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PEAP  
Policy Study 2000-2

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Outlook for the Canadian Economy:

**NATIONAL PROJECTION THROUGH 2020**

by

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## SUMMARY

This study presents a projection for the Canadian economy through the year 2020. Although the primary focus of this exercise is on the medium-term and the long-term, attention is inevitably drawn to the short-term outlook. We include, therefore, a revised version of our latest short-term forecast (PEAP Memo 2000-6, published on June 9<sup>th</sup>) which incorporates information available through July 13<sup>th</sup>.

Although there are indications that growth has slowed somewhat in the second quarter of 2000, we expect a solid economic performance by the Canadian economy in the near to medium term as investment (particularly machinery & equipment) spending remains strong and government becomes more expansionary -with federal and provincial levels increasing spending and cutting taxes. Consumption growth over the near term is expected to be very strong, due in no small part to increases in transfers from government and tax cuts (and also to the federal pay equity settlement and the special "tax rebate" in Ontario), but also because wage increases continue to modestly improve. Since we expect strong consumption and machinery & equipment investment growth, combined with less robust growth in the U.S. economy, net exports are seen to be relatively weak. As well, over the near term, we expect a modest reduction in inventory levels from their recent highs. Overall, therefore, we expect real GDP to grow by 4.4% in 2000, slowing somewhat to 3.3% and 3.4% in 2001 and 2002, respectively.

Given the shift to expansionary fiscal policy in Canada, the current relatively low level of unemployment and the danger that the recent high energy prices may feed through in to wage demands and prices, we expect that the Bank of Canada's bias will be towards tighter monetary policy over the near term, with three ¼ percentage point increases in the Bank rate expected from August through the 1<sup>st</sup> quarter of 2001. The rate remains at this level for the subsequent year, before easing somewhat. Given the recent jump in the headline CPI inflation rate, and another expected jump in this rate later this year when both senior levels of government are anticipated to implement major increases in tobacco taxes, CPI inflation is forecast to remain above 2% for both calendar year 2000 and 2001, although the core rate will be considerably lower. Because of relatively tight monetary policy (tighter than we expect in the U.S. where they do not have specific inflation targets), the Canadian dollar is expected to appreciate to over \$.695 U.S. dollars by the end of 2001.

At the federal government level, even with billions of dollars of "pre-booking" of spending into the previous fiscal year, the 1999-2000 public accounts federal surplus could be as high as \$8 billion. We expect both the federal and aggregate provincial levels of government to run relatively small public account surpluses over the next few years under pressures to increase spending (particularly for health care) and to implement announced and expected income tax cuts (both personal and corporate).

In the medium-term the economy is expected to be very close to potential. However, because of the Bank of Canada's expected cautious monetary policy stance over this term, inflation is expected to remain below the 2% target indefinitely. The lower Canadian inflation trajectory, coupled with somewhat higher U.S. inflation rates foreseen over the next decade, is consistent with a gradual appreciation of the Canada-U.S. exchange rate.

In the longer term the projection shows growth entering a declining trend together with potential (largely due to lower population growth), but there are nonetheless small gains made in consumption and real incomes. The aggregate government sector continues to accumulate surpluses (particularly in the Canada and Quebec Pension Plans). Aggregate labour productivity averages about 1.6% in the projection. Such a growth rate, sustained on an annual basis would certainly be an improvement over average labour productivity growth achieved in the 1990s and 1980s, but would be lower than that achieved in the 1950s and 1960s. We do not project that the industrial economies (or at least the North American ones) are now undergoing or are about to undergo a structural shift in which computer and communication technology will lead to permanently higher long-term productivity growth.

Table 1a

FOCUS Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Summary of Projection	History				Forecast												
	1999:1	1999:2	1999:3	1999:4	2000:1	2000:2	2000:3	2000:4	2001:1	2001:2	2001:3	2001:4	1998	1999	2000	2001	2002
Real Gross Domestic Product (%ch)	1.2	0.8	1.6	1.2	1.2	0.7	0.9	0.8	0.7	0.8	1.2	0.8	3.3	4.5	4.4	3.3	3.4
Expenditure on Personal Consumption	1.2	1.2	1.1	0.9	0.8	1.0	1.3	1.0	0.4	0.6	1.3	0.6	2.9	3.5	4.1	3.4	3.3
Expenditure by Governments	0.5	0.9	0.8	1.0	0.4	1.1	1.1	1.2	1.1	1.1	1.1	1.1	1.6	2.8	3.4	4.6	4.1
Investment Expenditure	2.1	5.0	1.2	4.3	2.6	1.8	1.4	1.3	0.9	0.9	0.9	0.9	3.7	9.4	10.3	4.4	3.4
Residential Construction	1.7	0.0	1.2	2.9	2.4	1.3	0.7	0.5	0.4	0.4	0.4	0.4	-2.0	6.6	7.5	2.1	1.9
Non-Residential Construction	1.7	0.0	0.6	2.1	3.0	1.7	1.2	0.9	0.6	0.7	0.7	0.7	1.7	2.0	7.2	3.4	2.9
Machinery and Equipment	1.2	9.1	1.5	6.2	2.5	2.1	1.8	1.8	1.3	1.3	1.3	1.2	9.0	15.6	13.5	6.2	4.5
Exports	3.3	0.1	3.1	2.6	3.3	1.5	1.3	1.3	1.1	1.1	1.1	1.1	8.9	10.0	10.0	9.1	4.8
Imports	2.0	3.9	1.6	5.1	1.9	2.2	2.0	1.7	1.3	1.1	1.1	1.1	6.1	9.4	10.9	5.9	4.4
Inventory - Non-Farm (\$ 92 Bill)	-1.4	3.8	4.7	8.6	7.4	5.5	3.5	2.2	2.6	3.0	3.0	3.1	5.6	3.9	4.6	2.9	3.4
Inventory - Farm (\$ 92 Bill)	0.4	1.0	0.1	0.6	-0.7	-0.5	-0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.5	-0.4	0.2	0.2
Residual Error (\$ 92 Bill)	1.6	0.1	-0.5	0.8	-0.7	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	-0.2	0.0	0.0
Gross Domestic Product (%ch)	1.9	2.0	2.3	1.7	2.1	1.5	1.3	1.4	1.2	1.2	1.6	1.2	2.7	6.2	7.3	5.4	5.0
Implicit Price Deflator for GDP (%ch)	0.7	1.2	0.7	0.5	0.9	0.7	0.4	0.6	0.5	0.4	0.4	0.4	-0.6	1.6	2.9	2.0	1.5
Unemployment Rate	7.9	7.8	7.6	7.0	6.8	6.7	6.6	6.5	6.5	6.4	6.3	6.3	8.3	7.6	6.6	6.4	6.3
Employment (%ch)	0.7	0.6	0.5	0.9	0.9	0.4	0.4	0.4	0.4	0.5	0.5	0.4	2.6	2.8	2.7	1.8	1.4
Labour Force (%ch)	0.5	0.5	0.3	0.2	0.8	0.3	0.3	0.4	0.4	0.4	0.4	0.4	1.8	2.0	1.6	1.5	1.3
Participation Rate	65.5	65.7	65.6	65.5	65.8	65.8	65.8	65.8	65.9	65.9	65.9	66.0	65.1	65.6	65.8	65.9	65.9
3-Month Treasury Bill Rate	4.7	4.5	4.7	4.8	5.1	5.3	5.7	5.9	6.2	6.2	6.2	6.2	4.7	4.7	5.5	5.2	6.0
30-Year Gov't of Canada Bond Rate	5.3	5.5	5.8	6.2	6.0	5.7	5.6	5.7	5.8	5.9	5.9	6.0	5.6	5.7	5.7	5.9	6.0
Inflation Rate - CPI	0.2	1.1	0.7	0.3	0.5	0.9	0.5	0.8	0.6	0.4	0.4	0.4	1.0	1.7	2.5	2.3	1.6
Annual Wage per Employee - P1 (%ch)	0.2	1.3	0.9	0.7	1.1	1.1	0.9	0.9	0.8	0.8	0.7	0.7	2.3	2.2	3.9	3.5	3.1
Real Ann Wage per Emp - P1 (%ch)	-0.1	0.2	0.2	0.4	0.5	0.3	0.5	0.1	0.2	0.4	0.4	0.4	1.2	0.4	1.4	1.2	1.5
Labour Productivity (%ch)	0.5	0.2	1.0	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.7	0.4	0.6	1.7	1.7	1.6	2.0
Exchange Rate (US \$/Can \$)	0.662	0.679	0.673	0.679	0.688	0.676	0.680	0.685	0.688	0.690	0.693	0.695	0.674	0.673	0.682	0.691	0.697
Terms of Trade (%ch)	1.3	3.8	0.6	1.2	1.7	0.9	0.6	0.3	0.1	0.0	0.0	0.0	-3.4	3.0	4.9	0.8	0.0
Balance on Current Account (\$ Bill)	-6.9	-7.2	1.7	-1.3	19.4	19.2	20.1	20.7	21.4	22.1	22.8	23.5	-16.3	-3.4	19.8	22.4	24.4
Consolidated Government Balance (\$ Bill)	10.5	15.0	31.5	25.8	35.4	33.9	31.7	30.7	32.1	35.9	31.6	32.8	1.8	20.7	32.9	33.1	30.1
Federal Gov't Balance (NA Basis) (\$ Bill)	1.2	0.5	6.0	16.1	22.6	15.6	13.4	15.3	11.4	15.7	13.4	15.0	4.7	5.9	16.7	13.9	10.7
Federal Balance as % of GDP	0.1	0.0	0.8	1.6	2.2	1.5	1.3	1.5	1.1	1.5	1.2	1.4	0.5	0.6	1.6	1.3	0.9
Ratio: Federal Debt to GDP (%)	60.5	59.3	57.9	56.5	54.8	53.6	52.6	51.5	50.6	49.6	48.6	47.6	62.6	58.5	53.1	49.1	45.7
Prov't Gov't Balance (NA Basis) (\$ Bill)	8.5	15.0	25.4	9.0	10.1	15.9	15.8	12.7	14.7	14.3	12.5	12.3	-4.4	14.5	13.6	13.5	10.6
Personal Savings Rate (%)	4.1	4.0	3.3	3.2	3.4	3.4	3.5	3.5	3.4	3.0	3.4	3.3	4.5	3.6	3.4	3.3	3.4
Real Personal Disposable Income (%ch)	0.5	1.0	0.5	0.8	1.1	1.0	1.5	1.1	0.4	0.3	1.8	0.6	2.8	2.7	4.1	3.6	3.4
Nominal After-Tax Corporate Profits (%ch)	4.3	11.0	17.0	5.1	3.5	1.9	1.2	0.9	2.2	0.7	3.1	1.5	-10.6	25.0	21.1	6.6	9.9
U.S. Real GDP Growth	0.9	0.5	1.4	1.8	1.3	0.8	0.9	0.7	0.7	0.7	0.7	0.7	4.3	4.2	4.8	3.0	3.0
U.S. Inflation (GDP Deflator)	0.5	0.3	0.3	0.5	0.7	0.6	0.7	0.5	0.5	0.5	0.5	0.5	1.2	1.5	2.3	2.2	2.1
U.S. 3-Month Treasury Bill Rate	4.4	4.5	4.7	5.0	5.5	5.7	5.9	5.9	5.9	5.9	5.9	5.9	4.8	4.6	5.8	5.9	5.8
U.S. 30-Year Gov't Bond Rate	5.4	5.8	6.0	6.3	6.3	6.0	5.9	6.0	6.1	6.2	6.2	6.3	5.6	5.9	6.1	6.2	6.3

