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## Canadian Government Debt 2003

A Guide to the Indebtedness of Canada and the Provinces

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## Executive summary

The Fraser Institute's fifth study examining Canadian public liabilities reveals that the net direct debt of all three levels of government in Canada fell from \$851 billion to \$797 billion between 1996/97 and 2000/01. This is a small drop compared to the growth in debt over the last decade: it was only \$533 billion in 1990/91. Nevertheless, there are several reasons why even a small reduction in debt is good news. First, governments have begun to balance their books and some have started paying down their debt. Second, continued economic growth will help reduce the ratio of debt to gross domestic product (GDP), currently at 75.4%. Third, a constant or declining debt stock will demand a smaller portion of government revenues. As a result, some of the 16.8% of revenues currently being spent on interest charges can be used for further debt relief or tax cuts.

The bad news is that the \$54 billion drop in debt was more than offset by increases in other liabilities such as program obligations, which grew significantly from 1996 to 2001. The net increase in total liabilities over this period was \$279 billion. The growth in obligations under programs such as the Canada and Quebec Pension Plans, the Old Age Security, and the Medicare system has been a focus of this debt study for many years. Specifically, the concern lies in the size of these obligations and what this implies for the future health of these programs. Largely due to increases in program obligations, in 2000/01 federal, provincial, and local liabilities added up to \$172,416 for each Canadian taxpayer or \$83,927 for each Canadian citizen.

Among the provinces, Ontario carries the heaviest future tax burden. Federal, provincial,

and local liabilities add up to \$91,826 for each Ontarian. Residents of Prince Edward Island, Quebec, the North West Territories, and Alberta all have per-capita liabilities above \$80,000.

From 1996/97 to 2000/01, all of the provinces decreased their direct debt as a percentage of GDP. Alberta led the way with a 49.8% decrease in direct debt as a percentage of GDP, followed by the Yukon at 31.3% and Ontario at 25.9%.

On the other hand, it is a concern that program obligations have grown in five of 12 jurisdictions. For example, the Yukon experienced a 21.4% increase in program obligations, followed by Saskatchewan at 5.6% and British Columbia at 4.1%.

### Definition of liabilities

Total liabilities include direct debt, debt guarantees, contractual commitments, contingent liabilities, and obligations. Direct debt includes the accumulated net debt incurred by a government and all its agencies.<sup>1</sup> Debt guarantees are issued by governments on behalf of privately held companies and government business enterprises. Contingent liabilities are potential claims, which may become actual depending on the outcome of uncertain future events while contractual commitments are the government's legally binding contracts to pay for future services rendered or goods provided. Unfunded liabilities include programs and benefits, such as Old Age Security (OAS), the Canada Pension Plan (CPP), and Medicare, that government has committed itself to providing.

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1 Net debt refers to the total stock of securitized liabilities owed by a government minus its financial assets. That is, gross debt minus financial assets equals net debt. Net debt is the appropriate focus for analyses because it focuses on liabilities that have been adjusted for the financial resources that a government holds.

## Unfunded liabilities of government programs—the most pressing concern

The largest portion of total liabilities is made up of the unfunded liabilities of government programs such as the Canada and Quebec Pension Plans (CPP/QPP), Old Age Security (OAS), and Medicare. These programs are at least partially unfunded in the sense that the estimated future stream of contributions falls short of the expected future payouts of benefits. The unfunded liability of Medicare alone grew by 37.4% between 1996 and 2000. In total, CPP, OAS, and Medicare unfunded liabilities grew by 22.3% during the 5-year period covered in this study.

At their inception, these programs were based on the assumption that population demographics, economic growth rates, and wage increases prevalent in the 1960s would persist. It was considered favourable social and economic policy to transfer a small amount of money from a large group of younger workers to benefit a small group of relatively poor retirees.

These assumptions have proven false. Birth rates have declined, income growth has stagnated, and mortality rates have decreased. In 1956, the proportion of the Canadian population that was under 20 years of age was 39.4% while the proportion of those over 65 was 7.7%. By 2002, the ratio of those under 20 years old to the total population had decreased to 25.2% and the ratio of those over 65 had increased to 12.7%. Estimates predict that by 2036 those under 20 will account for only 20.2% of the total Canadian population while those over 65 will account for 24.8% (Brown 2002). Demographic changes will continue to undermine the ability of these plans to provide the intended level of benefits at the current rate of taxation.

These unfunded liabilities have important implications about how future surpluses should be distributed between spending, tax cuts, and debt reduction. In addition, unfunded liabilities also raise concerns about the structure of current spending. Governments should determine what percentage of their revenue will likely be required by existing programs over the next 50 years and justify any new spending to Canadians in light of the fact that we do not know

how we are going to pay for the programs we have already committed ourselves to. In addition, the size of unfunded liabilities calls into question the structure of “pay-as-you-go” systems. That is, rather than accumulating funds in individual or even collective personal accounts for future payment, governments are using current contributions to pay the benefits of current CPP/QPP recipients. Similarly, OAS and Medicare are paid out of general government revenue.

## Canada compared to the world

International comparisons allow Canadians to get an idea of the relative severity of Canada’s direct debt burden. With a ratio of debt to discretionary income per person of 58.5%, Canada ranks 63<sup>rd</sup> overall among 126 jurisdictions. More important than the overall rankings are the relative rankings generated by comparison with other high-income nations (high-income nations, as defined by the World Bank, are those with average incomes in excess of \$9266). Canada has one of the highest debt burdens among high-income countries, ranking 17<sup>th</sup> out of 19. Only Italy and Belgium rank lower. Further, Canada ranks second last among the G-7 countries.

## Summing up—where do we go from here?

The good news should give us cause for some small celebration as the pain of deficit elimination continues to yield rewards. However, we must be cautious to ensure that we do not permit apathy to erode the recent gains in fiscal security. We must be vigilant that we do not assume new and larger obligations and we must be prudent in forming policies to deal with those that already exist. Hopefully, the bad news associated with unfunded liabilities will focus attention on the long-term problems built into our existing social programs and encourage Canadians to consider all the alternatives for achieving the goals of these programs.

# Government liabilities—what are they?

## Introduction

Government debt—the accumulation of budget deficits and capital borrowing—has been, and still is, a serious issue in Canada. In 2001/02, Canadian governments spent approximately 17% of their total revenues and over 7% of gross domestic product (GDP) servicing the existing debt. While many governments have focused on balancing their books, only two provinces, Ontario and Manitoba had consolidated (provincial-local) budget surpluses in 2001/02. The federal government also maintained a budget surplus for 2001/02. There is constant pressure on governments to deviate from a course of fiscal propriety as the unlimited demand for government programs collides with a limited capacity to raise revenues.

The purpose of this study is to provide Canadians with an accessible account of the total indebtedness of each of the provinces and the federal government. It serves as a reminder that, although progress has been made in some provinces and territories, all jurisdictions remain heavily indebted. In addition, the study examines how Canadian governments compare, both nationally and internationally, in the areas of direct government debt.

While governments have been focused on balancing their books (few other than Alberta have focused on debt reduction), an overly optimistic picture is often painted. That is, the primary focus of governments has been their direct debt and not other types of liabilities. A liability can be either a debt or an obligation and, in the context of government finance, the distinction between the two is critical. Governments must repay *debts* (e.g. the money owed to bondholders) or they default on their loans. Governments can eliminate or reduce

*obligations* through statutory changes that cancel or change the coverage of programs. These program obligations include the promises to pay benefits under the Canada and Quebec Pension Plans, Old Age Security (OAS), and Medicare. For example, the government can reduce the obligations of the CPP by increasing the eligible age at which one can start collecting retirement benefits from, say, 65 to 68. Obligations are not debt; they are promises to perform certain duties or pay a stream of benefits in the future. Throughout this study, liability refers to debts plus obligations.

## Categories of government liabilities

Total government liabilities can be placed in four categories: (1) direct debt, (2) debt guarantees, (3) contingent liabilities and contractual commitments, and (4) program obligations. Before examining each category, it is important to distinguish the difference between gross and net debt. Gross debt refers to the total stock of securitized liabilities owed by a government. Gross debt statistics are used to determine the total debt burden to taxpayers. Gross debt minus financial assets equals net debt. Net debt is the appropriate focus for analyses because it focuses on liabilities that have been adjusted for the financial resources that a government holds. For instance, two jurisdictions may have the same amount of gross debt but, if one has a greater stock of financial assets (cash and securities), it will have a smaller net debt. For comparative purposes, we use statistics for net debt throughout this report as financial assets ultimately reduce the burden of gross debt.

