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bulletin

Canadian Government Debt
A Guide to the Indebtedness of
Canada and the Provinces

*by Jared Alexander
and Joel Emes*



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Preface

Governments in Canada spend approximately 21 percent of their total revenues servicing the public debt. Finance Minister Paul Martin's recent announcement on February 24, 1998 of a balanced budget means that for the first time in nearly 20 years the federal debt will not increase. Six of the provinces have announced balanced budgets for the coming fiscal year; all plan to be in balance by the year 2001. A constant or declining stock of debt and growing national income will release an increasing fraction of revenues from servicing debt and allow it to contribute to future budget surpluses. We face a future in which the impact of government debt upon the economy can be considerably reduced. For this optimistic future to be realized, it is essential that governments and taxpayers continue to support a regime of fiscally responsible conduct. There are constant pressures on governments to deviate from a course of fiscal propriety as the unlimited demand for government programs collides with a limited capacity to raise tax revenues.

The purpose of this report on the public liabilities of Canada is to provide Canadians with an accessible account of the total indebtedness of each of the provinces and of the federal government. It is a reminder of the extent of our indebtedness, how jurisdictions compare both nationally and internationally, and how the national comparisons are changing as time passes.

One of the most striking revelations of the compilation of total government liabilities is that the optimistic picture that can be constructed for the direct debt is not matched by the outlook for other liabilities and, in particular, for future program obligations. These obligations include the promises to pay Canada/Quebec Pension Plan (CPP/QPP) benefits, Old Age

Security (OAS) pensions, and the medical care expenses of the population. While the direct debt of governments is beginning to decline as a fraction of our total national income, obligations are trending steadily upwards. There was a small drop in program obligations from 1996 to 1997, but these are the result of the recent reductions in the CPP/QPP unfunded liabilities, which more than offset the increased unfunded liabilities in Medicare and OAS.

Canadians are just beginning to recognize the significant challenge posed by these accumulating obligations and there are, as yet, no solutions proposed to deal with them. The recently enacted changes to the Canada Pension Plan (CPP) merely reduced the unfunded liability from \$600 billion to \$485 billion.

International comparisons help us to understand the true extent of our indebtedness; the only way to assess the seriousness of our indebtedness is to see how we rank compared with other countries. Certainly, that is how lenders assess country risk. In this report, we have carefully compiled statistics on the indebtedness of 138 countries against which Canada, the 10 provinces, and 2 territories can be compared. This comparison shows that Canada is among the most indebted countries of the world, both when compared to other affluent countries and to all countries.

This assessment of Canada's indebtedness demands caution, vigilance, and prudence. 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; we must be prudent in forming policies to deal with those that already exist.

Delay of the 1998 Debt Study

This study is dependent on Statistics Canada's Financial Management System (FMS). The FMS and Statistics Canada's System of National Accounts (SNA) were recently revised. The revision took longer than expected and caused several months delay of this study. Some of the data that we usually use for this report will not be updated until we are working on the 1999 edition; we have noted these data deficiencies in the applicable text.

Gross Domestic Product for Canada

The Gross Domestic Product (GDP) figures for Canada have been revised; the revised provincial GDP figures had not been released when this study was compiled. To maintain consistency, we make use of the "older" GDP figures for Canada and, therefore, the GDP figures presented in this study will not match those in recent Statistics Canada publications.



Introduction

Although Canadian governments are generally bringing their annual budget deficits under control, excessive debt persists. In this Critical Issues Bulletin, we summarize the total debt and liabilities for the various levels of government in Canada and provide an international debt ranking for Canada and the provinces. The study shows that Canadian federal and provincial governments not only have large debt but also a large and growing stock of total liabilities. A liability can be either a debt or an obligation; 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* (e.g. the Canada Pension Plan) through statutory changes that cancel or reduce the coverage of programs. 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 debt plus obligations.

Organization of the study

This Critical Issues Bulletin contains four main sections:

- **ALL INCLUSIVE GOVERNMENT LIABILITIES** consolidates the liabilities—direct debt, indirect debt, and program

obligations—of the three levels of government in Canada (for ease of exposition, later reference to provincial governments will imply both provincial and territorial governments)

- **UNFUNDED LIABILITIES OF GOVERNMENT PROGRAMS** discusses the unfunded liabilities of programs such as government employee pension plans, workers' compensation boards, retirement income support programs, and the health care system
- **INTERNATIONAL COMPARISON** compares the relative debt levels of 139 countries, the 10 provinces, and the two territories
- **RECOMMENDATIONS** provides a basic policy framework to resolve Canada's liability crisis.

The study also contains several appendices:

- **APPENDIX A** describes the methodology employed and data sources used in this study
- **APPENDIX B** and **APPENDIX C** provide detailed graphical and tabular presentations of the total liabilities of Canadian governments
- **APPENDIX D** gives the international debt ranking
- **APPENDIX E** is a list of readings that may be of interest.

Total government liabilities

The debt tables illustrate the type and extent of government liabilities. Table 1a shows the total government liability calculations broken down by level of government for Canada. (See Appendices B(1) through B(12) for the detailed debt tables of each province and territory.) Federal obligations are allocated to each province according to the share of federal tax revenues collected from each region. They could be allocated to the provincial governments based upon several other formulas including income per person, population, historical share of federal expenditures, and so forth. We use the share of federal tax revenues since it is a measure of the portion of the federal debt actually serviced by the province or territory. See Appendix A for

more details on methodology. Table 1b shows the growth and composition of total liabilities, the amount of direct debt owed per person and per taxpayer, and ratios of direct debt to exports and direct debt to Gross Domestic Product (GDP). Tables 1c and 1d provide the information in table 1b, broken down to the federal and provincial level.

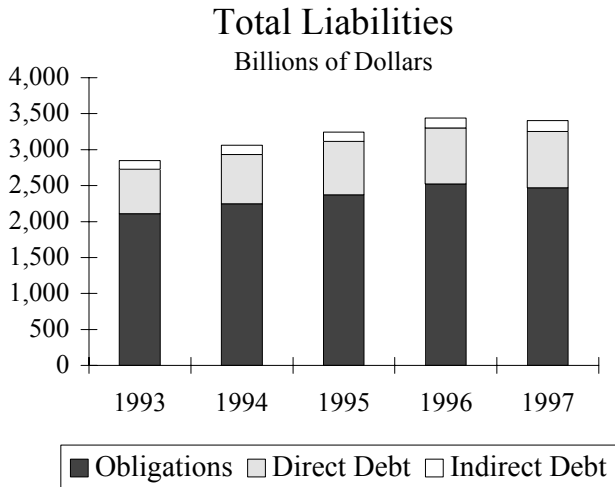
Table 2 contains a five-year summary of liabilities, general economic statistics, revenues and debt charges, liability calculated per person and per taxpayer, and ratios of debt charges to GDP and exports. (See Appendices C(1) through C(13) for the detailed statistical summaries of the federal government and of each province and territory.)