Percentage changes are period to period

Table 1b

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

## Summary of Projection

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Real Gross Domestic Product (%ch)	-1.9	0.9	2.3	4.7	2.8	1.5	4.4	3.3	4.5	4.4
Expenditure on Personal Consumption	-1.4	1.8	1.8	3.1	2.1	2.5	4.4	2.9	3.5	4.1
Expenditure by Governments	3.2	0.9	-0.1	-0.4	-0.8	-1.6	-1.4	1.6	2.8	3.4
Investment Expenditure	-5.1	-1.4	-2.8	7.4	-1.7	7.4	18.2	3.7	9.4	10.3
Residential Construction	-14.5	7.2	-3.5	4.2	-15.1	9.7	12.6	-2.0	6.6	7.5
Non-Residential Construction	-3.2	-15.6	0.5	8.9	0.6	1.9	16.6	1.7	2.0	7.2
Machinery and Equipment	0.5	2.6	-4.6	9.5	9.8	9.6	23.5	9.0	15.6	13.5
Exports	2.3	7.9	10.9	13.1	9.0	5.9	8.8	8.9	10.0	9.1
Imports	3.2	6.2	7.4	8.3	6.2	5.8	15.1	6.1	9.4	10.9
Inventory - Non-Farm (\$ 92 Bill)	-6.3	-5.8	-2.3	0.9	7.6	1.4	10.2	5.6	3.9	4.6
Inventory - Farm (\$ 92 Bill)	0.3	-0.7	1.4	0.5	0.5	0.7	-0.3	0.2	0.5	-0.4
Residual Error (\$ 92 Bill)	0.0	-1.5	-1.9	-1.1	-0.8	-0.6	0.2	0.3	0.5	-0.2
Gross Domestic Product (%ch)	0.8	2.2	3.8	5.9	5.2	3.2	5.4	2.7	6.2	7.3
Implicit Price Deflator for GDP (%ch)	2.7	1.3	1.5	1.1	2.3	1.6	1.0	-0.6	1.6	2.9
Unemployment Rate	10.3	11.2	11.4	10.4	9.4	9.6	9.1	8.3	7.6	6.6
Labour Force (%ch)	-1.8	-0.7	0.8	2.0	1.9	0.8	2.3	2.6	2.8	2.7
Labour Force (%ch)	0.6	0.2	1.0	0.8	0.9	1.0	1.7	1.8	2.0	1.6
Participation Rate	66.5	65.7	65.4	65.2	64.9	64.7	64.9	65.1	65.6	65.8
3-Month Treasury Bill	8.8	6.4	4.8	5.5	7.1	4.2	3.2	4.7	4.7	5.5
30-Year Gov't of Canada Bond	9.7	8.7	7.9	8.7	8.4	7.7	6.7	5.6	5.7	5.7
Inflation Rate - CPI	5.6	1.5	1.9	0.2	2.2	1.6	1.6	1.0	1.7	2.5
Annual Wage per Employee - Pvt (%ch)	4.6	2.4	1.0	0.4	1.7	2.2	3.6	2.3	2.2	3.9
Real Ann Wage per Emp - Pvt (%ch)	-1.0	0.9	-0.8	0.2	-0.5	0.6	2.0	1.2	0.4	1.4
Labour Productivity (%ch)	-0.1	1.7	1.5	2.7	0.9	0.7	2.0	0.6	1.7	1.7
Exchange Rate (US \$/cdn \$)	0.873	0.827	0.775	0.732	0.729	0.733	0.722	0.674	0.673	0.682
Terms of Trade (%ch)	-1.8	-0.7	-1.8	-0.9	2.9	2.1	-1.0	-3.4	3.0	4.9
Balance on Current Account (\$ Bill)	-25.6	-25.4	-28.1	-17.7	-6.1	4.6	-13.9	-16.3	-3.4	19.8
Consolidated Government Balance (\$ Bill)	-57.3	-63.9	-63.4	-51.7	-43.2	-23.4	2.1	1.8	20.7	32.9
Federal Gov't Balance (NA Basis) (\$ Bill)	-37.2	-35.8	-39.7	-35.1	-31.7	-17.0	4.3	4.7	5.9	16.7
Federal Balance as % of GDP	-5.4	-5.1	-5.5	-4.6	-3.9	-2.0	0.5	0.5	0.6	1.6
Ratio: Federal Debt to GDP (%)	57.3	61.5	65.4	66.7	68.1	68.7	65.3	62.6	58.5	53.1
Prov'l Gov't Balance (NA Basis) (\$ Bill)	-20.3	-28.2	-22.4	-14.7	-10.6	-4.3	0.8	-4.4	14.5	13.6
Personal Savings Rate (%)	13.2	13.0	11.9	9.4	9.2	7.0	4.7	4.5	3.6	3.4
Real Personal Disposable Income (%ch)	-1.4	0.9	0.2	0.3	2.3	-0.1	1.4	2.8	2.7	4.1
Nominal After-Tax Corporate Profits (%ch)	-49.0	1.1	79.6	111.1	21.5	-0.1	6.9	-10.6	25.0	21.1
U.S. Real GDP Growth	-0.5	3.1	2.7	4.0	2.7	3.6	4.2	4.3	4.2	4.8
U.S. Inflation (GDP Deflator)	3.6	2.4	2.4	2.1	2.2	1.9	1.9	1.2	1.5	2.3
U.S. 3-Month Treasury Bill	5.4	3.4	3.0	4.2	5.5	5.0	5.1	4.8	4.6	5.8
U.S. 30-Year Gov't Bond	8.1	7.7	6.6	7.4	6.9	6.7	6.6	5.6	5.9	6.1

Table 1b (cont'd)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Summary of Projection										
Real Gross Domestic Product (%ch)	3.3	3.4	3.2	3.0	2.9	2.7	2.6	2.5	2.3	2.2
Expenditure on Personal Consumption	3.4	3.3	3.1	2.8	2.9	2.7	2.5	2.4	2.5	2.2
Expenditure by Governments	4.6	4.1	3.6	3.3	3.0	2.8	2.7	2.5	2.4	2.7
Investment Expenditure	4.4	3.4	3.4	3.3	3.1	3.2	3.2	3.1	2.4	2.1
Residential Construction	2.1	1.9	2.2	2.2	2.4	2.2	2.1	1.9	1.8	1.8
Non-Residential Construction	3.4	2.9	2.9	3.2	2.9	3.1	3.1	3.1	2.2	1.9
Machinery and Equipment	6.2	4.5	4.2	3.9	3.5	3.7	3.7	3.7	2.7	2.3
Exports	4.8	4.0	3.7	3.6	3.3	3.2	3.0	2.9	2.8	2.7
Imports	5.9	4.4	3.8	3.7	3.5	3.4	3.3	3.1	3.0	2.9
Inventory - Non-Farm (\$ 92 Bill)	2.9	3.4	3.5	3.5	3.6	3.7	3.8	3.8	3.9	4.0
Inventory - Farm (\$ 92 Bill)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Residual Error (\$ 92 Bill)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Domestic Product (%ch)	5.4	5.0	4.8	4.5	4.5	4.4	4.3	4.1	4.0	3.8
Implicit Price Deflator for GDP (%ch)	2.0	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6
Unemployment Rate	6.4	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Employment (%ch)	1.8	1.4	1.4	1.3	1.3	1.2	1.1	0.9	0.8	0.7
Labour Force (%ch)	1.5	1.3	1.3	1.3	1.3	1.2	1.1	0.9	0.8	0.7
Participation Rate	65.9	65.9	65.9	65.9	65.9	65.8	65.7	65.5	65.3	65.0
3-Month Treasury Bill	6.2	6.0	5.8	5.8	5.6	5.3	5.0	5.0	5.0	5.0
30-Year Gov't of Canada Bond	5.9	6.0	6.1	6.1	6.2	6.2	6.1	6.0	6.0	6.0
Inflation Rate - CPI	2.3	1.6	1.6	1.6	1.7	1.8	1.8	1.8	1.8	1.8
Annual Wage per Employee - Pvt (%ch)	3.5	3.1	3.2	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Real Ann Wage per Emp - Pvt (%ch)	1.2	1.5	1.6	1.7	1.6	1.5	1.5	1.5	1.5	1.5
Labour Productivity (%ch)	1.6	2.0	1.8	1.6	1.6	1.5	1.5	1.5	1.5	1.5
Exchange Rate (US \$/Cdn \$)	0.691	0.697	0.701	0.706	0.710	0.715	0.720	0.725	0.730	0.735
Terms of Trade (%ch)	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Balance on Current Account (\$ Bill)	22.4	24.4	27.5	30.5	33.5	36.5	39.5	42.5	45.5	48.5
Consolidated Government Balance (\$ Bill)	33.1	30.1	27.5	25.5	26.0	26.7	27.3	27.9	28.4	28.8
Federal Gov't Balance (NA Basis) (\$ Bill)	13.9	10.7	8.7	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Federal Balance as % of GDP	1.3	0.9	0.7	0.5	0.5	0.4	0.4	0.4	0.4	0.4
Ratio: Federal Debt to GDP (%)	49.1	45.7	42.9	40.4	38.2	36.2	34.3	32.5	30.9	29.4
Provl. Gov't Balance (NA Basis) (\$ Bill)	13.5	10.6	7.9	8.0	7.9	8.0	8.0	7.9	8.0	7.9
Personal Savings Rate (%)	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2
Real Personal Disposable Income (%ch)	3.6	3.4	3.2	2.9	2.9	2.7	2.5	2.4	2.6	2.3
Nominal After-Tax Corporate Profits (%ch)	6.6	9.9	8.9	8.5	5.0	4.8	4.9	5.2	3.2	3.0
U.S. Real GDP Growth	3.0	3.0	2.8	2.6	2.5	2.4	2.2	2.1	2.0	2.0
U.S. Inflation (GDP Deflator)	2.2	2.1	2.4	2.4	2.4	2.5	2.6	2.6	2.6	2.6
U.S. 3-Month Treasury Bill	5.9	5.8	5.8	5.8	5.7	5.6	5.5	5.5	5.5	5.5
U.S. 30-Year Gov't Bond	6.2	6.3	6.4	6.4	6.5	6.6	6.6	6.6	6.6	6.6





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## **I Introduction**

This study presents a projection for the Canadian economy through the year 2020. The projection was developed with the University of Toronto's FOCUS macro-econometric model but it includes important inputs from other sources and depends heavily, especially in the short-term, on the judgement of the authors.

Although the primary focus of the exercise is on the medium-term and the long-term, attention is inevitably drawn to the short-term outlook; this is based on a revised version of our recently released short-term forecast (PEAP Memo #2000-6), updated to reflect data available through July 13<sup>th</sup>.

Section II below reviews the various assumptions and exogenous projections that enter into the national projection. Section III reviews and summarizes the projection itself. For variables not presented or for special tabulations PEAP members are invited to contact us directly.

While many of our members have read the following paragraphs before, we feel it is important for those unfamiliar with model-based longer-term economic projections to understand how a projection evolves. The tables and figures presented in this document are developed from three principal sets of ingredients:

First, there are a host of assumptions that must be made about the future economic environment outside Canada, about economic policies pursued by the different levels of government, and about underlying technology and population growth. The most important assumptions will be discussed further below.

Second, there is the computer simulation model of the Canadian economy (FOCUS) that is used to translate the assumptions into a numerical "picture" of the economy in detail (including output, employment, external trade and deficits). The model contains both accounting "identities" that express the way the national accounts and other Canadian data "add up", and "behavioural" equations that embody our best estimate of the way segments of the economy (like investment or consumption) have performed or behaved in the past.

The third ingredient is the authors' own judgement, which is used to coordinate and make consistent the previous two components. For example, initial assumptions about policy, when run through the model, may give a result that appears to be politically unsustainable in our judgement, causing us to change our assumptions. Or a particular model equation may be judged to be an unreliable guide at some point in the future and be overridden with judgmental assumptions instead. The economy remains sufficiently mysterious that the development of an economic projection is as much "art" as it is "science".

There are two additional features of this type of projection that should be noted:

First, the specific numbers generated by the computer model must be considered as only the median of the range of possibilities that becomes more diffuse the further into the future we proceed. Despite the apparent precision of the numerical results, they are rough estimates only.

Second, beyond the next few years, the projection can only indicate trends for the future. Reality will no doubt include future business cycles. The projection can only represent an average through the ups and downs that will inevitably occur. However, we do assume that the result of future cycles is likely to be that the economy on average will be below its "full employment" or potential level, and this feature is built into our projected longer-term trends.

## **II Assumptions and Factors Underlying the PEAP National Projection**

This section outlines and discusses the principal assumptions entering the PEAP national projection. These include assumptions about the economic prospects for the U.S., and about Canadian fiscal, monetary and exchange-rate policies. Table 2 provides a list of several of the numerical assumptions incorporated in the projection.

### **II.1 The Foreign Environment**

The near-term U.S. forecast used in this study is a mixture of elements from recent projections by Project LINK, information from Consensus Forecasts, and some additional judgement calls of our own. The longer-term projection is based on Standard and Poor's DRI U.S. projection, combined with our own judgement. For details see Tables 2 and 4 and Figures 4 and 5.

In the near-term, the U.S. continues its incredible run to a soft landing, after achieving growth above 3% in six of the last eight years. With growth in the 1<sup>st</sup> quarter of 2000 reported at over 5% at an annual rate, real growth is expected to be 4.8% in 2000, before slowing to 3.0% in both 2001 and 2002. (Of course, we have been forecasting this slowdown for some time but there are indications in the 2<sup>nd</sup> quarter of 2000 that it may have begun.) Thereafter, real growth slows somewhat to potential. The U.S. projection shows U.S. inflation (measured by the GDP deflator) climbing above 2% in 2000 (for the first time since the mid-1990s) and remaining above this level over the entire projection period, increasing slowly to 2.6% by 2007 and remaining stable thereafter. The CPI inflation rate is modestly higher throughout the projection period. U.S. potential growth is estimated to be about 2.5% in the first decade after the turn of the century and to decline gradually to just about 1.9% at the projection horizon. The U.S. unemployment rate, which is now well below what most, if not all, economists thought was the natural rate for the U.S., (with, as noted above, few signs of inflation), is expected to increase slowly over the next few years before levelling off at 4.6%, roughly 1.6% points below the Canadian rate.

Given the recent signs that the U.S. economy may be slowing somewhat, we now expect the U.S. Fed to increase its benchmark rate only one more time in 2000 (by one quarter point in the 3<sup>rd</sup> quarter).