**Direct debt**

Direct debt refers to the accumulated debt incurred by a specific government and its agencies and constitutes a direct legal contract. The government enters into a contract with creditors to obtain funds for current financing in exchange for regular interest payments and repayment of the principal at some future date. Direct debt represents the amount that governments are legally bound to repay or face default.

**Debt guarantees**

Debt guarantees are issued by governments on behalf of privately held companies and government business enterprises (Crown corporations) to stabilize those companies, provide capital, or lure firms to locate within a specific region by offering preferential financing. In the event that the firm fails, a debt guarantee would become a claim on government revenues—direct debt.

The principal problem with debt guarantees is that they create distortions in the marketplace. Firms rejected in the marketplace by entrepreneurs and investors use debt guarantees and subsidies to secure financing for on-going operations or expansion. Government intervention eliminates the discipline of the marketplace that allows profitable firms to flourish while forcing unproductive firms to improve or fail. Governments actively divert investment capital away from firms that the market favours towards firms that the government identifies as priorities.

**Contingent liabilities and contractual commitments***Contingent liabilities*

Contingent liabilities are potential claims, which may become actual depending on the outcome of uncertain future events. Examples are lawsuits against a government regarding tax refunds and the federal government's callable share capital in international organizations (shares of international companies that are paid in part with subsequent calls for payments) that could require payment to

these agencies. The contingent liabilities that the relevant government can affix a value to are included in this report. Those that the government cannot reasonably assess are not included.

*Contractual commitments*

The nature of government activity results in some large multi-year contracts and obligations. These are called contractual commitments because the government has a legally binding contract to pay for future services rendered or goods provided. Operating and capital leases are examples of contractual commitments. Governments can enter into long-term agreements with private firms that provide office space for government operations like Air Care testing centers and liquor distribution branches in British Columbia. Major contractual commitments that are estimated by governments are included in this report.

**Program obligations (unfunded liabilities)**

Obligations are the largest component of total liabilities and the most troubling because, while debt levels have stabilized, obligations continue to grow. In general, this category of liability consists of programs that Canadian governments have committed themselves to providing but that are not considered entitlements. Generally speaking, these programs, unlike direct debt, can be reduced or eliminated by changing or eliminating the relevant program. The main obligations that Canadians are familiar with are the Canada and Quebec Pension Plans, Old Age Security, and Medicare, Canada's public health-care system. Benefits paid by Workers' Compensation Boards and pension plans for civil service employees are also program obligations but these programs have relatively small unfunded liabilities or none at all.

Program obligations are either paid out of general government revenue or have specific dedicated funding sources such as payroll taxes. If, at any point, one of these programs has a shortfall between the future stream of funding and future obligations, it has an unfunded liability.

**Program obligations with little or no unfunded liabilities***Public sector pension plans*

Pension plans for civil service employees operate on an accumulated benefit formula. Put simply, individuals contribute to a program for a specified period, accumulating assets that are used to finance benefits to be received later. Thus, each individual has a legal claim on a specific amount accrued during their term of employment. Most provincial governments have recently committed to eliminating unfunded liabilities in these plans; the federal government's plans are already in surplus.

*Worker's Compensation Boards*

There has been a general trend of increased independence of provincial Worker's Compensation Boards (WCB) in recent years. This increased independence has been associated with a move to fully funded status in most provinces and, as a result, WCB unfunded liabilities are not covered in this report.

**Program obligations with unfunded liabilities***Canada and Quebec Pension Plans*

The Canada and Quebec Pension Plans are largely pay-as-you-go systems where today's contributions are used to pay for the benefits of today's recipients. For ease of presentation, only the CPP is discussed below since the CPP and QPP have the same structure and comments about the CPP also apply to the QPP. In 1997, amendments to the CPP transformed it into a partial accumulated benefits system. That is, increases in the contribution rate (5.85% in 1998)

were accelerated to reach 9.9% by 2003 in order to increase the amount in the CPP reserve fund.<sup>2</sup> From inception, the target for the reserve fund was that it be large enough to provide two years of benefits. The new target is for the reserve fund to be large enough for five years of benefits. The Canada Pension Plan Investment Board was created to invest and manage funds in the reserve. While these alterations have improved the CPP system it is still essentially a pay-as-you-go system in which benefits paid to each generation are financed from the contributions of the following generation.

*Old Age Security*

The Old Age Security (OAS), incorporating Old Age Security, the Guaranteed Income Supplement, and the Spouse's Pension Allowance, is paid for out of the federal government's general revenue. It has no stock of assets or even a specific funding source set aside to pay for its benefits.

*Canada's health care system (Medicare)*

Medicare is a provincial responsibility and is funded by both the provincial and federal levels of government; the provinces pay for the bulk of Medicare spending. Like the OAS, Medicare is paid for out of general revenue. It has no stock of assets or a specific funding source set aside to pay for its benefits.

A detailed explanation of the methodology used to determine the extent of unfunded liabilities is presented in the next section. For the purposes of calculating total government liabilities, estimates of the unfunded liabilities of the CPP, QPP, OAS, pension plans for civil service employees, and of the Medicare system are used.

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2 While the acceleration of increases in the contribution rate has attracted the greatest public attention, other reforms provided equal or greater savings. The largest saving, for example, came from freezing the basic exemption at \$3500, which effectively increases the pool of individuals who contribute to the CPP each year.

# Government liabilities—how much?

## Estimates of total government liabilities

Table 1 presents all four categories of liabilities for each of the provinces, the federal government, and Canada as a whole. Provincial data includes local government liabilities. Using consolidated provincial and local data accurately represents the total debt for which taxpayers in each province are responsible. In other words, provinces with a high concentration of spending authority at the local level and thus the possibility of large local government deficits and debt, can appear to have lower liabilities than other provinces if only provincial figures are used.

As a result of aggressively paying down its debt in the past five years, Alberta is the only province in which financial assets are greater than gross debt and, thus, has a negative direct net debt of \$10 billion. Ontario and Quebec are the most indebted provinces: both have direct debt in excess of \$100 billion. Quebec makes the largest use of debt guarantees and, as a result, is potentially on the hook for more than \$46 billion dollars, over \$23 billion more than second place Ontario (\$22 billion). In addition, Quebec has the largest total government liability among the provinces at \$406 billion, followed closely by Ontario (\$384 billion). British Columbia records the third largest total liabilities (\$87 billion).

**Table 1: Total government liabilities\* (\$millions), 2000/01**

	<i>Direct debt</i>	<i>Debt guarantees</i>	<i>Contingent liabilities and contractual commitments</i>	<i>Program obligations</i>	<i>Total government liabilities</i>
<b>British Columbia</b>	12,783	524	1,319	73,222	87,848
<b>Alberta</b>	(10,056)	11,055	10,359	62,829	74,187
<b>Saskatchewan</b>	8,395	312	389	15,049	24,145
<b>Manitoba</b>	9,643	435	1,163	17,326	28,567
<b>Ontario</b>	102,550	22,326	22,670	237,353	384,899
<b>Quebec</b>	100,367	46,113	19,559	240,163	406,202
<b>New Brunswick</b>	6,514	297	349	10,135	17,295
<b>Nova Scotia</b>	11,451	364	1,496	13,138	26,449
<b>Prince Edward Island</b>	1,066	15	3,541	1,771	6,393
<b>Newfoundland</b>	9,450	1,332	241	6,447	17,470
<b>Yukon Territory</b>	(308)	46	70	626	434
<b>Northwest Territories**</b>	36	187	280	1,306	1,809
<b>All Provinces</b>	251,891	83,006	61,437	679,364	1,075,698
<b>Federal Government</b>	545,300	52,648	101,686	807,115	1,506,749
<b>Canada (all inclusive)</b>	797,191	135,654	163,123	1,486,478	2,582,446***

\* Provincial data includes liabilities of local governments; \*\* includes Nunavut; \*\*\* number may not add due to rounding. Sources: Statistics Canada, Canadian and Provincial Public Accounts, 18th Actuarial Report on The Canadian Pension Plan; calculations by the authors.

Table 1 presents two important results. First, figures of indebtedness released by governments are far too optimistic in that they only account for direct debt. Direct debt in Canada (all inclusive) accounts for a mere 31% of total government liabilities. (See Appendix B for total liability breakdown, for Canada and each province.)

Second, separating provincial and federal liability figures does not account for the true indebtedness of each province. For example, while Alberta should be commended for aggressively paying down their direct debt, it should be noted that taxpayers in Alberta are still responsible for their portion of federal liabilities. Since federal liabilities are ultimately the responsibility of the taxpayers in each of the provinces, they are allocated to each province in this study. Federal liabilities are allocated according to the share of federal tax revenues collected from each province. (See Appendix A for more details on methodology.) Table 2 presents provincial liabilities, including their portion of federal liabilities allocated accord-

ing to the share of federal tax revenues collected from each province.

