the ministry representatives, some inefficiencies in coordinating borrowing requirements have to be addressed to minimize debt servicing costs.

## Strategic Borrowing Plans Aim at Balancing Risks with Costs

Strategies for managing government debt are developed each year, laying out plans for financing consolidated borrowing requirements along with plans for interest rate and foreign exchange rate risk exposures, funding sources, and financing terms. The ministry has recently given priority to determining levels of acceptable risk for all borrowing activities, and to developing new ways for obtaining financing.

We found that government debt managers in British Columbia are working within a framework that accepts only low levels of risk. For example, financing transactions are arranged to convert almost all foreign borrowing to Canadian dollars. This means that the Province does not benefit from lower debt servicing costs if the value of the Canadian dollar increases against other currencies, but it eliminates the risk of incurring additional costs from adverse exchange rate fluctuations. This is appropriate, in our opinion, for a risk-averse government setting.

## Diversification of Funding Sources Further Reduces Costs

The ministry has made it a priority to seek out opportunities for borrowing in new markets to obtain lower debt servicing costs. Two borrowing programs established in the last three years have resulted in reduced costs by tapping into new Canadian and European borrowing sources.

Our review of borrowing decisions made during 1994 showed that, in selecting between the various types of borrowing sources, the ministry had given due consideration to minimizing debt servicing costs.





## Use of Derivative Products Has Been Increased to Reduce Risks

The Province's debt managers make extensive use of "derivative products" to reduce risks associated with borrowing, such as changes in interest rates or foreign currencies. By arranging with a counterparty to trade certain terms of a borrowing agreement, debt managers can "swap" long-term interest rates for short-term rates or U.S. dollars for Canadian dollars. By doing this, the branch can prudently balance its interest rate exposure, between short- and long-term interest rates, or its currency exposure, between domestic and foreign currencies.

The term "derivative" has recently been linked with financial disasters that have been caused by investors using this type of product to speculate as to future changes in interest rates or foreign currency exchange. We found that debt managers in British Columbia do not use these products in a speculative manner, but rather to provide opportunities to finance in foreign currencies without taking on foreign currency exposure, and to manage short- and long-term interest costs. We also noted that senior management regularly review staff decisions in this area, to ensure that these instruments are being used only for approved purposes and that the risk of counterparty default is kept to a minimum.

## Models for Performance Measurement Are Being Developed

In an effort to evaluate its debt management performance, the ministry developed a performance measurement model in the 1993/94 fiscal year with the help of a major international investment bank. By applying the model to the central government debt portfolio in 1993/94, the ministry calculated that it generated cash and market value savings of over \$60 million during the year by its management of government debt, when compared to a passive- strategy benchmark portfolio.

Verification of actual savings indicated by the model is difficult, being subject to factors such as interest rate changes over the borrowing term, which in the case of some bond issues is as long as 30 years. However, the ministry plans to use the model to track changes in its various debt portfolios on an ongoing basis, to see if the strategies being used are effectively minimizing debt servicing costs. Given that there are not yet any generally accepted debt management performance models available, we think the ministry's efforts in this area are reasonable and worthwhile.



## Reporting On Strategies and Results Needs to Be Improved

The ministry produces various documents that provide all the financial information that is required to be disclosed by the *Financial Administration Act*, and by the Public Sector Accounting and Auditing Board of the Canadian Institute of Chartered Accountants. However, although there is considerable information about amounts and sources of debt, there is not very much about the methods being used to manage debt and related risks, or about the potential cost savings achieved. We think the Legislature and the public should be kept informed about the ministry's performance in minimizing debt servicing costs and risks. This information should include, for example, how and why derivative products are being used and what has been accomplished as a result. We also believe that, since there is an increasing public interest in debt management, the ministry should assist readers by producing a summary report that discloses total government debt and consolidates all pertinent information about its borrowing programs. This could be either part of its annual report or a separate report, as is done by the Province of Ontario and the federal government.







*Government Debt  
in British Columbia*







# Government Debt in British Columbia

From 1990 to 1994, provincial government debt has increased significantly.

At March 31, 1994, the total recorded debt of the British Columbia government stood at \$30 billion, offset by \$4 billion in sinking funds set up to pay off maturing debt. Most of the borrowing is for expenditures, largely capital in nature, of entities that perform public service functions; for example, Crown corporation spending for equipment or buildings. The remainder has been borrowed for operating expenditures of central government ministries (Exhibits 1 and 2).

The government borrows to pay for long-term investments in

capital expenditures such as school buildings and roads. When necessary, it also borrows to fund annual operating deficits caused by operating expenditures that are higher than revenues. (Operating expenditures for central government also include capital investments.) Exhibit 3 shows the increases in provincial government debt in the past five years to pay for capital investments and operating deficits.

As the amount of government debt increases, so does the need for managing the related increases in borrowing transactions and costs. As shown in Exhibit 4, the cost of servicing government debt has increased from \$1.7 billion in 1990 to \$2.3 billion in 1994.

## Exhibit 1

### Provincial Government Debt\*

*Gross and net debt for central government and Crown agencies (\$ Billions)*

	Central Government	Crown Agencies		Totals	
		Fiscal Agency Loans	Guaranteed Debt	1994	1993
Total debt at face value	12,201	13,689	4,496	30,386	27,712
Less: Sinking funds	(915)	(1,999)	(1,454)	(4,368)	(4,175)
Net debt	11,286	11,690	3,042	26,018	23,537

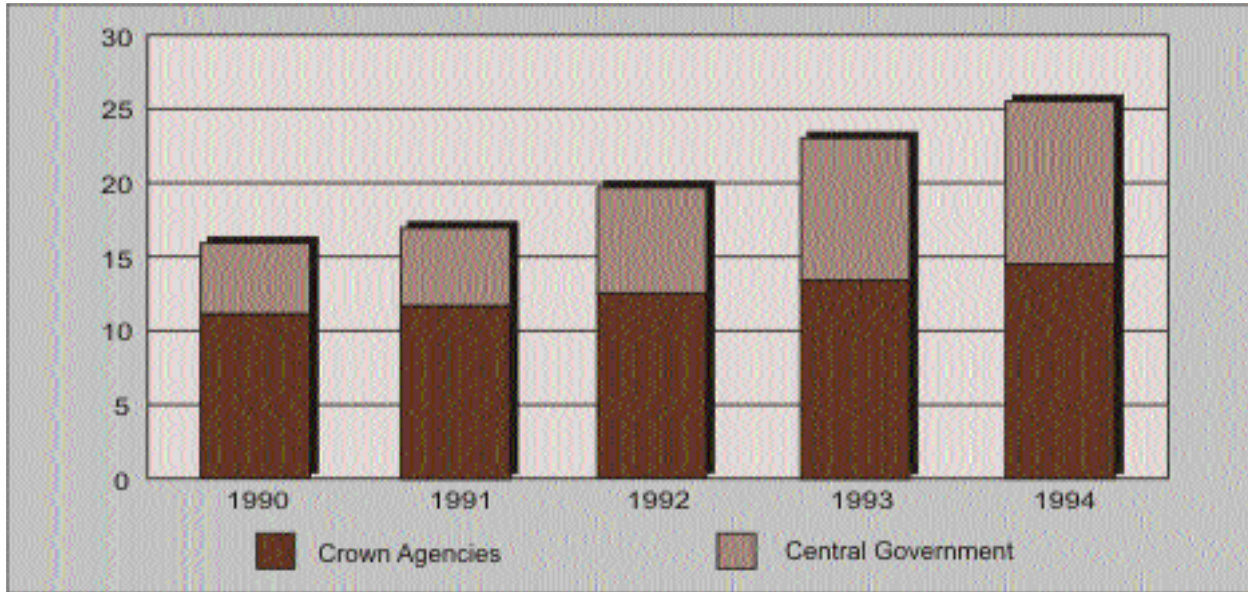
\*see Appendix D for details



## Exhibit 2

### Net Provincial Debt

*Net debt for each of the five fiscal years ending 1994 (\$ Billions)*

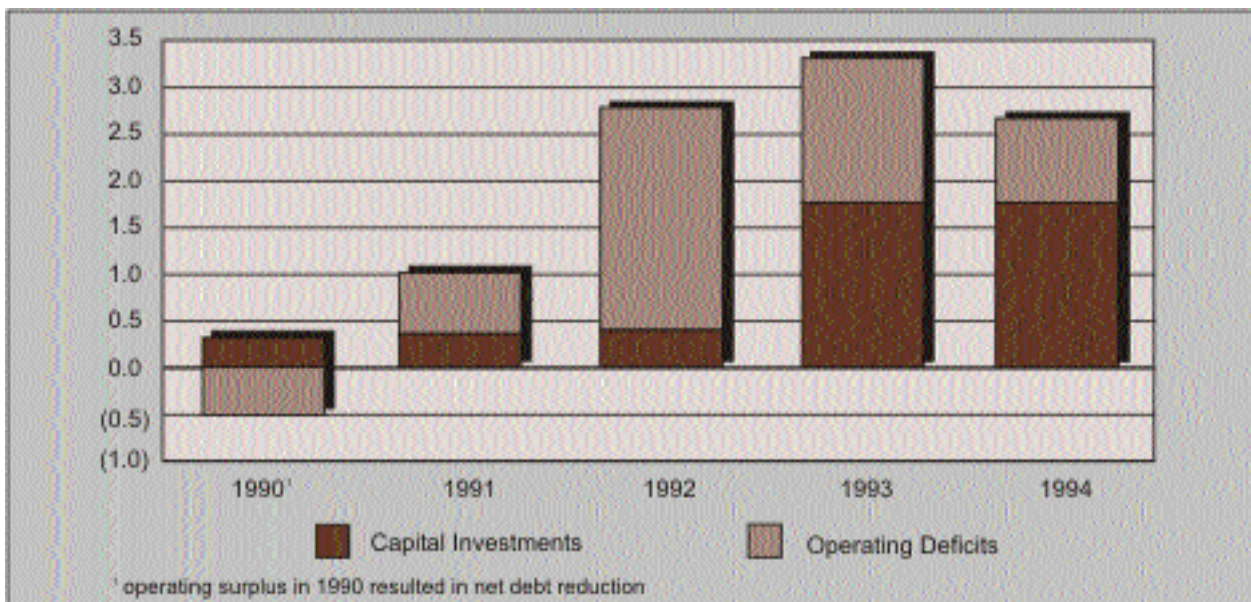


Source: The Public Accounts, Budget '94, Financial and Economic Reviews

## Exhibit 3

### Annual Increases in Debt

*Borrowing provides for capital spending and operating deficits (\$ Billions)*



Source: The Public Accounts





The increased volatility of interest rates and foreign currency exchange rates in recent years has stimulated many borrowers to look for ways to neutralize some of the higher risks involved. This has motivated financial market intermediaries to develop new ways of meeting the needs of different agencies. This development has been further accelerated by worldwide connections between financial markets, advances in communications and information processing technology, and by the heavy demands for funds by

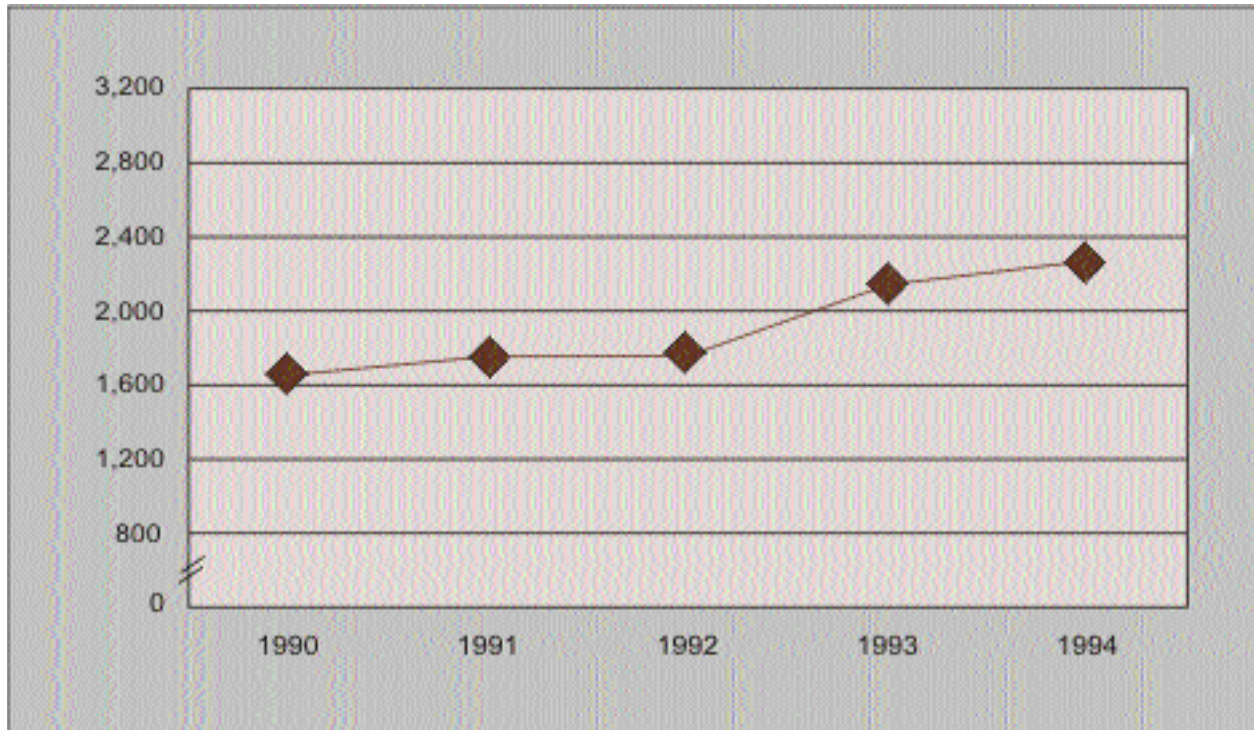
governments and their agencies. As a result, many more sources of funds have been opened up for borrowers such as the Province of British Columbia.

Some of these new financial instruments can be used to alter terms of existing debt to be more flexible. For example, those borrowings with a long-term fixed rate of interest can be switched to a short-term floating rate. When these alterations are made, there are sometimes increased risks. If short-term interest rates suddenly rise, for instance, debt servicing costs could rise more than with

## Exhibit 4

### Debt Servicing Costs

*Costs are increasing along with increases in debt (\$ Millions)*



Source: The Public Accounts



longer-term rates. The costs of using different types of financing can thus vary considerably, based on decisions that debt managers make. Accordingly, it is important that government managers of borrowing programs strive to service the debt at the least possible cost and without taking on excessive risks.

## Key Players in Managing Government Debt

The agency responsible for managing government cash balances and borrowing transactions—and the focus of this report—is the ministry’s Provincial Treasury. However, a number of other groups also play roles in the management of debt: within the ministry—Treasury Board Staff, Revenue Administration Branch, and Government Payments Services Branch—and outside the ministry—staff from other ministries who coordinate borrowing for schools, colleges, universities and hospitals, and Crown agencies.

### Provincial Treasury

Four branches of Provincial Treasury play a role in managing government cash balances and borrowing transactions: Banking and Cash Management, Debt Management, Investments, and Corporate Operations (Exhibit 5). The first three provide centralized financial services to the Province, Crown corporations, schools, hospitals, and other public sector organizations. The fourth provides systems support for the other branches.

The cash management group within the Banking and Cash Management Branch monitors the Province’s annual cash flows of over \$400 billion. It records deposits, distributes payments, forecasts and tracks cash flows, and arranges transfers of funds between bank accounts. Efforts have to be coordinated with the Investments Branch to decide where to place investments to maximize earnings on cash surpluses, and with the Debt Management Branch to arrange borrowing to minimize the cost of overdrafts and longer-term financing.

The Investments Branch, in addition to managing the Province’s trust funds of more than \$30 billion, assists the Banking and Cash Management Branch by investing daily cash surpluses. It also coordinates its interactions with both the financial community and the Debt Management Branch, and manages sinking fund investments that have been set up to pay off debt when it matures.

The Debt Management Branch borrows money to meet public sector financing requirements and manages the \$30 billion debt portfolio. To do this, it coordinates borrowing requests from all provincial government agencies and develops short-term and long-term borrowing strategies to minimize the cost of debt. It also maintains contact with members of the financial community to keep informed about changes in financial market conditions and related borrowing opportunities.

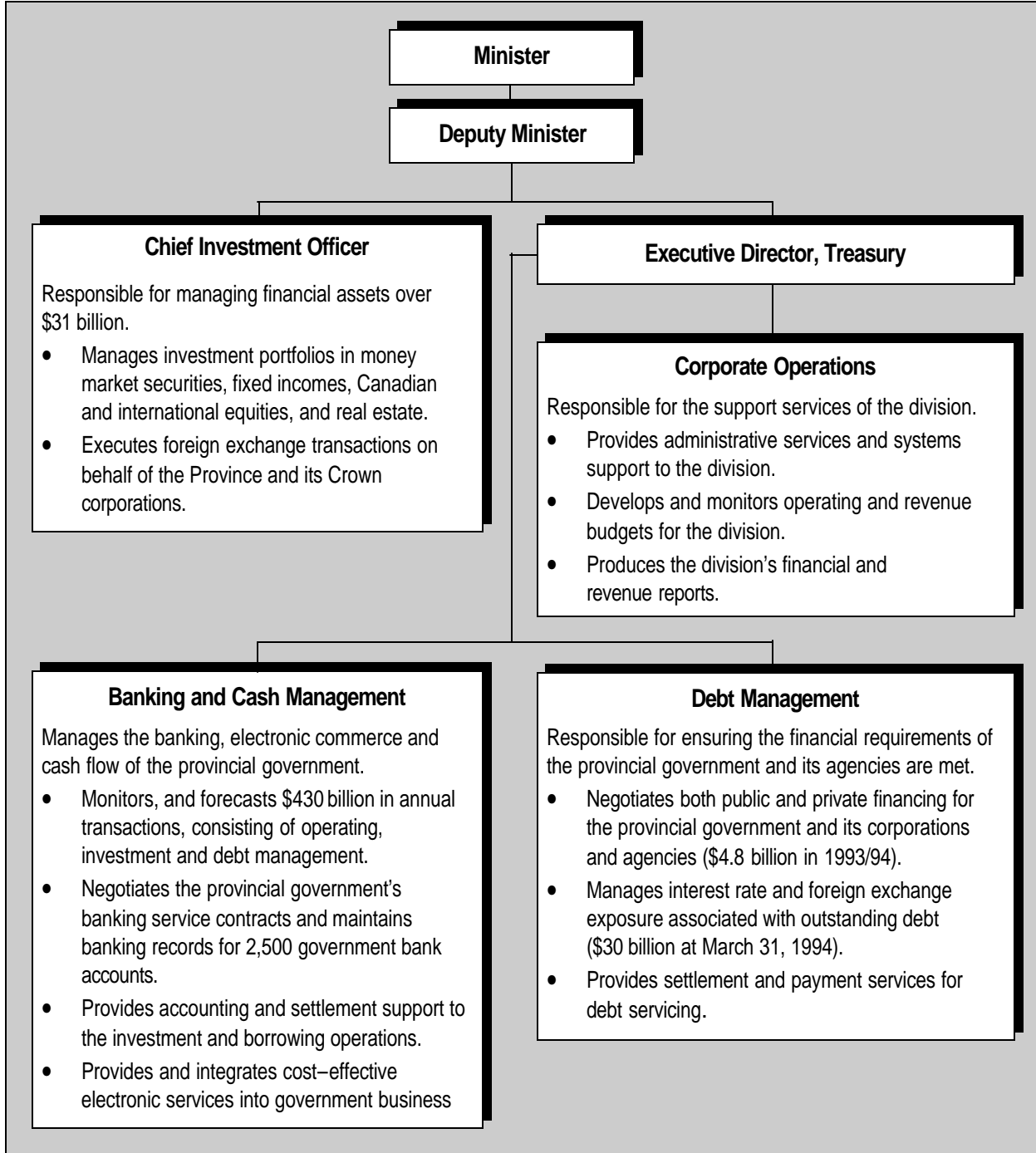
The Corporate Operations Branch provides support by



## Exhibit 5

### Provincial Treasury Organization Chart

*Four branches play a role in managing cash balances and borrowing transactions*



Source: Based on information from the Ministry of Finance and Corporate Relations



managing the computer systems used to coordinate information for predicting cash balances and to track investments and borrowing transactions.