Table 2

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Principal Assumptions (Per Cent - Unless Otherwise Indicated)	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>United States Economy:</b>										
U.S. Real GDP Growth	-0.5	3.1	2.7	4.0	2.7	3.6	4.2	4.3	4.2	4.8
U.S. Inflation (GDP Defl)	3.6	2.4	2.4	2.1	2.2	1.9	1.9	1.2	1.5	2.3
U.S. 3-Month T-Bill Rate	5.4	3.4	3.0	4.2	5.5	5.0	5.1	4.8	4.6	5.8
U.S. 30-Year Gov't Bond Rate	8.1	7.7	6.6	7.4	6.9	6.7	6.6	5.6	5.9	6.1
U.S. Industrial Bond Rate	8.8	8.1	7.2	8.0	7.6	7.4	7.3	6.5	7.0	7.7
<b>Population, Participation and Labour Force</b>										
Total Population (Millions) (Growth Rate)	27990 ( 1.25)	28330 ( 1.21)	28670 ( 1.20)	28995 ( 1.13)	29315 ( 1.10)	29633 ( 1.08)	29944 ( 1.05)	30212 ( 0.90)	30454 ( 0.80)	30721 ( 0.88)
Labour-Force Source Pop ('000) (Growth Rate)	21541 ( 1.53)	21867 ( 1.52)	22180 ( 1.43)	22440 ( 1.17)	22727 ( 1.28)	23031 ( 1.34)	23359 ( 1.43)	23671 ( 1.33)	23969 ( 1.26)	24275 ( 1.27)
Participation Rate	66.5	65.7	65.4	65.2	64.9	64.7	64.9	65.1	65.6	65.8
Labour-Force ('000) (Growth Rate)	14329 ( 0.59)	14364 ( 0.25)	14508 ( 1.00)	14623 ( 0.80)	14750 ( 0.87)	14902 ( 1.03)	15151 ( 1.67)	15416 ( 1.75)	15722 ( 1.98)	15977 ( 1.63)
<b>Policy:</b>										
Growth in Real Current and Capital Expenditure by Government	3.2	0.9	-0.1	-0.4	-0.8	-1.6	-1.4	1.6	2.8	3.4
Total Government Expenditures (ex Inter- Government Transfers) as % of GDP	54.3	55.3	54.2	51.8	50.5	48.5	45.8	46.1	43.7	42.3
Total Government Revenues (ex Inter- Government Transfers) as % of GDP	43.9	44.2	43.5	43.1	43.2	43.8	44.1	44.4	44.0	43.7

Table 2 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Principal Assumptions		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
(Per Cent - Unless Otherwise Indicated)											
United States Economy:											
U.S. Real GDP Growth		3.0	3.0	2.8	2.6	2.5	2.4	2.2	2.1	2.0	2.0
U.S. Inflation (GDP Defl)		2.2	2.1	2.4	2.4	2.4	2.5	2.6	2.6	2.6	2.6
U.S. 3-Month T-Bill Rate		5.9	5.8	5.8	5.8	5.7	5.6	5.5	5.5	5.5	5.5
U.S. 30-Year Gov't Bond Rate		6.2	6.3	6.4	6.4	6.5	6.6	6.6	6.6	6.6	6.6
U.S. Industrial Bond Rate		7.4	7.3	7.3	7.4	7.5	7.6	7.7	7.8	7.8	7.8
Population, Participation and Labour Force											
Total Population (Millions)		31026	31327	31617	31900	32178	32451	32720	32985	33249	33511
(Growth Rate)		( 0.99)	( 0.97)	( 0.93)	( 0.90)	( 0.87)	( 0.85)	( 0.83)	( 0.81)	( 0.80)	( 0.79)
Labour-Force Source Pop ('000)		24592	24918	25234	25560	25898	26234	26564	26883	27193	27497
(Growth Rate)		( 1.31)	( 1.33)	( 1.27)	( 1.29)	( 1.32)	( 1.30)	( 1.26)	( 1.20)	( 1.15)	( 1.12)
Participation Rate		65.9	65.9	65.9	65.9	65.9	65.8	65.7	65.5	65.3	65.0
Labour-Force ('000)		16214	16433	16640	16854	17070	17274	17456	17616	17764	17884
(Growth Rate)		( 1.48)	( 1.35)	( 1.26)	( 1.29)	( 1.28)	( 1.20)	( 1.05)	( 0.92)	( 0.84)	( 0.68)
Policy:											
Growth in Real Current and Capital Expenditure by Government		4.6	4.1	3.6	3.3	3.0	2.8	2.7	2.5	2.4	2.7
Total Government Expenditures (ex Inter-Government Transfers) as % of GDP		41.6	41.0	40.4	39.9	39.5	39.0	38.7	38.3	38.1	37.9
Total Government Revenues (ex Inter-Government Transfers) as % of GDP		43.0	42.0	41.1	40.3	39.8	39.4	39.0	38.6	38.3	38.1



Table 2 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

## Principal Assumptions

(Per Cent - Unless Otherwise Indicated)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
United States Economy:										
U.S. Real GDP Growth	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
U.S. Inflation (GDP Defl)	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
U.S. 3-Month T-Bill Rate	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
U.S. 30-Year Gov't Bond Rate	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
U.S. Industrial Bond Rate	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
Population, Participation and Labour Force										
Total Population (Millions)	33770	34026	34282	34536	34788	35040	35289	35537	35783	36025
(Growth Rate)	( 0.77)	( 0.76)	( 0.75)	( 0.74)	( 0.73)	( 0.72)	( 0.71)	( 0.70)	( 0.69)	( 0.68)
Labour-Force Source Pop ('000)	27794	28070	28334	28581	28820	29051	29273	29486	29692	29893
(Growth Rate)	( 1.08)	( 0.99)	( 0.93)	( 0.88)	( 0.84)	( 0.80)	( 0.76)	( 0.73)	( 0.70)	( 0.67)
Participation Rate	64.8	64.5	64.1	63.8	63.6	63.3	63.0	62.7	62.4	62.2
Labour-Force ('000)	17999	18093	18173	18248	18316	18376	18434	18482	18528	18581
(Growth Rate)	( 0.65)	( 0.52)	( 0.46)	( 0.41)	( 0.37)	( 0.33)	( 0.32)	( 0.26)	( 0.25)	( 0.29)
Policy:										
Growth in Real Current and Capital Expenditure by Government	2.7	2.6	2.6	2.5	2.5	2.4	2.4	2.4	2.4	2.4
Total Government Expenditures (ex Inter-Government Transfers) as % of GDP	37.8	37.7	37.7	37.6	37.6	37.5	37.5	37.5	37.5	37.5
Total Government Revenues (ex Inter-Government Transfers) as % of GDP	38.0	37.8	37.7	37.6	37.5	37.5	37.5	37.4	37.4	37.4

Since there will be looser fiscal policy in the U.S. next year, however, we do not expect that the rates will fall much over the next couple of years from these relatively high real levels. This last increase should act as the final tap on the brakes needed to achieve a slowdown such that inflation does not erupt. The U.S. real short-term interest rate (the 3-month t-bill rate) is expected to remain above 3% through well after the turn of the century, then fall gradually to 2.9% through the projection horizon. We expect real longer term government bond rates in the U.S. to remain at roughly 4% throughout the projection period. These real rates - especially the real long-term rate - of course will dominate the Canadian interest-rate projection. The long-term rate reflects the consensus view that world savings will be relatively scarce compared to world demands for capital in at least the two decades to come.

## **II.2 Population and Labour Force Participation**

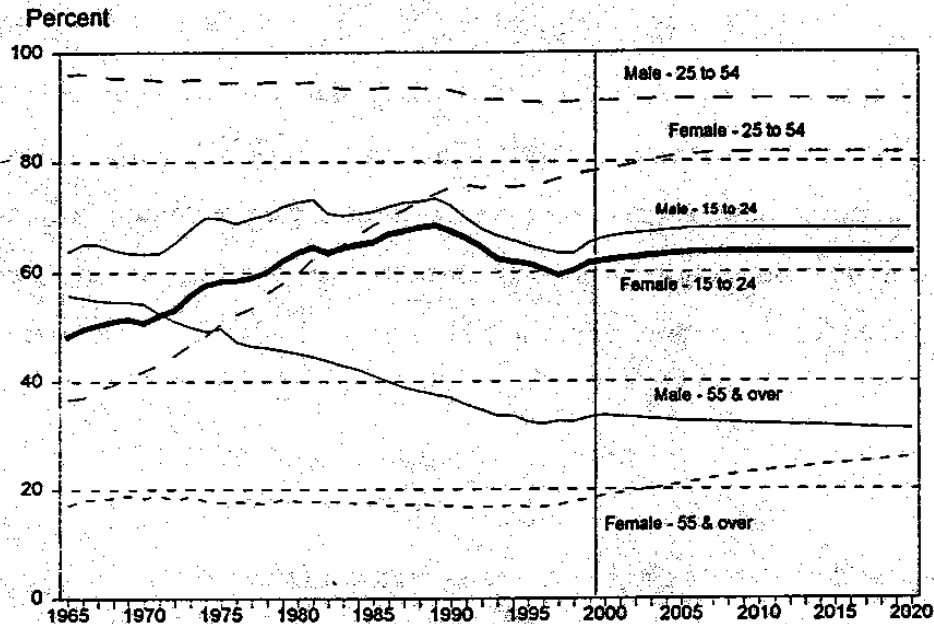
The population and household projections incorporated into the national projection (see Table 1b) are based on a new demographic projection model that we have recently developed, incorporating the latest population data and immigration targets. This new demographic model gives us greater flexibility in looking at the impact of changing assumptions on fertility, immigration and emigration and expected mortality.

The gradual aging of the source population for the labour force will likely have implications for the evolution of the full-employment unemployment rate; however, for the projection, a flat figure of between 6.0% and 6.5% has been assumed as a rough benchmark. Note that no special upward adjustment has been made to the equilibrium rate to reflect 'above normal' industrial re-structuring or regional imbalances.

We have made several adjustments to the model's participation rate equations to reflect the easing or termination of some long-term trends (see Figure 1). We now expect only a modest recovery in the participation rate of the 15-24 age group, which fell every year between 1990 and 1997 (from a peak of 68.4% (73.5%) in 1989 to 59.2% (63.5%) in 1997 for females (males)). The participation rate recovery for this age group has been quite substantial in late 1998 through mid-1999 but choppy since. It may well turn out to be greater than we have built into our projection but given the developments through much of the 1990s we have decided to continue to be "prudent". The recovery levels off by

Figure 1

### Canada: Participation Rates By Age Group and Gender



2006 to reflect increased returns to education to this group and a greater availability of education as the numbers of young people decline relative to the size of the education sector. The long secular rise in the participation rate of females 25-54 is assumed to begin to flatten after the turn of the century. This participation rate keeps rising through 2009 but more and more slowly as it nears its maximum value - assumed to be close to ten percentage points below the stable 92% rate for males 25-54. The participation rate for older males (55 and over) which fell dramatically over the thirty years through the mid-1990s, reflecting both enhanced early retirement related to technological adjustments and a gradual rise in the average age of this group, is expected to remain fairly stable through to the projection horizon. An expected rise in the participation rate of females 55 and over in the projection reflects the passage into this group of females who have entered the labour force over the past three decades. Given the participation rate assumptions for the population categories presented above, the aggregate participation rate is expected to fall gradually after 2002 to the projection horizon.

### **II.3 Fiscal Policy**

Setting fiscal policy in the model requires assumptions on certain spending categories and on a wide array of tax rates.

On a national income accounts basis, government expenditure can be roughly divided into current and capital spending, transfers and subsidies to persons and firms, transfers to other governments, and interest on the public debt. Real current and capital spending finally contributed positively to growth in 1998 and 1999 after five years of real cuts. Given recent federal budgets and announcements from various provincial governments, we expect real current and capital spending to be very strong in the near future, with growth rates of 3.4% in 2000, 4.6% in 2001 and 4.1% in 2002. While these increases may seem large relative to what we have seen in recent years, there is pent up demand for spending at both the federal and provincial levels not only on health care but also on numerous other programs that have had to be put on hold. Real spending is expected to remain robust through 2004 as pressures to increase spending grow in line with expectations of higher budget surpluses. Growth rates are expected to be more modest thereafter, but are stronger than we had previously forecast with expenditures now expected to grow at or above GDP growth.

Transfers to persons are largely determined by equations in the model. We assume in most cases that these spending categories will show their historical response to changes in unemployment, inflation and population growth (and in the case of Old Age Security payments, the aging of the population). We have had to adjust the EI program, however, for the recently announced increase in maternity leave.

Interest on the debt is handled entirely within the model based on past debt stocks and interest rates. We have made no adjustments to these relationships.

Finally, we assume that, given the rosy picture of the federal government's fiscal position, the pressure to increase transfers to the provinces, particularly for health care, will be impossible to ignore (nor should it be if a sensible long term plan for health care spending is put forward at the provincial level), so net transfers from the federal government to other levels of government

(essentially transfers to provincial governments) will increase through 2000 and thereafter. (The level of transfers as defined by the national accounts in calendar year 2000 is actually lower than in 1999 due to some large quarterly movements).

On the revenue side there are the three main areas of corporate, personal and indirect taxes to consider. (See the summary of tax rates in Table 3.)

Given this year's federal and provincial budgets, it is clear that corporate tax rates will be reduced substantially over the next few years. We expect that the federal government's strong fiscal position will allow it to aggressively implement its announced corporate tax rate cuts over the next three years, instead of the very gradual "target" outlined in the Budget. At the provincial level, we have implemented the announced corporate rate cuts. We do not expect either level of government to go much beyond the rate cuts already announced.

For personal income taxes, we have implemented the re-introduction of full indexing of the income tax system (instead of the 3% indexing floor) announced in this year's federal budget. As well, we expect that the tax cuts "targets" announced in the federal budget will be implemented in a smooth, timely fashion, and that given the solid fiscal position the federal government is in, further personal income tax cuts will be implemented.

With the success that many of the provincial governments have had in balancing their budgets coupled with the perception that personal taxes are too high, provincial personal income tax rates are expected to continue to fall. A number of provinces have announced that by 2001 they will "de-couple" their provincial personal income tax rates from the basic federal tax rate, and we continue to work on the model to implement these changes. As the provincial budgets continue to improve further rate cuts are possible. Again, it is possible that governments will choose instead to increase spending on existing programs or other initiatives such as increased availability of daycare, or will choose to cut other taxes. On the whole, such alternatives would not greatly alter the overall macro outlook, but they could affect the components of GDP.