Including the province's share of federal liabilities in the provincial calculation dramatically changes the amount of total liabilities taxpayers face in each province. Ontario's total liabilities increase from \$385 billion to over \$1 trillion, the largest among the provinces. Quebec (\$628 billion) and British Columbia (\$305 billion) trail Ontario recording the second and third largest total liabilities. Alberta's direct debt increases from -\$10 billion to \$52 billion when its portion of the federal debt is included.

There is, of course, an obvious problem with comparing absolute figures of total liabilities. That is, absolute figures do not take into account the differences in the populations or the size of the economies of the Canadian jurisdictions. Two indicators used to compare the relative indebtedness of the provinces and federal government are total liabilities per capita and as a percentage of gross domestic product (GDP). Table 3 presents

**Table 2: Total consolidated government liabilities\* (\$millions), 2000/01**

	<i>Direct debt</i>	<i>Debt guarantees</i>	<i>Contingent liabilities and contractual commitments</i>	<i>Program obligations</i>	<i>Total government liabilities</i>
<b>British Columbia</b>	85,509	7,546	14,881	197,209	305,144
<b>Alberta</b>	52,347	17,080	21,996	160,330	251,753
<b>Saskatchewan</b>	23,342	1,755	3,177	40,339	68,612
<b>Manitoba</b>	26,851	2,096	4,372	48,199	81,519
<b>Ontario</b>	338,295	45,087	66,631	622,968	1,072,981
<b>Quebec</b>	209,441	56,644	39,899	322,868	628,852
<b>New Brunswick</b>	16,580	1,269	2,226	29,010	49,085
<b>Nova Scotia</b>	24,500	1,624	3,930	36,505	66,559
<b>Prince Edward Island</b>	2,825	185	3,869	5,060	11,938
<b>Newfoundland</b>	15,853	1,950	1,435	18,301	37,539
<b>Yukon Territory</b>	314	106	186	1,839	2,445
<b>Northwest Territories**</b>	1,333	312	522	3,850	6,017
<b>Canada (All Inclusive)</b>	797,191	135,654	163,123	1,486,478	2,582,446

\* Federal Liabilities allocated to each of the provinces based on provincial contribution to federal revenues

\*\* Includes Nunavut

Sources: Statistics Canada, Canadian and Provincial Public Accounts, 18th Actuarial Report on The Canadian Pension Plan; calculations by the authors.

**Table 3: Total consolidated government liabilities, per capita and as a**

	<i>Direct Debt</i>		<i>Debt Guarantees</i>	
	<i>per capita</i>	<i>% GDP</i>	<i>per capita</i>	<i>% GDP</i>
<b>British Columbia</b>	21,067	67.0	1,859	5.9
<b>Alberta</b>	17,397	36.6	5,676	11.9
<b>Saskatchewan</b>	22,839	69.7	1,717	5.2
<b>Manitoba</b>	23,431	76.5	1,829	6.0
<b>Ontario</b>	28,951	78.8	3,859	10.5
<b>Quebec</b>	28,387	93.7	7,677	25.3
<b>New Brunswick</b>	21,961	84.1	1,681	6.4
<b>Nova Scotia</b>	26,036	101.8	1,726	6.8
<b>Prince Edward Island</b>	20,469	84.5	1,339	5.5
<b>Newfoundland</b>	29,522	112.6	3,632	13.9
<b>Yukon Territory</b>	10,132	27.9	3,420	9.4
<b>Northwest Territories**</b>	19,606	39.5	4,592	9.3
<b>Canada (All inclusive)</b>	25,908	75.4	4,409	12.8

\* Federal Liabilities allocated to each of the provinces based on provincial contribution to federal revenues

\*\* Includes Nunavut

Sources: Statistics Canada, Canadian and Provincial Public Accounts, 18th Actuarial Report on The Canadian Pension Plan;

the relative figures for each of the four liability categories. (Another relative measure, liabilities per taxpayer, is presented in Appendix B.)

Relative measures of total liabilities produce rather striking results. Among the provinces, Alberta records the smallest direct debt per capita (\$17,397) while Newfoundland's per-capita direct debt is a staggering \$29,522. Direct debt as a percentage of GDP ranges from 27.9% in the Yukon Territory to 112.6% in Newfoundland. Even more worrisome are figures for total government liabilities. New Brunswick records the smallest total government liabilities per capita at \$65,014, followed by Saskatchewan (\$67,135) and Newfoundland (\$69,906). In five jurisdictions, Alberta, Ontario, Quebec, Prince Edward Island, and the Northwest Territories, total liabilities exceed \$80,000 per capita. With the exception of Alberta and the Northwest Territories, all jurisdictions have total liabilities as a percentage of GDP in excess of 200%. If the government of Prince Edward Island taxed 100% of all income generated, it would still take

them over three and a half years to pay of all their debt and cover all program obligations.

Table 4 presents the growth rate of each category of liability from 1996/97 to 2000/01. The good news is that each province has decreased its direct debt as a percentage of GDP. Alberta leads the way with a 49.8% reduction in direct debt as a percentage of GDP over the last five years. Ontario and Newfoundland follow Alberta, Ontario having reduced its direct debt as a percentage of GDP by 25.9%, and Newfoundland, by 23.4%.

An area of concern is the growth of program obligations in five of 12 provinces and territories. For example, British Columbia experienced a 4.1% increase in program obligations as a percentage of GDP from 1996/97 to 2000/01. The most significant decrease in program obligations as a percentage of GDP occurred in Alberta, which decreased obligations as a percent of GDP by 15.4% since 1996/97. While progress has been made in some provinces, decreases in program obligations as a percentage of GDP have been less than 5% in all but three

## percentage of GDP\*

<i>Contingent Liabilities and Contractual Commitments</i>		<i>Program Obligations</i>		<i>Total Government Liabilities</i>	
<i>per capita</i>	<i>% GDP</i>	<i>per capita</i>	<i>% GDP</i>	<i>per capita</i>	<i>% GDP</i>
3,666	11.7	48,586	154.6	75,177	239.2
7,310	15.4	53,283	112.1	83,667	176.0
3,108	9.5	39,470	120.4	67,135	204.7
3,815	12.5	42,058	137.4	71,133	232.4
5,702	15.5	53,314	145.0	91,826	249.8
5,408	17.9	43,761	144.5	85,233	281.4
2,948	11.3	38,424	147.2	65,014	249.1
4,176	16.3	38,794	151.7	70,732	276.6
28,035	115.7	36,666	151.3	86,509	357.0
2,672	10.2	34,080	130.0	69,906	266.6
6,000	16.6	59,333	163.6	78,885	217.6
7,674	15.5	56,619	114.2	88,491	178.5
5,301	15.4	48,309	140.6	83,927	244.3

calculations by the authors.

**Table 4: Growth of total consolidated government liabilities as a percentage of GDP, 1996/97–2000/01**

	<i>Direct debt</i>	<i>Debt guarantees</i>	<i>Contingent liabilities and contractual commitments</i>	<i>Program obligations</i>	<i>Total government liabilities</i>
<i>British Columbia</i>	(17.2)	(4.5)	50.9	4.1	(1.7)
<i>Alberta</i>	(49.8)	(19.2)	37.0	(15.4)	(24.0)
<i>Saskatchewan</i>	(20.1)	(7.4)	(38.0)	5.6	(7.8)
<i>Manitoba</i>	(22.0)	(3.5)	13.8	(1.5)	(8.8)
<i>Ontario</i>	(25.9)	(27.3)	41.0	(3.7)	(11.5)
<i>Quebec</i>	(21.8)	(7.3)	(3.8)	(1.7)	(10.0)
<i>New Brunswick</i>	(16.5)	(16.9)	16.9	2.3	(5.0)
<i>Nova Scotia</i>	(13.4)	(12.7)	133.7	(1.4)	(3.4)
<i>Prince Edward Island</i>	(19.2)	18.6	1474.8	2.4	35.1
<i>Newfoundland</i>	(23.4)	(18.9)	11.4	(10.2)	(16.1)
<i>Yukon Territory</i>	(31.3)	12.5	(2.5)	21.4	8.3
<i>Northwest Territories**</i>	(25.0)	9.7	(28.3)	(9.6)	(14.7)
<i>Canada (all inclusive)</i>	(25.6)	(16.1)	25.8	(3.3)	(11.0)

\* Federal Liabilities allocated to each of the provinces based on provincial contribution to federal revenues

\*\* Includes Nunavut

Sources: Statistics Canada, Canadian and Provincial Public Accounts, 18th Actuarial Report on The Canadian Pension Plan; calculations by the authors.

jurisdictions. Total liabilities in each province as a percent of GDP decreased for 10 of 12 jurisdictions. Decreasing relative direct debt, not program obligations, however has largely fueled this reduction.