TABLE 1a: DEBT TABLES—CANADA (1997 estimate)

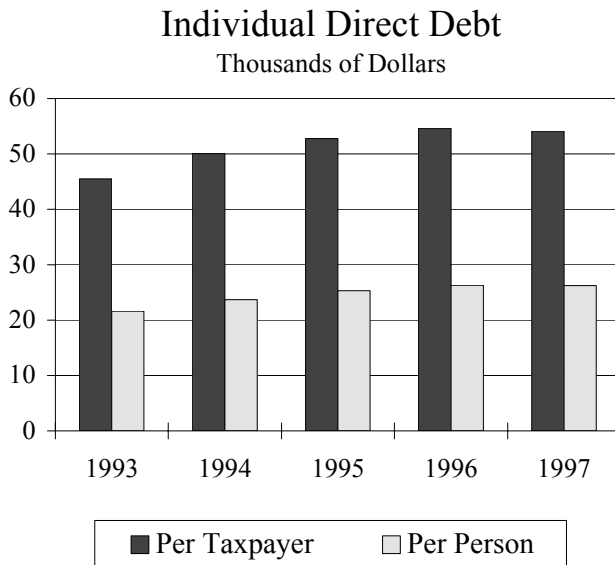
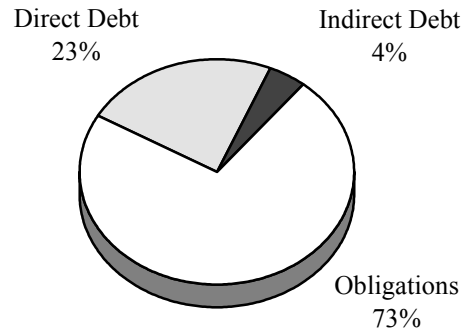
(\$Millions unless otherwise noted. Totals may not add due to rounding)

	Gross Liabilities	Financial Assets	Net Liabilities	Debt Charges
1. FEDERAL GOVERNMENT				
A. Federal Government Direct Debt	645,068	59,008	586,059	45,184
B. Federal Government Indirect Debt:				
Tax-Supported Federal Government Business Enterprises	4,615	4,482	133	136
Federal Government Debt Guarantees	<u>39,314</u>	<u>-</u>	<u>39,314</u>	<u>-</u>
Total Federal Government Indirect Debt	43,929	4,482	39,447	136
C. Federal Government Program Obligations:				
Canada Pension Plan	-	38,483	(38,483)	-
CPP Unfunded Liabilities	485,000	-	485,000	-
Old Age Security Unfunded Liabilities	609,000	-	609,000	-
Federal Government Employee Pension Plans	<u>(25,553)</u>	<u>-</u>	<u>(25,553)</u>	<u>-</u>
Total Federal Government Program Obligations	1,068,447	38,483	1,029,964	-
TOTAL FEDERAL GOVERNMENT LIABILITIES	1,757,443	101,973	1,655,470	45,320
2. PROVINCIAL GOVERNMENT				
A. Provincial Government Direct Debt	353,164	179,655	173,510	27,503
B. Provincial Government Indirect Debt:				
Provincial Government Debt Guarantees	<u>108,134</u>	<u>-</u>	<u>108,134</u>	<u>-</u>
Total Provincial Government Indirect Debt	108,134	-	108,134	-
C. Provincial Government Program Obligations:				
Unfunded Liabilities of the Medicare System	1,209,000	-	1,209,000	-
Workers' Compensation Plans	13,908	-	13,908	-
Provincial Government Employee Pension Plans	68,939	-	68,939	-
Quebec Pension Plan	-	14,437	(14,437)	-
QPP Unfunded Liabilities	<u>161,667</u>	<u>-</u>	<u>161,667</u>	<u>-</u>
Total Provincial Government Program Obligations	1,453,514	14,437	1,439,077	-
TOTAL PROVINCIAL GOVERNMENT LIABILITIES	1,914,812	194,091	1,720,721	27,503
3. LOCAL GOVERNMENT				
A. Local Government Direct Debt	59,173	33,481	25,692	3,109
TOTAL LOCAL GOVERNMENT LIABILITIES	59,173	33,481	25,692	3,109
4. ALL GOVERNMENTS				
A. Total Direct Debt	1,057,405	272,144	785,261	75,796
B. Total Indirect Debt	152,063	4,482	147,581	136
C. Total Program Obligations	2,521,961	52,920	2,469,041	-
TOTAL ALL GOVERNMENT LIABILITIES	3,731,429	329,545	3,401,884	75,932

TABLE 1b: DEBT TABLES—CANADA

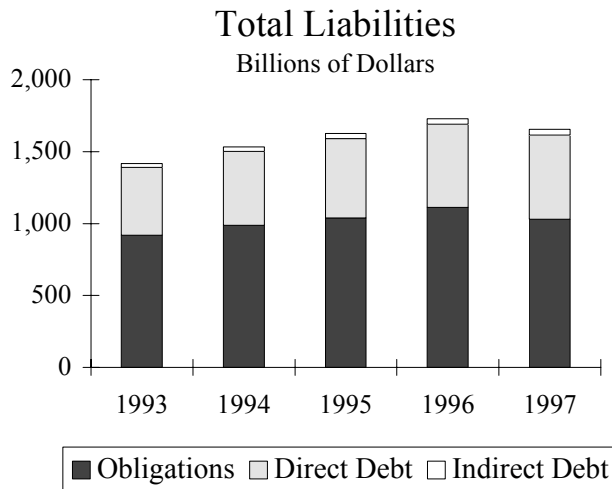


Components of Total Liabilities (1997)

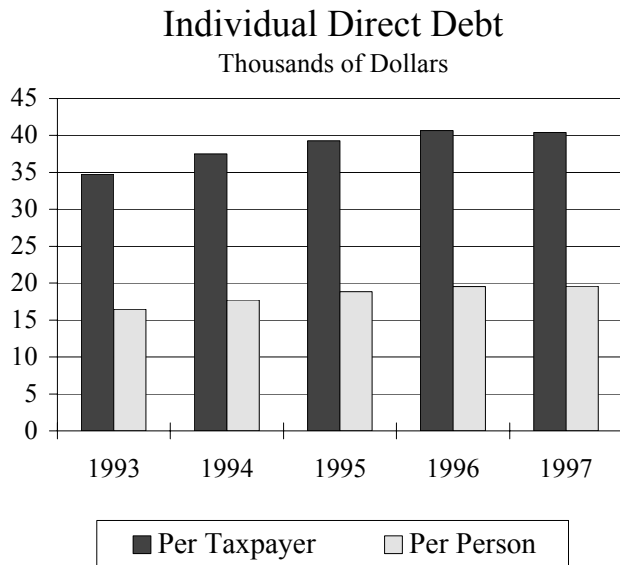
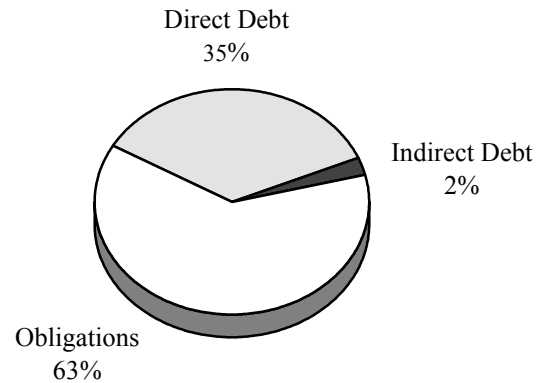


Liability Figures—Canada					
	1993	1994	1995	1996	1997
Direct Debt (\$millions)	615,908	685,010	739,974	777,647	785,261
Indirect Debt (\$millions)	122,686	127,882	132,337	139,798	147,581
Obligations (\$millions)	2,110,343	2,249,051	2,372,501	2,522,193	2,469,041
Total Liabilities (\$millions)	2,848,937	3,061,943	3,244,812	3,439,638	3,401,884
Direct Debt Per Person (\$)	21,579	23,664	25,293	26,259	26,207
Direct Debt Per Taxpayer (\$)	45,511	50,068	52,799	54,633	54,119
Direct Debt-to-GDP	89.2%	96.1%	99.0%	100.2%	98.4%
Direct Debt-to-Exports	339.9%	327.2%	295.0%	267.9%	256.2%