### Other Players in the Ministry of Finance and Corporate Relations

Provincial Treasury routinely collects information from a number of sources within the ministry as part of its job of managing government cash balances and borrowing transactions (Exhibit 6). Treasury Board Staff prepare forecasts of revenue and spending, as well as budget estimates at the beginning of each fiscal year, and monitor revenue collection and expenditure payments throughout the year to see if they agree with budgeted amounts. Staff directly manage \$7 billion in tax transfers from the federal government and track the revenue managed by others, such as the Revenue Administration Branch of the ministry which collects \$5 billion in local taxes, and other ministries which collect another \$5 billion in revenues. They also monitor expenditure payments and capital spending through information received from the Government Payments Services Branch and the Debt Management Branch.

### Players Outside the Ministry

Spending for capital investments in Crown corporations comes from central government funding that has to be approved by Treasury Board (except for BC Hydro and BC Rail, which are self-supporting). Annual expenditures of Crown corporations are approved by their

individual boards of directors (Exhibit 6). In some cases, operating subsidies are also granted to these corporations by the provincial government. As will be described in detail later in this report, the borrowing needs that arise as a result of both capital projects and operating expenditures are managed by Provincial Treasury.

For capital investments in schools, colleges, universities and hospitals, staff in each related ministry (and more recently, in the BC Transportation Financing Authority, for highways) have been assigned to coordinate project spending. These staff from other ministries use the services of Provincial Treasury to manage the funding for these projects.

### Factors Outside the Scope of This Report

The biggest factor influencing debt is the amount of borrowing to finance capital projects and operating deficits. The government makes these spending decisions every year, based on perceptions of the need for services to the public and estimates of changes in the economy. Given that these are essentially political decisions outside the mandate of our Office, this report does not examine the underlying rationale for the resulting level of debt.

The amount and type of resources applied to collecting revenue and receivables can also have a considerable influence on the amounts of money involved in cash flows and borrowing transactions. If not all amounts owing to government are collected,

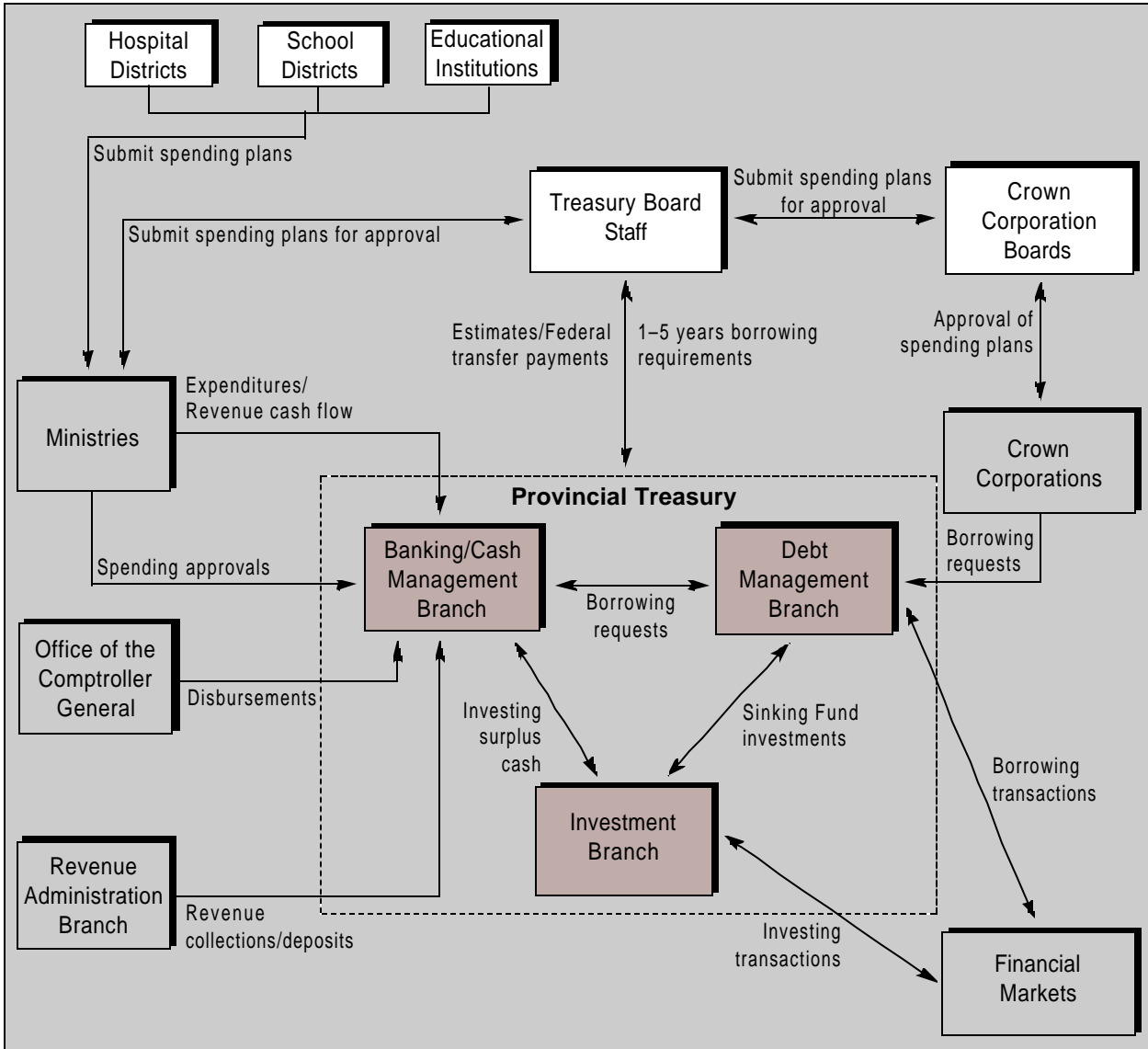




## Exhibit 6

### Key Players in Managing Government Debt

Many agencies play a role in managing cash balances and borrowing transactions



Source: Based on information from the Ministry of Finance and Corporate Relations

or if methods used are inefficient, then larger amounts will be borrowed than would otherwise be necessary. In addition, the policies and procedures for timing the payment of expenditures can affect amounts that need to be borrowed.

This audit, however, did not review the methods used to collect revenues and receivables or to make expenditure payments.



## Factors Within the Scope of This Report

While spending decisions that contribute to levels of debt are outside the mandate of our Office, we did look at another important factor relating to the amount being borrowed: namely, the way cash balances are managed. Cash managers need to ensure that there is enough cash on hand in government bank accounts to be able to pay expenses when they come due, without borrowing more than is needed and increasing debt and its related costs. They also need to ensure that money that could be used to pay down debt, or earn higher rates of interest elsewhere, is not sitting idle.

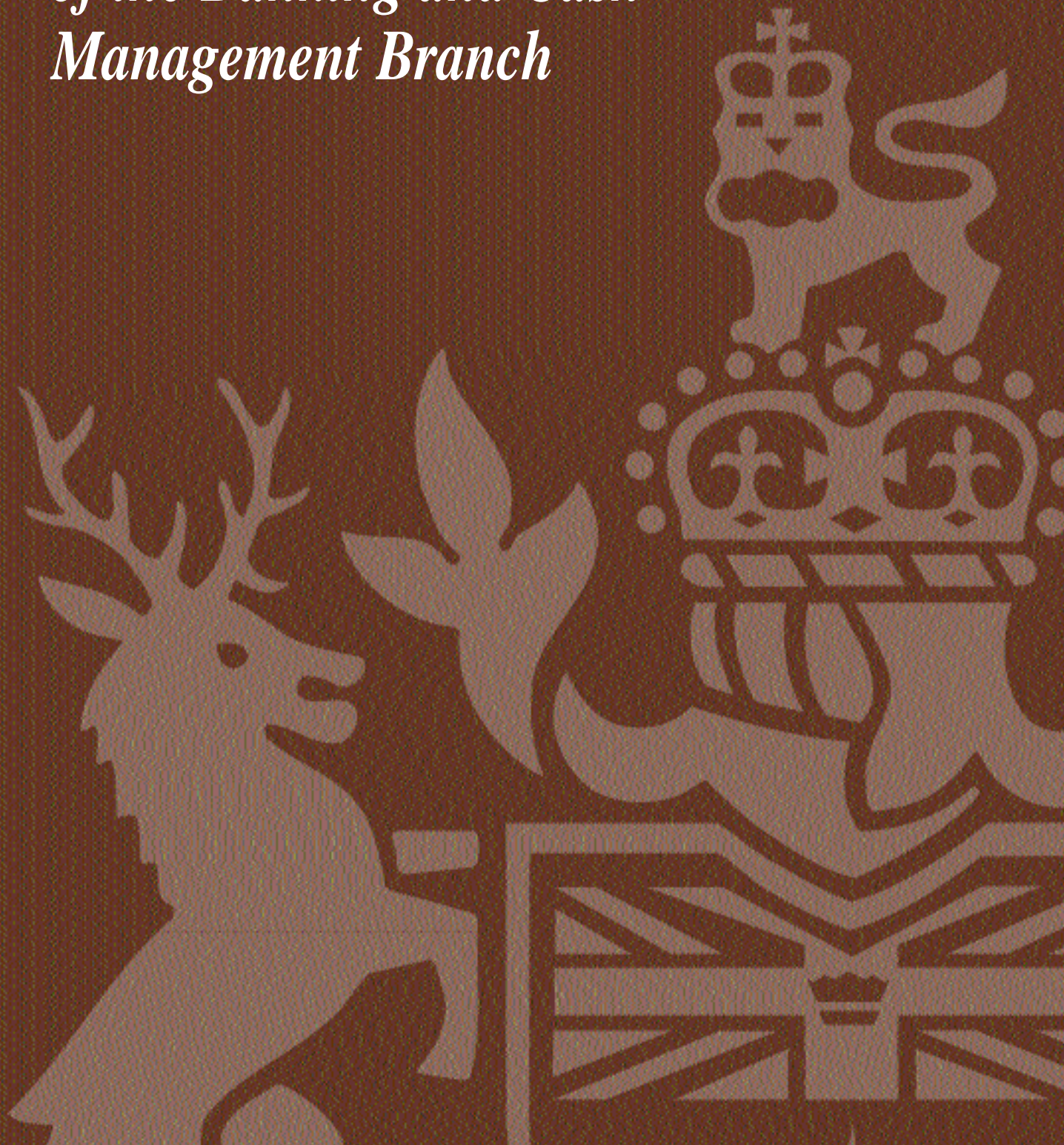
On the borrowing transaction side, once amounts to be borrowed are decided, it is important that the costs of all available options for obtaining the funds be compared. These costs, such as interest payments, and commissions paid to dealers, are influenced by many factors but mainly the market interest rate, the credit rating of the Province, and the supply of and demand for funds at the time of issuing debt. Debt managers try to ensure that borrowing needs for all provincial government entities are met at the lowest available rates. However, given that obtaining lower debt servicing costs in the short term can sometimes mean higher costs in the future, guidelines for acceptable levels of risks have to be determined and followed when borrowing transactions are arranged.

Provincial Treasury's Banking and Cash Management Branch manages the cash balances of the Province and is the subject of the next section of this report. The Debt Management Branch manages borrowing on behalf of central government and public entities, and is the subject of the last section of this report.





*Minimizing Debt: Actions  
of the Banking and Cash  
Management Branch*









# Minimizing Debt: Actions of the Banking and Cash Management Branch

## Introduction

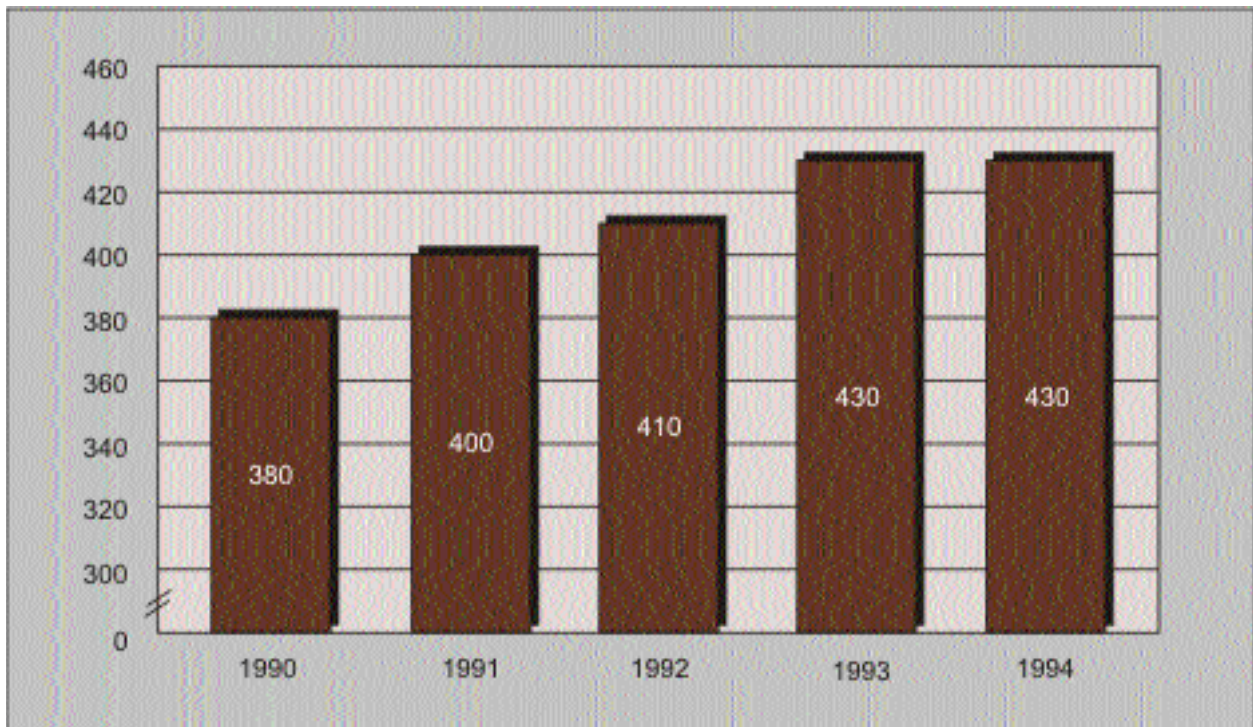
The provincial government has annual cash flows of more than \$400 billion (Exhibit 7). The size of these cash flows is high because large amounts of money are borrowed and invested every year,

and the money is often transferred a number of times between bank accounts. As well, amounts of cash collected for revenues are deposited in bank branches throughout the Province, transferred to central locations, and then distributed for expenditures.

## Exhibit 7

### Annual Cash Flows

Annual cash flows have increased from 1990 to 1994 (\$ Billions)



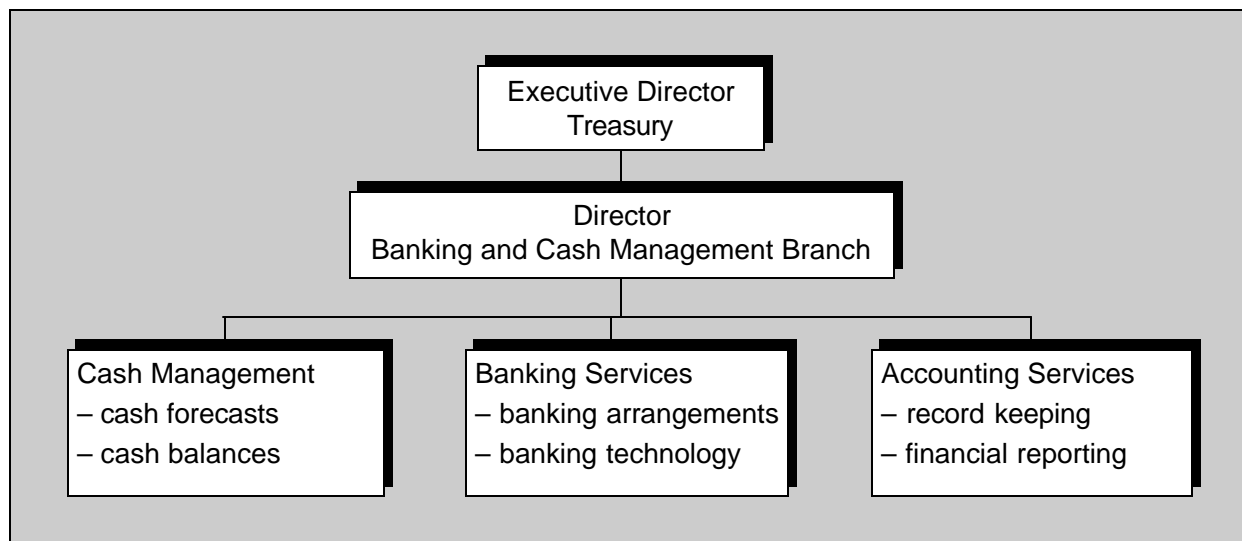
Source: Based on information from the Ministry of Finance and Corporate Relations



## Exhibit 8

### Banking and Cash Management Branch of Provincial Treasury

*Three groups in this branch play a role in managing cash balances*



Source: Based on information from the Ministry of Finance and Corporate Relations

The Banking and Cash Management Branch had 35 staff organized in three groups as of March 1994 (Exhibit 8). The cash management group maintains daily, weekly, and annual cash forecasts that are used in making investment and borrowing decisions. It also maintains a network of bank accounts and systems to transfer revenue deposits and to distribute payments for all government ministries. The banking group negotiates arrangements with banks and develops ways of keeping up with the latest banking technology. The accounting group provides accounting and reporting services.

The Office of the Comptroller General establishes policies and procedures for collecting revenues and paying expenditures, and it

monitors whether each ministry follows its guidelines. The Banking and Cash Management Branch gives the Comptroller's Office advice on whether these policies and procedures assist in the efficient control of cash balances. Branch staff also collect information about the timing and amounts of cash flows from each ministry and Crown agency so that they can prepare forecasts.

When daily cash inflows are forecast to exceed outflows, branch staff contact the Investment Branch to arrange for surpluses to be invested. When outflows are forecast to exceed inflows, the invested surpluses are drawn upon. When surpluses are depleted, staff contact the Debt Management Branch to arrange for borrowing to avoid overdrafts.



The way government manages its cash balances can help in minimizing debt and its related costs. Achieving this requires clear strategies and procedures for guiding cash management activities so that sufficient funds can be maintained to meet government payment obligations without having to borrow unnecessarily. It also requires efficient systems for forecasting and managing cash flows from all government sources and for evaluating results so that changes can be made to improve performance.





## Guiding the Management of Cash Balances

To properly guide the management of government cash balances, the ministry should have clear objectives, strategies, and procedures for minimizing amounts borrowed to meet government cash requirements. We looked for objectives that recognize the need to provide for sufficient cash to make necessary payments without incurring unnecessary debt. We also reviewed whether strategies had been developed to manage cash surpluses and shortages so that amounts in bank accounts are minimized and the best available interest rates are obtained. Finally, we looked to see if adequate procedures had been established for carrying out strategies.

### Conclusion

The ministry has clear objectives, strategies, and procedures to guide the management of cash balances. Objectives balance the need for liquidity with the need to minimize debt; strategies provide for proper management of cash surpluses and shortages; and procedures are adequate for carrying out these strategies.

### Findings

#### Objectives

Proper management of cash balances involves:

- maintaining sufficient access to cash to meet all payment obligations;

- earning maximum interest on surplus cash balances; and
- financing cash deficiencies with the lowest possible debt servicing costs.

We found that the objectives of the ministry's Banking and Cash Management Branch take the above principles into account and are used as a basis for guiding cash management activities.

#### Strategies

Strategies are required to ensure that adequate cash is on hand when it is needed, but not excess amounts that could be used more efficiently elsewhere. There also need to be ways of managing cash so that surpluses can be invested, and borrowing can be arranged to cover overdrafts, in a timely way and at the best available interest rates.

#### Consolidating All Government Bank Balances

To help maximize the earnings on cash surpluses and reduce the cost of overdrafts for government as a whole, the Banking and Cash Management Branch has developed the Offset Interest Program that consolidates all ministry and Crown agency bank accounts for the purpose of calculating interest earnings and charges. The branch has agreements providing for the balances of Crown agency accounts to be offset against the overdrafts and surpluses of central government accounts at each of the six major banks it deals with. In





return for notionally netting the cash balances of Crown agencies, the branch pays the agencies interest at a rate higher than they would have received from the banks and lower than the branch would have paid to the banks for overdraft interest. For offsetting Crown agency overdrafts with central government funds, the branch charges interest at a lower rate than the agencies would have paid to the banks and higher than central government would have received for investing surpluses elsewhere.

Although savings are achieved as a result of this program, the agency accounts represent a significant portion of each day's variances in cash flow forecasts. This occurs because the branch does not have authority to control Crown agency cash flows. However, we found that the savings achieved under this program more than compensate for the effort expended in monitoring balances.