The developments in the Employment Insurance (EI) Account affirm what we have incorporated into our projections for some time: a cushion will be allowed to build up in the account so that rates will

Table 3

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

## Principal Tax Rates and Related Fiscal Indicators

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Federal "High" Corporate Tax Rate	0.362	0.360	0.353	0.346	0.346	0.346	0.346	0.346	0.346	0.346
Prov'l Corporate Tax Rate	0.141	0.147	0.146	0.146	0.146	0.146	0.146	0.146	0.145	0.145
Indexing Rate	1.833	2.831	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.415
Indexing "Floor" Rate	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000	0.000
Basic Federal PIT Rate	0.199	0.199	0.199	0.199	0.199	0.199	0.199	0.199	0.199	0.197
Federal Surtax Rate (incl High Income)	0.058	0.053	0.038	0.038	0.038	0.038	0.038	0.031	0.019	0.011
Prov'l PIT Rate (% of Basic Fed) (incl. Quebec)	0.690	0.710	0.739	0.750	0.750	0.743	0.713	0.671	0.649	0.635
UI Contribution Rate (Employee)	0.025	0.030	0.030	0.031	0.030	0.030	0.029	0.027	0.025	0.024
CPP Contribution Rate (Employee)	0.023	0.024	0.025	0.026	0.027	0.028	0.030	0.032	0.035	0.039
Provincial Workers' Compensation Rate***	0.014	0.014	0.014	0.015	0.016	0.015	0.014	0.014	0.013	0.013
"Other" Prov'l Dir Tax Rate (as proportion of Personal Income)	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006
GST Rate	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070
Avg. Tariff Rate (on Non-Auto Imports)	0.033	0.033	0.024	0.023	0.017	0.014	0.012	0.011	0.009	0.009
Federal Gasoline Excise Rate *	0.032	0.033	0.036	0.033	0.036	0.037	0.038	0.038	0.036	0.035
Federal Alcohol/Tobacco Excise Rate *	0.019	0.019	0.018	0.018	0.020	0.019	0.018	0.019	0.018	0.018
Avg. Prov'l Sales Tax Rate (as proportion of approximate tax base)	0.079	0.077	0.078	0.080	0.081	0.077	0.074	0.076	0.077	0.076
Prov'l Tobacco Tax Rate *	0.027	0.026	0.022	0.017	0.016	0.016	0.016	0.018	0.018	0.018
Prov'l Gasoline Tax Rate *	0.045	0.051	0.052	0.054	0.054	0.054	0.053	0.054	0.053	0.053
Prov'l Liquor Board Profit Tax Rate *	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.023	0.022	0.023
Prov'l Capital Tax Rate **	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Prov'l Real Property Tax Rate **	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.003	0.003
Prov'l Other Payroll Taxes Rate ***	0.015	0.014	0.014	0.015	0.015	0.016	0.015	0.015	0.015	0.015
Prov'l Other Indirect Tax Rate **	0.012	0.012	0.013	0.014	0.013	0.014	0.014	0.015	0.015	0.014

\* - tax as a rate on total consumer non-durable spending

\*\* - tax as a rate on nominal GDP Private

\*\*\* - tax as a rate on nominal labour income

Table 3 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Principal Tax Rates and Related Fiscal Indicators	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Federal "High" Corporate Tax Rate	0.336	0.316	0.296	0.276	0.276	0.276	0.276	0.276	0.276	0.276
Provl Corporate Tax Rate	0.140	0.135	0.130	0.125	0.120	0.115	0.110	0.100	0.100	0.100
Indexing Rate	2.419	2.506	1.610	1.617	1.631	1.673	1.780	1.811	1.811	1.811
Indexing "Floor" Rate	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Basic Federal PIT Rate	0.194	0.191	0.189	0.187	0.187	0.187	0.187	0.187	0.187	0.187
Federal Surtax Rate (incl High Income)	-0.005	-0.040	-0.050	-0.058	-0.080	-0.101	-0.118	-0.138	-0.158	-0.171
Provl PIT Rate (% of Basic Fed) (incl. Quebec)	0.610	0.590	0.561	0.558	0.542	0.527	0.514	0.509	0.491	0.480
UI Contribution Rate (Employee)	0.023	0.021	0.020	0.018	0.016	0.015	0.014	0.013	0.013	0.013
CPP Contribution Rate (Employee)	0.043	0.047	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049
Provl Workers' Compensation Rate***	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Provl Dir Tax Rate (as proportion of Personal Income)	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
GST Rate	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070
Avg. Tariff Rate (on Non-Auto Imports)	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.008
Federal Gasoline Excise Rate *	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Federal Alcohol/Tobacco Excise Rate *	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
Avg. Provl Sales Tax Rate (as proportion of approximate tax base)	0.076	0.076	0.076	0.076	0.076	0.076	0.076	0.076	0.076	0.076
Provl Tobacco Tax Rate *	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
Provl Gasoline Tax Rate *	0.053	0.053	0.053	0.053	0.053	0.053	0.053	0.052	0.052	0.052
Provl Liquor Board Profit Tax Rate *	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
Provl Capital Tax Rate **	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Provl Real Property Tax Rate **	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Provl Other Payroll Taxes Rate ***	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Provl Other Indirect Tax Rate **	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014

\* - tax as a rate on total consumer non-durable spending

\*\* - tax as a rate on nominal GDP Private

\*\*\* - tax as a rate on nominal labour income

Table 3 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Principal Tax Rates and Related Fiscal Indicators

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Federal "High" Corporate Tax Rate	0.276	0.276	0.276	0.276	0.276	0.276	0.276	0.276	0.276	0.276
Prov'l Corporate Tax Rate	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
Indexing Rate	1.811	1.811	1.811	1.811	1.811	1.811	1.811	1.811	1.811	1.811
Indexing "Floor" Rate	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Basic Federal PIT Rate	0.187	0.187	0.187	0.187	0.187	0.187	0.187	0.187	0.187	0.187
Federal Surtax Rate (incl. High Income)	-0.183	-0.192	-0.199	-0.206	-0.210	-0.215	-0.219	-0.223	-0.226	-0.229
Prov'l PIT Rate (% of Basic Fed) (incl. Quebec)	0.472	0.464	0.455	0.446	0.437	0.433	0.428	0.425	0.422	0.420
UI Contribution Rate (Employee)	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
CPP Contribution Rate (Employee)	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049
Provincial Workers' Compensation Rate***	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
"Other" Prov'l Dir Tax Rate (as proportion of Personal Income)	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
GST Rate	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070
Avg. Tariff Rate (on Non-Auto Imports)	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Federal Gasoline Excise Rate *	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Federal Alcohol/Tobacco Excise Rate *	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
Avg. Prov'l Sales Tax Rate (as proportion of approximate tax base)	0.076	0.076	0.076	0.076	0.076	0.076	0.076	0.076	0.076	0.076
Prov'l Tobacco Tax Rate *	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
Prov'l Gasoline Tax Rate *	0.051	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
Prov'l Liquor Board Profit Tax Rate *	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
Prov'l Capital Tax Rate **	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Prov'l Real Property Tax Rate **	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Prov'l Other Payroll Taxes Rate ***	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Prov'l Other Indirect Tax Rate **	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014

\* - tax as a rate on total consumer non-durable spending

\*\* - tax as a rate on nominal GDP Private

\*\*\* - tax as a rate on nominal labour income



not have to be raised in a downturn. However with the relatively modest cuts in the rate in 1998, 1999 and 2000 the accumulated surplus in the EI account has been pushed well beyond any reasonable cushion and has increased the pressure to implement major reductions or spending increases in coming years. The government has announced that it will dramatically increase the duration of maternity leave under the EI system by 2001/2002. It has become clear that the government will reduce EI contribution rates only gradually over the next few years to give itself more room in other areas (personal tax cuts, higher health spending) and will not reduce the rates as we think it "should" over the next few years to offset announced CPP increases.<sup>1</sup> We now expect the EI rate to be cut by only 0.15% points in each of the next few years (rather than the 0.3%-0.4% through 2003 that we believe is warranted). With these cuts the EI accumulated surplus is expected (with our employment growth rates) to continue to balloon.

Given the concern surrounding the solvency of the public pension plans, the federal and (a sufficient majority of the) provincial governments agreed in 1997 that the Canada and Quebec Pension Plan contribution rates will be increased more aggressively to ramp up to a steady state rate of 9.9% (employee/employer combined) in 2003 and thereafter. As well, the governments have loosened the investment rules in effect for these plans so that hopefully a better return will be generated from the funds. The increased rates coupled with better investment returns provides a coverage of asset stock to payouts above 4:1 at its peak in 2015 and still well above 3:1 at the projection horizon. This should be sufficient to pay pensions to retiring baby boomers after 2010.

On the indirect tax side, the GST rate stays at 7% throughout the projection. Given the current environment, we now expect both the federal and provincial governments to move aggressively on tobacco taxes, reversing most of the reductions implemented in 1994. We also expect the provinces to keep general sales taxes and gasoline taxes stable over the projection period. The temptation to do something about global warming (or raise some "easy cash") by raising gasoline taxes has been offset by the fear of a backlash from raising taxes of any kind (and the current high level of the price of gasoline). At the local level, property and other indirect taxes are assumed to increase, but by somewhat less than GDP growth. Local Ontario communities are

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<sup>1</sup> We do not support the view that rates should be immediately reduced to the "steady state" rate. Rather we think they should be reduced sufficiently so as to offset the negative impacts of the CPP increases.

expected to implement some user fees for services, as the provincial government cuts back on transfers (at least in the short run). It is entirely possible that, instead of (or in conjunction with) lowering personal income taxes as budget balances improve, the federal and individual provincial governments will choose to reduce the GST and provincial sales taxes respectively.

#### **II.4 Monetary and Exchange Rate Policies**

While the recent runup in CPI headline inflation is clearly due primarily to oil prices, and CPI inflation will fall naturally even if oil prices do not retreat, we think the recent surge will find its way partially into expectations and will raise the underlying inflation rate at which the economy will reach full employment. Given this, strong recent growth, an unemployment rate near 6½%, and at least one speech by the Governor stating that Canada is near full capacity, we now anticipate that the Bank will raise rates by 25 basis points in step with the U.S. in August, and again, probably *two* times - tentatively in late 2000 and early 2001 (we do not expect the U.S. to be raising rates at that time). These rate increases, especially the latter two, should be accompanied by an increase in the pace of nominal Canadian dollar appreciation, which will further help to dampen growth. The Bank is forecast to reverse two of these increases by 2003, once the economy absorbs the signal that a demand-driven inflation acceleration will not be permitted. If the rest of our forecast is correct, the unemployment rate will continue to fall *gradually* under this treatment, without new internal inflationary pressures, and the Bank will be able to claim that it successfully "pushed the envelope" on capacity utilization and inflation without taking unnecessary chances.

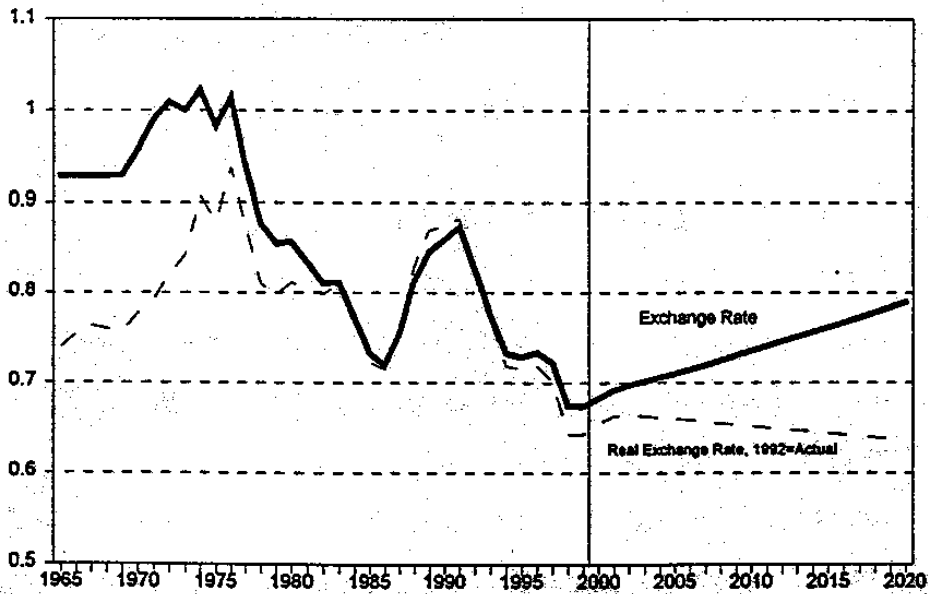
Because of the productivity gains assumed to stem from economic recovery and the continued adjustment to free trade, and the Bank of Canada's cautious monetary policies, Canadian inflation is projected to remain well below that of the U.S. over the projection period (except in 2001 when the tobacco tax increases in Canada in late 2000 continue to have an effect). The all-items CPI inflation rate is expected to be 2.5% in 2000 and 2.3% in 2001 is seen to remain below 2% thereafter. The GDP inflation rate, negative in 1998 and only 1.6% in 1999, is expected to surge somewhat in 2000 before falling back to historically low levels, below 2% from 2002 through to the end of the projection period. The inflation rate is expected to be significantly lower in Canada than in the U.S.

The overall orientation of monetary policy, coupled with the accommodation of moderately higher rates of inflation in the U.S., allows for a gradual appreciation of the Canada-U.S. exchange rate, which reaches almost \$.72 US by 2007 and \$.79 US at the projection horizon. Obviously, there is going to continue to be significant volatility in the exchange rate as world events impact commodity prices and the desire for a “flight to quality”. Although we expect the nominal exchange rate to appreciate over the term of the projection, as one can see from Figure 2, we do not expect the same for the real exchange rate (the exchange rate adjusted for differences in the two countries' GDP deflators and equal to the actual exchange rate in 1992). We see the real exchange rate appreciating over the near term in conjunction with the relatively tight monetary policy in Canada, before depreciating modestly to the projection horizon.