TABLE 1c: DEBT TABLES—FEDERAL GOVERNMENT



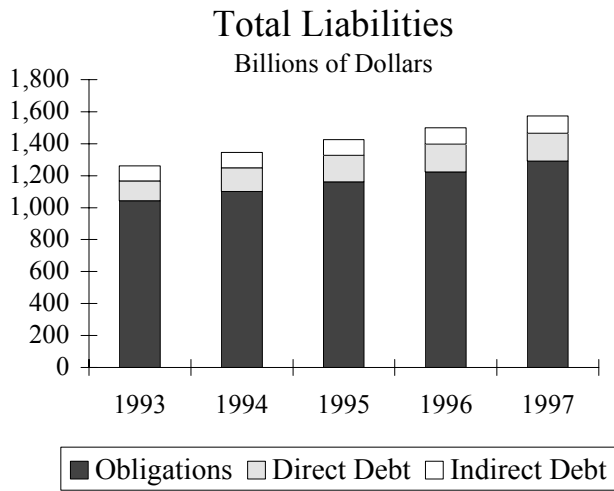
Components of Total Liabilities (1997)



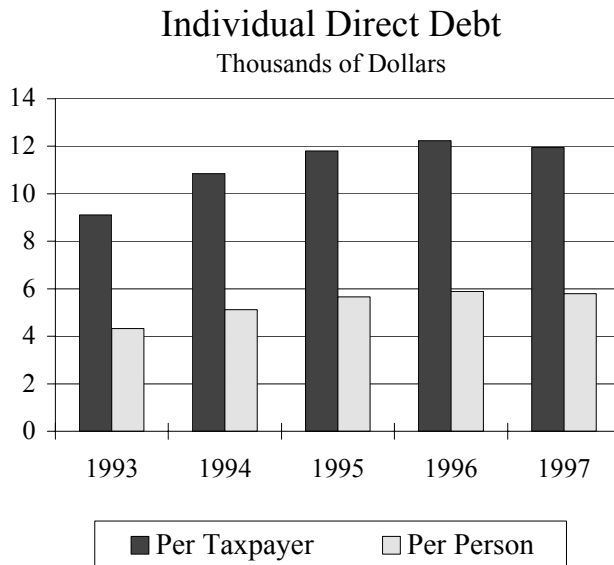
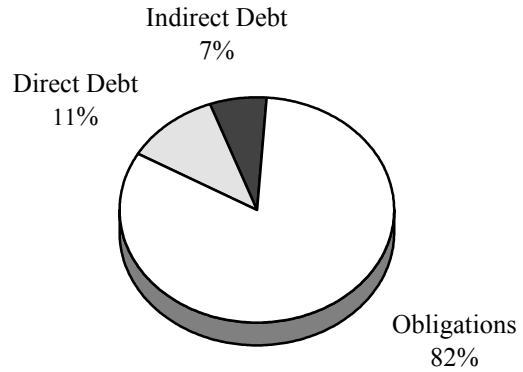
Liability Figures—Federal Government

	1993	1994	1995	1996	1997
Direct Debt (\$millions)	470,046	513,219	550,685	578,718	586,059
Indirect Debt (\$millions)	27,927	31,731	34,830	37,267	39,447
Obligations (\$millions)	919,688	987,709	1,039,900	1,113,086	1,029,964
Total Liabilities (\$millions)	1,417,661	1,532,659	1,625,415	1,729,071	1,655,470
Direct Debt Per Person (\$)	16,469	17,730	18,823	19,541	19,559
Direct Debt Per Taxpayer (\$)	34,733	37,511	39,292	40,657	40,390
Direct Debt-to-GDP	68.1%	72.0%	73.7%	74.5%	73.5%
Direct Debt-to-Exports	150.4%	148.8%	139.4%	130.6%	125.7%

TABLE 1d: DEBT TABLES—ALL PROVINCES*



Components of Total Liabilities (1997)



Liability Figures—All Provincial Governments*

	1993	1994	1995	1996	1997
Direct Debt (\$millions)	123,285	148,334	165,444	174,192	173,510
Indirect Debt (\$millions)	94,759	96,151	97,507	102,531	108,134
Obligations (\$millions)	1,043,653	1,101,075	1,162,138	1,223,643	1,291,847
Total Liabilities (\$millions)	1,261,697	1,345,560	1,425,089	1,500,366	1,573,491
Direct Debt Per Person (\$)	4,319	5,124	5,655	5,882	5,791
Direct Debt Per Taxpayer (\$)	9,110	10,842	11,805	12,238	11,958
Direct Debt-to-GDP	17.9%	20.8%	22.2%	22.5%	21.8%
Direct Debt-to-Exports	39.4%	43.0%	41.9%	39.3%	37.2%

* including the Territories; excluding QPP

Definitions

Gross debt refers to the total stock of securitized liabilities owed by a government. Gross debt statistics are used to determine the total burden of debt on taxpayers. Knowing gross debt is also useful when one considers the term-structure of debt.

Financial assets refers to those assets held by a government (e.g. securities and demand deposits) that are readily convertible into cash. *Gross debt* minus *financial assets* equals *net debt*.

Figures for *net debt* adjust liabilities to account 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, it will have a smaller net debt. For comparative purposes, we use statistics for net debt throughout the document.

Debt charges refers to the interest costs associated with direct and indirect debt.

Table 1a is separated into four subsections: (1) federal government liabilities, (2) provincial government liabilities, (3) local government liabilities, and (4) a summary section of all government liabilities. The federal and provincial government sections have three categories of liabilities: (1) direct debt, (2) indirect debt, and (3) program obligations. The local government section only includes direct debt because statistics for other liabilities are not available. Throughout the following discussion, figures from the Ontario provincial government are cited to illustrate each category of liability.

Categories of liability

Direct debt

Direct debt refers to the accumulated debt incurred by a specific government and its agencies. Direct debt is the only category of liability in this study that 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.

Indirect debt

Indirect debt is the accumulated direct debt of quasi-governmental agencies for which the government is ultimately responsible. It is classified as indirect debt for the purposes of this study because the government may or may not have to repay it. Under normal circumstances, each agency's operations will generate the financial resources required to service its debt and only under exceptional circumstances, such as bankruptcy,

would the government have to assume the debt. However, since such circumstances can arise, it is necessary to acknowledge the direct debt of quasi-government agencies within the total liabilities of the government.

This category of liability includes debt guarantees of non-governmental firms and the debt of tax-supported government business enterprises (GBEs). The direct debt of hospitals could not be included this year because of problems with the data; the hospital category has been dropped from all years to maintain comparability. The direct debt of post-secondary institutions is not included because data were not available.

Government Business Enterprises (GBEs)

This study includes only those firms that Statistics Canada has defined as tax-supported, *i.e.*, "enterprises which continually incur operating losses funded through loans from their parent government" (Statistics Canada 1998b). Only GBEs supported by the federal government are included in this year's report as Statistics Canada was unable to provide the necessary information on the provinces in time for publication. The revision of Statistics Canada's Financial Management System (FMS) saw many tax-supported GBEs reclassified as "special funds" of the parent government. For example, the Canadian Broadcasting Corporation is classified as a "special fund" of the federal government under the revised FMS; it used to be classified as a federal tax-supported GBE. This reclassification has sharply reduced the importance of the tax-supported GBE section in this study. As a result, the exclusion of provincial tax-supported GBEs has a small impact on total government debt.

Debt guarantees

Debt guarantees are issued by governments on behalf of privately held companies to stabilize those companies, provide venture 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.

Table 3 summarizes total and per-person debt guarantees granted by the federal and provincial governments. The amount of the guarantees varies considerably among provincial jurisdictions. For instance, Quebec has almost \$48 billion in debt guarantees while British Columbia has only \$3.7 billion. The per-person figures better illustrate these regional differences: Quebec has the highest level of debt guarantees at \$6,453 per person while Prince Edward Island has only \$43 per person. It is difficult to predict, however, how many firms will default and to what extent lenders will require governments to cover debt servicing.