### Forecasting Revenue Flows

In any government cash flow forecasting system, it is generally more difficult to forecast revenues than it is to forecast expenditures. This is because expenditures are controlled by budget approvals, and payment amounts and dates are usually known before they clear the bank. Revenues, because they are based on fluctuating factors such as economic activity, are much less predictable.

To assist in the timely transfer of revenue deposits and in predicting when revenue will be deposited, accelerated funds transfers are used for a significant portion of cash inflows (Exhibit 9).

These include approximately \$7 billion in transfers from the federal government and \$2 billion in amounts collected from resource revenues. In the case of federal transfer payments, exact details about amounts and timing of deposits are known ahead of time because they are pre-arranged. For those revenue flows not currently received by accelerated funds transfer, the branch is working on switching them to accelerated transfer or otherwise improving the predictability of inflows.

### Keeping Up with Changes in Banking Technology

At the moment, information about actual cash deposits to, and withdrawals from, bank accounts is not available until the day after such transactions take place. Since technology for obtaining bank transaction and balance information is a key component in coordinating cash flow information, the branch is working to keep up with changes in banking technology. As a part of this, it is looking into methods for electronic data interchange (EDI) to obtain more certainty with respect to cash transactions and balances.

### Arranging Bank Rates and Lines of Credit

The banking group in the Banking and Cash Management Branch negotiates, implements, and administers banking services that are used to manage the Province's cash balances. Factors that staff consider when arranging these services include interest rates to be paid on surpluses and charged on overdrafts, as well as charges for individual transactions.



We found that the branch has negotiated lines of credit, at reasonable interest rates, adequate to provide sufficient liquidity for the Province's sizable daily cash flows, considering that the Debt Management Branch arranges borrowing in advance for larger anticipated borrowing needs.

### Investing Surplus Cash and Borrowing to Meet Cash Shortages

When the Cash Flow Forecasting system projects a positive consolidated bank balance for the following day, the Banking and Cash Management Branch issues an investment order to the Investments Branch in an amount that aims at reducing this balance

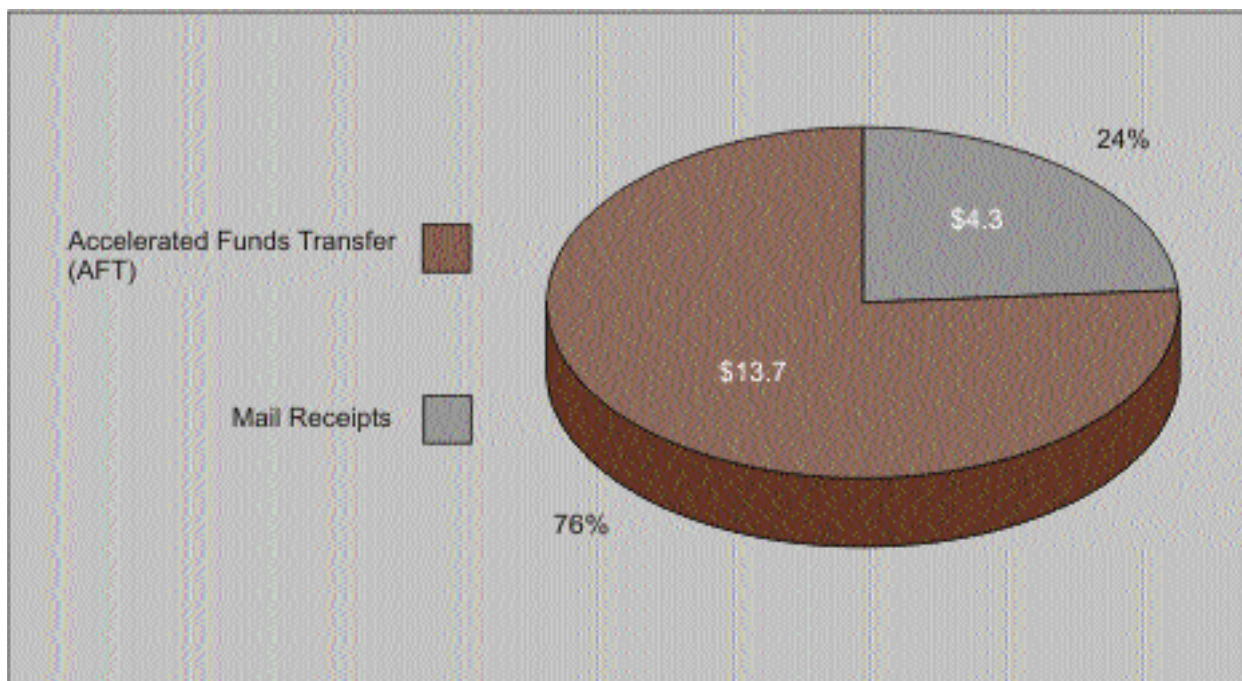
to zero. When a negative consolidated bank balance is projected, investments are liquidated, or a borrowing order is issued to the Debt Management Branch, in an amount that aims at bringing this balance up to zero.

We believe this strategy is reasonable because it gives staff with expertise in investing and borrowing the responsibility for obtaining the best rates for invested or borrowed funds. Indeed, we found that the increased amounts of interest earned on invested funds and the lower amounts of interest paid on borrowed funds more than compensated for the administration costs involved.

## Exhibit 9

### Methods for Collecting Revenues

*A significant portion of revenues were received by accelerated funds transfer in 1993/94 (\$ Billions)*



Source: Based on information from the Ministry of Finance and Corporate Relations



## Procedures

We found that the Banking and Cash Management Branch has developed, and is using, established guidelines and procedures for all important functions to do with cash flow management.

Staff functions in the branch are highly interdependent. This requires significant interaction between staff to communicate expectations and allow managers to follow up on whether guidelines and procedures are being followed. Branch managers monitor staff compliance with guidelines and procedures informally on a daily basis when discussing routine activities, and more formally through reviews of printed bank balance variance reports. In addition, senior management use monthly cash management performance reports to assess whether staff are efficiently carrying out assigned procedures.

When we began the audit, we found that written procedures were not up to date, although branch management had previously recognized the importance of having them current and was drafting a new procedures manual. In spite of the lack of written procedures, branch staff were clear about procedures for their assigned functions. Before we completed the audit, the manual had been completed and was being used to train new staff.

## Communicating Branch Procedures to Others

The Banking and Cash Management Branch does not have an explicit legislated mandate for monitoring and controlling ministry or other government agency cash management activities. As a result, the manuals used by other ministries contain few written policies or procedures for communicating with the branch. This has led, on occasion, to the Banking and Cash Management Branch not getting timely information for forecasting cash flows. To reduce the chance of this happening, branch staff have increased their efforts to encourage cooperation of staff in other agencies. Improvements have resulted, but when staff in the other agencies change, the branch has to take the initiative in making sure they continue communicating the necessary cash flow information.

To further improve communication with other agencies, the branch has followed our suggestion to arrange with the Office of the Comptroller General to draft written procedures for ministry staff to use in providing cash flow information. These new sections are expected to be inserted in procedures manuals for all ministries by the end of 1995.







## Forecasting Cash Flows

To provide for cash requirements in a way that minimizes amounts borrowed, the ministry should have systems for gathering cash flow information from all government sources and projecting cash balances. We looked for proper coordination of forecasted cash flow information used to project bank balances, and for timely adjustment of these projections in response to information about actual cash flows.

### Conclusion

The ministry helps minimize amounts borrowed by properly coordinating forecast information for the cash flows under its direct control, and by preparing timely projections of cash surpluses and requirements. For cash flows of other government agencies, the ministry has adequate methods for adjusting cash balances within a reasonable period of time.

### Findings

#### Coordinating Forecast Information

The Banking and Cash Management Branch has established staff contacts in each of the government entities from which it collects cash flow information. These contacts are used to obtain information about when and how much money is expected to be collected or disbursed.

To test its reliability, the information received about cash flows from outside the branch is

compared to amounts that have been approved in government budgets and to historical data. The information is then entered into the Cash Flow Forecasting system that has been designed to assist in forecasting cash flows and calculating daily bank balances. We found this system to be working well.

As well, regular meetings are held with staff from the Debt Management Branch, the Investments Branch, and Treasury Board Staff. Cash flow information is exchanged in both written and verbal form.

#### Information Gathered from Treasury Board Staff

As part of its preparation of annual budget figures, Treasury Board Staff develops a document called the "Estimates," containing amounts of projected revenues and expenditures that the Legislature later reviews and approves for the fiscal year. These numbers are based on information about transfer payments to be received from the federal government, anticipated changes in the economy and resulting revenue impacts, and structural program changes and resulting expenditure impacts.

Treasury Board Staff provide cash managers with this information when it is in the draft stages, so that forecasts of cash flows for the year can be prepared in a timely way. As the year progresses, ongoing corrections are



*Cash managers meeting with debt managers and Treasury Board Staff*

made to these estimates. Treasury Board Staff provide the branch with monthly updates of projected revenue and expenditure amounts, and more frequent updates of actual transfer amounts as information is received from the federal government.

The Banking and Cash Management Branch converts the revenue and expenditure information from Treasury Board Staff to a cash basis from the accrual basis of accounting that is used for government budget purposes. It then uses the various revenue and expenditure totals to check the reliability of information received from individual ministries.

### **Information Gathered from Ministries**

When it comes to forecasting the timing of cash flows, the branch relies on the ministries for information about the amounts and

the timing of revenues to be collected under ministry programs and expenditure payments. Branch staff begin by generating forecasts based on timing of cash flows derived from historical trends for each type of cash flow. Then, as the year progresses, they collect more timely information directly from ministry sources.

### **Revenues**

Exact information about some amounts that have been deposited under ministry programs, such as sales of permits and licenses, is communicated to Banking and Cash Management Branch by ministry staff on the day that deposits are made. For others, such as forestry stumpage fees, details are not usually available until the day after amounts are deposited, because receipts are numerous and widely distributed throughout the province. Similarly, exact amounts for provincial taxes that are



managed by the ministry's Revenue Administration Branch, such as consumer sales taxes remitted by businesses, are not available beforehand because they are based on fluctuating factors such as the level of consumer sales.

The uncertainties in forecasting amounts that are to be collected for consumer sales taxes, such as the sales tax and tobacco tax, account for 85% of the variance in revenue forecasts. This happens largely because remittances come from many sources and are based on fluctuating sales. Although legislation requires that businesses mail the amounts owing on or before the 15th of each month, uncertainties still result as to how much will be received each day.

To improve the accuracy in forecasting consumer sales tax receipts, branch staff are working with the Revenue Administration Branch to come up with new collection methods. We found that these two branches have developed a proposal for changes to legislation that would require deposit of funds on the 15th of the month. In the meantime, they have set up a system at several financial institutions whereby remitters can make direct payments. The result is more timely receipt of funds because more remitters are now paying on the 15th. In addition, we noted that a pilot project is now underway in the branch to improve revenue forecasts by collecting one of the components of consumer sales tax amounts, the Social Services Tax, from a large Crown corporation (BC Telephone) by electronic data interchange (EDI).

These efforts aside, there are

still complexities beyond Banking and Cash Management Branch control when it comes to predicting certain revenue flows, because the latter are affected by changes in the economy and by methods of collection. We found that accurate amounts are known for three-quarters of revenue because it is received by accelerated funds transfer (Exhibit 9), and that the branch has developed adequate processes for obtaining and checking the reliability of information. When amounts are not known until after deposits are made, we believe that reasonable means are used to estimate amounts and timing of receipts based on historical trends.

### *Expenditures*

Details about electronic funds transfer payments and cheque disbursements are received on the day before transactions occur, because the Banking and Cash Management Branch controls the release of such payments (Exhibit 10). Although this information is available in computerized form from the Comptroller General's Office, it is manually entered into the branch's Cash Flow Forecasting system. Branch staff are in the process of investigating a computer link that will help ensure data input is accurate and efficient. The investigation is part of a project underway to connect systems across government.

Variances between projected and actual amounts for disbursements are small. This degree of accuracy is to be expected, given that most expenditure payments are

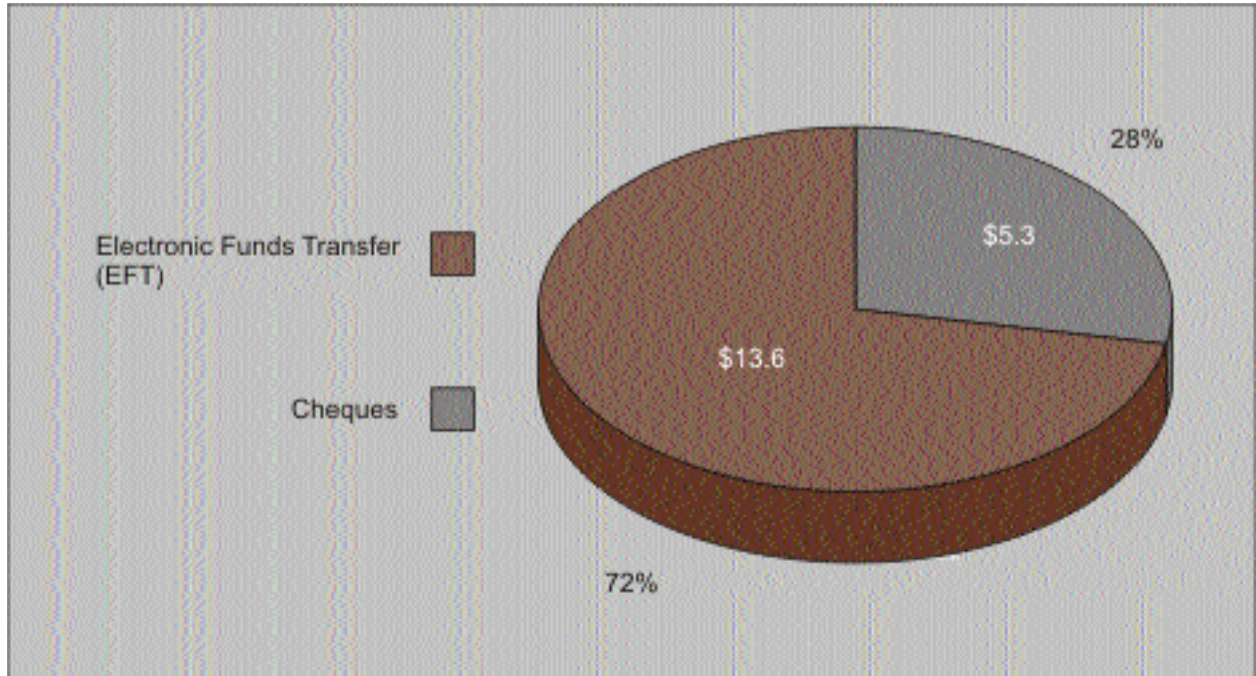




## Exhibit 10

### Methods for Paying Expenditures

*A significant portion of expenditures were paid by electronic funds transfer in 1993/94 (\$ Billions)*



Source: Based on information from the Ministry of Finance and Corporate Relations

controlled by the Banking and Cash Management Branch.

#### Information Gathered from Crown Agencies

The Banking and Cash Management Branch collects projected cash flow information through established contacts at Crown corporations and other government agencies. Although information about electronic fund transfer payments is known ahead of time, the branch does not always control the release of cheques. Thus, details about cheques for large amounts of money are not discovered until the cheques clear the bank. Even if the details were to be given to the branch ahead of

time, it would still not be easy to predict when they would be cashed. At the moment, only one day's interest is paid in each case because branch staff arrange for money to be transferred to cover overdrafts that become known the day after the draw is made.

#### Information Gathered from Other Provincial Treasury Branches

The Banking and Cash Management Branch also collects projected cash flow information from other Provincial Treasury branches. The Investments Branch provides information about how much invested money is available to draw down in times of cash shortages, as well as amounts and



timing for payments that have to be made for sinking fund investments being purchased to pay off debts when they mature. The Debt Management Branch provides information about amounts and timing for debt-related payments and for proceeds of medium- and long-term borrowing.

Because these cash flows are based on pre-determined amounts, information is reliable and, we found, exchanged in a timely way. When we began our audit, the computer systems generating the information in each branch were not connected to each other, so information had to be manually entered in the Cash Flow Forecasting system. By the end of the audit, however, the systems of Provincial Treasury branches had been linked to permit automatic transmission of data, thus enhancing accuracy and efficiency.

### Adjusting Bank Balance Projections

We found that projections of closing bank balances for each day are continuously adjusted during the day as information comes into the Banking and Cash Management Branch from all the various sources described above. In this way, the amounts being invested or borrowed are more likely to achieve a zero bank balance for the next day. When information about actual cash flows is received via banking information the next morning, it is used to update closing bank balance projections for that day.

As the year progresses, branch

staff update cash flow forecasts by comparing original forecasted amounts to those that have been received. When we began our audit, changes made to projections were not being tracked to assess the accuracy of original projections. We suggested that, if this were to be done, the branch would probably find it easier to adjust future projections. Before the end of the audit, we found that the branch had followed up on our suggestion.





## Managing Cash Balances

To ensure that government bank accounts are managed to minimize borrowing, the ministry should manage cash balances so that money is properly transferred between bank accounts, invested when there are cash surpluses, and borrowed when there are cash shortages. We looked for timely transmission of information about cash balances, maximization of earnings on cash surpluses, and minimization of costs for cash deficiencies.

### Conclusion

The ministry is managing government cash balances so that borrowing to meet cash requirements is minimized. It transmits information about cash flows in a timely way, invests surplus cash so that earnings are maximized, and requests borrowing in a way that helps minimize the costs of cash deficiencies.

### Findings

#### Transmittal of Information About Cash Balances

##### Bank Information

Before the close of business hours each day, the cash manager calculates the projected bank balances for the following morning. Orders are then prepared for early morning investments of projected surplus cash, or borrowing for projected cash shortages, so that closing balances for the next day will be as close as possible to zero.

The following morning, cash managers obtain banking information through direct links with bank systems. Actual opening balances are compared to projected opening balances, significant differences are found and verified, and changes are made to projected closing balances for the current day. Cash transfers are then initiated between banks, and all surplus or overdraft balances are concentrated at one bank. Additional investment or borrowing orders are then placed to ensure closing balances will be closer to zero.

##### Staff Responses to Surprise Variances

When there are significant variances between actual closing balances and projected ones, branch staff respond quickly to determine the causes and make any necessary adjustments. First, banks are phoned to confirm significant variances and to determine possible causes; then the cash manager checks his or her list of likely problem areas for errors. Branch staff use guidelines for deciding what constitutes a significant variance for each account, based on the amount of average daily cash flows in the account.

We found that branch staff clearly understand their responsibilities for coordinating information with all relevant parties and for checking completeness of information. Branch staff have established staff contacts at each key information





*Cash manager using Cash Flow Forecasting system*

source and a cash flow information log is continuously updated as new information is received and entered into the Cash Flow Forecasting system.

### Information Backup

Cash flow information is backed up and stored off-site in case of system failure. This is done daily for key functions and every two or three weeks for other less important functions. This means that, if a shutdown occurs, information can continue to be transmitted in a timely way. The system was recently tested by the Corporate Operations Branch and found to be functioning properly. In our analysis, we concluded that all functions should be backed up daily. The ease with which routine daily backups can be done warrants their being undertaken in

order to reduce the potential for problems if a system disaster were to occur.

*Recommendation: The ministry should make daily backups of all cash flow information to assist in the continuance of operations in case of system failure.*

### Investing Surpluses and Borrowing for Shortages

We found that Investments Branch staff have set up various investment “pools” that earn higher rates of interest than banks pay for short-term balances. A number of pools are available, according to the estimated time period before the money is needed. Cash can be put into a specified number of units in a given pool and retrieved at any time. Investments Branch staff compare



the projected timing for the availability of funds and decide which pools to invest in.

By using this approach, cash managers are able to invest the money rather than leaving it in bank accounts at short-term interest rates, and thus are able to generate higher interest earnings on surpluses. The cash is invested by the Investments Branch and drawn down as needed by the Banking and Cash Management Branch. When Banking and Cash Management staff project that cash flows for the day will result in a positive bank balance, they request that the Investments Branch place the surplus in short-term investment pools.

We found that Banking and Cash Management Branch staff regularly send projections of daily cash shortages Debt Management Branch staff, who then use them to arrange medium- and long-term borrowing. When there are projected daily cash shortages that exceed amounts borrowed on a longer-term basis and there are no previously invested surpluses to draw upon, staff from the Banking and Cash Management Branch request that the Debt Management Branch obtain short-term financing.