Real short-term interest rates (as measured using the 3-month t-bill rate and the GDP deflator) are expected to stabilize at around 3.4% over the longer term after rising with the expected Bank rate increases over the next year. Long-term real rates are expected to remain within a fairly narrow band throughout the projection period (after 2000 when they fall to only 2.9% due to the jump in the GDP

Figure 2

Exchange Rate (US\$/C\$)  
Real and Nominal



inflation rate), rising only modestly from an annual average of 4.1% in 1999 to 4.6% in 2003 then falling to 4.4% in 2008 and thereafter.

The long-run projection for the unemployment rate at 6.2% (lower than in past long-term projections) we view as still somewhat above the long-term equilibrium rate, reflecting some constant element of slack in the system to resist probable asymmetric upward shocks to the inflation rate.

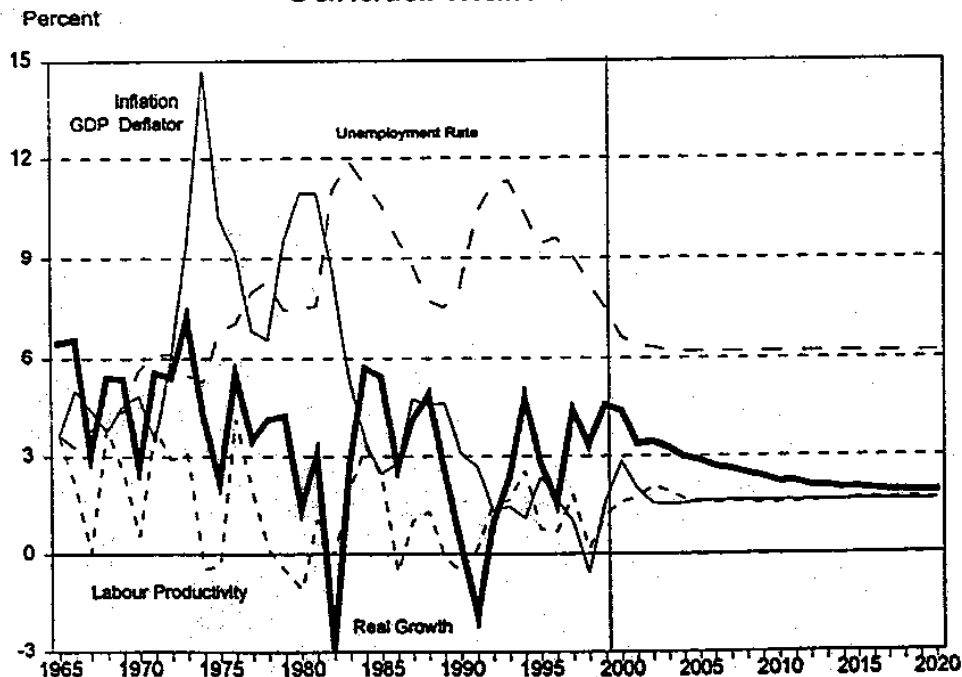
### III The PEAP National Projection - 2000 to 2020

#### III.1 Summary

The basics of the national projection are summarized in Table 1a (the revised short term quarterly projection, page ii) and Table 1b (the long term projection, pages iii-v) and Figure 3. Real GDP - which has grown solidly in the last three years (4.4% in 1997, 3.3% in 1998 and 4.5% in 1999) - is expected to grow robustly by 4.4% in 2000, before moderating somewhat to 3.3% in 2001 (as interest rate increases begin to bite), and 3.4% in 2002.

The unemployment rate, which has fallen by over 1 percentage point since the first quarter of 1999, is expected to fall only modestly into 2001 as more people are attracted into the labour market and growth starts to slow somewhat. By the end of 2001, the unemployment rate is expected to fall to 6.3%, averaging 6.4% for the year as a whole in 2001 and 6.3% for 2002. Labour productivity growth is expected to remain solid in 2000 and thereafter, remaining above 1.5% over the entire projection period. GDP price inflation, is expected to rebound somewhat

Figure 3  
Canada: Main Indicators



(to 2.9%) 2000 due to increased commodity prices and some delayed exchange rate pass-through. This rate is expected to remain well below 2%, however, over the rest of the projection period.

In the medium-term the economy is expected to be close to full employment, but given the Bank of Canada's cautious monetary policy stance, inflation is expected to remain below the 2% target indefinitely. Much of the inflation is simply imported from the U.S. projection, although some wage "catch-up" is allowed for as the unemployment rate falls. The lower Canadian inflation trajectory, coupled with somewhat higher U.S. inflation rates foreseen over the next decade, leads to a gradual appreciation of the Canada-U.S. exchange rate. Finally, the long-term trend projection shows growth rates largely at potential. Real growth declines gradually along with potential growth, primarily due to declining population growth.

### **III.2 Comparison with the U.S. Projection**

Projection results for Canada and for the United States are compared in Figures 4 and 5 and Table 4. One may be surprised to see that Canadian real GDP growth has actually exceeded growth in the U.S. for two of the last three years (although in 1998 it was lower by a full percentage point). In 2000, however, U.S. growth is expected to surge once more, before Canada finally starts to consistently outperform the American economy due to its higher potential growth rate. The unemployment rate in Canada is expected to remain well above that in the U.S. throughout the entire projection period due in some part by more restrictive monetary policy but also because of definitional differences and more generous social benefits in the Canada that increase our natural unemployment rate.

The inflation differential between Canada and the U.S. (using the GDP deflator) was about .6% to .8% through the 1970s and 1980s. However, the severity of the recession in Canada, coupled with the stop-start recovery, has driven the inflation differential to an average of -0.8% in the 1990s. The projection maintains inflation in Canada well below that in the U.S. for the projection period due to a cautious Canadian central bank with an explicit inflation target, and now-entrenched low inflation expectations.

Figure 4  
Canada and U.S.  
Growth and Unemployment

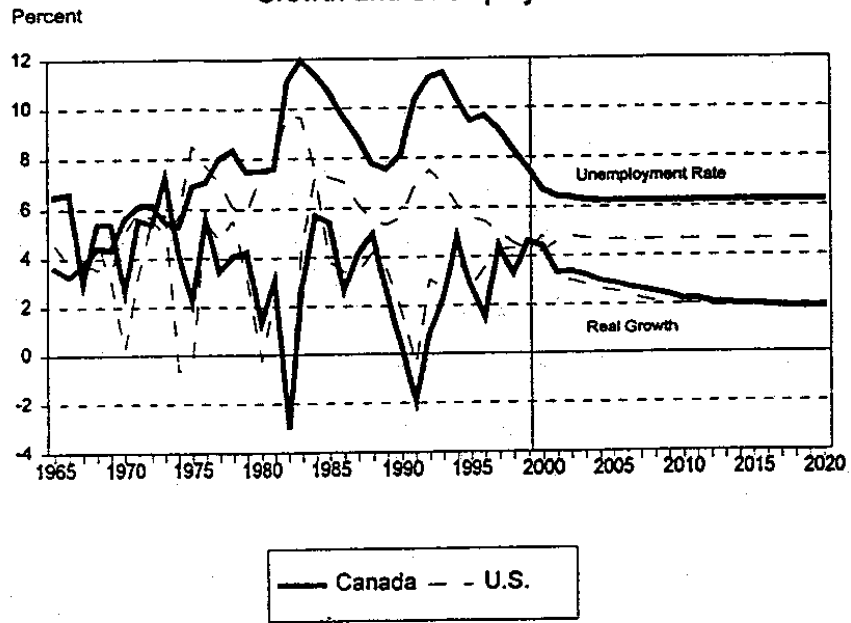
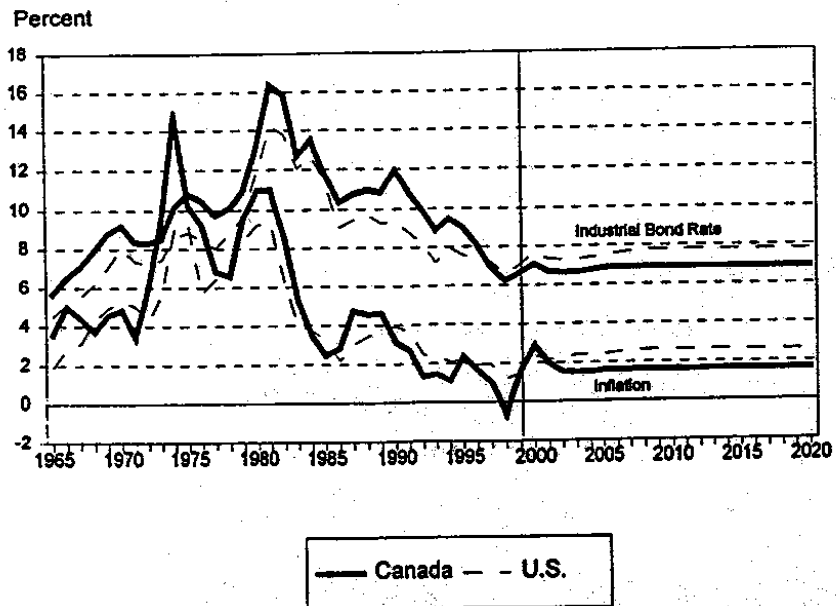


Figure 5  
Canada and U.S.  
Inflation and Interest Rates



Focus Model - Institute for Policy Analysis  
 CANADA: Base Projection - July 13, 2000

Table 4

Comparison with U.S.  
 (Per Cent)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Real GDP Growth:</b>										
Canada:	-1.9	0.9	2.3	4.7	2.8	1.5	4.4	3.3	4.5	4.4
U.S.:	-0.5	3.1	2.7	4.0	2.7	3.6	4.2	4.3	4.2	4.8
Cda. - U.S.:	-1.4	-2.1	-0.4	0.7	0.1	-2.0	0.1	-1.0	0.4	-0.4
<b>Inflation Rate (GDP Deflator):</b>										
Canada:	2.7	1.3	1.5	1.1	2.3	1.6	1.0	-0.6	1.6	2.9
U.S.:	3.6	2.4	2.4	2.1	2.2	1.9	1.9	1.2	1.5	2.3
Cda. - U.S.:	-1.0	-1.1	-1.0	-1.0	0.1	-0.3	-0.9	-1.7	0.1	0.5
<b>Inflation Rate (CPI):</b>										
Canada:	5.6	1.5	1.9	0.2	2.2	1.6	1.6	1.0	1.7	2.5
U.S.:	4.2	3.0	3.0	2.6	2.8	2.9	2.3	1.6	2.2	3.2
Cda. - U.S.:	1.4	-1.5	-1.1	-2.4	-0.6	-1.4	-0.7	-0.6	-0.5	-0.7
<b>Short-Term Interest Rates:</b>										
Canada: (3 Month T-Bill Rate)	8.8	6.4	4.8	5.5	7.1	4.2	3.2	4.7	4.7	5.5
U.S.: (3 Month T-Bill Rate)	5.4	3.4	3.0	4.2	5.5	5.0	5.1	4.8	4.6	5.8
Cda. - U.S.:	3.4	3.0	1.8	1.3	1.6	-0.8	-1.9	-0.1	0.1	-0.3
<b>Real Short-Term Interest Rates:</b>										
Canada: (3 Month T-Bill Rate)	6.1	5.1	3.4	4.4	4.7	2.6	2.2	5.3	3.1	2.7
U.S.: (3 Month T-Bill Rate)	1.7	1.0	0.6	2.2	3.3	3.1	3.1	3.6	3.2	3.5
Cda. - U.S.:	4.3	4.1	2.8	2.3	1.4	-0.5	-0.9	1.7	-0.1	-0.8
<b>Long-Term Interest Rates:</b>										
Canada: (30-Year Gov't Bond Rate)	9.7	8.7	7.9	8.7	8.4	7.7	6.7	5.6	5.7	5.7
U.S.: (30-Year Gov't Bond Rate)	8.1	7.7	6.6	7.4	6.9	6.7	6.6	5.6	5.9	6.1
Cda. - U.S.:	1.6	1.0	1.3	1.3	1.5	1.0	0.1	0.0	-0.1	-0.3
<b>Real Long-Term Interest Rates:</b>										
Canada: (30-Year Gov't Bond Rate)	7.0	7.4	6.4	7.6	6.1	6.1	5.7	6.2	4.1	2.9
U.S.: (30-Year Gov't Bond Rate)	4.5	5.2	4.2	5.3	4.7	4.8	4.7	4.4	4.4	3.7
Cda. - U.S.:	2.5	2.1	2.2	2.3	1.4	1.3	1.0	1.8	-0.3	-0.9
<b>Unemployment Rates:</b>										
Canada:	10.3	11.2	11.4	10.4	9.4	9.6	9.1	8.3	7.6	6.6
U.S.:	6.8	7.5	6.9	6.1	5.6	5.4	4.9	4.5	4.2	4.2
Cda. - U.S.:	3.5	3.7	4.5	4.3	3.8	4.2	4.2	3.8	3.3	2.5







### III.3 Sources of Aggregate Demand

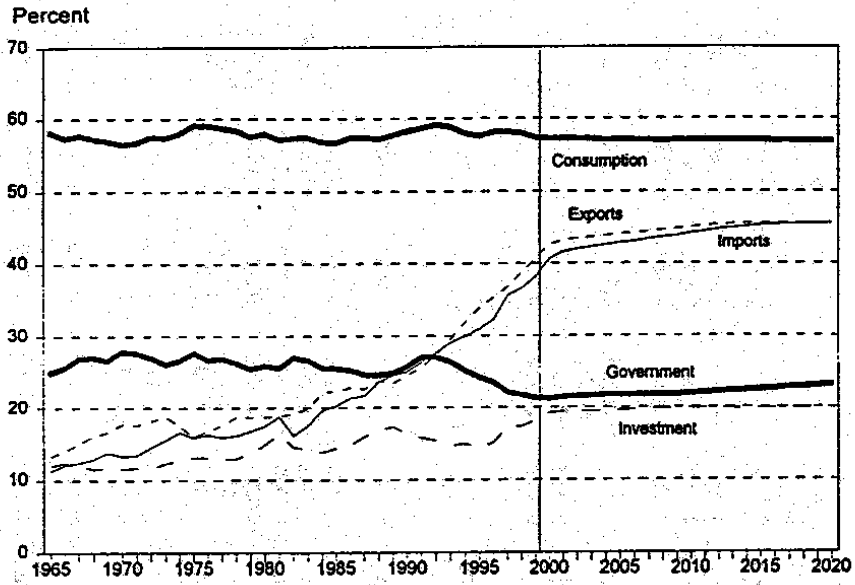
Next we look more closely at the sources of final demand that largely determine the path of GDP through the projection in the short- and medium-term. Figures 6 and 7 show the evolution of expenditure shares of GDP while Figure 8 shows income shares. Details on expenditure and income shares of GDP are given in Table 5.