The principal problem with both GBEs and debt guarantees is that they create distortions in the marketplace. Firms rejected in the marketplace by entrepreneurs and investors use

TABLE 2: STATISTICAL SUMMARY FOR CANADA (ALL-INCLUSIVE)

	1992/93	1993/94	1994/95	1995/96	1996/97
Liability Summary (\$ Millions):					
Total Direct Debt	615,908	685,010	739,974	777,647	785,261
Total Indirect Debt	122,686	127,882	132,337	139,798	147,581
Total Program Obligations	<u>2,110,343</u>	<u>2,249,051</u>	<u>2,372,501</u>	<u>2,522,193</u>	<u>2,469,041</u>
Total Liabilities	2,848,937	3,061,943	3,244,812	3,439,638	3,401,884
General Economic Statistics:					
Population (Thousands)	28,542	28,947	29,256	29,615	29,964
Taxpayers (Thousands)	13,533	13,682	14,015	14,234	14,510
Gross Domestic Product (\$ Millions)	690,122	712,855	747,260	776,299	797,789
GDP Per Person (Dollars)	24,179	24,626	25,542	26,213	26,625
Exports of Goods and Services (\$ Millions)	181,189	209,370	250,877	290,325	306,534
Exports / GDP	26.3%	29.4%	33.6%	37.4%	38.4%
Government Revenues (\$ Millions):					
Federal Government	131,548	130,044	137,456	142,854	153,769
Total Provincial & Territorial Governments	146,458	152,316	161,766	169,582	170,493
Total Local Governments	<u>37,314</u>	<u>38,011</u>	<u>39,299</u>	<u>40,386</u>	<u>38,903</u>
Total	315,320	320,371	338,520	352,822	363,165
Government Debt Charges (\$ Millions):					
Federal Government	39,292	37,899	41,927	46,692	45,184
Total Provincial & Territorial Governments	21,642	24,730	26,657	27,748	27,503
Total Local Governments	<u>3,220</u>	<u>3,223</u>	<u>3,204</u>	<u>3,189</u>	<u>3,109</u>
Total	64,154	65,851	71,787	77,629	75,796
Indicators of Debt Charges:					
Federal Debt Charges / Federal Revenues	29.9%	29.1%	30.5%	32.7%	29.4%
Provincial Debt Charges / Provincial Revenues	14.8%	16.2%	16.5%	16.4%	16.1%
Local Debt Charges / Local Revenues	8.6%	8.5%	8.2%	7.9%	8.0%
Total Debt Charges / Total Revenues	20.3%	20.6%	21.2%	22.0%	20.9%
Total Debt Charges / GDP	9.3%	9.2%	9.6%	10.0%	9.5%
Total Debt Charges / Exports	35.4%	31.5%	28.6%	26.7%	24.7%
Per Person Liability Figures (Dollars):					
Total Direct Debt	21,579	23,664	25,293	26,259	26,207
Total Indirect Debt	4,298	4,418	4,523	4,720	4,925
Total Program Obligations	<u>73,938</u>	<u>77,695</u>	<u>81,095</u>	<u>85,166</u>	<u>82,400</u>
Total Liabilities	99,816	105,778	110,911	116,145	113,532
Per Taxpayer Liability Figures (Dollars):					
Total Direct Debt	45,511	50,068	52,799	54,633	54,119
Total Indirect Debt	9,066	9,347	9,442	9,821	10,171
Total Program Obligations	<u>155,939</u>	<u>164,384</u>	<u>169,282</u>	<u>177,194</u>	<u>170,163</u>
Total Liabilities	210,516	223,799	231,523	241,649	234,453
GDP Indicators:					
Total Direct Debt / GDP	89.2%	96.1%	99.0%	100.2%	98.4%
Total Program Obligations / GDP	305.8%	315.5%	317.5%	324.9%	309.5%
Total Liabilities / GDP	412.8%	429.5%	434.2%	443.1%	426.4%
Exports Indicators:					
Total Direct Debt / Exports	339.9%	327.2%	295.0%	267.9%	256.2%
Total Program Obligations / Exports	1164.7%	1074.2%	945.7%	868.7%	805.5%
Total Liabilities / Exports	1572.4%	1462.5%	1293.4%	1184.8%	1109.8%

Table 3: Debt Guarantees

Province/Territory	Total Debt Guarantees (\$millions)	Debt Guarantees Per Person (\$)
Prince Edward Island	6	43
Manitoba	430	376
Saskatchewan	571	559
New Brunswick	569	745
British Columbia	3,708	962
Federal Government	39,314	1,312
Northwest Territories	105	1,573
Yukon Territory	55	1,760
Newfoundland	1,381	2,418
Nova Scotia	2,294	2,433
Ontario	39,542	3,514
Alberta	11,798	4,229
Quebec	47,676	6,453

Source: Statistics Canada, Financial Management System; Statistics Canada, Provincial Economic Accounts; calculations by author.

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.

Program obligations

This category of liability is the most complex and difficult to describe. In general, obligations encompass annually financed programs and benefits that a government has committed itself to providing in perpetuity. Examples include the Canada and Quebec Pension Plans, the Old Age Security Program, pension plans for civil-service employees, Workers' Compensation Boards, and the health-care system. We did not include post-secondary education and programs such as Spouse's Allowance and the Guaranteed Income Supplement because data were not available.

Appendixes B and C

Appendix B has a total liability section similar to Table 1a and a graphical section similar to Table 1b for each province and territory.

The graph, Total Liabilities, illustrates both the composition and overall growth in total liabilities from 1993 to 1997.

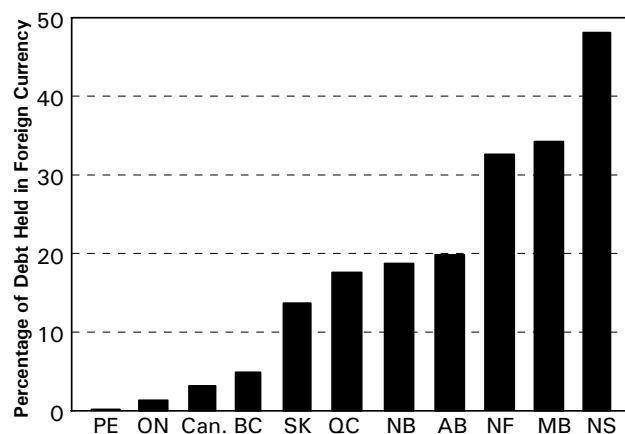
The graph, Components of Total Liabilities, shows the composition of total liabilities for 1997. The graph, Individual Direct Debt, depicts the level of direct debt per person and per taxpayer. The Direct Debt Indicators illustrate the ratios of direct debt to GDP and direct debt to exports. The table at the bottom of the page provides the data underlying the graphs. Table 2 for Canada as a whole and Appendix C for the federal government and for each province include several other ratios and statistics, such as general economic indicators, government revenues, and debt charges.

Foreign currency exposure

A significant portion of the debt of many provinces is denominated in foreign currency. The necessity to pay interest on, and ultimately redeem 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 in foreign currency; a rise in its value 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 debt that each province holds in foreign currencies.