### **Appendix B**

Appendix B presents liability tables for each province, the federal government and Canada (all inclusive). The tables show the four categories of liability for each province broken down into the local, provincial, and federal portions. Program obligations are broken down into the four main components, Canada Pension Plan, Old Age Security, Medicare, and Employee Pension Plans. In addition, four graphs show total liabilities, individual direct debt, components of total liabilities, and the ratio of direct debt to GDP for each jurisdiction.

### **Exposure to foreign currencies**

A significant portion of the debt of many provinces is denominated in a foreign currency. The necessity of paying interest on, and ultimately redeeming, bonds issued in foreign currencies imposes an additional risk on taxpayers. A significant deterioration in the value of the Canadian dollar correspondingly increases the cost of servicing the debt held in foreign currencies while a rise in the Canadian dollar reduces these costs. In general, this means that the provinces are “speculating” on exchange markets unless, like Alberta and British Columbia, they receive revenues such as resource royalties that are themselves effectively linked to the exchange rate. Figure 1 illustrates the proportion of total direct debt that each province holds in foreign currencies. Quebec is heavily exposed to foreign exchange risk as bonds denominated in foreign currency account for 33.7% of its direct debt. Nova Scotia also has a relatively high degree of foreign exchange exposure—bonds denominated in foreign currency account for 29.1% of its direct debt—but it has decreased the percentage of direct debt denominated in foreign currency

by almost 20 percentage points since 1999. Relative to the other jurisdictions, Ontario faces a small amount of foreign exchange risk as bonds denominated in foreign currency make up only 1.9% of direct debt. Prince Edward Island has no foreign exchange exposure.

### **Interest charges**

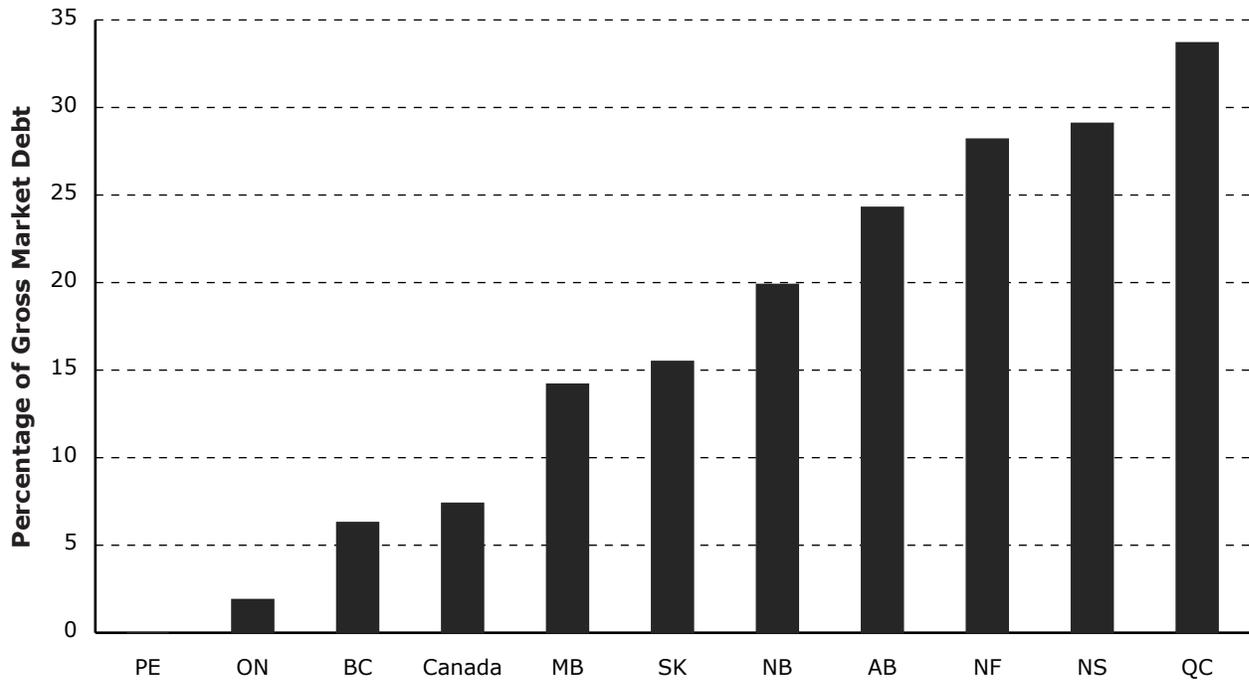
Interest represents the cost of past consumption and investment that has been financed through deficit spending and debt financing. In 2000/01, Canadian governments spent over \$77 billion on interest payments, which accounts for 7.3% of GDP and 16.8% of total government revenues. Figure 2 illustrates the proportion of government revenues consumed by interest charges. Interest payments on direct debt account for 23.6% of federal government revenues, 13.3% of provincial revenues, and 5.1% of local revenues.

Figure 3 shows the share of government revenues allocated to interest payments for provincial and local governments. Provincial debt charges vary considerably, from 5.3% in Alberta to 19.0% in Nova Scotia. Local debt charges vary from 1.8% in Saskatchewan to 12.1% in Newfoundland. This expense to current taxpayers illustrates foregone tax cuts in order to service the costs of previous deficit-financed program expenditures.

### **Summing up—total liabilities**

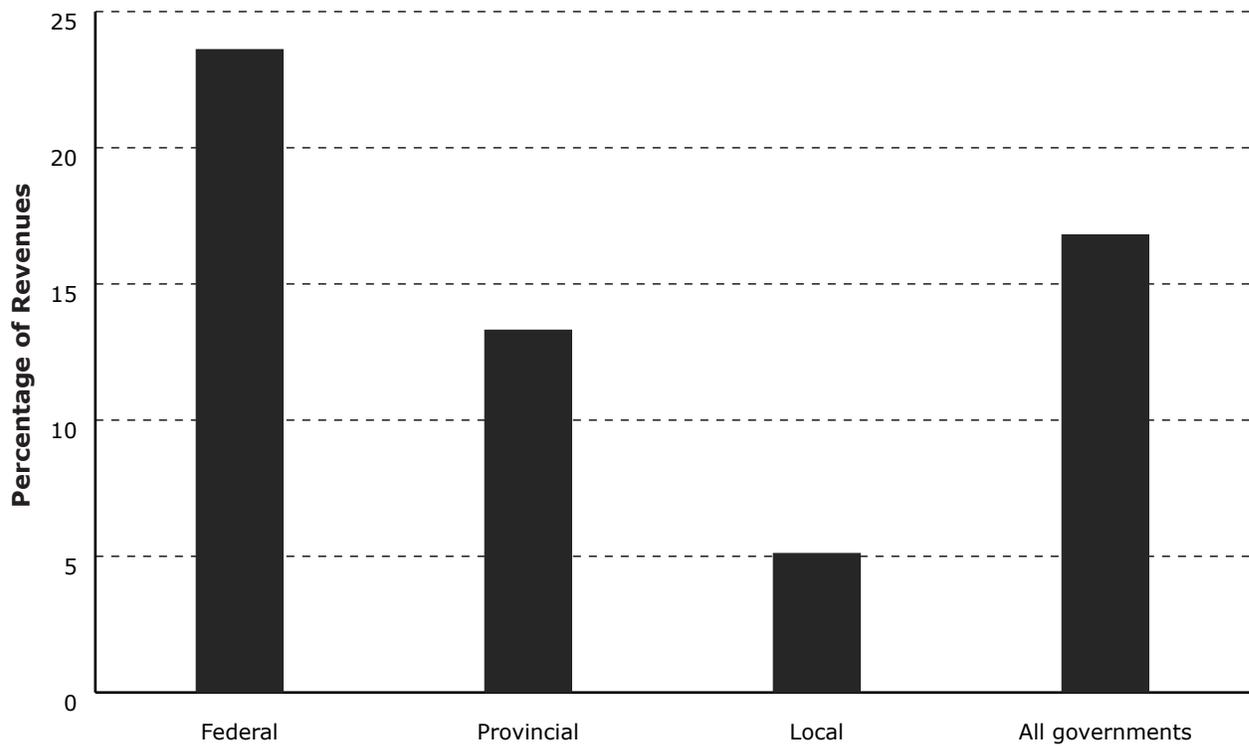
While governments should be commended for decreases in direct debt over the past 5 years, Canada is not yet out of the woods in regards to its liabilities. The level of total liabilities accumulated by Canadian governments is enormous. Total liabilities, including direct debt, debt guarantees, contingent liabilities, contractual commitments and program obligations, amount to \$83,927 for every Canadian citizen, \$172,416 for each taxpayer, and 244.3% of GDP. These statistics show that Canadian govern-

**Figure 1: Foreign Exchange Exposure, 2001**



Source: Dominion Bond Rating Service. Note: Exposure is net of hedges.