## Evaluating Performance

To promote the efficiency and effectiveness of its management of cash balances, the ministry should routinely evaluate the extent to which objectives have been achieved and make improvements where possible. We looked to see if reliable information is collected about performance, is compared to objectives, and is made into meaningful reports for senior management review. We also looked for evidence of changes made as a result of such review.

### Conclusion

The ministry is adequately evaluating its management of cash balances using reliable performance information. In addition, senior management uses performance reports to seek ways of making improvements.

### Findings

#### Performance Evaluations

##### Performance Targets

The Banking and Cash Management Branch has developed performance targets to use in evaluating its management of cash balances. Branch staff have developed target ranges for bank balance variances from zero, based on the level of activity in each bank. They have also set levels to aim for when it comes to measuring the costs of missed opportunities for transferring surpluses to investments and arranging short-term borrowing to cover overdrafts. Based on our

review of these targets and how they are currently being used, we think the branch has established satisfactory performance measures.

##### Performance Reports

The Banking and Cash Management Branch produces monthly performance reports using consolidated balances at each of the six banks used. The main focus in measuring performance is, understandably, on the degree of success in attaining zero bank balance targets.

Our review of performance reports for the period from April 1993 to January 1994 showed us that details are provided about the percentages of time that bank balances are within these target ranges, along with reasons for variances that are outside these ranges. We found that the reports are well laid out, with clear graphs showing the differences between targets and actual balances achieved. In addition, the reports include calculations of the opportunity costs of not attaining zero balances, both inside and outside the target ranges. Performance during April 1993 to January 1994 was within target ranges for most months.

##### Making Improvements

##### Management Review of Results of Operations

We found that Banking and Cash Management Branch senior management routinely review:





#### *Cash Management Performance Reports*

- monthly Performance Reports;
- monthly Forecast to Actual Summary Reports;
- variance reports for individual cash flows, produced as requested;
- bank error reports, produced on a regular basis; and
- informal feedback received from other Treasury branches.

For each of the formal reports listed above, branch staff list explanations for variances as part of the reports. These are discussed with senior management in the normal course of business.

#### **Management Efforts to Make Adjustments**

When significant variances occur, senior management consider

ways to adjust procedures and underlying systems by:

- reviewing causes of variances;
- looking to other jurisdictions for improved methods; and
- maintaining ongoing efforts to improve linkages to bank information systems.

We found that only \$38,000 in interest earnings had been forgone in 1993/94 from variances in forecasts of revenues and expenditures (and resulting surpluses not being transferred to investment pools). On the borrowing side, only \$42,000 in additional interest costs had been paid in 1993/94 from forecast variances (and resulting overdrafts not being reduced by arranging short-term borrowing through financial markets). Most of the

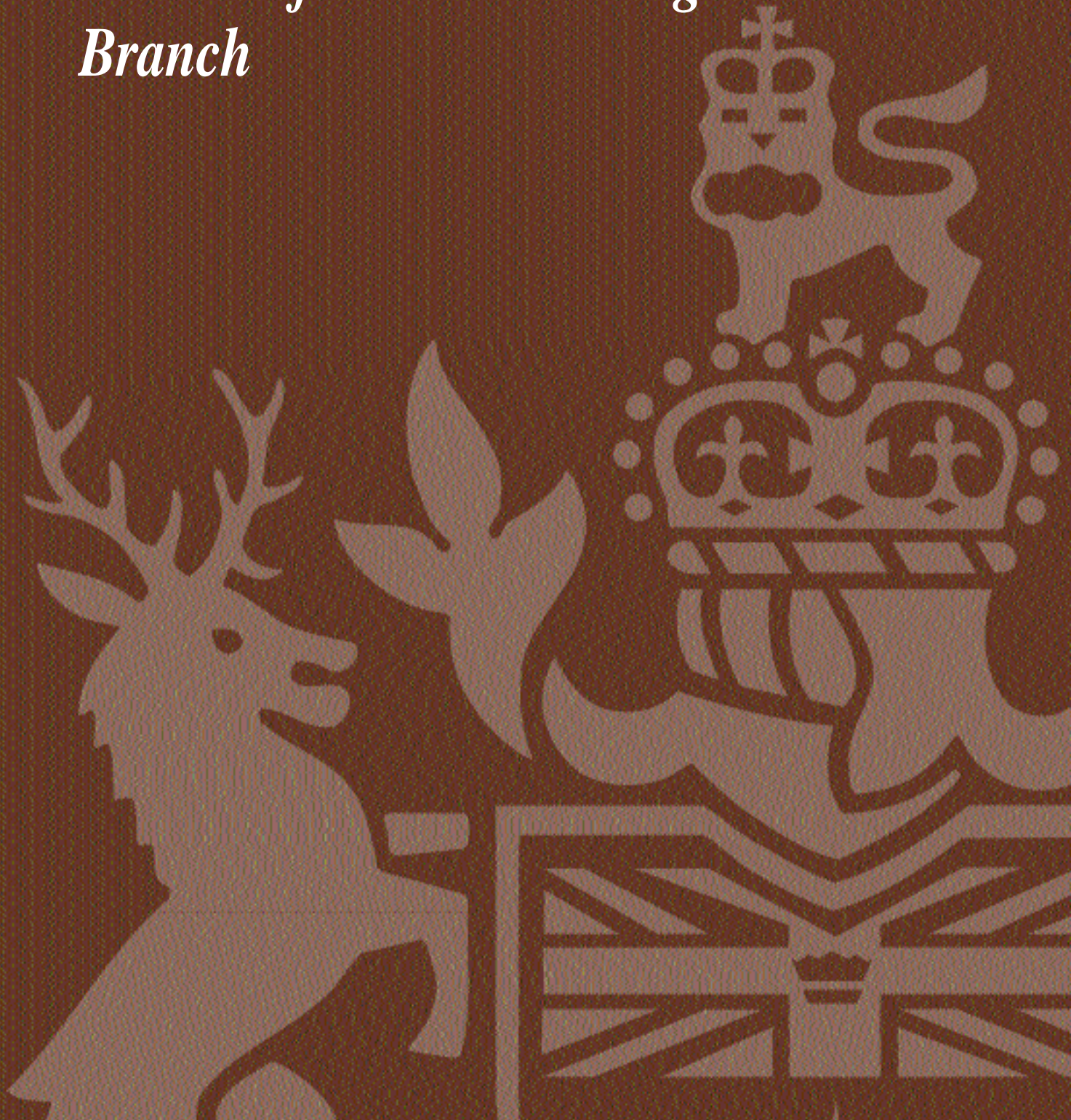


variances were due to fluctuations in bank balances for entities outside the branch's control. Other variances were due mostly to revenue deposits for which actual information is available only after bank information is received. Considering that annual cash flows are over \$400 billion, we think performance is satisfactory.





*Minimizing Debt Servicing Costs:  
Actions of the Debt Management  
Branch*









# *Minimizing Debt Servicing Costs: Actions of the Debt Management Branch*

## **Introduction**

The Debt Management Branch is responsible for managing debt portfolios, for both central government and Crown agencies, totaling more than \$30 billion (offset by \$4 billion in sinking funds set up to pay off maturing debt) at March 31, 1994. To do this, it collects information about borrowing needs from its clients: the Banking and Cash Management Branch, Crown agencies, and staff of other ministries who coordinate capital projects for schools, colleges, universities, and hospitals. Branch staff then prepare annual and five-year borrowing plans for both new and existing debt, and select between the various options for raising funds for government requirements. They do the latter by maintaining daily contact with brokers and investment dealers in the financial community.

The British Columbia Financial Review (a review of the Province's finances conducted, at government request, by independent consultants from November 1991 to March 1992) recommended that additional resources be applied to managing debt. As a result, the Debt Management Branch was increased from 22 to 25 staff

members, and in 1993/94 reorganized along four main functional lines: overseeing strategic and risk management; carrying out borrowing transactions; ensuring legal requirements are met; and making settlements and maintaining records for debt issues (Exhibit 11).

The amount of total new debt incurred each year is driven partly by amounts that are approved for capital spending. In years where government approves operating expenditures that exceed revenues, debt is also increased by the resulting deficits. Thus, branch staff, in preparing borrowing plans for the year, have to compare the information collected about each agency's borrowing needs to amounts approved as part of government budget processes. These plans, in turn, get reviewed by Treasury Board Staff to ensure that total amounts to be borrowed do not conflict with government objectives.

To minimize the cost of debt without taking undue risks, staff need clear guidance for determining when to borrow and what means to use. This requires systems for forecasting the amounts and timing of borrowing



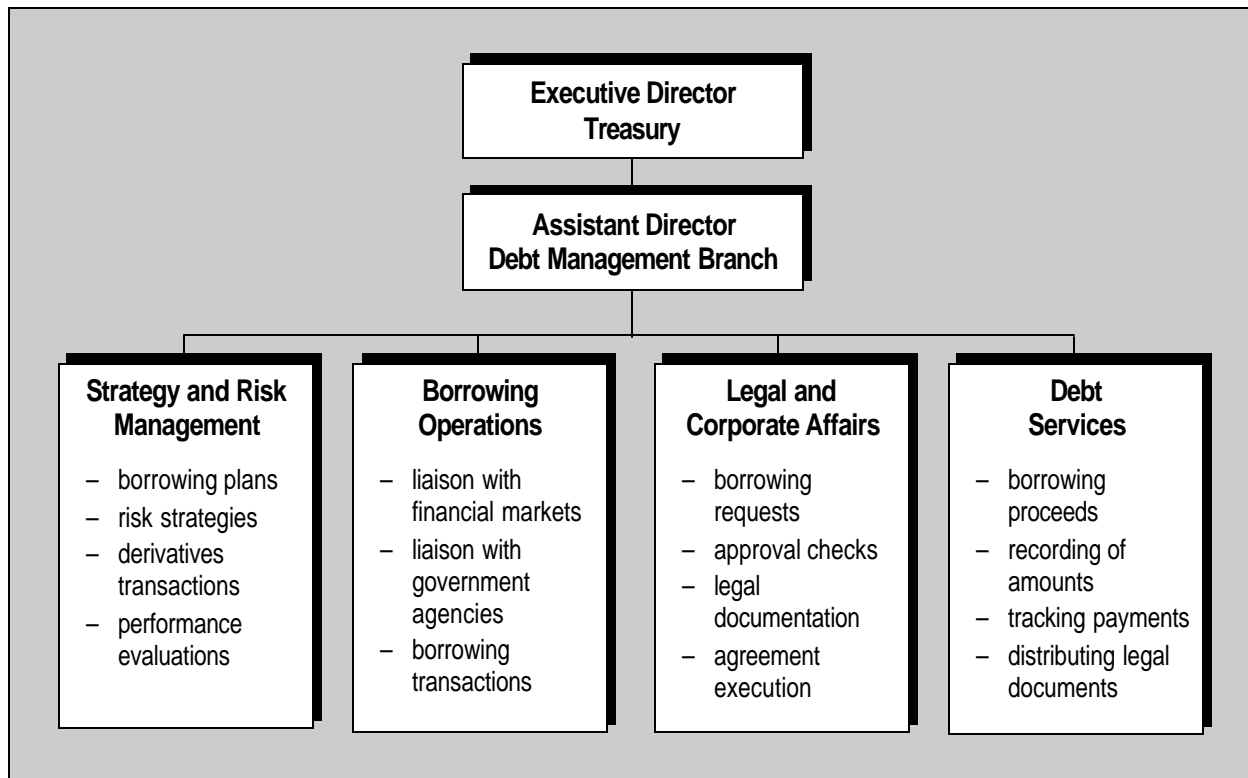
requirements, and for managing actual borrowing so that transactions are arranged to obtain the lowest costs within acceptable levels of risk. There should also be

methods for evaluating the effects of these strategies and procedures so that their effectiveness can be assessed and the results reported to the public and Legislative Assembly.

## Exhibit 11

### Debt Management Branch of Provincial Treasury

Four groups in this branch play a role in managing borrowing transactions



Source: Based on information from the Ministry of Finance and Corporate Relations





## Guiding the Management of Borrowing Transactions

To properly guide the management of borrowing transactions, the ministry should have clear objectives, strategies, and procedures for minimizing costs of borrowing. We looked for objectives that recognize the need to balance the minimization of costs with acceptable levels of risk. We reviewed whether strategies had been developed to respond to changes in government borrowing requirements and financial market conditions, so that debt servicing costs and risks can be minimized. Finally, we looked to see if procedures had been developed for carrying out strategies in an organized way.

### Conclusion

The ministry has clear objectives, strategies, and procedures for guiding the management of borrowing transactions. Objectives recognize the need to minimize debt servicing costs within acceptable risk guidelines; strategies allow the ministry to respond to changes in borrowing requirements and market conditions; and procedures are adequate for carrying out these strategies.

However, the complexities of changing financial markets and related technology are such that ongoing reviews of strategies and procedures would be enhanced if the ministry's Risk Committee were to include outsiders with expertise in debt management.

### Findings

#### Objectives

While it is obvious that minimizing debt servicing costs is important, this must be done without taking inappropriate risks. For example, short-term financing is often available at a lower rate than longer-term financing, but putting too much in the form of short-term debt increases the risk of paying higher interest if rates jump unexpectedly. It is therefore important that objectives for managing debt give due consideration to the need to balance the minimization of costs with acceptable levels of risk.

We found that the objective of the Debt Management Branch for minimizing overall debt servicing costs is to provide clients with the most cost-effective form of financing within appropriate risk parameters.

Risk parameters identified by the branch include:

- limits on delegated authorities for individual staff members to approve and transact financings;
- limits on floating-rate debt relative to net debt;
- limits for amounts of debt maturing in each future year;
- limits for percentage of foreign currency exposure;





- restrictions on types of borrowing instruments to use; and
- credit criteria for derivatives counterparties.

We reviewed the above limits and found the levels of risk to be set conservatively, but without unduly constraining debt managers to limited means of borrowing. Overall, we believe that the ministry's debt management objectives and related risk parameters give adequate consideration to the need for maintaining a balance between costs and risks. We also found that branch staff have a clear understanding of debt management objectives and the importance of the risk parameters within which they need to operate.

### Strategies

#### Resources Used for Strategic Planning

More resources have recently been applied to developing strategic plans and risk strategies. As a result, progress has been made in developing branch capabilities for managing government debt through the use of advanced portfolio management techniques. Staff are also using more analytical methods for assessing the market and credit risks of new and existing financial instruments.

To continue to look for opportunities to lower debt servicing costs, the branch has rated the following actions as high priority:

- developing new sources of funds, such as new markets and ways of borrowing;

- developing comprehensive risk parameters for all borrowing activities, such as levels of exposure for counterparty credit ratings, derivative product use, proportion of variable rate and foreign currency debt, and overall transaction limits;
- improving existing systems capabilities, with specific emphasis on enhancing the capability to handle a wide range of derivative products; and
- developing programs for simulation analysis, performance measurement, and management reporting.

Since these functions are key to developing and maintaining borrowing strategies, we believe that giving them priority is the right thing for the ministry to do, given that the amount of government debt has grown significantly in the past few years and that the financial community has developed more complex means of investing and borrowing.

#### Key Management Strategies

We consider the following management strategies to be essential for adequately managing debt in a provincial government setting:

- centralized control of borrowing;
- flexibility and autonomy—balanced with control—in decision-making;
- development and review of annual strategic plans; and
- diversification of funding sources.



The benefit of centralizing control of borrowing is that all needs can be combined. As a result, central managers can achieve lower debt servicing costs by offering larger debt issues and avoiding duplicated or conflicting efforts that may otherwise occur between individual agencies. In addition, the marketability of the Province's debt ensures that maximum benefit is obtained from its superior credit rating, especially since consolidation of borrowing requirements results in larger debt issues than would otherwise be the case.

To be able to respond quickly to changes in financial market conditions, debt managers need a certain amount of flexibility and autonomy. A number of new types of borrowing have been developed that require quick settlement and result in lower costs of debt. However, with the large amounts of money involved, the importance of having controls increases. As part of this control, and to assist in the coordination and monitoring of borrowing efforts, debt managers should develop annual strategic plans that are reviewed and approved by others with appropriate expertise in financial matters.

Finally, it is important for debt managers to be constantly tracking opportunities for reducing costs through the use of new sources of funding—either new markets or new types of products. By increasing the number of borrowing options, debt managers can give themselves more flexibility when it comes to making borrowing arrangements.

## Centralized Control of Borrowing

All provincial government borrowing in British Columbia is done centrally by the Debt Management Branch.

The Fiscal Agency Loan Program has been established, under the authority of the *Financial Administration Act*, to finance operating and capital expenditures for Crown agencies and capital expenditures for schools, colleges, universities, hospitals, and highways. Under this program, the government (represented by Provincial Treasury) acts as a fiscal agent by borrowing directly in the financial markets and relending funds to Crown corporations and agencies.

When we reviewed the advantages and disadvantages of centralizing borrowing in British Columbia, we found that the advantages by far outweigh the disadvantages. In our discussions with a number of other government agencies, it was confirmed that the savings from the lower cost financing obtained by the Debt Management Branch exceed the administration costs of the branch. Although there are occasionally delays in making borrowing arrangements centrally, considerable benefits result from consolidating borrowing requirements for all of government when a large debt issue is being arranged. As well, the agencies we surveyed spoke positively about the services delivered by branch staff. They also confirmed that debt servicing costs overall are less than would otherwise be available, because of the Province's strong



credit rating and reputation in financial markets.

### **Flexibility and Autonomy, Balanced with Control**

We found that debt managers in British Columbia have a high degree of autonomy and flexibility. This is largely the result of having the Legislature approve a number of Orders in Council for total borrowing at the beginning of each fiscal year.

These Orders in Council are approved for total short-term and long-term borrowings that include both new debt and refinancing of existing debt. The amounts specified in the Orders set total borrowing limits for the year in a way that eliminates the need for government approval each time a borrowing is transacted.

The decision to give more flexibility to the branch was made five years ago when it was recognized that certain types of borrowing transactions—those that achieve lower debt servicing costs overall—require quick settlements. Previously, government approval had to be obtained for each major debt issue and this sometimes led to delays.

Branch staff help prepare the Orders by collecting information about total government borrowing requirements. From branch records, staff determine what amounts are needed to refinance existing debt; they also collect information from the Banking and Cash Management Branch about borrowing needed to cover operating cash flow shortages. They then obtain information about borrowing

needed to pay for capital expenditures, from Treasury Board Staff, Crown corporations, and staff from other ministries who coordinate borrowing for schools, colleges, universities, and hospitals. All of these amounts are totaled and used to prepare the Orders in Council, which are submitted to Cabinet for approval.

This same information is used to control borrowing throughout the year to ensure that limits approved in the Orders will not be exceeded. The Debt Management Branch is assisted by the Banking and Cash Management Branch, which prepares and updates cash flow forecasts that compare borrowing requirements to approved budgets.

Tracking approvals for borrowing to pay for capital expenditures is more complex because government Estimates do not disclose these amounts. It therefore requires coordination with Treasury Board Staff, Crown agencies, and staff of other ministries who coordinate borrowing for schools, colleges, universities, and hospitals. In 1993, recognizing that this was an area that needed more attention, Treasury Board Staff began to track capital project spending more closely to ensure that amounts borrowed would not exceed approved spending. According to Debt Management Branch staff, this increased focus has helped them ensure that borrowing requests from Crown agencies are within approved limits.

We agree that the use of Orders in Council to pre-approve borrowing enables the branch to



respond quickly to market changes. However, while there are adequate controls in place to ensure that authority is not exceeded, the fact that the Legislature is no longer consulted on individual borrowings means that its members do not get to debate details about the reasons for particular debt issues and methods used to raise funds. The Debt Management Branch does provide a monthly report to the Ministry of Attorney General with details about borrowing transacted during the month. In this way, at least, members of the Legislature can keep informed about debt management activities. The subject of accountability reporting is discussed in more detail in the last section of this report.

We noted that Ontario is the only province in Canada where debt managers have more autonomy than in British Columbia. In 1992 it set up a separate Financing Authority to perform the functions of Provincial Treasury. The Seaton Commission Report of July 1992 suggested that British Columbia should consider the merits of having independent management of government borrowing and investing. The government of British Columbia is still examining the advantages and disadvantages of this arrangement.

### Development and Review of Annual Strategic Plans

Branch staff develop annual borrowing plans each year that lay out amounts of consolidated borrowing requirements along with planned targets for funding sources, risk exposures, and financing terms.

Targets are set for central government and most Crown agencies for:

- amounts to be borrowed under each type of financing source—for example, \$400 million from B. C. Savings Bonds;
- floating rate debt exposure—varies between 15% and 35%; and
- foreign currency exposure—limited to 10% of net debt.