Interest charges

Interest represents the cost of past consumption that has been financed through deficit spending. In 1997, Canadian govern-

Figure 1: Foreign exchange exposure

Sources: Public Sector Finance 1995-96, Financial Management System, Statistics Canada

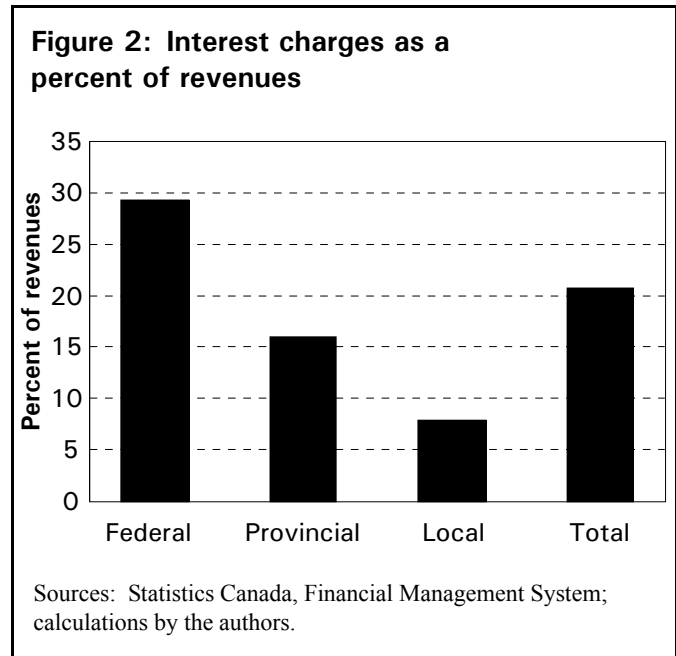
ments spent almost \$76 billion on interest payments; that is, 9.5 percent of GDP and 24.7 percent of exports. Figure 2 illustrates the proportion of government revenues consumed by interest charges. Debt servicing costs account for 29.4 percent of federal government revenues, 16.1 percent of provincial revenues, and 8.0 percent of local revenues. Interest costs account for 20.9 percent of total government revenues.

Figure 3 shows, by province, the share of government revenues allocated to interest payments for provincial and local governments. Provincial debt charges vary considerably, from 0.5 percent in the Northwest Territories to 20.9 percent in Saskatchewan. Local debt charges vary from 1.5 percent in the Yukon to 18.0 percent in Newfoundland. This expense to current taxpayers illustrates the cost of program spending or tax cuts foregone in order to service the costs of previous deficit-financed program expenditures.

Total liabilities

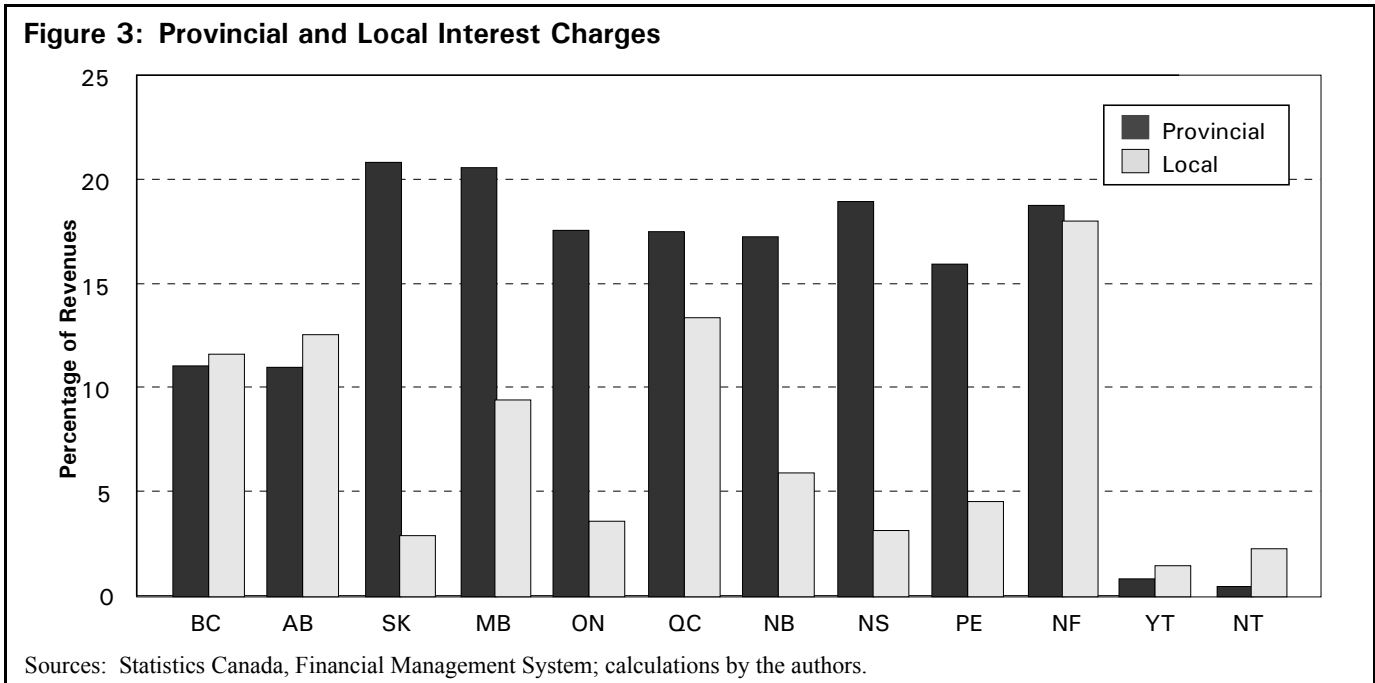
The statistics on Canada’s debt describe a bleak situation (tables 1 and 2). Total liabilities per person, including direct debt, indirect debt, and program obligations, amount to \$113,532 for every Canadian citizen or \$234,453 for each taxpayer.

The level of total liabilities accumulated by Canadian governments is enormous. The total liabilities for Canada represent 426 percent of GDP and 1,110 percent of exports. These statistics show that Canadian governments have accumulated an unsustainable level of liability: even if governments taxed 100 percent of every dollar of income generated,



it would take over four years to pay back the debt and fully fund all programs.

The notion that Canadians owe \$600 billion (the approximate federal debt) ignores federal obligations and indirect debt as well as all the liabilities of the provincial and local governments. *Total government liabilities actually amount to just over \$3.4 trillion.* The changes that federal and provincial governments have already made to deal with this debt are only a small fraction of the changes that must be made. A significant restructuring of government programs is unavoidable.



Unfunded liabilities of government programs

Many programs in Canada—retirement income support plans (CPP/QPP and OAS), workers' compensation boards, the health-care system, and pension plans for civil-service employees—have unfunded liabilities. These programs are government obligations or promises to provide benefits in the future.

Funding structure

These programs 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, only the 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 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 an analysis of unfunded liabilities is the actuarial valuation. This valuation assesses the ability of a program to finance the stated benefits for a specific time given the contribution rates, expected investment returns, and specific economic and demographic assumptions. For instance, the Ontario government currently has a large unfunded liability for its Teachers' Pension Plan. Actuarial calculations show that the Ontario government would have to add \$8.4 billion to the fund today to cover all of its stated future pension obligations (see the box in Table 4).

Actuarial valuations are extremely sensitive to their underlying assumptions. For this report, the assumptions for most program valuations are: inflation 3.5 percent, wage growth 4.5 percent, and interest rate 6.0 percent. Changes in these assump-

tions can cause significant deviations in the results. The purpose of the valuation is to determine the current long-term deficit or surplus. Actuaries normally conduct valuations every three years to modify assumptions based on new economic conditions. All past and current unfunded liability figures in this report make use of consistent assumptions.

Pension plans for government employees

The federal and provincial governments have benefit funds for their pension plans for government employees and the workers' compensation programs. Table 4 summarizes the most recently available actuarial valuations for the provincial and federal governments' pension plans. Most provincial governments have committed themselves to the elimination of the actuarial deficits by a set deadline, and the federal government currently maintains a surplus of about \$25.6 billion.