**Figure 2: Interest charges as a percent of revenues, 2000/01**



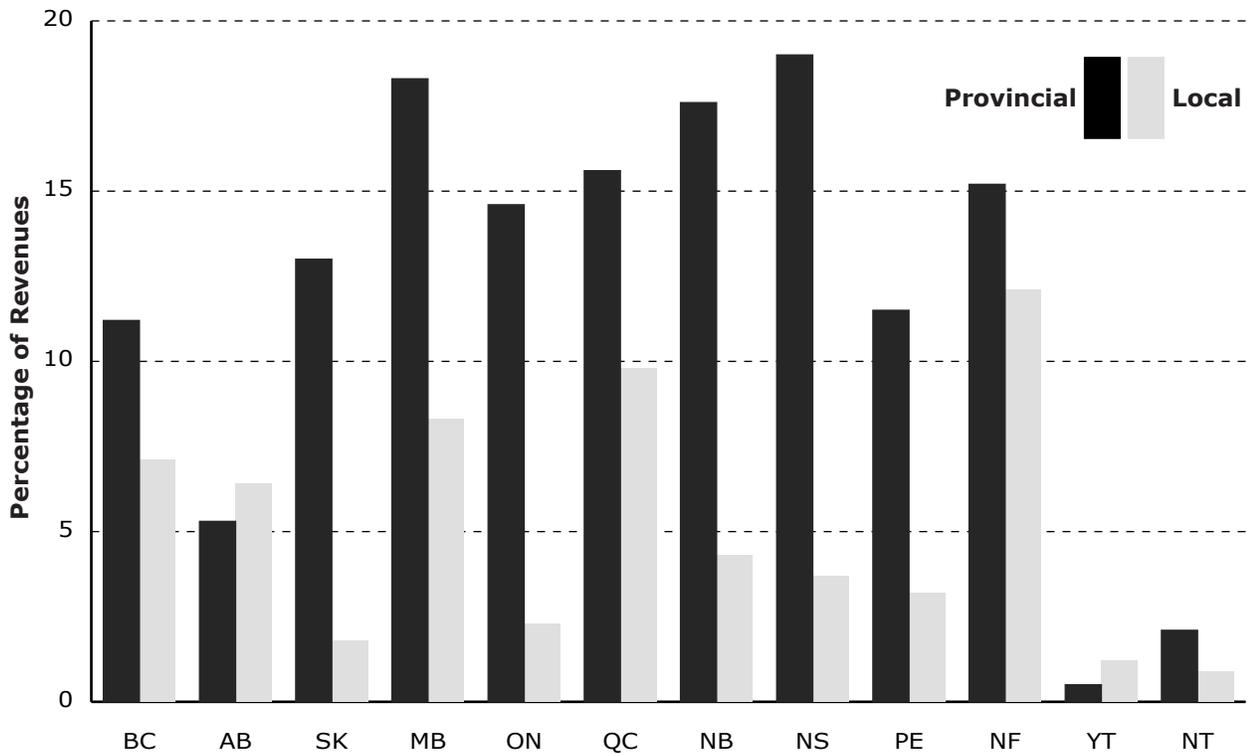
Source: Statistics Canada, Financial Management System; calculations by the authors.

ments have accumulated an unsustainable level of liabilities: even if governments taxed 100% of every dollar of income generated in a given year, it would take almost two and a half years to pay back the debt and fully fund all programs.

The notion that Canadians owe \$545 billion (the approximate federal debt) ignores federal obligations and other liabilities as well as all the

liabilities of the provincial and local governments. *Total government liabilities actually amount to just over \$2.5 trillion.* The changes that federal and provincial governments have already made to deal with their debts are only a small fraction of the changes that must be made. Significant restructuring of government programs and further decreases in direct debt are necessary.

**Figure 3: Provincial and local interest charges, 2000/01**



Source: Statistics Canada, Financial Management System; calculations by the authors.

# Unfunded liabilities of government programs

## The most pressing concern

The size and complexity of the unfunded liabilities associated with the Canada and Quebec Pension Plans (CPP/QPP), Old Age Security (OAS), and Canada's health-care system (Medicare) require that this category of liability receive special discussion. Taken together, the unfunded liabilities of CPP/QPP, OAS, and Medicare are responsible for 57% of Canada's total liabilities. Unfunded liabilities of civil service pensions account for only 1.3% of total liabilities, but are discussed briefly for the sake of completeness.

Awareness of the deficit and debt on the part of the public helped push federal and provincial governments to stop using deficit financing for the most part and to begin to decrease Canada's debt burden. Similarly, attention paid to the CPP unfunded liability because of the triennial actuarial reports that are required by statute helped initiate the reforms to that program to put it on a more solid financial footing. The main difference between the problems that have, at least partially, been dealt with (deficits, debt, and the CPP) and those that have not (OAS and Medicare) comes down to the attention that each type of liability receives. Deficits and debts are intuitively simple concepts as people experience them in their personal everyday lives. The CPP unfunded liability, while far from simple, is at least reported and discussed regularly. The Medicare unfunded liability is rarely discussed and few people are aware of the size of the OAS program, much less its unfunded liability. In a first for Canada, The Fraser Institute has generated unfunded liability estimates of OAS and Medicare by utilizing Statistics Canada's microsimulation model (the Social Policy Simulation Database and Model or SPSD/M) and detailed data from Statistics Canada and the Canadian Institute

for Health Information. The unfunded liability estimates for the CPP/QPP, OAS, and Medicare for 1995 through 2000 are presented in table 5. This section introduces the new models and elaborates on how Canada got into its current unfunded liability problem.

## Funding structure

The Canada/Quebec Pension plans, Old Age Security, and Medicare are designed like insurance plans: individuals contribute to a program for a specified period of time, accumulating benefits that are to be received at a later date. Unfortunately, in the public liability sphere, only workers' compensation boards and pension plans for civil-service employees operate on an accumulated-benefit formula. The remaining programs are funded on a "pay-as-you-go" system. Rather than accumulate funds in individual or even collective personal accounts for future payment, current contributions are used to pay the benefits of current recipients.

The source of funds also varies among programs. The Canada and Quebec Pension Plans, the pension plans for civil-service employees, and the workers' compensation boards derive their funding from direct payroll deductions. Old Age Security and the health-care system are financed through general government tax revenues.

## Analysis of unfunded liabilities

The essence of unfunded liabilities analysis is the actuarial valuation. An actuarial valuation assesses the ability of a program to finance the stated benefits for a specific time given the contribution rates, expected investment returns, and

**Table 5: Summary of unfunded liabilities (\$billions)**

	<i>CPP</i>	<i>OAS</i>	<i>Medicare</i>	<i>Total</i>
<b>1996</b>	400.0	366.5	399.6	1166.1
<b>1997</b>	428.1	381.9	433.9	1243.9
<b>1998</b>	455.4	395.6	456.4	1307.4
<b>1999</b>	483.5	412.6	478.5	1374.5
<b>2000</b>	443.0	433.6	549.0	1425.6
<b>% Change 1996–2000</b>	10.7%	18.3%	37.4%	22.3%

Sources: Office of the Chief Actuary, Office of the Superintendent of Financial Institutions Canada, Ottawa, Canada; The Fraser Institute.

specific economic and demographic assumptions. The purpose of the valuation is to determine the current long-term deficit or surplus of program obligations of Canadian jurisdictions. Unlike previous editions of this study, unfunded liability estimates for Old Age Security (OAS) and Medicare are produced using a model developed by The Fraser Institute. (see Appendix A for details of the methodology.)

The unfunded liability model was constructed because previous estimates of “unfunded liabilities” for OAS and Medicare by the Office of the Superintendent of Financial Institutions (OSFI) only considered the stream of benefits to be paid out and, therefore, greatly over estimated Canada’s liabilities from these programs. To be accurate, the previous estimates should be described as “estimates of future liabilities.”