Investment spending (especially in machinery and equipment) continues to be the main driver of the recovery, with investment as a share of real GDP reaching a height not achieved since at least the early 1960s (see Figure 6). If one looks at the shares in nominal terms (Figure 7), however, one can see that investment shares are not outside the historical norm. The share of consumption has remained much stronger than we had expected over the last couple of years, with little help from real personal income growth, as the savings rate has dropped dramatically to compensate. Interestingly, as deficits and debt have been brought into line and government interest payments on the debt begin to fall as a share of GDP, this also cuts into personal-income growth although much of this seems to show up automatically in a lower savings rate. Shares of imports and exports continue their long historical rise - in the present case pushed along by free trade. The contribution of government has finally begun to stabilize (at historically low levels).

In the short and into the medium to long term the investment share levels off at historically high levels while the government share slowly begins to climb as healthy fiscal balances coupled with demands for government programs cause governments to loosen the purse strings. Even with increases in government transfers and cuts in personal taxes coupled with a bright employment picture, we do not expect a big improvement in the consumption share since the savings rate is expected to stabilize and slowly increase over the projection period. The rate of growth in both exports and imports is expected to level off with imports growing more rapidly due to the high level of imports in m&e investment and the solid demand for consumer goods coupled with the slowing of the U.S. economy dampening the demand for exports.

The projected income shares of GDP show that the share of wages and salaries, after a small spike up in 1998, will remain at over 30-year lows well into the next decade. Corporate profits, after rebounding from their disastrous 1991 and 1992 GDP shares of less than 5%, are expected to continue to be strong,

**Figure 6**  
**Expenditure Shares of Real GDP**



**Figure 7**  
**Expenditure Shares of Nominal GDP**

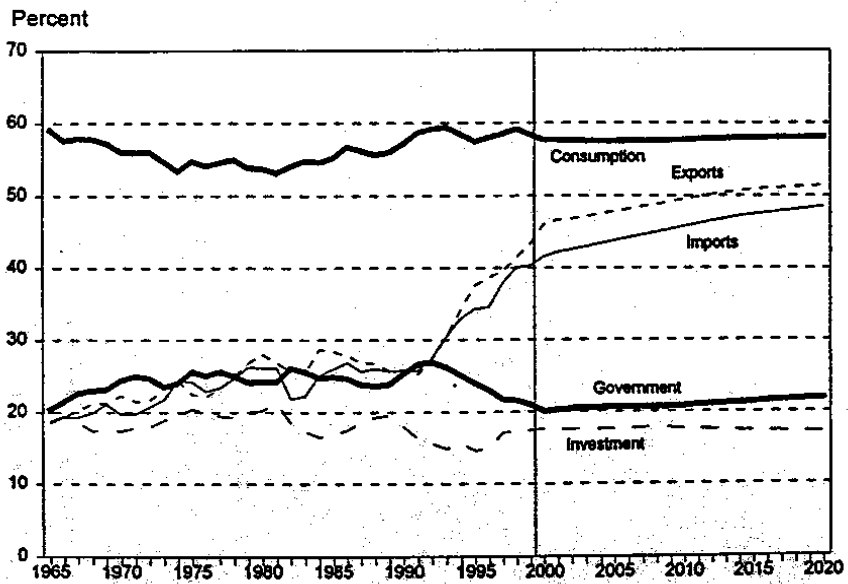


Table 5

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>GDP - Expenditure Shares</b>										
Consumption	0.586	0.591	0.588	0.579	0.576	0.581	0.581	0.579	0.573	0.572
Residential Construction	0.054	0.057	0.054	0.054	0.044	0.048	0.052	0.049	0.050	0.051
Non-Res'l Construction	0.051	0.042	0.042	0.043	0.042	0.043	0.048	0.047	0.046	0.047
Machinery & Equipment	0.054	0.055	0.052	0.054	0.058	0.062	0.074	0.078	0.086	0.093
Government	0.269	0.269	0.263	0.250	0.241	0.234	0.221	0.218	0.214	0.212
Exports	0.254	0.272	0.295	0.318	0.338	0.352	0.367	0.387	0.407	0.426
Imports	0.262	0.275	0.289	0.299	0.309	0.322	0.355	0.365	0.382	0.406
<b>GDP - Income Shares</b>										
Wages and Salaries	0.555	0.555	0.545	0.528	0.519	0.515	0.516	0.526	0.521	0.516
Interest & Misc Invest	0.080	0.076	0.072	0.068	0.063	0.061	0.056	0.051	0.050	0.046
Corporate Profits	0.047	0.046	0.055	0.084	0.093	0.095	0.099	0.091	0.105	0.120
Inventory Valuation Adjust.	0.002	-0.005	-0.004	-0.007	-0.003	-0.002	-0.001	-0.001	-0.003	-0.003
Unincorporated - Non-Farm	0.054	0.056	0.058	0.059	0.057	0.059	0.062	0.064	0.062	0.061
Farm Unincorporated	0.002	0.002	0.003	0.002	0.003	0.005	0.002	0.002	0.002	0.002
Indirect Taxes	0.150	0.153	0.151	0.147	0.144	0.143	0.143	0.144	0.140	0.138
Subsidies	-0.019	-0.018	-0.014	-0.013	-0.011	-0.010	-0.011	-0.012	-0.011	-0.011
Capital Consumption Allow's	0.122	0.124	0.125	0.125	0.125	0.127	0.126	0.128	0.125	0.122
Statistical Discrepancy	0.000	0.002	0.003	0.002	0.001	0.001	0.000	0.000	-0.001	0.000
Personal Income	0.886	0.889	0.874	0.843	0.833	0.826	0.814	0.827	0.810	0.797
Personal Disposable Income	0.694	0.695	0.686	0.656	0.646	0.636	0.623	0.630	0.617	0.609
Wages and Salaries	0.555	0.555	0.545	0.528	0.519	0.515	0.516	0.526	0.521	0.516
Farm Income	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Unincorporated Income	0.054	0.056	0.058	0.059	0.057	0.059	0.062	0.064	0.062	0.061
Interest Income	0.149	0.139	0.129	0.123	0.128	0.124	0.115	0.115	0.110	0.106
Transfers from Gov't	0.123	0.134	0.136	0.129	0.123	0.119	0.115	0.117	0.111	0.109
Other Income	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.003
Direct Taxes	0.192	0.195	0.188	0.187	0.187	0.190	0.191	0.197	0.194	0.188

Table 5 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

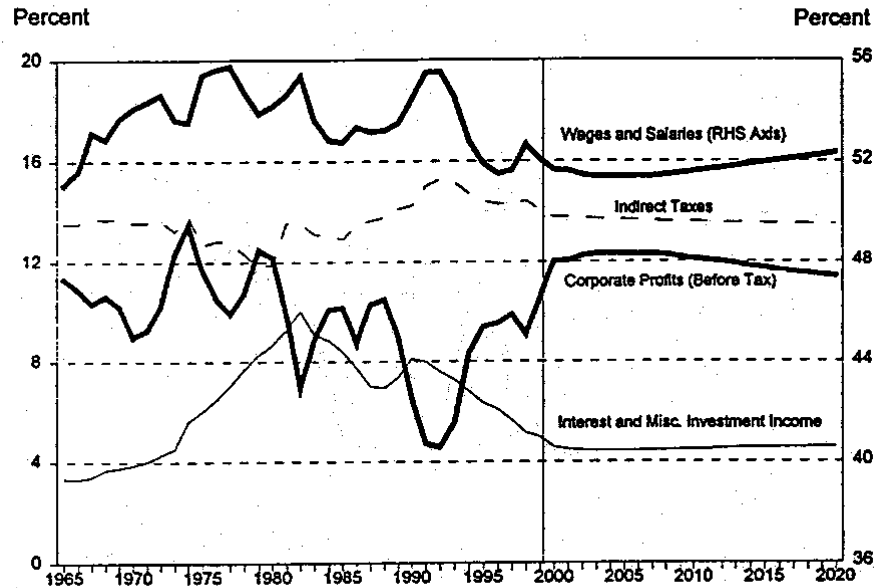
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>GDP - Expenditure Shares</b>										
Consumption	0.572	0.572	0.571	0.570	0.571	0.570	0.570	0.569	0.570	0.570
Residential Construction	0.051	0.050	0.050	0.049	0.049	0.049	0.049	0.048	0.048	0.048
Non-Res'l Construction	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.048	0.048	0.047
Machinery & Equipment	0.096	0.097	0.098	0.099	0.099	0.100	0.101	0.103	0.103	0.103
Government	0.214	0.216	0.217	0.218	0.218	0.218	0.218	0.218	0.218	0.220
Exports	0.432	0.434	0.436	0.439	0.441	0.443	0.444	0.446	0.448	0.450
Imports	0.416	0.419	0.422	0.425	0.428	0.431	0.433	0.436	0.439	0.442
<b>GDP - Income Shares</b>										
Wages and Salaries	0.516	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.515	0.516
Interest & Misc Invest	0.045	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.045	0.045
Corporate Profits	0.120	0.122	0.123	0.123	0.123	0.123	0.123	0.123	0.122	0.121
Inventory Valuation Adjust.	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002
Unincorporated - Non-Farm	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061
Farm Unincorporated	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Indirect Taxes	0.138	0.137	0.137	0.137	0.137	0.136	0.136	0.136	0.136	0.136
Subsidies	-0.010	-0.010	-0.010	-0.009	-0.009	-0.009	-0.009	-0.009	-0.008	-0.008
Capital Consumption Allow's	0.122	0.122	0.122	0.121	0.122	0.122	0.122	0.122	0.122	0.122
Statistical Discrepancy	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Personal Income	0.793	0.786	0.780	0.776	0.772	0.768	0.764	0.762	0.761	0.761
Personal Disposable Income	0.609	0.609	0.609	0.608	0.609	0.609	0.609	0.609	0.611	0.612
Wages and Salaries	0.516	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.515	0.516
Farm Income	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Unincorporated Income	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061
Interest Income	0.106	0.103	0.099	0.095	0.093	0.090	0.087	0.084	0.084	0.083
Transfers from Gov't	0.105	0.103	0.102	0.101	0.100	0.099	0.099	0.098	0.098	0.098
Other Income	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002
Direct Taxes	0.184	0.177	0.171	0.167	0.163	0.159	0.155	0.153	0.150	0.148

Table 5 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>GDP - Expenditure Shares</b>										
Consumption	0.570	0.570	0.570	0.570	0.570	0.570	0.569	0.569	0.569	0.568
Residential Construction	0.048	0.047	0.047	0.047	0.047	0.047	0.046	0.046	0.046	0.045
Non-Res'tl Construction	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047
Machinery & Equipment	0.104	0.104	0.104	0.104	0.104	0.105	0.105	0.106	0.107	0.107
Government	0.221	0.222	0.223	0.224	0.225	0.226	0.228	0.229	0.230	0.231
Exports	0.452	0.453	0.455	0.456	0.456	0.456	0.455	0.455	0.454	0.454
Imports	0.445	0.447	0.450	0.451	0.453	0.454	0.454	0.455	0.455	0.456
<b>GDP - Income Shares</b>										
Wages and Salaries	0.516	0.517	0.518	0.519	0.519	0.520	0.521	0.522	0.522	0.523
Interest & Misc Invest	0.045	0.045	0.045	0.045	0.045	0.045	0.046	0.046	0.046	0.046
Corporate Profits	0.120	0.120	0.119	0.118	0.117	0.116	0.115	0.115	0.114	0.113
Inventory Valuation Adjust.	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.003	-0.003	-0.003
Unincorporated - Non-Farm	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061
Farm Unincorporated	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Indirect Taxes	0.135	0.135	0.135	0.135	0.135	0.135	0.135	0.135	0.135	0.134
Subsidies	-0.008	-0.008	-0.008	-0.008	-0.008	-0.007	-0.007	-0.007	-0.007	-0.007
Capital Consumption Allow's	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.121	0.121	0.121
Statistical Discrepancy	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Personal Income	0.760	0.760	0.760	0.760	0.760	0.761	0.761	0.762	0.762	0.763
Personal Disposable Income	0.613	0.614	0.615	0.617	0.617	0.618	0.619	0.620	0.620	0.621
Wages and Salaries	0.516	0.517	0.518	0.519	0.519	0.520	0.521	0.522	0.522	0.523
Farm Income	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Unincorporated Income	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061
Interest Income	0.082	0.081	0.080	0.079	0.079	0.078	0.078	0.077	0.077	0.077
Transfers from Gov't	0.097	0.097	0.098	0.098	0.098	0.098	0.098	0.098	0.099	0.099
Other Income	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Direct Taxes	0.147	0.146	0.145	0.144	0.143	0.143	0.142	0.142	0.142	0.142

**Figure 8**  
**Income Shares of GDP**



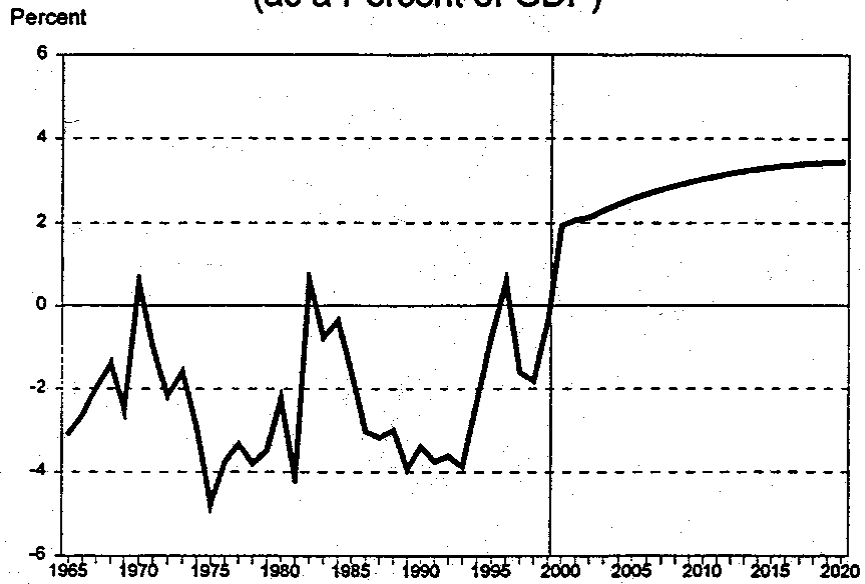
climbing to their highest levels in over twenty years and remaining at near forty year highs until 2010 when the share slowly falls to the projection horizon.