Workers' compensation boards

There is a wide disparity in the liability status of workers' compensation boards within Canada. Five of the 12 boards currently possess a surplus. Four regions have removed the workers' compensation boards from government control and have established an arms-length management approach.

Retirement income support programs and the health-care system

The unfunded liabilities of most pressing concern are the retirement programs and the health-care system. At their inception, both programs were based upon similar assumptions and philosophies. It was assumed that the population demographics, rate of economic growth, and 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.

TABLE 4: UNFUNDED LIABILITIES OF CIVIL SERVICE EMPLOYEE PENSION PLANS (in millions of dollars)

	Valuation Date	Unfunded Liabilities
FEDERAL GOVERNMENT		
Public Service Pension Plan	March 31, 1996	(11,476)
Canadian Forces Pension Plan	December 31, 1993	(12,382)
Royal Canadian Mounted Police Pension Plan	March 31, 1996	(2,295)
Members of Parliament Retiring Allowance	March 31, 1995	(38)
Federally Appointed Judges	March 31, 1995	638
TOTAL		<u>(25,553)</u>
PROVINCIAL / TERRITORIAL GOVERNMENTS:		
BRITISH COLUMBIA		
Teachers' Pension Plan	December 31, 1993	1,780
Municipal Pension Plan	December 31, 1994	1,310
Public Service Pension Plan	March 31, 1996	(222)
College Pension Plan	August 31, 1994	<u>28</u>
TOTAL		<u>2,896</u>
ALBERTA		
Teachers' Pension Plan	August 31, 1995	3,666
Public Service Pension Plan	December 31, 1995	280
Public Service Management Pension Plan	December 31, 1994	660
Local Authorities Pension Plan	December 31, 1995	84
Universities Academic Pension Plan	December 31, 1996	97
Special Forces Pension Plan	December 31, 1995	39
Management Employees Pension Plan	December 31, 1994	87
Members of the Legislative Assembly Pension Plan	December 31, 1994	<u>57</u>
TOTAL		<u>4,969</u>
SASKATCHEWAN		
Teachers' Superannuation Fund	June 30, 1995	2,302
Public Service Superannuation Fund	December 31, 1996	1,175
Others	Various	54
TOTAL		<u>3,530</u>
MANITOBA		
Teachers' Plan	January 1, 1996	1,313
Civil Service Plan	December 31, 1995	828
Members of the Legislative Assembly Plan	September, 1997	28
TOTAL		<u>2,169</u>
ONTARIO		
Teachers' Pension Plan	December 31, 1996	8,400
Public Service Pension Plan	December 31, 1995	2,229
Other Plans	Various	<u>324</u>
TOTAL		<u>10,953</u>

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TABLE 4 continued	Valuation Date	Unfunded Liabilities
QUEBEC		
RREGOP	March 31, 1997	15,892
TPP & PPCT	March 31, 1997	7,029
CSSP	March 31, 1997	1,418
Other	March 31, 1997	<u>2,136</u>
Total Reported by Provincial Government		26,475
Auditor General's Adjustment	March 31, 1997	<u>12,458</u>
TOTAL		<u>38,933</u>
NEW BRUNSWICK		
Teachers' Pension Plan	April 1, 1993	756
Public Service Pension	April 1, 1993	420
Early Retirement	March 31, 1996	54
Other (Judges', Members', Hospitals & Schools)	Various	<u>22</u>
TOTAL		<u>1,252</u>
NOVA SCOTIA		
Teachers' Pension Plan	July 31, 1994	824
Members Retiring Allowance	August 31, 1996	41
Early Retirement Incentive Program	March 31, 1997	115
War Service & Other Non-Contributory Service Plans	March 31, 1997	16
Public Service Superannuation Fund	March 31, 1995	135
Judges' Pension Supplement	March 31, 1997	8
Sysco Pension Plan	December 31, 1996	33
TOTAL		<u>1,172</u>
PRINCE EDWARD ISLAND		
Teachers' Superannuation Fund	July 1, 1996	79
Civil Service Superannuation Fund	April 1, 1996	31
MLA Pension Fund (Combined)	April 1, 1997	<u>(3)</u>
TOTAL		<u>107</u>
NEWFOUNDLAND & LABRADOR		
Teachers' Plan	August 31, 1996	1,491
Public Service Plan	December 31, 1994	1,242
Uniformed Services Plan	December 31, 1993	171
MHA Plan	December 31, 1994	<u>39</u>
TOTAL		<u>2,943</u>
YUKON TERRITORY*		
Legislative Assembly Retirement Allowance Plan	March 31, 1996	<u>(754)</u>
TOTAL		<u>(754)</u>
NORTHWEST TERRITORIES*		
Legislative Assembly Supplementary Allowance	March 31, 1997	14,626
Judges' Supplemental Pension Plan	March 31, 1997	623
TOTAL		<u>15,249</u>

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

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

These assumptions were wrong. Birth rates have declined, income growth has stagnated, and mortality rates have decreased. In 1966, the ratio of Canadians under 20 to Canadians over 65 was 5.5 to 1. This ratio decreased to 2.3 by 1995 and is expected to decline further to 1.1 by the year 2030 (Canadian Institute of Actuaries 1995: 2). A more alarming trend is the relationship between workers and retirees. In 1995, seniors represented 19.8 percent of the working age population but this figure is expected to increase dramatically to 38.9 percent by 2030 (Canadian Institute of Actuaries 1995: 2). 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 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. The Fraser Institute's study on inter-generational accounts (Good 1995) shows that the tax rates implied by all of the different transfers that we expect to get from our working population by the time the last of the "baby boomers" retires in 2030 is simply unsustainable.

Table 5 shows a summary of the unfunded liabilities from 1991 to 1997 of the various retirement income support programs and the health-care system. This section considers health care along with retirement income support programs since seniors currently consume approximately 50 percent of all health care expenditures. This rate is expected to increase to almost 67 percent by 2030 (Good 1995: 16).

These unfunded liabilities are enormous obligations. Current estimates of the unfunded liabilities of the federal retirement income support programs and the health-care system exceed 293 percent of the total direct debt of all governments in Canada and 289 percent of GDP. The actuarial valuations for these programs may be overstated because taxes used to finance expenditures are not fully incorporated into the valuation process. For example, income taxes collected from seniors in 1992 covered about 25 percent of the cost of their

OAS and health care benefits. If we use an assumption from *Troubled Tomorrows* (Canadian Institute of Actuaries 1995: C2), namely, that other taxes paid by seniors cover the cost of the other benefits they receive, we could reduce the estimated accrued OAS and health care liabilities by 25 percent. This would more accurately reflect the unfunded OAS and health-care liabilities that must be borne by future generations. The adjustment is not reflected in this years' calculations as further research is necessary to determine precisely how much of the cost of OAS and health care is covered by taxes paid by seniors.

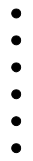
Even if the unfunded liabilities can legitimately be reduced by 25 percent, they are still an enormous burden. Restructuring retirement income support programs should be initiated immediately to eliminate the inter-generational wealth transfer and to ensure that needy seniors do not suffer for the policy 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. Unless governments make changes soon, these pressures will inevitably lead to higher general tax rates or a further reduction in services.

Table 5: Summary of Unfunded Liabilities (\$billions)

Year	CPP*	OAS	Medicare	Total
1991	420.4	445.0	867.0	1,732.4
1992	454.0	470.0	917.0	1,841.0
1993	487.5	488.0	969.0	1,944.5
1994	527.3	515.0	1,024.0	2,066.3
1995	555.5	544.0	1,082.0	2,181.5
1996	600.1	576.0	1,144.0	2,320.1
1997	485.0	609.0	1,209.0	2,303.0
Average Annual Growth	3.0%	5.4%	5.7%	4.9%

* The 1997 value reflects Bill C-2.