Calculating the present value of the future stream of benefits, as the previous models did, tells only part of the story. The other part of the story is the funding for these programs. Although there are no explicit revenue streams attached to these programs, they do have a payment stream associated with them through general revenue. In order to have a true analysis of unfunded liabilities for OAS and Medicare, such as this paper presents, both the discounted stream of future benefits and the discounted stream of future contributions must be calculated. Appendix A explains how The Fraser Institute’s unfunded liability model was built.

Actuarial valuations are extremely sensitive to their underlying assumptions. Both sets of estimates, OAS and Medicare, use the same basic assumptions used in the compilation of the Canada Pension Plan estimate (Office of the Superintendent of Financial Institutions); namely, a discount rate of 6.0%, price increases (measured by the consumer price index) of 3.0%, and a nominal rate of wage growth of 4.0%. Changes in these underlying assumptions can cause significant changes in the results. Actuaries normally conduct valuations every three years and modify assumptions, if warranted, based on new economic conditions. All past and current unfunded liability figures in this report make use of consistent assumptions.

At their inception, the CPP/QPP, OAS and Medicare system were based upon similar assumptions and philosophies. It was assumed that the mix of ages in the population, the rate of economic growth, and the wage increases of the 1960s would continue indefinitely. It was considered favourable social and economic policy to transfer a small amount of money from a large group of younger workers to benefit a small group of relatively poor retirees.

These assumptions were entirely wrong. Birth rates have declined, income growth has stagnated, and mortality rates have decreased. In 1956, the proportion of the Canadian population that was under 20 years of age was 39.4% while the proportion of those over 65 was 7.7%. By 2002, the ratio

of those under 20 years old to the total population had decreased to 25.2% and the ratio of those over 65 had increased to 12.7%. Estimates of these ratios for Canada predict those under 20 to account for only 20.2% of the total population by 2036 while those over 65 will account for 24.8% (Brown 2002). These demographic changes have undermined the ability of the retirement programs and the health-care system to provide the intended level of benefits; and will continue to do so. Because of these demographic changes, the policy of transferring a small amount of money from a large group of younger workers to benefit a small group of relatively poor retirees has become, in fact, a policy of using large deductions from a small group of workers with stagnant incomes to sustain a large group of relatively wealthy retirees.

### **Canada and Quebec Pension Plans (CPP/QPP)**

The CPP's unfunded liability was \$443.0 billion in 2000, 10.7% higher than in 1996 (\$400.0 billion), although lower than its recent peak of \$483.5 billion in 1999. The QPP is not included in this table because it does not have an official unfunded liability estimate. That said, the generally accepted rule is that, since the CPP and QPP are set up and modified in the same ways, changes in the CPP's valuation will be reflected in the QPP's valuation. The QPP is roughly one-third the size of the CPP.

### **Old Age Security (OAS)**

After the costs of servicing debt, OAS is the largest spending commitment the federal government has. OAS spending was \$24.3 billion or 15.0% of total federal spending in 2000/01. Expenditures on OAS grew by 12.2% between 1996/97 and 2000/01. The OAS's unfunded liability has grown by 18.3%

between 1996/97 and 2000/01, from \$366.5 billion to \$433.6 billion.

### **Medicare**

Spending on Medicare is the largest expenditure category in all of the provinces' budgets and, although difficult to determine exactly, a large expenditure in the federal budget. According to Statistics Canada, Medicare spending was \$72.7 billion in 2000/01 and has grown by 36.2% between 1996/97 and 2000/01. Medicare's unfunded liability has grown by 37.4% between 1996/97 and 2000/01, from \$399.6 billion to \$549.0 billion.

### **Total unfunded liabilities for major government programs**

Taken together, the unfunded liabilities of the CPP, OAS, and Medicare represent \$1.4 trillion. This figure has grown by 22.3% since 1996/97 when it was at \$1.2 trillion. These unfunded liabilities are enormous obligations. The unfunded liabilities of the federal retirement-income support programs and the health-care system are currently estimated at 140% of GDP in Canada. Restructuring retirement-income support programs should be initiated immediately to eliminate the intergenerational wealth transfer and to ensure that needy seniors do not suffer for the policy mistakes of government.

Health-care funding is primarily provided through general tax revenue even though it is consumed according to a normal insurance pattern. There continues to be lengthy waiting lists for a wide range of procedures in every province and an aging population will place tremendous pressures on the health-care system (Esmail and Walker 2002). Unless governments make changes soon, these pressures will likely lead to higher general tax rates or a further reduction in services.

## Public-sector pension plans

The federal and provincial governments have benefit funds for their pension plans for government employees. Most provincial governments have committed themselves to the elimination of the actuarial deficits by a set deadline. The Federal government currently maintains a surplus of \$23 billion in its pension plans. Table 6 summarizes the most recently available actuarial valuations for the provincial and federal government's pension plans. This table is presented for illustrative

purposes only as unfunded liabilities of public sector pensions are included in the direct debt figures to maintain consistency with Statistics Canada data. Surplus amounts for the provinces are not included in this study, again to maintain consistency with the Statistics Canada data. The surpluses in federal government employee pension plans have been deducted from gross direct debt because Bill C-78, effective as of April 2000, allows the Government of Canada to keep the accumulated surpluses in these funds.

**Table 6: Unfunded liabilities of public-sector pension plans (in \$millions)**

	Valuation Date	Unfunded liabilities
<b>Federal government</b>		
<i>Public Service Pension Plan</i>	March 31, 1999	(8,148)
<i>Canadian Forces Pension Plan</i>	March 31, 2000	(16,254)
<i>Royal Canadian Mounted Police Pension Plan</i>	March 31, 1999	(1,013)
<i>Members of Parliament Retirement Allowance</i>	March 31, 1998	27
<i>Federally Appointed Judges Pension Plan</i>	March 31, 1998	1,098
<i>Retirement Compensation Arrangements Plan</i>	n/a	542
<i>Total</i>		<u>(23,748)</u>
<b>British Columbia</b>		
<i>Teacher's Pension Plan</i>	December 31, 1999	1,315
<i>Municipal Pension Plan</i>	December 31, 1997	149
<i>Public Service Pension Plan*</i>	March 31, 1999	—
<i>Members of the Legislative Assembly Pension Plan</i>	n/a	13
<i>College Pension Plan*</i>	August 31, 1997	—
<i>Total</i>		<u>1,477</u>
<b>Alberta</b>		
<i>Teacher's Pension Plan</i>	August 31, 2000	3,833
<i>Public Service Pension Plan</i>	December 31, 1998	—
<i>Public Service Management Pension Plan</i>	December 31, 1999	642
<i>Universities Academic Pension Plan</i>	December 31, 2000	145
<i>Special Forces Pension Plan</i>	December 31, 2000	54
<i>Management Employees Pension Plan</i>	December 31, 1999	19
<i>Members of the Legislative Assembly Pension Plan</i>	December 31, 1997	49
<i>Total</i>		<u>4,742</u>

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**Saskatchewan**

<i>Teacher's Superannuation Fund</i>	June 30, 1999	2,561
<i>Public Service Superannuation Fund</i>	September 30, 1999	1,285
<i>Others</i>	Various	67
<i>Total</i>		<u>3,913</u>

**Manitoba**

<i>Civil Service Superannuation Fund</i>	December 31, 1998	1,194
<i>Members of the Legislative Assembly Plan</i>	March 31, 2000	28
<i>Teacher's Retirement Allowances Fund</i>	December 31, 1998	1,687
<i>Total</i>		<u>2,909</u>

**Ontario**

<i>Teacher's Pension Plan</i>	January 1, 2000	—
<i>Public Service Pension Plan</i>	December 31, 1998	—
<i>Ontario Public Service Employee's Union</i>	March 31, 2001	97
<i>Other Plans</i>	various	390
<i>Total</i>		<u>487</u>

**Quebec**

<i>RREGOP</i>	December 31, 1999	17,027
<i>TPP &amp; PPCT</i>	various	14,343
<i>CSSP</i>	December 31, 1999	5,106
<i>Other Plans</i>	various	3,366
<i>Total</i>		<u>39,842</u>

**New Brunswick**

<i>Public Service Superannuation Plan</i>	April 1, 2000	49
<i>Teacher's Pension Plan</i>	April 1, 2000	227
<i>Early Retirement</i>	April 1, 1999	124
<i>Other (Judges', Members', Hospitals &amp; Schools)</i>	Various	(9)
<i>Total</i>		<u>391</u>