We believe these targets are within an acceptable range for a risk-averse entity such as the provincial government.

To ensure that strategic plans for borrowing are properly scrutinized, the ministry established a Risk Committee in February 1994. This is an internal executive committee that acts as the senior authority in setting the Province's debt management policies. The committee's role is to ensure that borrowing strategies and plans are based on sound financial principles, and that activities are conducted in a prudent manner, balancing costs and risks within acceptable control standards. The committee consists of the Deputy Minister, the Executive Director of Provincial Treasury, and senior Debt Management Branch staff. At the time of our audit, the committee had met only informally, so there were no minutes of meetings and consideration was still being given to including other ministry members.

When we examined the formation of the Risk Committee, we considered whether the committee should have





representation from outside government. Given the critical role of the committee and the complexities of rapidly changing financial markets and related technology, we concluded that it is imperative that outsiders with appropriate expertise be included. Only in this way could more objective points of view on branch policies and procedures be gained. As well, since Crown agencies account for more than half of the total debt portfolio, we think the advantages of including representatives from those organizations should also be considered. In addition, increased accountability would be promoted by requiring minutes of the meetings to be recorded and given to senior government decision-makers, along with details of borrowings conducted on a quarterly basis.

*Recommendation: The ministry should include external representation on the Risk Committee to obtain more objective points of view about the policies of the Debt Management Branch. In addition, minutes of committee meetings should be provided to senior decision-makers, along with details of borrowings on a quarterly basis.*

### Diversification of Funding Sources

As mentioned earlier, having a diversified range of borrowing options provides debt managers with flexibility when it comes to borrowing funds. Although some options may cost more than others for certain components (for example, commissions paid to dealers), it is important that several sources of borrowing be maintained

in case one or more of them has a shortage of funds at any one time. In its efforts to look for opportunities to expand borrowing sources (Exhibits 12 and 13) and lower debt servicing costs, the Debt Management Branch has established a wide variety of borrowing programs, including:

- Treasury Bills
- Canadian Promissory Notes
- U.S. Commercial Paper
- Medium-Term Notes—Euro and Domestic
- Syndicated Public Bond Issues—Canada, U. S., Europe, and Japan
- B.C. Saving Bonds
- Matched Book Financing
- Debt Warehousing
- Private Placements
- Canada Pension Plan

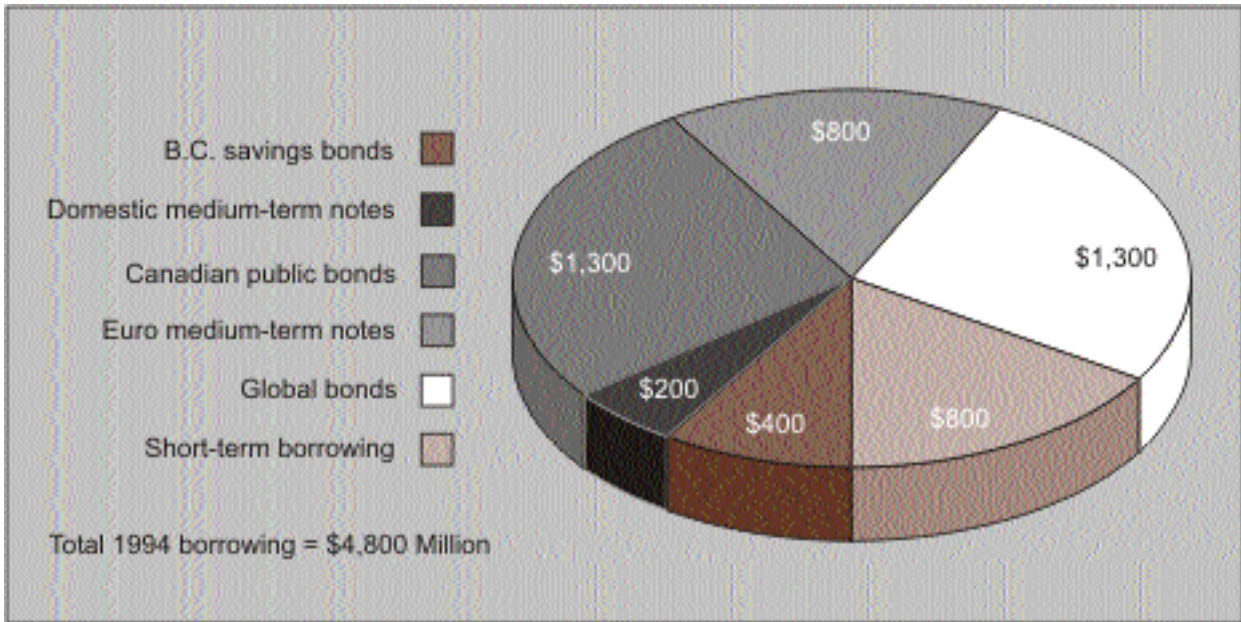
We found that all of these borrowing programs were set up in accordance with, and within the context of, the branch's overall borrowing strategy plans. We believe that the Debt Management Branch has developed a good range of innovative financing programs for keeping the costs of debt down.



## Exhibit 12

### Market Issues During the Fiscal Year 1994

*A variety of markets are used to borrow money (\$ Millions)*

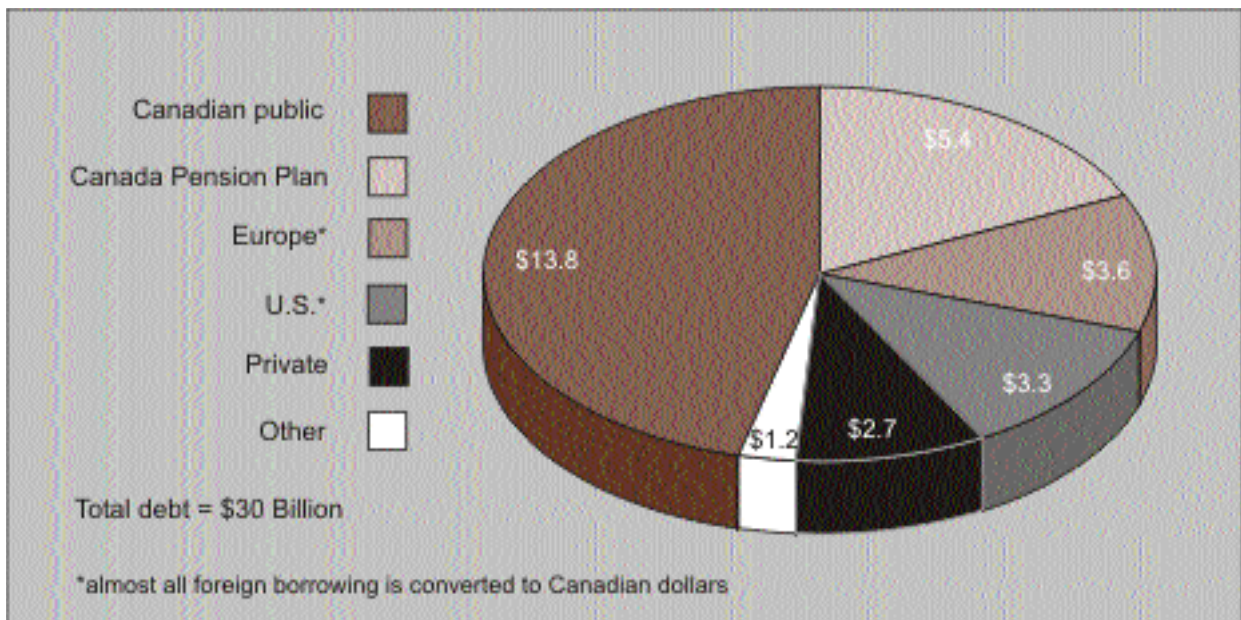


Source: Based on information from the Ministry of Finance and Corporate Relations

## Exhibit 13

### Outstanding Debt by Investor Source at March 31, 1994

*A variety of investors loan money to British Columbia (\$ Billions)*



Source: Based on information from the Ministry of Finance and Corporate Relations



## Provincial Borrowing Programs

### Treasury Bills

This program was temporarily discontinued in May 1994 because it was not providing as much flexibility and cost savings as the other two short-term funding programs. Before that date, auctions were usually held every Tuesday for \$30 million in 91-day issues and \$15 million in 182-day issues.

### Canadian Promissory Notes and U.S. Commercial Paper

Both of these forms of short-term financing are based on notes that pay to the bearer the agreed amount at the end of a specified term that does not exceed one year. Under these programs, debt managers meet short-term borrowing requirements by contacting designated members of the financial community to solicit bids for required funds and choosing the one with the lowest total costs.

### Medium-Term Notes

Medium-Term Notes have, until recently, been used as a way of raising funds for periods from one to five years. More recently, the use of this type of borrowing has grown and periods have been extended to include terms between 10 and 30 years. This type of financing is offered to the Debt Management Branch on a periodic basis by investment dealers who work with branch staff to design packages in response to specific investor demands. Money can be obtained in Canadian dollars through the Domestic Medium-Term Note Program or in any one of 17 different approved currencies through the newly established Euro Debt Issuance Program (which also permits syndicated bond issues in any of the approved currencies).

The Euro program is limited to a maximum of U. S. \$2 billion, or its equivalent, in outstanding debt.

### Syndicated Public Bond Issues

When longer-term financing is needed, the Debt Management Branch issues public bonds. The Province agrees to sell a specified amount of marketable bonds to a syndicate of underwriters, which then markets the bonds to investors. The branch invites participation of investment dealers in management syndicates structured for specific markets. Syndicate members are selected according to a number of weighted criteria such as market distribution capabilities and successes, previous service, reputation, and interest rates offered.

A separate management syndicate is established for each market in which securities are issued. Those public markets currently include the Canadian, Euro-Canadian, U.S., Euro-U.S., and Euro-Yen.

### B. C. Saving Bonds

These bonds are sold in limited quantities to individual British Columbia investors. Generally, they involve higher overall debt servicing costs than do other floating rate notes, but they offer a source of funds that would not otherwise be easily accessible to the Province. This program is part of the overall strategy to diversify funding sources and facilitate local investor participation in the government's financing program. It is also part of the Province's strategy to support growth of British Columbia's financial market community.

**Matched Book Financing Program**

This program takes advantage of opportunities that debt managers sometimes have to borrow funds and re-invest them at a higher interest rate, thereby gaining a profit for the government. This program was set up to take advantage of opportunities as they arise in the normal course of business, not to actively seek them out. Current policy sets the limit for this type of debt at \$500 million because of the associated financial risks.

**Debt Warehousing Program**

The primary objective of the warehouse program is to pre-borrow funds to get better borrowing rates and to improve the ability to readily access funds. The money obtained is invested by the Investments Branch and interest earned is about the same as interest paid for the funds before they are needed for lending to Debt Management Branch clients.

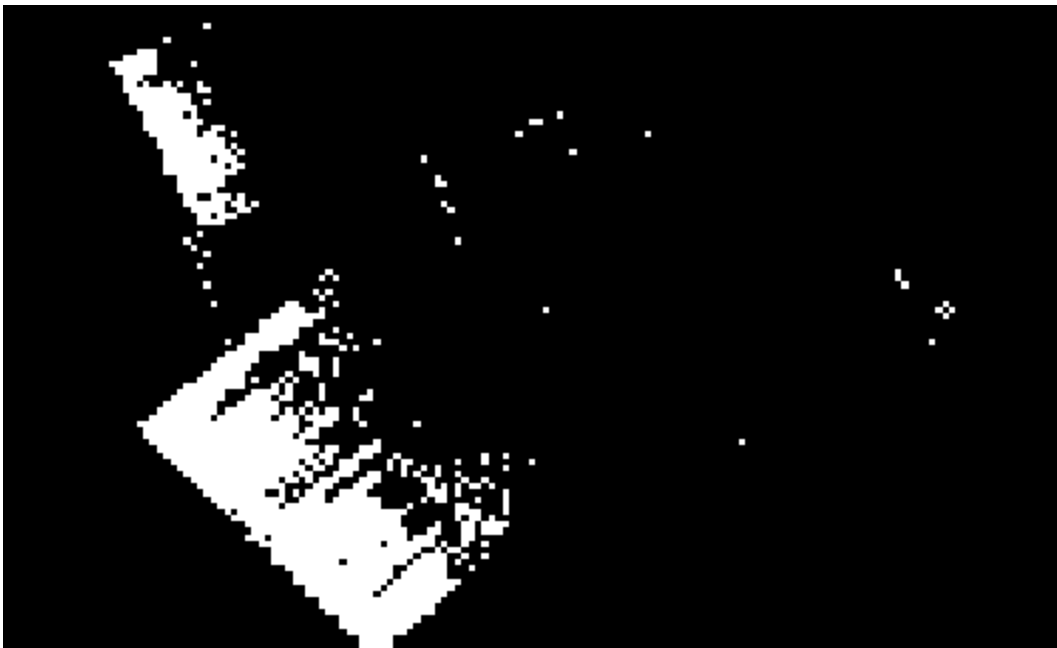
The amount of financing that can be prearranged and warehoused at any point in time is \$2 billion.

**Private Placements**

The Province will sometimes undertake private placements with investors to supplement its financing program. Examples of such financings are leases of capital equipment on behalf of government and Crown agencies (for example, ferries and transit vehicles). Consideration of such opportunities is subject to achieving lower costs than through traditional borrowing sources.

**Canada Pension Plan (CPP)**

From time to time, the federal government offers to lend CPP funds, at attractive rates, in provincially issued securities. However, since 1992 the federal government has not provided opportunities for new borrowings, or for refinancing, under this program.



*A variety of means is used to borrow*





## Use of Derivative Products

The Province's debt managers make extensive use of "derivative products" to reduce risks and to significantly improve their flexibility to raise funds from a variety of sources. The most common derivatives used by debt managers, including the Province of British Columbia, are interest rate swaps and foreign currency swaps or a combination of the two. For example, a portion of long-term, fixed-rate debt can be "swapped" to a floating-rate, through a counterparty that wants to swap floating-rate for fixed-rate financing. This enables the Province to increase the total percentage of floating-rate financing when future interest rates are expected to drop. Also, foreign dollar borrowing can be swapped into Canadian currency to avoid taking risks on foreign exchange variations.

With the increased use of derivative products comes a need for greater vigilance to ensure that related risks are properly managed. It is important to know, for instance, that counterparties will be able to meet their obligations when those obligations come due, otherwise the Province could find itself paying higher debt servicing costs. We found that the ministry takes prudent measures in selecting counterparties, in negotiating legal documentation and terms of these transactions, and in monitoring the financial condition of the counterparties throughout the term of the agreements. In addition, activities are reviewed and discussed with senior management on a regular basis to ensure that derivatives are being appropriately used.

## Use of Sinking Funds

The government and its agencies make annual contributions to sinking funds to pay off debt when it comes due. One of the reasons for this is to avoid having to refinance a large amount of debt due in any given year and thus run the risk of incurring higher debt servicing costs as a result. Unfortunately, debt managers currently have to borrow money to make sinking fund payments for central government debt.

The establishment of sinking funds for each specific issue is a self-imposed discipline by the Province, so investors are not necessarily aware of them. The credit agencies are, however, and Branch staff believe from their discussions with credit rating agency representatives that this is an important contributor to British Columbia's current high credit rating. Sinking funds are seen as a conservative approach—something that other provinces do not routinely establish. Our conversations with credit rating agency representatives confirmed that this could well be a factor, although not a major one, in deciding British Columbia's credit rating.

The Debt Management Branch has roughly compared the costs of setting up sinking funds with the interest savings gained, and results show that the costs of administering them is sometimes more and sometimes less than the gains made through interest savings.



## Procedures

We found that the Debt Management Branch has developed appropriate procedures for carrying out all key borrowing functions: preparing plans for borrowing requirements, interacting with clients and dealers to manage debt portfolios and arrange borrowing transactions, and recording and communicating results of actions. However, not all of these procedures are in writing, and those for dealing with representatives from other ministries who coordinate borrowing for schools, universities, colleges, and hospitals need improvement.

The Debt Management Branch continues to update its policies and procedures manual in response to new programs and initiatives. The manual covers many of the key procedures in borrowing operations, reporting, and administration. It does not, however, address some important areas, such as the use of derivative products. Although we did not find written material for most areas, not all of it was in the form of specific directions to guide day-to-day activities.

Our discussions with staff did not uncover any significant problems caused by some procedures not being spelled out in writing. Nevertheless, we think there could be difficulties when it comes to training new staff and ensuring staff backup in complex areas where written procedures would help.

We think that the branch should continue its efforts to draft

written procedures for all key areas because they will provide a better means of training new staff, and to assist in ensuring adequate staff member backup and uniform application of policies and procedures.

## Clarifying Procedures for Ministry Representatives

Staff representatives from other ministries coordinate financing for such capital expenditures as buildings for schools, colleges, universities and hospitals. Designated bank accounts with established lines of credit are used to give these institutions a source of funds to pay for capital projects during the construction phase. Overdrafts are replenished on a daily basis by the Banking and Cash Management Branch, with the help of the Debt Management Branch through short-term borrowing. When projects near completion, the Debt Management Branch converts the short-term financing to long-term after consulting with ministry representatives.

At the request of the Debt Management Branch, the Internal Audit group in the Office of the Comptroller General recently conducted a review of the way borrowing is arranged for capital expenditures. This review identified two problems that affect value-for-money:

- higher debt servicing costs on occasion, due to inconsistencies in ministry representative decisions about when to convert short-term to long-term debt and when to retire debt; and



- inefficiencies in processing documentation for borrowing, due to the high volume of paperwork currently required.

We reviewed the details of this study, discussed them with senior management in Internal Audit, and confirmed with ministry executives that they are concerned about these problems. At the time of our audit no direct action had been taken to resolve the difficulties. It has however, been decided that Internal Audit should further assess the procedures carried out in ministries. We think that the ministry should examine the advantages and disadvantages of the options available to improve the situation and that the necessary improvements should receive prompt attention once the various options are considered.

*Recommendation: The ministry should revise procedures for dealing with representatives from other ministries on capital financing, to promote consistency of borrowing decisions and reduction in duplication of paperwork.*





## Forecasting Borrowing Requirements

To ensure that proper planning for borrowing is done and that senior decision makers are kept informed, the ministry should have systems for gathering information about borrowing requirements from all government sources, and for projecting how much is needed at different times during the year. We looked for projections that are prepared and updated from reliable information and communicated to decision-makers in a timely way.

### Conclusion

The ministry prepares and updates projections of borrowing requirements from reliable information and provides them to decision-makers in a timely way.

### Findings

#### Preparing and Updating Borrowing Projections

In January of each year, the Debt Management Branch prepares an overall borrowing plan for the coming fiscal year using information collected from external sources: the Banking and Cash Management Branch, Treasury Board Staff, Crown agencies, and representatives from other ministries who coordinate capital financing for schools, universities, colleges, and hospitals. This information consists of projections of borrowing requirements for the coming year as well as for the next four years, in amounts that include requirements for operating deficits, capital expenditures, and refinancing of existing debt.

When all estimated amounts have been received, branch staff discuss with Treasury Board Staff the likelihood of government approval for each agency's borrowing requirements. Amounts are then used to prepare summaries of total government borrowing requirements for the current year and for each of the next four years in the government's Five-Year Borrowing Plan. Upward adjustments to these projections are made only if Treasury Board approval is obtained for increased spending.

Branch staff revise these borrowing projections at the beginning of each fiscal year and throughout the year, as more current information is received directly from both central government and Crown agencies.

#### Central Government Borrowing Requirements

Annual projections of the total borrowing needs of government ministries are determined from the projected deficit reported in government budget documents known as "Estimates." The shortfall of estimated accrued revenues over accrued expenditures is translated to a cash basis as part of the Banking and Cash Management Branch's routine preparation of daily cash flow forecasts. These cash forecasts are then used to prepare projections of borrowing requirements, including amounts to refinance debt from prior years.





## Crown Agency Borrowing Requirements

Crown agencies such as BC Hydro, BC Ferries, and BC Transit use Debt Management Branch short-term borrowing to finance their cash flow shortages and longer-term borrowing to pay for major capital expenditures. These agencies, like central government, send the branch periodic updates of current borrowing requirements. These are compared to approved borrowing limits as specific borrowing requests are received.

Representatives from other ministries who coordinate capital financing for schools, colleges, universities, and hospitals do not send the Debt Management Branch periodic updates of borrowing needs. Instead they draw on bank account lines of credit that have been established for this use. The overdrafts created are managed by the Banking and Cash Management Branch, which communicates short-term borrowing needs for this purpose, along with other borrowing needs sent to the Debt Management Branch.