With the large terms of trade shift due to commodity price movements resulting from the Southeast Asian currency crisis, the improvements we had seen in the current account of the balance of payments through 1996 were dramatically reversed in 1997 and 1998. However 1999 and the 1<sup>st</sup> quarter of 2000 saw huge improvements in the current account balance, as merchandise trade has been very strong (in no small part due to the strength in the U.S. economy). The strength in merchandise trade, coupled with the reduced capital needs of greatly improving government fiscal imbalances we feel will continue to outweigh the import needs of the sustained investment boom. Thus throughout the projection period we show a growing positive current account balance (see Figure 9).

Moreover, as Canada reduces its net external debt (both in absolute terms and in relation to the size of GDP) the size of its net capital service payments relative to GDP also begins to decline (see Figure 10). The merchandise surplus which fell to a share of roughly 2% in 1998 from a record 5.0% in 1996,

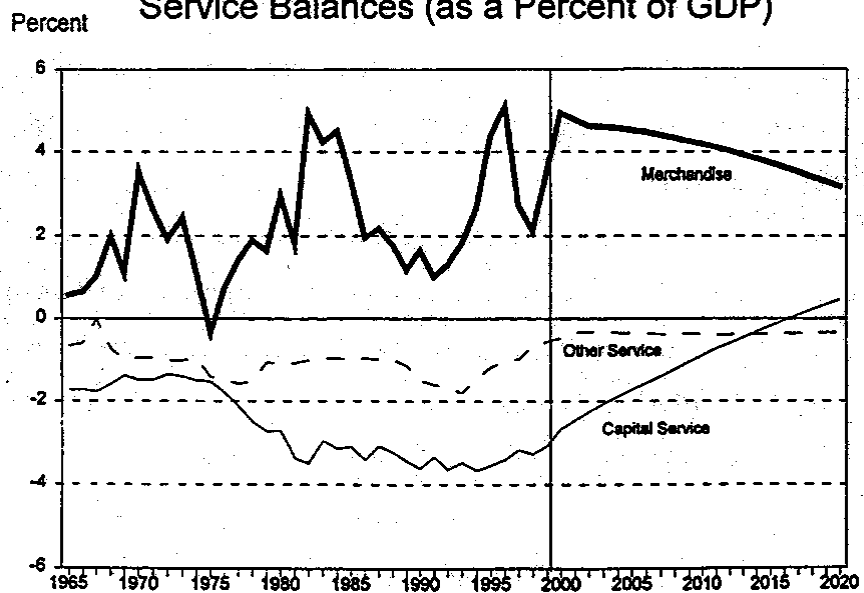


**Figure 9**  
**Current Account Balance**  
**(as a Percent of GDP)**



**Figure 10**

**Trade, Capital Service, and Other**  
**Service Balances (as a Percent of GDP)**



is expected to hit another peak in 2000 before moderating thereafter (but remaining above 4% of GDP for the next decade).

### **III.4 The Net Saving and Investment Balance**

Figures 11 and 12 and Table 6 examine the net saving and investment balances in the projection, with all figures expressed as shares of GDP. One can see that (see Figure 11) the shares of net saving have gone through some rather significant swings<sup>2</sup>: Government became a net sink for savings from the mid-1970s, with another sharp drop in net saving in the 1982 recession. Most of this drop was recovered by 1988 when another deterioration began, made worse in the 1990-92 recession. The projection expects that government net dissaving (governments have actually become net savers by 1997) will be fairly stable through the projection period. The deficit battle (at all levels of government) has effectively been won and there appears to be little incentive for governments to run large fiscal surpluses.

Net foreign saving has typically been positive for Canada: that is, the current account has been negative implying net borrowing from abroad by Canadians or net saving in Canada by foreigners. In 1981-83, however, there was such a surplus of domestic saving over investment (largely due to a massive drop in domestic investment - see Figure 12), that Canadians actually placed some savings abroad, despite massive new dissaving by governments. No such shift in net foreign saving was seen in the 1990-92 recession, based as it was on an over-valued dollar. After the recession, however, there was a rapid decline in foreign saving in Canada through 1996. With developments elsewhere in the world and the lack of domestic savings relative to investment, foreign saving in Canada was roughly 1.8% of GDP in 1998, falling to 0.3% in 1999, turning negative in 2000 and continuing to fall to the projection horizon.

Domestically, the private sector had been generating savings in excess of investment ever since the mid-

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<sup>2</sup> The National Income and Expenditure accounts (as well as the National Balance Sheets) have been revised to move federal and provincial government, non-autonomous pension plans to the private sector. This has had the impact of increasing the level of savings in the personal sector and increasing the level of dissaving by governments. For details on the revisions interested readers can go to the Statistics Canada release on the web at <http://www.statcan.ca/english/concepts/pensions.htm>.

Figure 11  
Net Saving Shares

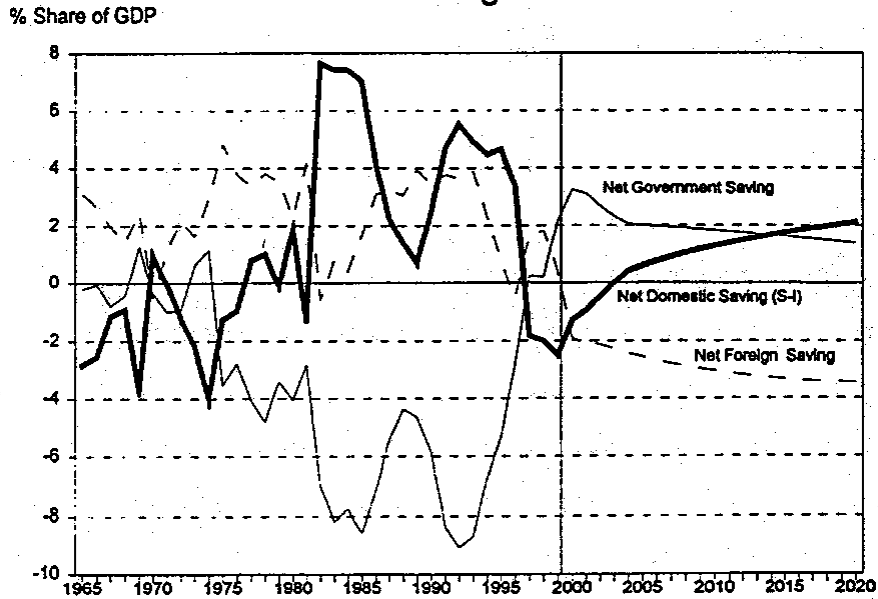


Figure 12  
Domestic Saving and Investment  
as a Percent of GDP

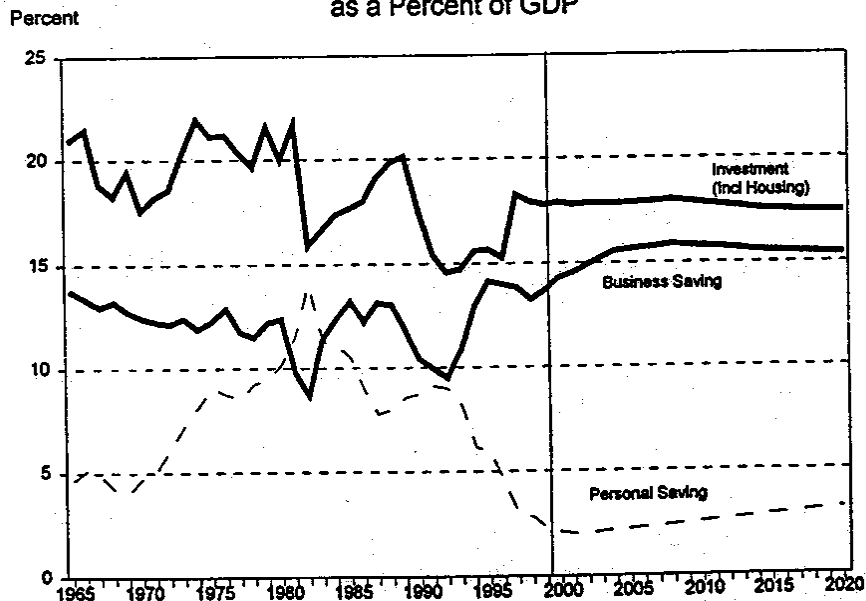


Table 6

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Net Saving and Investment - Domestic, Foreign and Government

Share of GDP	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Net Gov't Saving (GBAL); Surp(+)/Def(-)	-0.084	-0.092	-0.087	-0.067	-0.054	-0.028	0.002	0.002	0.022	0.032
Net Foreign Saving (-BPC)	0.037	0.036	0.039	0.023	0.008	-0.006	0.016	0.018	0.004	-0.019
Domestic Saving Less Investment	0.036	0.043	0.048	0.037	0.045	0.034	-0.022	-0.026	-0.026	-0.020
Sum of For'n, Gov't, Domestic (Should be Approx Zero)	-0.010	-0.013	0.000	-0.008	-0.001	0.001	-0.004	-0.006	0.000	-0.007
Domestic Investment	0.154	0.146	0.147	0.156	0.156	0.152	0.182	0.179	0.178	0.179
Domestic Saving	0.190	0.188	0.195	0.192	0.201	0.186	0.160	0.153	0.152	0.159
Personal Saving	0.091	0.090	0.081	0.062	0.059	0.045	0.029	0.028	0.022	0.021
CCA's (ex Gov't)	0.102	0.104	0.105	0.105	0.105	0.108	0.107	0.109	0.107	0.104
Undistributed Corp. Profits	-0.004	-0.004	0.007	0.031	0.039	0.034	0.032	0.024	0.033	0.042
Inventory Valuation Adjustment	0.002	-0.005	-0.004	-0.007	-0.003	-0.002	-0.001	-0.001	-0.003	-0.003
Miscellaneous	0.000	0.003	0.006	0.001	0.001	0.002	-0.007	-0.007	-0.007	-0.005
Capital Assistance to Bus.	0.003	0.002	0.001	0.000	0.000	0.001	-0.004	-0.003	-0.004	-0.004
Net Migrants' Funds	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other Corporate Adjustments	0.010	0.010	0.007	0.008	0.007	0.007	0.005	0.008	0.008	0.008
Other (Incl Stat. Discrep.)	-0.013	-0.009	-0.003	-0.007	-0.007	-0.005	-0.009	-0.012	-0.012	-0.009
Federal Gov't Saving	-0.054	-0.051	-0.055	-0.046	-0.039	-0.020	0.005	0.005	0.006	0.016
Provincial	-0.030	-0.040	-0.031	-0.019	-0.013	-0.005	0.001	-0.005	0.015	0.013
Local	-0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000
CPP and opp	0.002	0.000	-0.001	-0.002	-0.001	-0.003	-0.003	-0.001	0.001	0.002

Table 6 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Net Saving and Investment - Domestic, Foreign and Government										
Share of GDP										
Net Gov't Saving (GBAL); Surp(+)/Def(-)	0.031	0.026	0.023	0.020	0.020	0.020	0.019	0.019	0.019	0.018
Net Foreign Saving (-BPC)	-0.021	-0.021	-0.023	-0.024	-0.026	-0.027	-0.028	-0.029	-0.030	-0.030
Domestic Saving Less Investment	-0.017	-0.013	-0.008	-0.004	-0.002	-0.001	0.001	0.002	0.003	0.005
Sum of For'n, Gov't, Domestic (Should be Approx Zero)	-0.007	-0.008	-0.008	-0.008	-0.008	-0.008	-0.008	-0.008	-0.008	-0.008
Domestic Investment										
Domestic Saving										
Personal Saving	0.020	0.020	0.021	0.022	0.022	0.023	0.024	0.024	0.025	0.025
CCA's (ex Gov't)	0.104	0.104	0.105	0.105	0.105	0.105	0.105	0.105	0.105	0.105
Undistributed Corp. Profits	0.043	0.047	0.050	0.053	0.053	0.054	0.055	0.055	0.055	0.054
Inventory Valuation Adjustment	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002
Miscellaneous	-0.005	-0.004	-0.003	-0.002	-0.002	-0.001	-0.001	-0.001	0.000	0.000
Capital Assistance to Bus.	-0.003	-0.003	-0.003	-0.003	-0.003	-0.003	-0.003	-0.002	-0.002	-0.002
Net Migrants' Funds	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other Corporate Adjustments	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Other (incl Stat. Discrep.)	-0.009	-0.009	-0.008	-0.008	-0.007	-0.007	-0.007	-0.006	-0.006	-0.005
Federal Gov't Saving										
Provincial	0.013	0.009	0.007	0.005	0.005	0.004	0.004	0.004	0.004	0.004
Local	0.012	0.009	0.007	0.006	0.006	0.006	0.006	0.005	0.005	0.005
CPP and QPP	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.005	0.008	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.009