Source: Special Report for The Fraser Institute, June 1996 and January 1998, Actuarial Services Division, Office of the Superintendent of Financial Institutions Canada, Ottawa, Canada.



International comparison

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 the 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 6 ranks jurisdictions from best to worst on the basis of their debt calculated as a percentage of discretionary income. For instance, Ontario ranks 86th out of 151 jurisdictions with a ratio of 74.9 percent. This means that the debt per person accumulated by Ontario represents 74.9 percent of the average person's total annual income less an allowance for a minimum level of subsistence.

To compare jurisdictions in the same income groups, with similar income and consumption patterns, countries are separated according to their income levels per person using modified World Bank classifications (see Appendix D).

The ranking shows several interesting results. Norway, South Korea, and Finland, 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 6, since they have more financial assets than gross debt.

At the bottom of the ranking, Rwanda, Chad, Burundi, Malawi, Tanzania, Mozambique, and Ethiopia all reported negative discretionary income levels. In other words, the average citizen in these countries does not earn the level of income necessary for subsistence. The annual study of human development by the United Nations (United Nations Development Programme 1997) provides further evidence of the poverty in these particular countries. It reports that the average life expectancy in these countries is 42.7 years. The average life expectancy for all developing countries is 61.8 years. In addition, these nations fall below the subsistence level of daily caloric intake: a subsistence diet is 2,869 calories but average consumption in these seven countries is only 1,841 calories. The United Nations study corroborates the findings of this study; that these countries are being crushed by debt and an inability to generate income.

Ten of the 14 former Soviet republics—Estonia, Belarus, Latvia, Uzbekistan, Ukraine, Lithuania, Turkmenistan, Azerbaijan, Armenia, and Kazakhstan—rank within the top 20. In fact, former Soviet republics dominate the top 10, occupying positions 4 through 7, 9 and 10. The principal reason for their success is the Zero Option Agreement (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 external debt of these countries stood at \$15.3 billion by the end of 1994. The bulk of the debt was issued to “transform and stabilize the economy” and “finance imports” (Boote *et al.* 1995: 82). External debt grew to \$21.2 billion in 1995. The former Soviet republics currently have an advantage due to their relatively small debt stock. However, if they continue to accumulate debt as quickly as they have been, they will erode this advantage.

The results for Canada and the provinces are remarkably poor. The Yukon ranks the highest of any Canadian region at 46th while Newfoundland ranks the lowest at 98th. Table 7 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 belonging to the Organisation for Economic Cooperation and Development (OECD) (see Appendix D[1]). Canada ranks third lowest; only Italy and Belgium rank lower. Among the G-7 nations, Canada is second to last and, while Canada is considerably above Italy, it is also significantly below the other G-7 nations. Japan ranks eighth overall, and first among G-7 nations with a ratio of debt to discretionary income per person of 11.9 percent while Canada ranks 81st overall and sixth in the G-7 with a ratio of 70.3 percent.

Implications

Canada has few options in selecting a strategy for eliminating its deficits and debt. Since tax rates are high compared to those of other G-7 nations, only spending reductions can be used to eliminate debt without affecting global competitiveness. In a

Table 6: Debt as a percentage of discretionary income (1995)

Rank	Country	Percent	Rank	Country	Percent
1	Norway	(23.5)	40	France	36.7
2	Korea, Rep.	(20.9)	41	Russian Federation	37.7
3	Finland	(10.4)	42	Poland	38.2
4	Estonia	8.4	43	Iceland	38.4
5	Belarus	8.8	44	Czech Republic	38.7
6	Latvia	8.8	45	Chile	39.5
7	Uzbekistan	9.4	46	YUKON TERRITORY	40.7
8	Japan	11.9	47	Malaysia	42.1
9	Ukraine	11.9	48	United Kingdom	42.1
10	Lithuania	12.5	49	Dominican Republic	43.3
11	Turkmenistan	12.7	50	Dominica	43.5
12	Fiji	13.1	51	Grenada	43.5
13	Azerbaijan	15.3	52	Costa Rica	44.1
14	Botswana	17.2	53	Albania	44.4
15	Armenia	17.3	54	Denmark	44.8
16	Slovenia	19.2	55	Germany	45.2
17	Kazakhstan	20.2	56	Netherlands	46.1
18	Romania	21.2	57	Tonga	46.3
19	Croatia	21.3	58	Turkey	47.9
20	Sweden	24.1	59	United States	48.2
21	Brazil	24.1	60	NORTHWEST TERRITORIES	48.2
22	St. Lucia	24.3	61	Belize	48.4
23	China	24.7	62	Mauritius	48.5
24	Moldova	25.4	63	Bhutan	49.3
25	St. Kitts and Nevis	25.9	64	Spain	49.9
26	Guatemala	26.1	65	Austria	50.1
27	Oman	26.6	66	Trinidad and Tobago	50.2
28	Kyrgyz Republic	27.4	67	Venezuela	50.4
29	Swaziland	27.7	68	Solomon Islands	54.7
30	Australia	28.5	69	ALBERTA	54.9
31	Lebanon	28.5	70	Peru	58.1
32	Colombia	29.9	71	BRITISH COLUMBIA	59.0
33	El Salvador	30.6	72	Papua New Guinea	59.1
34	Uruguay	30.7	73	Tunisia	60.6
35	Argentina	32.7	74	India	60.9
36	Paraguay	33.3	75	SASKATCHEWAN	63.8
37	Barbados	35.3	76	Philippines	64.0
38	Slovak Republic	35.5	77	Indonesia	66.3
39	Thailand	36.3	78	Djibouti	68.7

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Table 6 continued: Debt as a percentage of discretionary income (1995)

Rank	Country	Percent	Rank	Country	Percent
79	Maldives	68.9	116	Uganda	166.0
80	MANITOBA	69.2	117	Cameroon	170.0
81	Canada	70.3	118	Nigeria	174.0
82	Mexico	71.1	119	Kenya	175.3
83	Tajikistan	71.5	120	Central African Republic	178.5
84	QUEBEC	74.0	121	Ghana	184.2
85	Hungary	74.7	122	Cambodia	216.8
86	ONTARIO	74.9	123	Bangladesh	227.6
87	PRINCE EDWARD ISLAND	75.4	124	Gambia, The	235.4
88	Macedonia, FYR	76.4	125	Lao PDR	249.7
89	NEW BRUNSWICK	76.5	126	Cote d'Ivoire	252.3
90	Morocco	80.4	127	Zambia	282.0
91	Pakistan	81.8	128	Togo	288.6
92	Sri Lanka	85.7	129	Burkina Faso	297.6
93	St. Vincent and the Grenadines	87.2	130	Equatorial Guinea	307.5
94	Ecuador	88.1	131	Yemen, Rep.	311.3
95	Georgia	89.0	132	Congo	358.7
96	NOVA SCOTIA	89.4	133	Mauritania	378.6
97	Algeria	89.8	134	Vietnam	383.7
98	NEWFOUNDLAND	90.6	135	Guyana	475.5
99	Egypt, Arab Rep.	92.8	136	Mali	479.2
100	Lesotho	98.9	137	Madagascar	615.0
101	Gabon	100.0	138	Angola	655.9
102	Bulgaria	100.5	139	Nepal	785.8
103	Panama	103.6	140	Niger	787.3
104	Jamaica	108.2	141	Nicaragua	836.5
105	Zimbabwe	108.4	142	Sao Tome and Principe	1,266.7
106	Haiti	110.3	143	Guinea-Bissau	1,467.6
107	Bolivia	110.3	144	Sierra Leone	2,180.7
108	Italy	110.8	145	Ethiopia	(103.7)
109	Senegal	115.9	146	Mozambique	(388.0)
110	Mongolia	124.9	147	Tanzania	(402.3)
111	Belgium	125.3	148	Malawi	(667.9)
112	Guinea	130.7	149	Burundi	(1,373.5)
113	Comoros	149.4	150	Chad	(2,171.5)
114	Syrian Arab Republic	150.1	151	Rwanda	(2,310.5)
115	Honduras	160.1			

Sources: OECD 1997a; World Bank 1997; Statistics Canada, Canadian Federal and Provincial government budgets, calculations by authors.