## Communicating Projections to Decision-Makers

An important part of preparing borrowing requirement projections is communicating details to senior decision-makers so that they are made aware of any plan before it is carried out. By “senior” decision-makers we mean:

- Treasury Board and Cabinet;
- Minister of Finance and Corporate Relations;

- Treasury Board Staff; and
- senior ministry staff.

We found that a number of documents can be used to glean information about projected annual borrowing requirements. There are two such documents we consider to be the most useful for determining projected amounts and any changes made from month to month.

One, the “Month-End and Sources of Funds Report,” is prepared at the end of each month by the Debt Management Branch. It shows the amounts and sources of borrowing to date, compared to planned borrowing for the year. The other, the monthly “Financial and Economic Report,” is produced by Treasury Board Staff. It shows forecasts of revenues and expenditures for the year, compared to the amounts in government Estimates, along with changes in projected borrowing requirements. We found that both of these reports are well formatted, easy to understand, and readily available to the senior decision-makers identified above.

These reports, in combination with the approval processes for short- and long-term borrowing through Orders in Council and Five-Year Borrowing Plans, are used by senior decision-makers as they look for information about government debt. In addition, branch staff discuss any anticipated changes to projected amounts with Treasury Board Staff and the Deputy Minister. The Deputy, in turn, is expected to keep the Minister informed so that changes can be discussed with Cabinet.





## Managing Borrowing Transactions

In order to meet its objective of minimizing the costs of government debt within existing constraints, the ministry should properly manage borrowing activities. We looked for coordination of information about borrowing needs and for adequate consideration of costs when borrowing transactions are arranged. We also examined the adequacy of processes for reviewing and approving the appropriateness of borrowing decisions and for recording and communicating information about borrowing proceeds to relevant parties.

### Conclusion

The ministry is managing government debt in a way that enables it to minimize debt servicing costs within existing constraints. It coordinates borrowing needs and fully considers costs when selecting from among borrowing options. In addition, processes are adequate to review and approve the appropriateness of borrowing decisions, and to record and communicate information to relevant parties.

### Findings

#### Coordination of Borrowing

The Debt Management Branch coordinates borrowing requirements for a number of clients: the Banking and Cash Management Branch, individual Crown agencies, and

representatives from other ministries who coordinate capital financing for schools, colleges, universities, and hospitals. This it does by coordinating information with representatives of financial markets—investment dealers and bankers, both domestic and international. To coordinate information properly, the branch has developed ways of communicating with clients, staff in the Investments Branch, and staff in the Debt Management Branch so that efforts are not duplicated or delayed unnecessarily.

#### Keeping in Touch with Financial Markets

Debt Management Branch staff coordinate with Investments Branch staff to maintain daily communication with contacts in financial markets, using direct computer links so that they can monitor changes in available financing options. Because the Province has a high credit rating, there is no shortage of dealers competing to propose financing packages.

#### Keeping in Touch with Clients

Debt Management Branch staff manage individual debt portfolios for each client and interact with them by:

- gathering information about borrowing requirements;
- informing clients of ongoing developments in financial markets; and



*Debt managers maintain contact with financial markets*

- recommending borrowing strategies for short- and long-term requirements.

After reviewing procedures and talking with a number of branch clients, we concluded that coordination of borrowing needs is adequate, given that branch staff have to consolidate the needs of a variety of clients.

#### Sharing Information with Investments Branch

We also found that, besides sharing information about financial

markets, the Debt Management Branch and the Investments Branch coordinate information for borrowing that is done to make sinking fund installments. Investments Branch staff arrange suitable investments as part of their routine investment portfolio management and calculate installment payments needed; Debt Management Branch staff arrange short-term borrowing for installment payments as part of their routine servicing of cash flow requirements of the Province.



*Weekly market meeting*

### **Communications Within Debt Management Branch**

Branch staff attend an internal market meeting every week to share information obtained from various sources about financial markets and related economic conditions. Staff also discuss the demand from clients for funds and their preferred terms, gather advice, and communicate decisions made about future debt issues. This meeting is used as an important part of generally reviewing and planning specific details for borrowing activities for the following week as well as for the coming year. Each staff member presents a report of activities in his or her area, and relevant information is exchanged.

Comparative financing levels for various markets are compiled weekly in a "Financing Alternatives Report" which is distributed to branch staff and clients, showing term rates, interest spreads,

commissions, and total costs for different maturity terms for various financial markets.

### **Ensuring Efficient Coordination in Case of Systems Failure**

The Debt Management Branch has a Business Continuation Plan for carrying out key procedures at an alternate site, to ensure the timely coordination of borrowing should there be a systems breakdown. This plan is part of the overall Provincial Treasury plan that we reviewed in the cash management part of this audit and found to be acceptable.

### **Considering Costs When Choosing Modes of Financing**

The Debt Management Branch selects from among a number of options when it comes to arranging borrowing transactions. We reviewed a number of transactions that were conducted during 1994 under each borrowing program





and found that branch staff fully consider key cost factors when making their selections.

### Key Factors in Selecting Between Borrowing Options

The main objective in debt management is to minimize the costs without taking imprudent risks. Major components of the cost are ongoing interest charges and commissions paid to brokers at the time of issuing debt.

We found that some borrowing programs pay lower commissions to brokers than others. However, this cost must be weighed against other factors (such as the need to draw from a variety of sources) when it comes to selecting between borrowing options.

When comparing interest charges, on the other hand, debt managers have to consider how interest rates are affected by:

- the yield curve of Government of Canada securities;
- the credit rating of the Province; and
- supply and demand for funds at time of issue.

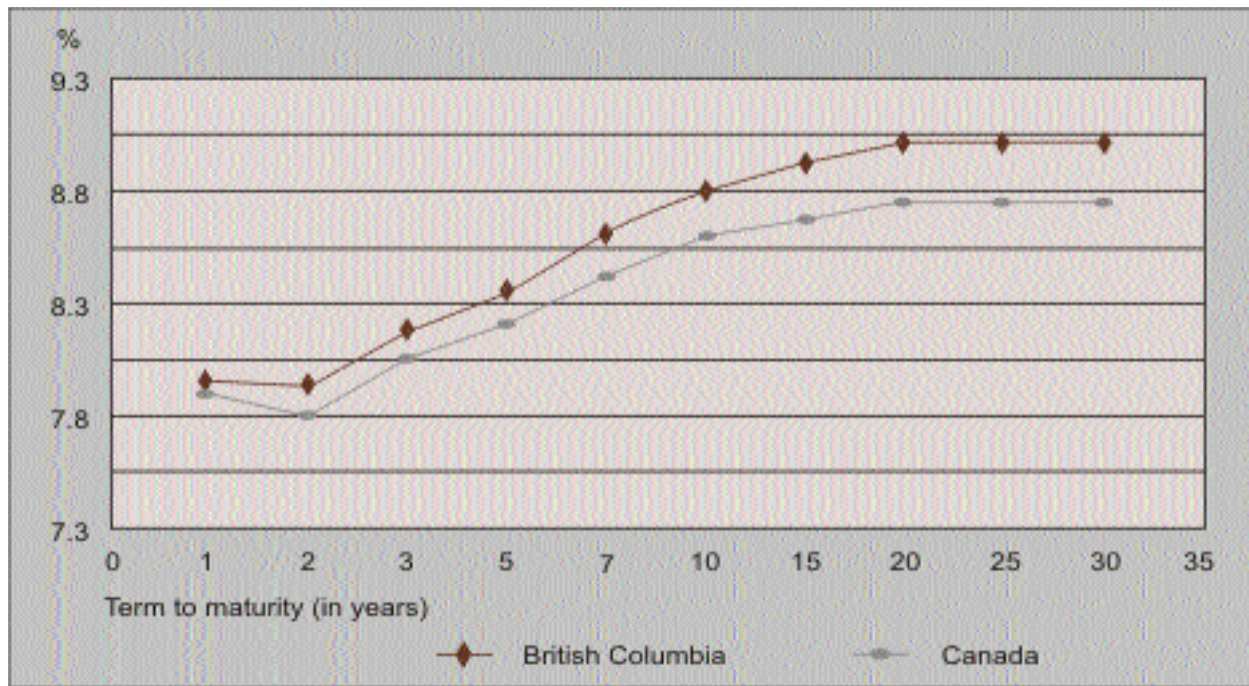
### Yield Curve of Government of Canada Securities

The Government of Canada yield curve (Exhibit 14) is a standard reference used in the industry to decide fair prices for Canadian dollar borrowing. It provides a basis for comparing the Province's financing rates for various terms to maturity with

## Exhibit 14

### Example Yield Curves

*Federal interest rates are used to price Province of British Columbia Canadian dollar financings*



Source: Based on information from the Ministry of Finance and Corporate Relations



rates on Government of Canada securities. In addition, the yield curve provides a reference for comparing alternative maturities for new financings.

We found that the Debt Management Branch invariably refers to the yield curve in pricing its transactions.

### Credit Rating of the Province

Credit rating is one of the key factors in bond pricing and marketability. If British Columbia's credit rating was to be downgraded, a higher interest rate would likely need to be attached to each issue to increase marketability, which in turn would result in higher debt servicing costs.

The way interest rates are negotiated by debt managers is complex, and only partly driven by a Province's credit rating. Thus it is not possible to determine a range of interest rates for a given credit rating. In our comparison of interest rates negotiated by British Columbia debt managers with those obtained by other provinces, we determined that as much as a half of 1% spread resulted due to differences in provincial credit ratings. When borrowing involves billions of dollars, increases in annual debt servicing costs due to a poor credit rating can be in the millions.

Many of the factors affecting the determination of the Province's credit rating are external to the Debt Management Branch and beyond its control. Branch management, however, recognize the importance of managing relationships with credit rating agencies and financial markets so

that a clear picture is presented of debt management targets, forecasted needs, and results.

We found that ministry executive and branch staff make it a priority to meet with representatives of the major credit rating agencies to give them the information necessary to instill confidence about the management of provincial debt. To maintain a favorable reputation with the financial community, the branch also makes reasonable efforts to deal with the members of that community in a consistent and fair way.

### Supply and Demand at Time of Issue

The timing of debt issuance is critical in minimizing debt servicing costs. It is important for branch staff to work with dealers handling major issues to make sure that transactions are arranged after due consideration of supply and demand in the market for the type of debt being issued. This, of course, is largely driven by market expectations about the direction of future interest rates, British Columbia's prospects, and the availability of various sources of funding.

We found that branch staff work closely with dealers and give due consideration to supply and demand when arranging debt issues.

### Pricing Model

To help it make borrowing decisions, the Debt Management Branch is developing a "debt portfolio management model" jointly with a major investment



bank. This model uses actual portfolio information with hypothetical changes in risk variables to allow debt managers to assess the trade-off between reducing the expected costs of the Province's debt and increasing the related risks.

The investment bank has completed initial studies and installed the necessary software in the branch, and staff are now using it on a pilot basis.

### **Acknowledgment for Borrowing Efforts**

We found that the Debt Management Branch efforts to obtain funding from new sources in the past three years has resulted in transactions with lower debt servicing costs than would have been arranged through other sources.

The Debt Management Branch has arranged a number of borrowing transactions that have been acknowledged for significant cost savings in the financial community. One issue of a 12-year bond for \$400 million in September 1993 was recognized with an award from the journal *International Finance Review* for being the first to tap European investor demand for Canadian dollar securities beyond 10 years. The journal also acknowledged the Province's 30-year Euro-Canadian bond issue in November 1993 for furthering the development of long-term debt issues in the Euro-Canadian dollar sector. As a result of these transactions, substantially lower debt servicing costs are expected to be paid over the course of the term

than would have been arranged domestically.

Under the Domestic Medium-Term Note program, commissions for agented transactions are significantly less than commissions for underwriting domestic public bond issues. From the program's inception in June 1992 until July 1994, \$993 million has been raised through 28 issues. We found that the total saving on differences in commissions for these issues to July 1994 was \$1.1 million, and that during the next 10 years an additional \$3.5 million in today's dollars will be saved.

In the 1994/95 fiscal year, approximately \$1.5 billion was raised under the newly established Euro Medium-Term Note program, through one public issue and eight notes denominated in yen and converted into Canadian dollars. Over the next 10 years, \$1.7 million in today's dollars will be saved as a result of the lower interest rates obtained compared to those available in domestic markets at the time the issues were arranged.

Given their lower commissions, global bond issues usually have lower overall debt servicing costs than do domestic public placements. The Province issued such a bond in June 1993 for \$1.25 billion in Canadian dollars with a 10-year term and 7.5% coupon. The lower commissions and interest rates arranged for this issue are expected to save \$9.3 million in today's dollars over the term of the bond, when compared to domestic prices at the time of issue.



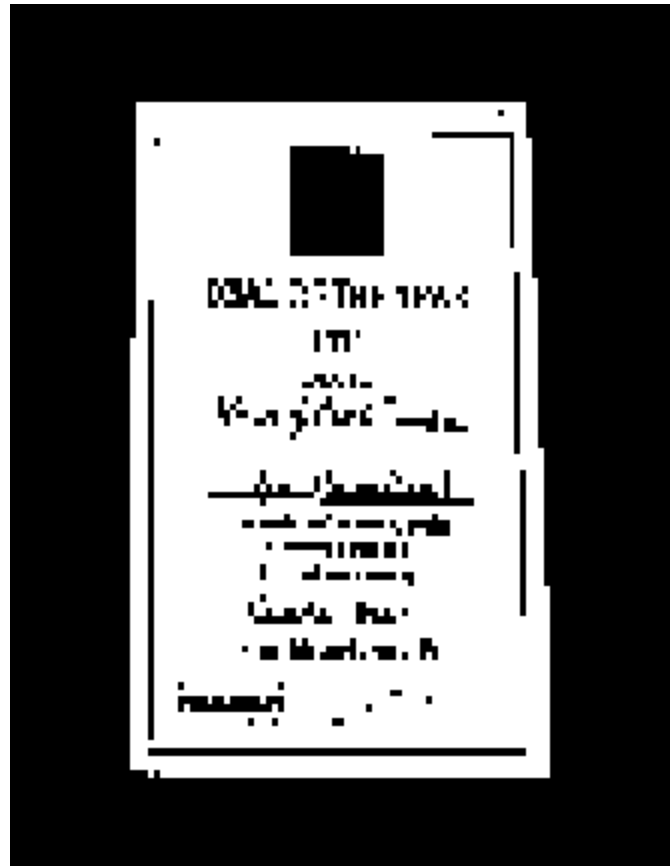
## Review and Approval of Decisions

An important part of managing debt is ensuring that borrowing authority is not exceeded, either for individuals making the transactions or for each agency for which the borrowing is being requested. The Debt Management Branch has established an authority matrix that sets out the levels of approval required under each borrowing program. In addition, it encourages informal review and discussion about borrowing transactions in its weekly meetings and in day-to-day interactions between staff and management. A separate group of staff in the branch also ensure that proper authority for each borrowing transaction has been obtained and that borrowing limits for individual agencies are not exceeded before any borrowing arrangement is agreed to in writing.

### Authority Matrix

The Debt Management Branch's portfolio management authority matrix outlines the levels of approval required for all borrowing decisions.

We found that staff use the authority matrix to make borrowing decisions. Verbal approval for individual transactions is also used extensively, as it enables staff to respond promptly to changing market conditions when arranging borrowing transactions. This, however, is adequately compensated for by the checks done as part of the registration process described in the next section of this report.



*Province acknowledged for bond issue*

### Weekly Market Meetings

As mentioned earlier, the Debt Management Branch holds weekly market meetings to coordinate information. These meetings are also important as a means of pre-approving, and later reviewing, borrowing transactions arranged by branch staff. The meetings are chaired by the Executive Director of Provincial Treasury and all staff with debt management responsibilities attend, along with cash managers from the Banking and Cash Management Branch. Attendees use this opportunity to compare notes about market conditions, availability of funds, client needs, and borrowing transactions that have been recently completed or are about to take place.





### Separate Check of Borrowing Limits

As part of the process described below, a separate group of branch staff check the approvals for individual borrowing transactions to ensure that the authority matrix has been followed before agreements are made legally binding. They also track borrowing for each agency to ensure that approved limits are not exceeded.

### Recording and Communicating Information About Transactions

While borrowing transactions are being formally arranged by debt managers in Borrowing Operations, staff from the Legal and Corporate Affairs group check for compliance with legislated requirements and prepare all required documentation related to the borrowing. Details about each borrowing are then given to the Debt Services group to be recorded and maintained in branch information systems, and are used to arrange for receipt of the money and for payment of debt servicing costs.

### Documentation and Checking of Legislative Compliance for Borrowing

Management and staff of the Legal and Corporate Affairs group prepare borrowing requests under the direction of branch clients. Before doing so they check that borrowing authority is not exceeded, by referring to Orders in Council limits, board resolutions for Crown agencies, and the authority matrix. They also review all legal documentation related to borrowing to ensure that agreements have been properly

executed, and they communicate details to the Provincial Secretary, Treasury Board Staff, and the Debt Services group.

### Maintaining Records and Arranging for Payment and Receipt of Funds

Management and staff of the Debt Services group ensure that borrowing details are properly recorded in branch information systems and that payments of debt servicing costs are made as required. They also interact with the financial community to exchange legal documents for the money being borrowed, and they communicate information to the clients for whom borrowing has been conducted and to the Banking and Cash Management Branch which manages the deposits of debt proceeds in bank accounts.

In our review of the procedures used to record debt information and arrange for payment of debt servicing costs, we found that there are adequate systems in place to ensure efficient performance of these functions. We also found that procedures for arranging settlements of borrowing transactions and communicating information to relevant parties were being properly conducted.





## Evaluating Performance

To promote the efficiency and effectiveness of its debt management activities, the ministry should routinely evaluate the extent to which objectives have been achieved and make improvements where possible. We looked to see if reliable performance information is collected, compared to objectives, and made into meaningful reports for senior management review. We also looked for evidence of changes made as a result of such review.

### Conclusion

Evaluating the efficiency and effectiveness of debt management activities is complex, because it is only after a number of years that assumptions made at the time of original decisions can be proven to be correct. The ministry, however, is making reasonable efforts to measure the impact of its borrowing decisions. In addition, reports resulting from these analyses are adequately reviewed by senior management.

### Findings

#### Measuring Performance

##### Measuring Minimization of Debt Servicing Costs for Individual Clients

At present there are no generally accepted models for measuring debt management performance. The reason is that it is difficult to obtain a representative benchmark, and to assess the long-

term effects of making decisions. Because of this, the Debt Management Branch has obtained the help of major investment bankers to develop its own theoretical model for assessing performance. The model is designed to compare decisions made by branch staff with those that would have been made if strategies had not varied with changes in the financial market.

In 1993/94, the branch used this model to analyze its performance for the total central government debt portfolio, based on changes in the market value of the debt and interest paid, compared to a benchmark portfolio. Results showed that, by using existing strategies, the branch has generated a \$61 million saving in the value of the government's financing obligation as compared to a passive-strategy benchmark.

A separate model is also being used to assess short-term debt management performance for individual Crown agencies on a monthly basis. We found that results for 1993/94 show that current strategies have also led to lower debt servicing costs for these debt portfolios.

Given that there are no generally accepted models for measuring performance in this area, we believe that Debt Management Branch efforts are reasonable.



## Measuring Performance in Individual Borrowing Programs

The Debt Management Branch also analyzes the cost savings achieved under each of its borrowing programs, based on estimated values of cash flows in today's dollars over the life of each issue. Savings are calculated by comparing interest rates and other types of debt available at the time of issue. Our review of these analyses found that they were based on reasonable assumptions and that performance under each of the programs has been good.

### *Short-Term Borrowing (Promissory Notes/Commercial Paper)*

Branch staff prepare monthly reports that show interest rates obtained for short-term borrowing compared to average published daily short-term rates for one-, three-, and six-month terms. Results show that short-term borrowing rates obtained usually vary proportionately with average short-term rates. This serves as a means for ensuring that short-term rates being negotiated are reasonable, and for identifying instances that should be checked to determine the reasons for there being relative differences.

### *Domestic Medium-Term Notes*

The ministry estimates that from June 1992 (when this program began) to July 1994, \$3.9 million was saved on the \$993 million raised through this program. This is attributed to two reasons: \$1.1 million from paying lower commission costs compared to those that would result from the alternative of issuing bonds; and

\$2.8 million from responding to specific investor demands for this type of note. Cost savings have been calculated to be, in today's dollars, approximately \$3.5 million on \$848 million maturing within the next 10 years and \$5.5 million in total on the \$993 million over the next 25 years.