**Nova Scotia**

<i>Teacher's Pension Fund</i>	March 31, 2000	298
<i>Member's Retiring Allowance</i>	March 31, 2000	54
<i>Early Retirement Incentive Programs</i>	March 31, 2000	171
<i>War Service &amp; Other Non-contributory Service Plans</i>	March 31, 2000	20
<i>Public Service Superannuation Fund</i>	March 31, 2000	(187)
<i>Judge's Pension Supplement</i>	March 31, 2000	17
<i>Teacher's Early Retirement Program (ERP)</i>	March 31, 2000	162
<i>Deputy Minister's Supplement</i>	March 31, 2000	3
<i>Sysco Pension Plan</i>	March 31, 2000	179
<i>Public Service Awards</i>	March 31, 2000	102
<i>Self-Insured Workers' Compensation</i>	March 31, 2000	34
<i>Total</i>		<u>853</u>

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**Prince Edward Island**

<i>Teacher's Superannuation Fund</i>	July 1, 1999	159
<i>Civil Service Superannuation Fund</i>	April 1, 1999	64
<i>MLA Pension Fund (both plans)</i>	April 1, 2000	(8)
<i>Total</i>		<u>215</u>

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**Newfoundland and Labrador**

<i>Teachers' Superannuation Fund</i>	August 31, 2000	1,644
<i>Public Service Pension Plan</i>	December 31, 1997	1,457
<i>Uniformed Services Plan</i>	January 1, 1997	202
<i>Members of the House of Assembly Plan</i>	December 31, 1996	46
<i>Total</i>		<u>3,349</u>

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**Yukon Territory\*\***

<i>Legislative Assembly Retirement Allowances Plan</i>	March 31, 1999	(658)
<i>Total</i>		<u>(658)</u>

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**Northwest Territories\*\***

<i>Legislative Assembly Supplementary Allowance</i>	March 31, 2000	15,625
<i>Judge's Supplemental Pension Plan</i>	January 1, 1998	1,408
<i>Total</i>		<u>17,033</u>

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\* Note: The Public Service Pension Plan and College Pension Plan are joint trusteeship plans in which control of the pension plans and their assets are assumed by a pension board. Thus the government has no formal claim on pension fund surpluses and is liable for 50% of the unfunded liabilities. To date the Public Service Pension Plan and College Pension Plan are in surplus.

\*\* Note: Territorial assessments are expressed in thousands rather than in millions of dollars.

Sources: Federal and provincial Public Accounts; various Departments of Finance.

## Canada compared to the world

One way to assess the indebtedness of a nation is to compare it to other nations. Accordingly, a standard feature of the annual calculation of the total liabilities of Canadian governments has been a comparison with the debt levels of other countries. Countries are compared using the amount of debt per person within a country compared to discretionary income per person (the level of income earned above the subsistence level). This method of assessing debt levels by including income statistics takes into account the ability of nations to service their debt.

Table 7 ranks jurisdictions from best to worst on the basis of their debt calculated as a percentage of discretionary income. For instance, Alberta ranks 19<sup>th</sup> out of 126 jurisdictions with a ratio of 27.3%. This means that the debt per person accumulated by Alberta represents 27.3% of the average person's total annual income less an allowance for a minimum level of subsistence.

The ranking shows several interesting results. Norway, Finland, and South Korea, which took the top three spots in the overall ratings, have governments that are net providers of capital. All three governments have negative net debt, as indicated by the negative ratio in Table 7, since they have more financial assets than gross debt.

Only one of the 14 former Soviet republics, Belarus, ranks within the top 20. Surprisingly, this is down from seven in 1999. The principal reason for their success in 1999 was the Zero Option Agree-

ment (1993), by which the newly formed Commonwealth of Independent States (CIS) assumed all the debt of the former Soviet Union while the new republics forfeited all claims against assets of the former Soviet Union (Boote *et al.* 1995: 81). In this study, the entire stock of external debt for the former Soviet republics consists of debt accumulated since 1993. The bulk of this debt was issued to "transform and stabilize the economy" and "finance imports" (Boote *et al.* 1995: 82). The former Soviet republics had an advantage in 1999 due to their relatively small debt stock. However, continued debt accumulation since has quickly eroded this advantage.

The results for Canada and the provinces are remarkably poor. The Yukon ranks the highest of any Canadian region, 10<sup>th</sup>, while Newfoundland ranks the lowest at 88<sup>th</sup>. Table 8 summarizes the ranking of each region in Canada.

More important than the overall rankings are the relative rankings generated from the specific comparison with other high-income nations (high-income nations, as defined by the World Bank, are those with average incomes in excess of \$9,266). Table 9 presents the rankings of Canadian jurisdictions against high-income nations. Canada has one of the highest debt burdens among high-income countries ranking 17<sup>th</sup> out of 19. Only Italy and Belgium rank lower. More narrowly, Canada ranks second last among the G-7 countries with a ratio of debt to discretionary income per person of 58.5%

**Table 7: Jurisdictions ranked by ratio of debt to discretionary income, 2000**

<i>Rank</i>	<i>Jurisdiction</i>	<i>Debt to Discretionary Income (%)</i>	<i>Rank</i>	<i>Jurisdiction</i>	<i>Debt to Discretionary Income (%)</i>
1	Norway	(62.7)	46	Austria	49.0
2	Finland	(45.0)	47	Vanuatu	49.1
3	Korea, Rep.	(29.6)	48	Tonga	49.9
4	Belarus	3.2	49	<b>British Columbia</b>	50.3
5	Sweden	6.8	50	Azerbaijan	50.8
6	Botswana	8.8	51	Japan	50.9
7	Australia	8.8	52	Malaysia	51.5
8	Iran, Islamic Rep.	9.7	53	Macedonia, FYR	51.7
9	Fiji	11.3	54	Colombia	51.8
10	<b>Yukon</b>	20.9	55	Kazakhstan	52.1
11	Equatorial Guinea	21.1	56	<b>Saskatchewan</b>	52.2
12	South Africa	22.5	57	Latvia	53.8
13	New Zealand	22.8	58	Argentina	53.9
14	Swaziland	23.8	59	Slovak Republic	55.2
15	China	24.2	60	Grenada	55.2
16	Iceland	24.3	61	Paraguay	56.1
17	<b>North West Territories</b>	25.9	62	Chile	56.9
18	Denmark	26.9	63	<b>Canada</b>	58.5
19	<b>Alberta</b>	27.3	64	<b>Ontario</b>	58.9
20	Dominican Republic	27.7	65	Algeria	59.2
21	Mexico	27.9	66	<b>Manitoba</b>	59.7
22	Seychelles	27.9	67	Mauritius	60.1
23	Costa Rica	30.9	68	<b>New Brunswick</b>	63.3
24	Guatemala	31.2	69	<b>Prince Edward Island</b>	63.7
25	Albania	31.3	70	Peru	64.8
26	United Kingdom	33.9	71	Turkey	66.0
27	Venezuela, RB	34.2	72	St. Vincent & the Grenadines	66.1
28	Romania	35.8	73	Tunisia	66.4
29	Trinidad and Tobago	36.1	74	Jamaica	66.5
30	St. Lucia	36.5	75	Belize	68.1
31	El Salvador	36.8	76	Lebanon	69.2
32	Egypt, Arab Rep.	38.4	77	Croatia	69.5
33	Germany	42.2	78	Hungary	70.1
34	France	42.9	79	<b>Quebec</b>	70.3
35	Spain	43.5	80	Estonia	73.4
36	United States	43.9	81	<b>Nova Scotia</b>	76.7
37	Poland	44.3	82	Morocco	78.5
38	Uruguay	44.3	83	Thailand	79.7
39	Dominica	44.4	84	Panama	79.8
40	Brazil	44.6	85	Russian Federation	81.0
41	Czech Republic	45.3	86	Djibouti	81.4
42	Maldives	45.4	87	Cape Verde	82.4
43	Netherlands	45.6	88	<b>Newfoundland</b>	84.7
44	St. Kitts and Nevis	46.8	89	Ukraine	88.7
45	Lithuania	48.7	90	Gabon	89.1

**Table 7 continued**

<i>Rank</i>	<i>Jurisdiction</i>	<i>Debt to Discretionary Income (%)</i>	<i>Rank</i>	<i>Jurisdiction</i>	<i>Debt to Discretionary Income (%)</i>
91	Bosnia and Herzegovina	96.1	109	Armenia	170.7
92	Sri Lanka	98.1	110	Indonesia	185.5
93	Italy	101.2	111	Syrian Arab Republic	195.6
94	Haiti	102.1	112	Congo, Rep.	231.2
95	Bhutan	102.7	113	Angola	251.5
96	Belgium	104.0	114	Yugoslavia, Fed. Rep.	261.9
97	Philippines	106.2	115	Yemen, Rep.	262.2
98	Bolivia	109.9	116	Cameroon	267.9
99	Bulgaria	111.2	117	Pakistan	285.5
100	Samoa	113.5	118	Guyana	335.2
101	India	115.0	119	Cote d'Ivoire	344.3
102	Jordan	125.5	120	Senegal	377.7
103	Papua New Guinea	133.9	121	Lesotho	458.4
104	Georgia	136.6	122	Vietnam	476.6
105	Solomon Islands	139.5	123	Mongolia	911.8
106	Zimbabwe	143.8	124	Guinea	1110.0
107	Ecuador	147.7	125	Nicaragua	1286.9
108	Honduras	152.9	126	Sudan	9440.7

Sources: OECD, Economic Outlook 71, June 2002; World Bank, World Development Indicators CD-ROM, 2002; Statistics Canada, Canadian Federal and Provincial government budgets, calculations by the authors.