Note: Rwanda, Chad, Burundi, Malawi, Tanzania, Mozambique, and Ethiopia all reported negative discretionary income levels; the average citizen in these countries does not earn the level of income necessary for subsistence.

recent study by the Canadian Institute of Actuaries, Canada ranked first in personal income tax, second in indirect and “other” taxes, fourth in corporate taxes, and last in payroll taxes (Canadian Institute of Actuaries 1995: 20). A recent OECD publication (OECD 1997b) shows that, excluding social security taxes, Canadians already pay 1.4 percentage points more of their income to government than the average citizen of the European Community. Lower social-security taxes in Canada are due mostly to the fact that our population is younger. When the promises we have made to ourselves about social security and health care have to be delivered, the tax burden of Canadians will increase dramatically—witness the recent CPP/QPP reforms that will increase public pension contributions from 6 percent to 9.9 percent, the largest tax increase in Canadian history.

The relatively high level of Canadian and provincial debt offers an explanation for the higher-than-average interest rates and persistently high unemployment rates in our recent past. While debt is not the sole cause of high interest rates or unemployment, it is certainly a contributing factor. Interest is the payment demanded by individuals who forego current consumption and make their savings available to borrowers. When the risk of default is high, higher interest rates (risk premiums) compensate these lenders. As government debt increases relative to the size of revenues, the risk of default increases and the risk premium goes up; increasing debt places upward pressure on interest rates.

A high interest rate is a key contributor to unemployment since businesses postpone borrowing for investment projects. A recent publication from the Canadian Centre for Policy Alternatives (an Ottawa-based, labour-supported, think tank), notes the damaging effects of high interest rates on job creation (Cameron and Finn 1998: 18–19). This report also highlights the need for a plan to reduce interest rates, to reduce the stock of

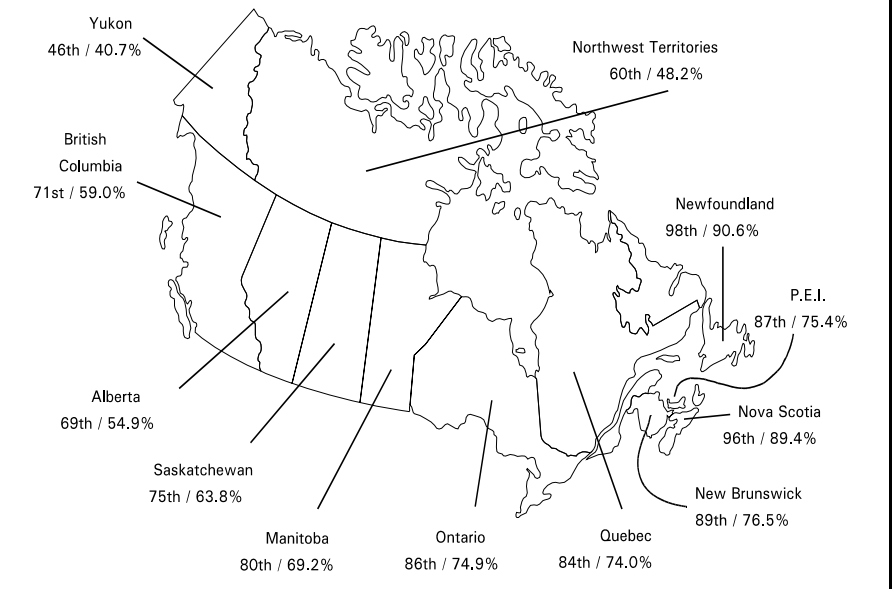
debt relative to the size of the economy, and to eliminate the default-risk premium. Recently, the decrease in the rate at which Canadian governments are accumulating debt and the increasing focus on fiscal responsibility has lessened the upward pressure on interest rates.

Table 7: Canadian Rankings, 1995

Rank in Canada	Rank in world	Region	Debt to GDP (%)	Debt to Discretionary Income (%)
1	46	Yukon Territory	40.4	40.7
2	60	Northwest Territories	47.9	48.2
3	69	Alberta	54.5	54.9
4	71	British Columbia	58.5	59.0
5	75	Saskatchewan	63.2	63.8
6	80	Manitoba	68.5	69.2
7	81	Canada	69.6	70.3
8	84	Quebec	73.3	74.0
9	86	Ontario	74.3	74.9
10	87	Prince Edward Island	74.4	75.4
11	89	New Brunswick	75.6	76.5
12	96	Nova Scotia	88.2	89.4
13	98	Newfoundland	89.3	90.6

Sources: OECD 1997a; World Bank 1997; Statistics Canada, Canadian Federal and Provincial government budgets, calculations by authors.

Figure 4: Canadian Rankings



Recommendations

Alberta, Saskatchewan, Manitoba, Nova Scotia, and New Brunswick all have surplus budgets. The other provinces plan to have balanced budgets by 2001. Alberta has made significant progress in eliminating its net debt and many provinces either have a debt-reduction plan in place or are working on such a plan. 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 our 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 defense. 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 re-organization 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 consolidated financial statements. In the 1996/97 public accounts, the Auditors-General of British Columbia and Quebec included reservations because their respective governments did not fully consolidate their financial statements. Quebec's Auditor General went so far as to write that "the readers of these financial statements cannot use them to understand or evaluate financial management of the Gouvernement du Québec as a whole" (Québec, Ministère des Finances, *Public Accounts*: I, 45). Legislation must prevent governments from financing projects "off balance sheet" in order to avoid—technically—operating 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 consolidate and 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 49.3 percent in 1997, ranging from 39.6 percent in Newfoundland to 51.2 percent in Quebec (Emes and Walker 1998). Recent reports by the Canadian Institute of Actuaries (1995) and the OECD (1997b) clearly document the international disadvantage under which Canada suffers as a result of high taxes.

The only effective course of action towards fiscal balance is control of spending. Governments can and should im-

plement further initiatives to reduce spending and encourage free-market competition. For example, federal transfer payments to high-income households could be eliminated. This approach to assistance, targeted through a means-test, would ensure that programs transfer benefits only to Canadians who truly require assistance. The funds freed would provide resources with which the federal government could reduce debt and taxation.

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 and Ontario have also included contingency reserves; all provincial governments should do likewise.

Conclusion

The apparent success of fiscally responsible governments in Alberta, Saskatchewan, Manitoba, 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. Canadians must persist in demanding that governments balance their budgets, provide full disclosure in a timely manner, and implement 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

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.

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Step 6: enact legislation to limit debt in the future

All jurisdictions should enact legislation enforcing balanced budgets and debt reduction. This legislation should include strict penalties for politicians and bureaucrats who do not comply. Finally, 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. (For a further discussion of the pros and cons of balanced budget and debt reduction laws, see Buchanan and Tullock 1962; Downs 1967; Wittman 1989; Lott 1995; Krol 1997.)

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 provide background information to help the average Canadian understand the size, nature and impact of public debt and obligations. 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.