### *Euro Medium-Term Notes*

The Debt Management Branch raised \$1.5 billion under this program from May 1994 (when this program began) to July 1994. Approximately \$1.7 million in today's dollars will be saved on these issues over the next 10 years. This savings is attributed to the branch's entering a previously untapped market with favorable rates.

### *Public Bond Issues*

We reviewed three bond issues of \$400 million each, issued during 1993 and 1994, and found that debt managers had obtained the lowest debt servicing costs available at the time for this type of issue (within acceptable risk levels).

### *Matched Book Program*

Results of a performance review conducted in 1993 indicate that objectives had been achieved—that is, significant revenues had been generated without incurring excessive risks. In that year, \$320,000 was earned compared to a target of \$270,000.

### *Debt Warehousing Program*

We found that, in 1993/94, slightly more interest had been earned on pre-borrowed funds than the interest paid to arrange for financing ahead of time. In our



view, this, along with the increased flexibility for providing short-term financing for clients in a timely way, makes this a worthwhile program.

### **Management Review of Results**

As has been described previously, the ministry has recently established a Risk Committee to review the results of key debt management activities on a quarterly basis. In addition, senior management of Provincial Treasury review various reports that show the results of activities. In our discussions with senior management, they confirmed that these reports are adequate for reviewing results of operations and are used as part of management's ongoing interactions with branch staff to adjust strategies and procedures to improve performance.

### **Reports Produced**

A number of reports are available for total debt and for individual borrowing programs:

#### ***Consolidated Debt Maturity Profile***

Quarterly reports include:

- estimates of consolidated new financing requirements for the next three years; and
- consolidated profiles of net debt maturities plus sinking fund requirements for the current year and the following year.

#### ***Counterparty Credit Exposure***

Quarterly reports include:

- lists of derivative transactions;
- market values of all derivatives, by counterparty; and

- total net market exposures of individual counterparties.

#### ***Short-Term Borrowing***

##### ***(Promissory Notes/Commercial Paper)***

Monthly reports show:

- short-term borrowing rates obtained compared to average short-term rates.

#### ***Medium-Term Notes (Domestic and Euro)***

After each transaction, debt managers prepare a "note to file" that is transmitted to other debt managers and senior management. These notes document:

- financial market conditions and available borrowing rates at the time of issue; and
- reasons for making the final selection from among the various sources.

#### ***Public Bond Issues***

After every Canadian public bond issue, debt managers prepare a note to file as they do for medium-term borrowing. As well, a "Distribution Reports Summary" of performance for all firms within the issuing syndicate is prepared for debt managers and senior management to use in:

- measuring the overall performance for each syndicate member, based on sales; and
- ranking firms according to the results of their performance.

#### ***Matched Book Program***

Quarterly reports include:

- summaries of outstanding transactions, along with total investments and related debt; and





- profits that have resulted under the program.

***Debt Warehousing Program***

Quarterly reports include:

- lists of outstanding pre-borrowed funds, along with related derivatives and investments; and
- details of transactions arranged in the period.

In addition, monthly reports are produced by the Investments Branch using information from the Debt Management Branch about interest costs for pre-borrowing that show:

- pre-borrowed amounts by source and investments; and
- interest earned compared to interest paid on pre-borrowed money.





## Keeping the Public and Legislature Informed

In order to inform the Legislative Assembly about the management of government debt, the ministry should provide it and the public with pertinent information about its borrowing activities and the extent to which debt servicing costs are being minimized. We looked for reports that show amounts and terms of debt, including details about sources of funds and amounts borrowed by each agency. We also looked for disclosure of strategies about risks taken to reduce costs and the results of these strategies.

### Conclusion

The ministry discloses much information about amounts, terms, and sources of debt in a number of reports that are available to the public and Legislative Assembly. It also discloses the potential cost savings for some of its borrowing programs. However, there is no single report that interested readers can refer to that will summarize this information and explain specific strategies that are being used to reduce risks while minimizing debt servicing costs.

### Findings

#### Meeting Legislated Information Requirements

##### Reports Produced

Information about government debt can be found in a variety of government reports that are readily available to the Legislature and the public:

- Public Accounts

- British Columbia Financial and Economic Review
- Ministry of Finance and Corporate Relations Annual Report
- Ministry of Finance and Corporate Relations Interim Quarterly Report
- BC Budget
- Treasury Management
- Ministry of Attorney General Filing of Borrowing Transactions
- Ministry of Attorney General Filing of Loans Made to Government Bodies

Briefing notes are also prepared for the Minister of Finance and Corporate Relations for use in discussions with Cabinet, the Legislative Assembly, and the public. These notes give a broad overview of debt management activities, and include:

- the Provincial Treasury Briefing Book
- the Budget Briefing Book
- the Estimates Briefing Book
- briefing notes for individual major debt issues

We found that the ministry has met all of the legislated requirements for disclosure of information about government debt arranged by Provincial Treasury. Provincial Treasury also discloses all accounting information that is required by the Public Sector Accounting and Auditing Board of the Canadian Institute of Chartered Accountants.



*A variety of public reports are available*

In our review of the ministry's various reports and documents, we found that considerable information is given about debt amounts, terms of borrowing, and sources of funds. The amount of debt is shown as a percentage of Gross Domestic Product, along with the debt per capita. However, we think that the government could provide the public with a better understanding of the public debt by disclosing certain other key measures and indicators in the Public Accounts. Specific references can be found in our 1994/95: Report 3 to the Legislative Assembly on our audit of the 1993/94 Public Accounts, an excerpt of which is included in Appendix C of this report.

## Completeness and Clarity of Information

Although legislated requirements for disclosing information are met, we think that the ministry could do more to inform the public and the Legislature about how debt is being managed. In reports meant for the use of the Legislature and the public, there is some mention of priorities and cost savings for some of the borrowing programs. Overall, however, we found only limited information about the way government debt is being managed. More is needed to explain:

- the types of borrowing programs used;
- levels of risks deemed to be acceptable and why;
- the extent to which objectives are being achieved; and
- the challenges that lie ahead.

We believe that, with the growing public awareness and concern about debt and how government is managing it, the ministry should disclose more information about its strategies for dealing with risks. This information could include the percentage of floating rate debt to fixed rate debt, limits on foreign borrowing, and the extent to which derivative products are used.

Although there is a lot of information available to the public and Legislative Assembly about government debt, it is not well organized. What is available is scattered in various reports and not easily understandable, making it difficult for a lay reader to gain



assurance about whether government debt is being adequately managed. We noted that the Province of Ontario and the federal government produce separate debt management reports that would be examples to follow.

Finally, it is not easy to determine the amount of total government debt from the available information. Our Office has suggested for a number of years that the ministry make this summary information readily available for interested readers. In response to this, the ministry has recently prepared an analysis of possible options and is considering ways of disclosing better information.

*Recommendation: The ministry should provide a summary of all pertinent information about its management of government debt, to be included either as part of the Public Accounts or in a government annual report. This summary should include details about total government debt, strategies used and levels of risk taken to manage it, and the accomplishments of each borrowing program.*







*Ministry Response*









# Ministry Response



*The Ministry of Finance and Corporate Relations very much appreciates the Office of the Auditor General (OAG) special Value-for-Money audit of the management of government debt. The audit was conducted in a very professional and open manner and has successfully been able to distill the complex and evolving functions of cash management and borrowing down to their core components and has presented them in everyday language.*

*It is our belief that reviews such as this are essential to verify that appropriate policies and controls are in place within an organization that daily deals with domestic and international financial transactions and fund flows in the \$100s of millions a year to markets around the globe. The report should lend further credibility and confidence to the province's treasury management.*

*We are certainly pleased that in the OAG's opinion the "Ministry is properly managing cash balances and borrowing transactions"; "The Banking and Cash Management Branch is managing government cash balances in a way that helps to minimize borrowing requirements"; and "The Debt Management Branch ... give(s) due consideration to the need for minimizing debt servicing costs within existing risk guidelines..."*

*The ministry does recognize that there is always room for improvement. In some cases, e.g. improving our cash management policy and procedures manual, and testing of back-up systems, we have already addressed the audit observations. More work is planned to:*

- *improve public reporting of debt management strategies and methods;*
- *investigate the possible merits of an outside party being a member of our Risk Committee; and*
- *simplify and improve the policies and procedures for financing projects through the Financing Authorities.*

*While the OAG report is a confirmation that the cash and debt functions within Provincial Treasury are managed prudently, we will continue to move forward. It is, therefore, our intent to address the remaining issues raised in the report.*

*We would like to extend our thanks to the staff of the OAG responsible for this report and for their diligent and professional approach in reviewing this very important function.*







# *Appendices*









## Appendix A



### 1994/95 Audit Reports Issued to Date

**Report 1**

Purchasing in School Districts

**Report 2**

Provincial Agricultural Land  
Commission

**Report 3**

Report on the 1993/94 Public  
Accounts,  
Province of British Columbia

**Report 4**

Management of Government  
Debt







## Appendix B

### Office of the Auditor General: Audit Objectives and Methodology

Audit work performed by the Office of the Auditor General falls into three broad categories:

- Financial statement auditing;
- Value-for-money auditing; and
- Compliance-with-authorities auditing.

Each of these categories has certain objectives that are expected to be achieved, and each employs a particular methodology to reach those objectives. The following is a brief outline of the objectives and methodology applied by the Office for value-for-money auditing.

#### Value-for-Money Auditing

##### *Purpose of Value-for-Money Audits*

Value-for-money audits look at how organizations have given attention to value for money—to economy, efficiency and effectiveness.

The concept of value-for-money auditing is based on two principles. The first is that public business should be conducted in a way that makes the best possible use of public funds. The second is that people who conduct public business should be held accountable for the prudent and effective management of the resources entrusted to them.

##### *The Nature of Value-for-Money Audits*

A value-for-money audit has been defined as:

*... the independent, objective assessment of the fairness of management's representations on performance, or the assessment of management systems and practices, against criteria, reported to a governing body or others with similar responsibilities.*

This definition recognizes that there are two primary forms of reporting used in value-for-money auditing. The first—referred to as attestation reporting—is the provision of audit opinions on reports that contain representations by management on matters of economy, efficiency and effectiveness.

The second—referred to as direct reporting—is the provision of more than just auditor's opinions. In the absence of representations by management on matters of economy, efficiency and effectiveness, auditors, to fulfill their mandates, gather essential information with respect to management's regard for value for money and include it in their own reports along with their opinions. In effect, the audit report becomes a partial substitute for information that might otherwise be provided by management on how they have discharged their essential value-for-money responsibilities.

The attestation reporting approach to value-for-money



auditing has not been used yet in British Columbia because the organizations we audit have not been providing comprehensive management representations on their value-for-money performance. Indeed, until recently, the management representations approach to value for money was not practicable. The need to account for the prudent use of taxpayers' money had not been recognized as a significant issue and, consequently, there was neither legislation nor established tradition that required public sector managers to report on a systematic basis as to whether they had spent taxpayers' money wisely. In addition, there was no generally accepted way of reporting on the value-for-money aspects of performance.

Recently, however, considerable effort has been devoted to developing acceptable frameworks to underlie management reports on value-for-money performance, and public sector organizations have begun to explore ways of reporting on value-for-money performance through management representations. We believe that management representations and attestation reporting are the preferred way of meeting accountability responsibilities and are actively encouraging the use of this model in the British Columbia public sector.

Presently, though, all of our value-for-money audits are conducted using the direct reporting model, therefore, the description that follows explains that model.

Our value-for-money audits are not designed to question government policies. Nor do they assess program effectiveness. The *Auditor General Act* directs the Auditor General to assess whether the programs implemented to achieve government policies are being administered economically and efficiently. Our value-for-money audits also evaluate whether members of the Legislative Assembly and the public are provided with appropriate accountability information about government programs.

When undertaking value-for-money audits, auditors can look either at results, to determine whether value for money is actually achieved, or at managements' processes, to determine whether those processes should ensure that value is received for money spent.

Neither approach alone can answer all the legitimate questions of legislators and the public, particularly if problems are found during the audit. If the auditor assesses results and finds value for money has not been achieved, the natural questions are "Why did this happen?" and "How can be prevent it from happening in future?" These are questions that can only be answered by looking at the process. On the other hand, if the auditor looks at the process and finds weaknesses, the question that arises is "Do these weaknesses result in less than best value being achieved?" This can only be answered by looking at results.

We try, therefore, to combine both approaches wherever we can. However, as acceptable results



information and criteria are often not available, our value-for-money audit work frequently concentrates on managements' processes for achieving value for money.

We seek to provide fair, independent assessments of the quality of government administration. We conduct our audits in a way that enables us to provide positive assessments where they are warranted. Where we cannot provide such assessments, we report the reasons for our reservations. Throughout audits, we look for opportunities to improve government administration.

#### ***Audit Selection***

We select for audit either programs or functions administered by a specific ministry or public body, or cross-government programs or functions that apply to many government entities. There are a large number of such programs and functions throughout government. We examine the larger and more significant ones on a cyclical basis.

We believe that value-for-money audits conducted using the direct reporting approach should be undertaken on a five-to six-year cycle so that members of the Legislative Assembly and the public receive assessments of all significant government operations over a reasonable time period. Because of limited resources, we have not been able to achieve this schedule.

#### ***Our Audit Process***

We carry out these audits in accordance with the value-for-

money auditing standards established by the Canadian Institute of Chartered Accountants.

One of these standards requires that the "person or persons carrying out the examination possess the knowledge and competence necessary to fulfill the requirements of the particular audit." In order to meet this standard, we employ professionals with training and experience in a variety of fields. These professionals are engaged full-time in the conduct of value-for-money audits. In addition, we often supplement the knowledge and competence of our own staff by engaging one or more consultants, who have expertise in the subject of that particular audit, to be part of the audit team.

As value-for-money audits, like all audits, involve a comparison of actual performance against a standard of performance, the CICA prescribes standards as to the setting of appropriate performance standards or audit criteria. In establishing the criteria, we do not demand theoretical perfection from public sector managers. Rather, we seek to reflect what we believe to be the reasonable expectations of legislators and the public. The CICA standards also cover the nature and extent of evidence that should be obtained to support the content of the auditor's report, and, as well, address the reporting of the results of the audit.





# Appendix C

## Excerpt from Auditor General 1994/95: Report 3

### Provincial Debt: Comments on Its Reporting

The debt of the Province of British Columbia has increased from \$16.3 billion in 1990 to \$26.0 billion in 1994, an increase of 60% over four years. Its increase during the 1993/94 fiscal year has

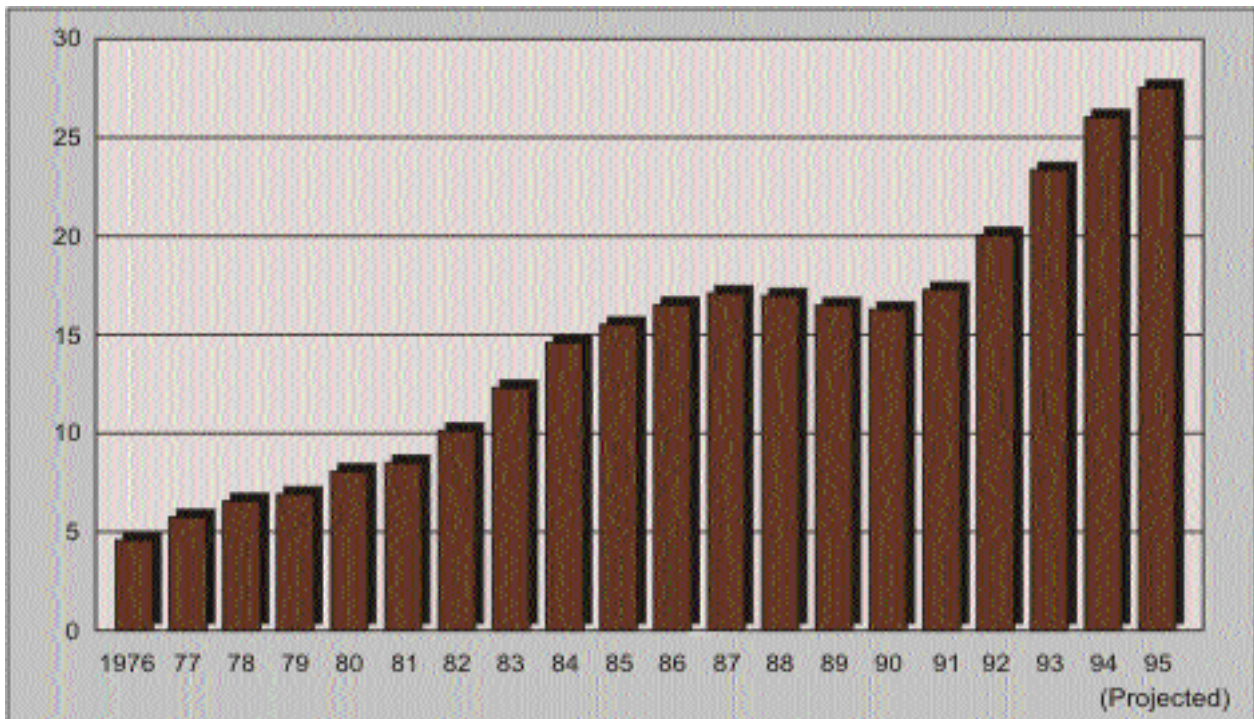
been 11%, from \$23.4 billion to \$26.0 billion. Each British Columbian's share of the provincial debt has increased from \$4,965 to \$7,189 between 1990 and 1994. Exhibit 4.1 shows the total provincial debt for each of the 20 fiscal years 1975/76 to 1994/95.

The public is concerned about the extent of provincial debt. We believe that better information about debt would allow people to

### Exhibit 4.1

#### Total Provincial Debt

Total debt for each of the 20 fiscal years ending 1994/95 (\$ Billions)



Source: The Public Accounts, Budget '94, Economic and Statistical Review reports





better understand provincial borrowing and how it affects them.

The Auditor General's Report on the 1992/93 Public Accounts included various recommendations on how the reporting of debt could be improved. We suggested that the government consider reporting in the Public Accounts information about the total provincial debt, changes in debt, the financial well-being of the province, and the cost of debt servicing. We also suggested that key performance indicators be included to show trends in provincial debt.

During the 1993/94 fiscal year, the government has made few changes to what it reports about provincial debt. Some additional

information has been provided in both the Budget and the Economic and Statistical Review, but it continues to be incomplete and widely scattered throughout various government publications.

In Exhibit 4.2, we summarize the items we recommended for disclosure and indicate the extent to which government publications now include information about them.

The information needed to calculate a few of the measures and indicators we recommended in Exhibit 4.2 is not currently being disclosed by the government. Thus, in our comments here we have not addressed the effects of operating deficit on provincial debt.

## Exhibit 4.2

### Measures and Indicators Recommended for Disclosure in the Public Accounts

*Are they disclosed in government publications?*

Recommended Measures and Indicators	Public Accounts	Public Accounts Digest	Economic and Statistical Review	1994/95 Budget
1. Debt to revenue	No	No	No	No
2. Total provincial debt	No	No	Yes	Yes
3. Debt per capita	No	No	Yes	No
4. How debt changed	Partially	No	Partially	Partially
5. Why debt changed, including the operating deficit	No	No	No	No
6. Sources of borrowing	No	No	Yes	Yes
7. Interest bite	No	Partially	No	No
8. Debt to GDP	No	Yes	Yes	Yes
9. Total cost of debt servicing	No	No	No	No
10. Rate of interest	Partially	No	No	No

Source: The Public Accounts, 1992/93 Public Accounts Digest, Budget '94, 1993 BC Economic and Statistical Review



## Total Provincial Debt

The total debt of the province is composed of amounts borrowed by the province for the operation of the central government (direct), for government agencies (other), and the third-party guaranteed debt. Exhibit 4.3 shows a breakdown of direct, other, and third-party guaranteed debt as at March 31, 1994. Total provincial debt at

March 31, 1994, was \$26.0 billion. This consisted of the \$22.7 billion in debt reported in the Summary Financial Statements, together with \$2.9 billion in additional debt of “government enterprises” and \$0.4 billion in third-party guaranteed debt.

Two important indicators of trends in provincial debt are “debt per capita” and “debt to revenue.”