Note: Thirty-four other countries could not be included in the ranking because they reported negative discretionary income levels. The average citizen in these countries does not earn the level of income necessary for subsistence.

**Table 8: Canadian jurisdictions ranked by ratio of debt to discretionary income, 2000**

<i>Rank</i>	<i>Overall Rank</i>	<i>Jurisdictions</i>	<i>Debt-to-GDP (%)</i>	<i>Debt to Discretionary Income (%)</i>
1	10	Yukon	20.6%	20.9%
2	17	North West Territories	25.6%	25.9%
3	19	Alberta	27.0%	27.3%
4	49	British Columbia	49.4%	50.3%
5	56	Saskatchewan	51.3%	52.2%
6	63	Canada	57.5%	58.5%
7	64	Ontario	58.0%	58.9%
8	66	Manitoba	58.6%	59.7%
9	68	New Brunswick	62.0%	63.3%
10	69	Prince Edward Island	62.3%	63.7%
11	79	Quebec	69.1%	70.3%
12	81	Nova Scotia	75.0%	76.7%
13	88	Newfoundland	83.0%	84.7%

Sources: OECD, Economic Outlook 71, June 2002; World Bank, World Development Indicators CD-ROM, 2002; Statistics Canada, Canadian Federal and Provincial government budgets, calculations by the authors.

**Table 9: Canadian jurisdictions and high-income countries ranked by ratio of debt to discretionary income, 2000**

<i>Rank</i>	<i>Overall Rank</i>	<i>Jurisdiction</i>	<i>Debt to Discretionary Income (%)</i>
1	1	Norway	(62.7)
2	2	Finland	(45.0)
3	3	Korea, Rep.	(29.6)
4	5	Sweden	6.8
5	7	Australia	8.8
6	10	<b>Yukon</b>	20.9
7	13	New Zealand	22.8
8	16	Iceland	24.3
9	17	<b>North West Territories</b>	25.9
10	18	Denmark	26.9
11	19	<b>Alberta</b>	27.3
12	26	United Kingdom	33.9
13	33	Germany	42.2
14	34	France	42.9
15	35	Spain	43.5
16	36	United States	43.9
17	43	Netherlands	45.6
18	46	Austria	49.0
19	49	<b>British Columbia</b>	50.3
20	51	Japan	50.9
21	56	<b>Saskatchewan</b>	52.2
22	63	<b>Canada</b>	58.5
23	64	<b>Ontario</b>	58.9
24	66	<b>Manitoba</b>	59.7
25	68	<b>New Brunswick</b>	63.3
26	69	<b>Prince Edward Island</b>	63.7
27	79	<b>Quebec</b>	70.3
28	81	<b>Nova Scotia</b>	76.7
29	88	<b>Newfoundland</b>	84.7
30	93	Italy	101.2
31	96	Belgium	104.0

Sources: OECD, Economic Outlook 71, June 2002; World Bank, World Development Indicators CD-ROM, 2002; Statistics Canada, Canadian Federal and Provincial government budgets, calculations by the authors.

## Summing up—where do we go from here?

The first step towards ensuring fiscal responsibility is to balance yearly budgets. The next step is to enact legislation enforcing a planned reduction and elimination of the debt. The third step is to limit, by law, the ability of government to run deficits and accumulate debt, including future obligations.

### Step 1—acknowledge the problem

Governments and taxpayers must recognize the liability problem that exists in Canada. Acknowledging total liabilities means recognizing both accumulated direct debt and Canada's enormous program obligations.

### Step 2—restructure government

A restructured, limited, government should focus its resources on necessary public services such as law enforcement and national defence. Further, federal and provincial governments must work together to clarify the responsibilities of each jurisdiction and to eliminate overlap in the provision of goods and services.

Gordon Gibson's *Thirty Million Musketeers* offers a fresh and innovative approach to restructuring government in Canada, an approach that would not only result in fiscal responsibility but could also resolve the issue of Quebec's inclination to separation. Gibson specifically recommends broad acceptance of a limited government defined within legal parameters. He then offers a "subsidiarity" theory of government: the level of government closest to the citizens should deliver services, since local governments can respond quickly to

pressure from taxpayers. The laws should devolve specific powers upon communities, municipalities, regional agencies, and the provincial government, or assign powers to the federal government based upon which level of government can best deliver services and products. Such a fundamental reorganization of government would clarify and eliminate overlap and duplication between levels of government.

### Step 3—apply the fundamentals of balance sheets to government

The basic tenets of financial responsibility and disclosure that governments enforce for business must apply to governments. A broad standard for government accounting must include the notion of full and timely disclosure. Governments must fully report all of their activities in fully consolidated financial statements. Auditors-General often include reservations in their reviews of the Public Accounts because their respective governments did not fully consolidate their financial statements. Legislation must prevent governments from financing projects "off balance sheet" in order to avoid operating—technically—in a deficit position. Governments and investors do not tolerate this type of deception from business and voters should not accept such accounting malpractice from government.

In addition, governments must rationalize their balance sheets. They should privatize profitable Crown corporations and government business enterprises and apply the proceeds to reducing debt. They must eliminate debt guarantees and subsidies for businesses—including government business enterprises—to reduce state intervention and distortion in capital markets.

### **Step 4—control spending to balance budgets**

Canadians are overtaxed in both absolute and relative terms. The average total tax rate for Canada was 48.6% in 2002, ranging from 41.0% in Newfoundland to 49.9% in Quebec (Clemens and Emes 2002). The only effective course of action towards fiscal balance is control of spending. Governments can and should implement further initiatives to reduce spending and encourage free-market competition.

### **Step 5—revise the budget process**

Provincial and federal budgets should provide full disclosure and consolidation of all spending, taxing, and borrowing requirements. Further, budgets should outline contingency plans to meet budget objectives if key economic assumptions or projections are wrong. The federal government has been doing this for a number of years by including a contingency item in expenditures. Recent budgets from the governments of Alberta, Ontario, and British Columbia have also included contingency reserves; all provincial governments should do likewise.

Given a revised budget system and the ability of governments to balance their budgets, debt reduction must become the priority. Budgets should provide for a yearly retirement of debt, not simply a payment of the accumulated interest.

### **Step 6—enact legislation to limit debt in the future**

All jurisdictions should enact tax and expenditure limits and legislated plans for reducing their debt. This legislation should include strict penalties for politicians and bureaucrats who do not comply. Voters should demand that governments

pass laws that would outline the specific process through which governments may raise taxes. For instance, laws that require a referendum before governments can raise taxes except in a crisis such as war would limit the ability of government to raise taxes and implement new program spending for political reasons. Strong tax and expenditure limits (TEs) have proven to be effective safeguards against mismanagement of public finances in American jurisdictions.

### **Conclusion**

The apparent success of fiscally responsible governments in Alberta, Saskatchewan, and Ontario provides evidence that the Canadian public have accepted that there are negative consequences from government deficits and debt. However, this is only the first step in a larger movement towards fiscal balance. Canadian governments need to continue to balance their budgets, and Canadians should persist in demanding that governments provide full disclosure in a timely manner, and implement, and adhere to, reasonable plans for reducing their debt. Further, Canadians must encourage all levels of government to assess the viability of the various programs that currently maintain unfunded liabilities. Generational accounting done by The Fraser Institute shows that the total obligations resulting from the promises we have made to ourselves are not sustainable and must be restructured to take into account the impact of future demographic change in Canada.

In this study, we have provided background information to help the average Canadian understand the size, nature, and impact of public debt and other types of liabilities. Our most important message is that achieving and maintaining a balanced budget is only the first step towards fiscal responsibility. Debt reduction and the proper funding of obligations are also essential to Canada's economic health.