## Exhibit 4.3

### Total Debt

*Details of total provincial debt as at March 31, 1994 (\$ Millions)*

<b>Direct debt</b>		<b>10,257</b>
<b>Debt of Crown corporations and agencies</b>		<b>15,335</b>
BC Buildings Corporation	612	
BC Ferry Corporation	415	
BC Hydro and Power Authority	7,680	
BC Lottery Corporation	5	
BC Railway Company	316	
BC Systems Corporation	26	
BC Transit	1,348	
BC Transportation Financing Authority	73	
Capital Project Certificate of Approval Program	408	
Duke Point Development Limited	3	
Educational Institutions	1,116	
Greater Vancouver Sewerage and Drainage District	197	
Greater Vancouver Water District	130	
Improvement Districts	3	
Pacific National Exhibition	7	
Pacific Racing Association	5	
Provincial Rental Housing Corporation	99	
Regional Hospital Districts	1,087	
School Districts	1,804	
W.L.C. Developments Ltd.	1	
<b>Third-party guaranteed debt</b>		<b>426</b>
<b>Total provincial debt</b>		<b>26,018</b>

Note: Debt includes regular borrowings, capital leases, notes payable, and minority interests.

Source: The Public Accounts



### Debt Per Capita

As a performance indicator, the debt per capita shows the average amount of provincial debt owing by each British Columbian. It is calculated by dividing the total debt of the government by the population of the province.

Exhibit 4.4 shows the debt per capita for the last five years. Debt per capita has increased every year since 1990. It stood at \$7,189 at March 31, 1994, an increase of \$548 in one year.

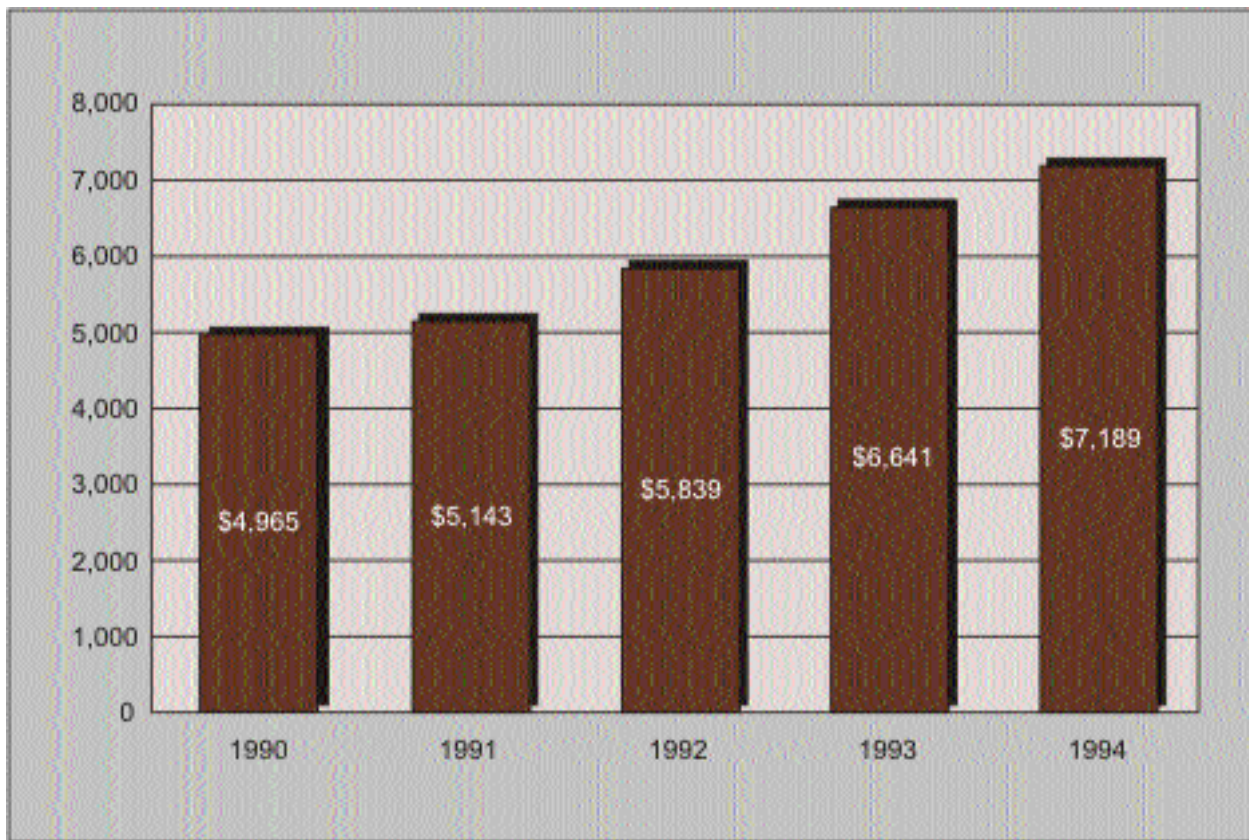
### Debt to Revenue

Another frequently used indicator is debt to revenue. Calculated as the ratio of debt outstanding at yearend compared to revenue from all sources for that year, it indicates how many years of revenue it would take to repay the provincial debt. Comparing this ratio for the 1992/93 fiscal year (96%) to that of the 1993/94 fiscal year (98%) shows that in the latter year the rate of increase in debt has been higher than the rate of increase in revenue.

## Exhibit 4.4

### Debt Per Capita

*Average share of provincial debt of a person living in British Columbia, 1990 to 1994*



Source: The Public Accounts for debt, Statistics Canada for population as at March 31



## Changes in Debt

To understand why debt was incurred, it is useful to understand both the use and source of borrowing. We have recommended that a statement of changes in debt be provided, to explain why, and from whom, the province has been borrowing.

Total provincial debt increased from \$23.4 billion in 1993 to \$26.0 billion in 1994. Part of the reason for the increase is the financing of the annual deficit—the amount by which expenditures exceed revenues. In addition to

financing the deficit, debt is reflected in the increase in financial assets of central government and in loans to agencies, primarily for the acquisition of physical properties such as schools.

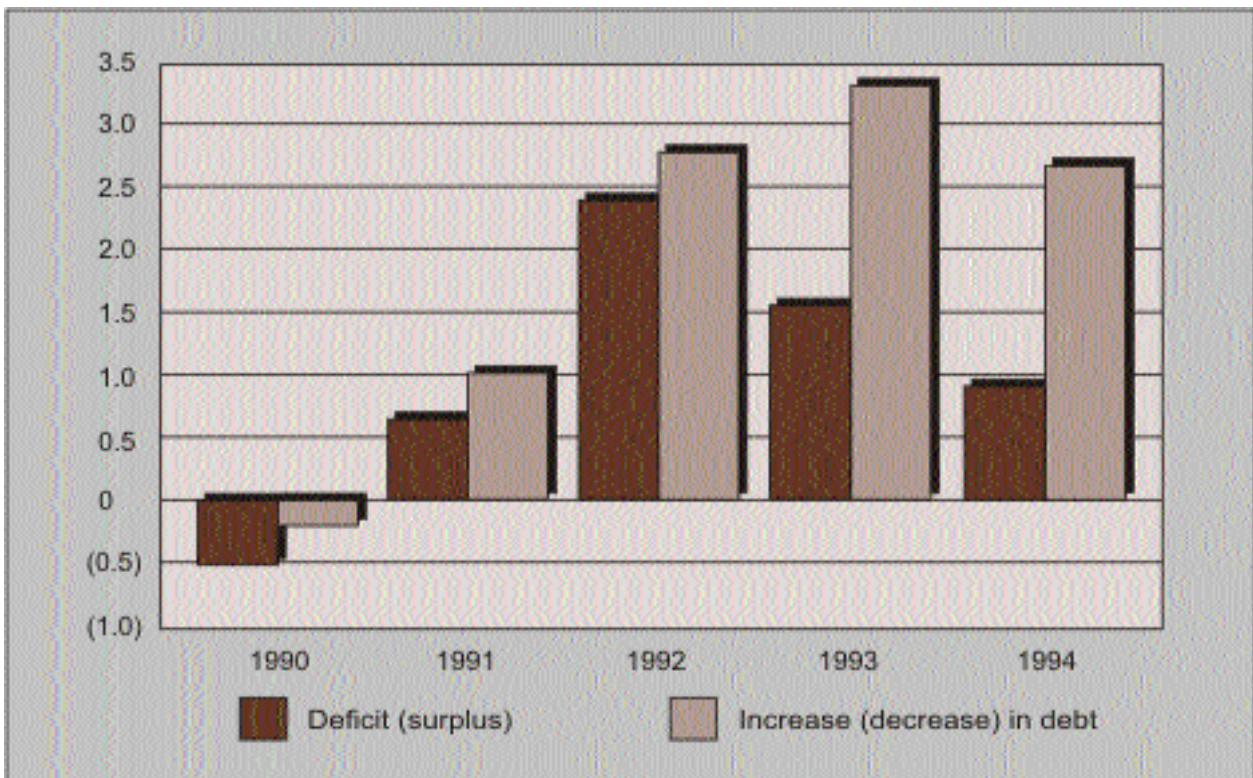
However, the financial information currently provided by the government does not distinguish between operating and non-operating expenditures. It is therefore not possible to determine if current borrowings are being used to finance the operating deficit or to go to other purposes.

Exhibit 4.5 shows the annual deficit compared to the annual

### Exhibit 4.5

#### Deficit Compared to Debt

*Annual deficit (surplus) compared to the annual changes in total provincial debt, 1990 to 1994 (\$ Billions)*



Source: The Public Accounts





change in total provincial debt over the past five years. Although the annual deficit decreased approximately 40% from \$1.5 billion in 1993 to \$0.9 billion in 1994, the increase in total provincial debt in 1994 was only 20% less than the previous year's: \$2.6 billion in 1994, compared with \$3.3 billion in 1993. The change in total provincial debt, beyond that required to finance the deficit, is primarily due to a substantial increase in borrowing by government agencies.

Exhibit 4.6 shows the increase in provincial debt, providing a

breakdown of the changes in direct debt, other debt, and third-party guaranteed debt during the 1993/94 fiscal year. A complete statement of changes in debt would also include a listing of the sources and uses of current borrowings.

## Financial Well-being of the Province

As more money goes to pay the interest on debt, there is less money left over to pay for government programs such as health care, education, and social services. This

### Exhibit 4.6

#### Change in Total Provincial Debt

*Detailed list of changes in total provincial debt in the 1993/94 fiscal year (\$ Millions)*

<b>Increase in direct debt</b>		<b>1,287</b>
<b>Increase in debt of Crown corporations and agencies</b>		<b>1,542</b>
BC Buildings Corporation	34	
BC Ferry Corporation	69	
BC Hydro and Power Corporation	475	
BC Railway Corporation	80	
BC Transportation Financing Authority	73	
Capital Project Certificate of Approval Program	41	
Educational institutions	242	
Greater Vancouver Sewerage and Drainage District	35	
Greater Vancouver Water District	28	
Provincial Rental Housing Corporation	14	
Regional hospital districts	38	
School districts	412	
Net increase in other government entities	1	
<b>Decrease in third-party guaranteed debt</b>		<b>(165)</b>
<b>Increase in total provincial debt</b>		<b>2,664</b>
<b>Total provincial debt, 1992/93 yearend</b>		<b>23,354</b>
<b>Total provincial debt, 1993/94 yearend</b>		<b>26,018</b>

Note: Change is affected by debt issues, retirements, and changes in sinking funds.

Source: The Public Accounts



“crowding out” effect can seriously hamper fiscal decision-making and become an obstacle to meeting government program objectives. In this section, we discuss two indicators of the province’s financial well-being: the “interest bite” and “debt to gross domestic product.”

### Interest Bite

The interest bite shows how much of each dollar of the province’s total revenue is used to pay for debt servicing costs. (It is a ratio, calculated by dividing the

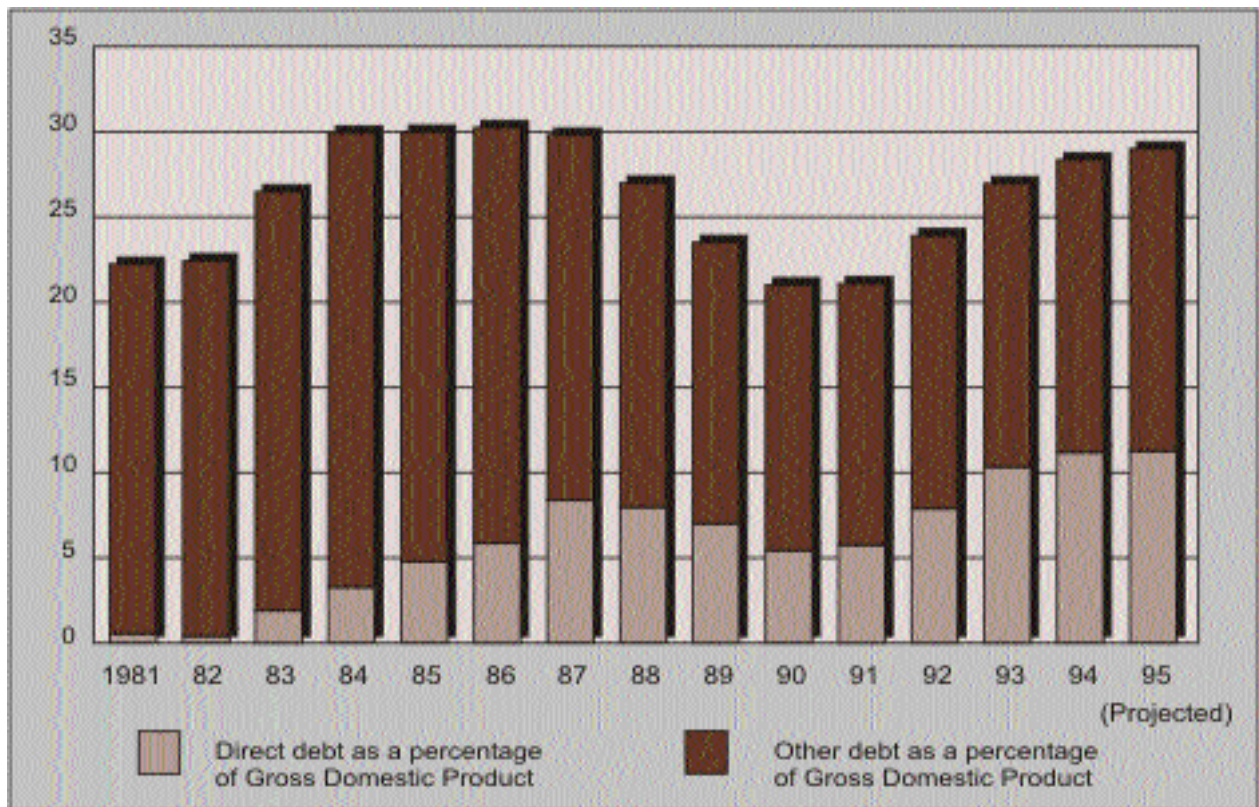
total cost of borrowing into total revenue.) Should an increasing portion of the revenues of the province be used each year to pay interest on debt, less money would be left to provide services to taxpayers. Thus, the interest bite gives an indication of the fiscal flexibility of the government.

We calculated the interest bite of the government to be 8.5 cents in 1994 (8.8 cents in 1993). The decrease is due mainly to lower interest rates during the 1994 fiscal year.

### Exhibit 4.7

#### Debt to Gross Domestic Product (GDP) Ratio

*Provincial debt as a percentage of GDP in British Columbia, 1981 to 1995*



Source: The Public Accounts for debt, Statistics Canada for B.C. GDP (calendar year ending in the fiscal year)



## Debt to Gross Domestic Product

The province's ability to service its debt primarily relates to both its economy and the magnitude of its debt. Gross Domestic Product (GDP) is a calculation of economic production. The debt to GDP indicator compares total debt outstanding at yearend to the annual GDP of the province. Exhibit 4.7 shows the total debt of the province as a percentage of GDP, broken down by direct debt and other debt, since 1981.

The debt to GDP ratio has been increasing since 1990.

## Cost of Debt Servicing

The cost of debt servicing, or the province's cost of borrowing money, represents the interest paid on debt plus the costs associated with the administration of debt, less investment income from sinking funds.

The Summary Financial Statements for the 1993/94 fiscal year reported the annual debt servicing expense as \$1,937 million (\$1,784 million in 1992/93). Because government enterprises are not fully consolidated, however, this amount does not include all the debt servicing costs of these entities. We calculated the total cost of debt servicing as \$2,270 million in 1993/94 (\$2,142 million in 1992/93).

## Conclusion and Recommendation

By disclosing these key measures and indicators in the Public Accounts, the government would provide the public with a better understanding of the provincial debt.

The governments of Canada, Alberta, and Nova Scotia have included similar information on public debt in their latest reports.

*We recommend that, as a minimum, the 10 measures and indicators listed in Exhibit 4.2 be disclosed in the Public Accounts.*





## Appendix D

### Excerpts from 1993/94 Public Accounts, Volume 1 Notes to the Financial Statements

#### Government Borrowing (\$ Millions) at March 31, 1994

##### Note & Public Debt, Used for Government Operating Purposes

	Year of Maturity	In Millions					
		1994			1993		
		Canadian Dollar Debt \$	U.S. Dollar Debt (CDN \$) \$	Total Canadian Dollars \$	Weighted Average Coupon Rate Percent	Total Canadian Dollars \$	Weighted Average Coupon Rate Percent
Short-term promissory notes	1993-1994					364	
	1994-1995	302		302			
		<u>302</u>		<u>302</u>		<u>364</u>	
Treasury bills	1993-1994					780	
	1994-1995	780		780			
		<u>780</u>		<u>780</u>		<u>780</u>	
Notes, bonds and debentures	1993-1994					356	9.26
	1994-1995	532	15	547	8.32	545	8.55
	1995-1996	1,105	1	1,106	8.38	1,405	7.67
	1996-1997	1,311	4	1,315	7.95	927	9.30
	1997-1998	978		978	7.97	992	7.96
	1998-1999	716		716	9.79	782	9.79
	1999-2004	3,085	988	4,073	9.26	3,355	9.72
	2004-2009	356		356	8.84	120	11.57
	2009-2014	970		970	9.51	870	9.63
	2014-2019	6		6	7.48	15	8.50
	2019-2024	1,052		1,052	8.74	445	9.34
		<u>10,111</u>	<u>1,008</u>	<u>11,119</u>	8.73	<u>9,812</u>	9.13
Total debt issued at face value		<u>11,193</u>	<u>1,008</u>	<u>12,201</u>		<u>10,956</u>	
Less:							
Sinking funds				(915)		(1,080)	
				<u>11,286</u>		<u>9,876</u>	
Unamortized discount				(170)		(172)	
				<u>11,116</u>		<u>9,704</u>	
Amount held in the Consolidated Revenue Fund						(15)	
				<u><u>11,116</u></u>		<u><u>9,689</u></u>	




**Note 7: Public Debt, Used for Loans under the Fiscal Agency Loan Program**

		In Millions						
		1994					1993	
Year of Maturity		Canadian Dollar Debt \$	U.S. Dollar Debt (CDN \$)	Total Canadian Dollars \$	Weighted Average Coupon Rate Percent	Total Canadian Dollars \$	Weighted Average Coupon Rate Percent	
Short-term promissory notes	1993-1994					2,224		
	1994-1995	1,778	1,249	3,027				
		1,778	1,249	3,027		2,224		
Notes, bonds and debentures	1993-1994					788	11.44	
	1994-1995	242		242	9.68	242	9.68	
	1995-1996	32		32	11.27	32	11.27	
	1996-1997	230		230	8.62	231	9.19	
	1997-1998	567		567	8.86	562	8.85	
	1998-1999	556		556	9.57	441	9.95	
	1999-2004	2,821	477	3,298	10.32	2,722	10.95	
	2004-2009	1,550		1,550	10.53	1,386	10.91	
	2009-2014	2,745		2,745	9.42	2,356	9.73	
	2014-2019	394		394	7.31			
	2019-2024	1,048		1,048	9.77	905	10.06	
		10,185	477	10,662	9.79	9,665	10.36	
Total debt issued at face value		11,963	1,726	13,689		11,889		
Less:								
Sinking funds				(1,999)		(1,657)		
				11,690		10,232		
Unamortized discount				(68)		(64)		
				11,622		10,168		
Amount held in the Consolidated Revenue Fund				0		(22)		
				11,622		10,146		

**Note 20: Guaranteed Debt**

	In Millions	
	1994	1993
	Net Outstanding \$	Net Outstanding \$
Municipalities and other local governments .....	5	5
Health and education .....	196	182
Economic development .....	645	815
Utilities .....	2,276	2,504
Total .....	3,122	3,506
Less:		
Amounts included as investments within the consolidated entity .....	(24)	(34)
Provision for probable payout .....	(56)	(43)
	<u>3,042</u>	<u>3,429</u>



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