Table 6 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Net Saving and Investment - Domestic, Foreign and Government										
Share of GDP										
Net Gov't Saving (GBAL); Surp(+)/Def(-)	0.018	0.017	0.017	0.016	0.016	0.015	0.015	0.015	0.014	0.013
Net Foreign Saving (-BPC)	-0.031	-0.032	-0.032	-0.033	-0.033	-0.034	-0.034	-0.034	-0.034	-0.035
Domestic Saving Less Investment	0.006	0.007	0.008	0.009	0.010	0.011	0.011	0.012	0.013	0.014
Sum of For'n, Gov't, Domestic (Should be Approx Zero)	-0.008	-0.008	-0.008	-0.008	-0.008	-0.007	-0.007	-0.007	-0.007	-0.007
Domestic Investment	0.178	0.177	0.176	0.176	0.175	0.175	0.175	0.175	0.174	0.174
Domestic Saving	0.183	0.184	0.184	0.184	0.185	0.186	0.186	0.187	0.187	0.188
Personal Saving	0.026	0.027	0.027	0.028	0.029	0.029	0.030	0.030	0.031	0.032
CCA's (ex Gov't)	0.105	0.105	0.105	0.105	0.105	0.106	0.106	0.106	0.107	0.107
Undistributed Corp. Profits	0.054	0.054	0.053	0.053	0.052	0.052	0.051	0.050	0.050	0.049
Inventory Valuation Adjustment	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.003	-0.003	-0.003
Miscellaneous	0.000	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002
Capital Assistance to Bus.	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002
Net Migrants' Funds	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other Corporate Adjustments	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Other (incl Stat. Discrep.)	-0.006	-0.005	-0.005	-0.005	-0.005	-0.004	-0.004	-0.004	-0.004	-0.004
Federal Gov't Saving	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Provincial	0.005	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Local	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CPP and OPP	0.009	0.009	0.009	0.009	0.009	0.008	0.008	0.008	0.008	0.007

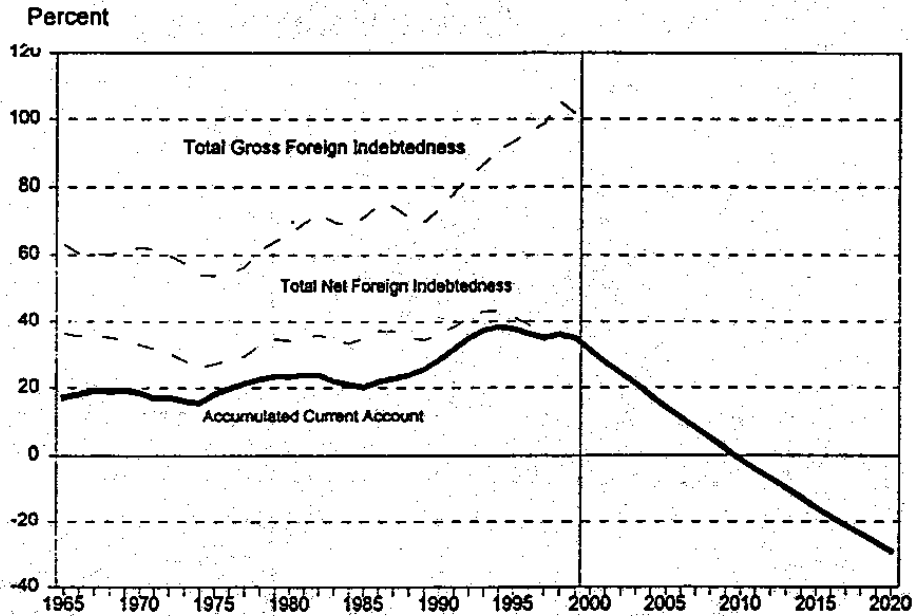
1970s (except for two brief periods) until 1997 when, in tandem with the rapid improvement in government balances, net domestic savings fell. The private sector is expected to remain a net dissaver until 2004 as the economy proceeds through investment-led growth. This reduction in private net saving, and also the reduction in foreign net saving, depend critically of course on the government sector remaining as a saver in the decades to come.

It is also worth noting from Figure 12 that the share of total nominal investment (including housing) in nominal GDP for the next 10-15 years in the projection is not at all out of line with ratios common in the 1960s and 1970s. The projection's investment boom, as mentioned earlier, only becomes extraordinary when compared to history when measured in constant dollars and restricted to non-residential investment. This reflects, in turn, a much lower than average inflation in equipment prices (due primarily to price reductions for computing and related equipment) and a shift away from residential investment with gradually declining population growth. Measured in nominal dollar terms therefore, there is ample room to finance the investment surge projected.

Figure 13 shows the implications of the history and projection of the current account for Canada's foreign indebtedness. The figure charts two measures for which the FOCUS model cannot offer a projection. "Total Net Foreign Indebtedness" is determined by Statistics Canada on an annual survey basis. Total net foreign indebtedness includes not only the accumulation of all past net borrowing (which could be also represented by accumulated current account deficits from the distant past) but also the retained earnings of foreign-owned firms re-invested in Canada and major re-valuations of assets based, for example, on earnings, interest rate and exchange rate changes. As can be seen, the total net foreign indebtedness and the accumulated current account measure are correlated rather closely until the last several years. In this recent period the accumulated current account measure (as a share of GDP) has risen significantly, but total net foreign indebtedness much less so because exchange rate changes and, the recession in the early 1990s may have caused many foreign-owned assets in Canada to be re-valued downwards.

What the model can project and calculate is the stock of accumulated current account deficits (or surpluses) as a share of GDP. This figure has remained roughly stable since 1993 but with the expected significant current account surpluses in the projection, the stock is seen to fall dramatically throughout

**Figure 13**  
**Canadian External Debt**  
**as a Percent of GDP**



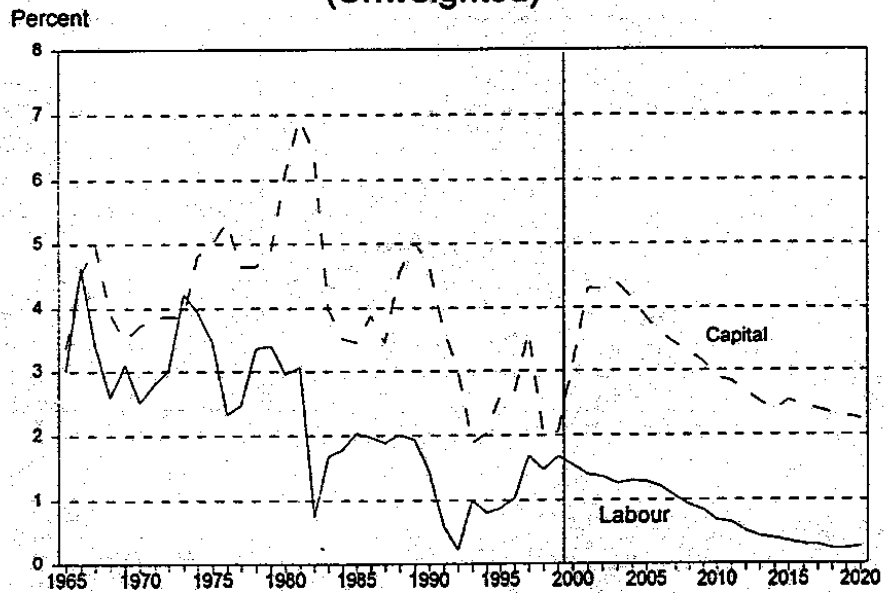
the projection period. Indeed, according to our projection Canada will start accumulating net foreign assets beginning in 2010.

### III.5 Aggregate Supply and Potential Growth

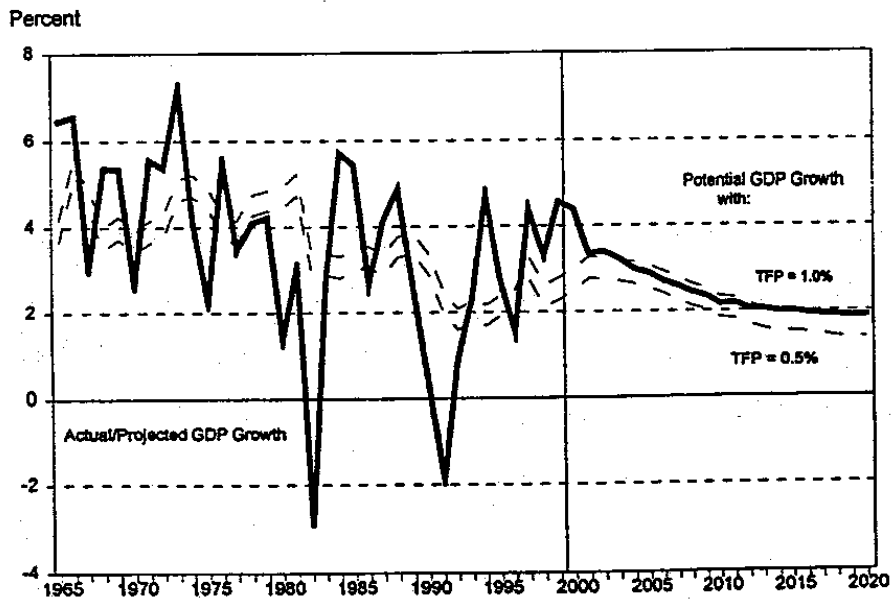
Figure 14 plots growth rates of the capital stock and the labour force at full employment. The population and participation-rate projections imply a gradual decline in labour force growth after the late 1990s. The projected growth in the capital stock (measured as accumulated investment less depreciation) is actually higher for the next decade than shown in Figure 14. For purposes of estimating potential growth, however, our measure of capital-stock growth has been adjusted downward to reflect the fact that significant investment over the next 10-15 years will be to re-structure rather than increase the capital base (which would in turn involve scrapping of existing capital well beyond the normal depreciation rates). Some investment for major energy projects also may not be as fully productive as average capital accumulation in the past. In Figure 15 labour-force and capital growth are weighted by Cobb-Douglas weights (labour .7 and capital .3)



**Figure 14**  
**Components of Potential Growth**  
**(Unweighted)**



**Figure 15**  
**Potential and Projected Growth**



with additions of both .5% and 1.0% to represent a range of possibilities for total factor productivity. The band of potential growth rates thus created can be seen to be roughly equivalent to actual growth through the mid-1970s and to exceed actual growth from that point through 1984. Note that in 1990-93 actual growth was well below potential. The years in the mid-1990s could be characterized as a "start-stop" recovery, which since 1997 has been followed by a period of recovery to potential (and therefore of above-potential growth). Over the longer-term, real growth essentially follows a potential-growth track with growth in total factor productivity (TFP) of close to 1% per year (about a ¼ percentage point higher than we have projected in the past).

Aggregate labour productivity averages about 1.6% in this projection. Such a growth rate, sustained on an annual basis, would certainly be an improvement over average labour productivity growth achieved in the 1990s and 1980s, but would be lower than that achieved in the 1950s and 1960s. It is also lower than the 2+% annual growth recently recorded for the U.S. and that is forecast by some observers to continue well into the future.

In our projection, Canada achieves a higher growth of labour productivity in the next two decades, compared to the last two, because of higher capital accumulation (the share of non-residential investment in GDP is projected to remain quite high) and because the economy is running at close to full capacity on a sustained basis - unlike in the 1980s and 1990s. Over the next three years productivity growth is somewhat higher (averaging 1.8%) as the benefits of computers and communications technology continue to be realized. However, we do not project that the industrial economies (or at least the North American ones) are now undergoing or are about to undergo a structural shift in which computer and communication technology will lead to permanently higher long-term productivity growth. Our view is that the recent surge in U.S. productivity growth is due partly to measurement issues (e.g., treating software as investment, not as a business expense), partly to the U.S. being a producer of computers and semiconductors (sectors which have shown huge productivity growth - again possibly a measurement issue- , but in which Canada is not a major participant) and partly to the U.S. being recently above full employment, which has caused a cyclical but temporary boost to productivity there. If this is the case, then U.S. productivity growth will soon shift back to 'good' from 'extraordinary' levels and Canada will be able to sustain 'good' productivity numbers as well - i.e. better performance than that realized over the last two decades.

### III.6 Inflation: Wages and Prices

As shown in Figure 16, the recession of the early 1990s and the subsequent very slow recovery has kept CPI inflation below the mid-point of the Bank of Canada's target range for some time. The recent runup in CPI headline inflation, as mentioned earlier, is due primarily to oil prices and is expected to dissipate (after the impact of expected tobacco tax increases). We do expect the Bank to remain quite cautious so while we see the long term unemployment rate at a rate somewhat below past projections we do not expect to get to this lower rate much more rapidly than we previously expected. Consequently the inflation rate, with little wage cost pressure but with some pass through of past devaluations and continued profit margin rebuilding, will remain well below the rate established in the U.S (2.5%-3.0%) and the Bank's expected targets (2%).

Real wages (Figure 17) are expected to show modest strength over the next few years but remain below productivity growth through 2003. As the labour market continues to tighten somewhat we do expect to see real wage growth in line with productivity growth over the longer term.

Figure 16

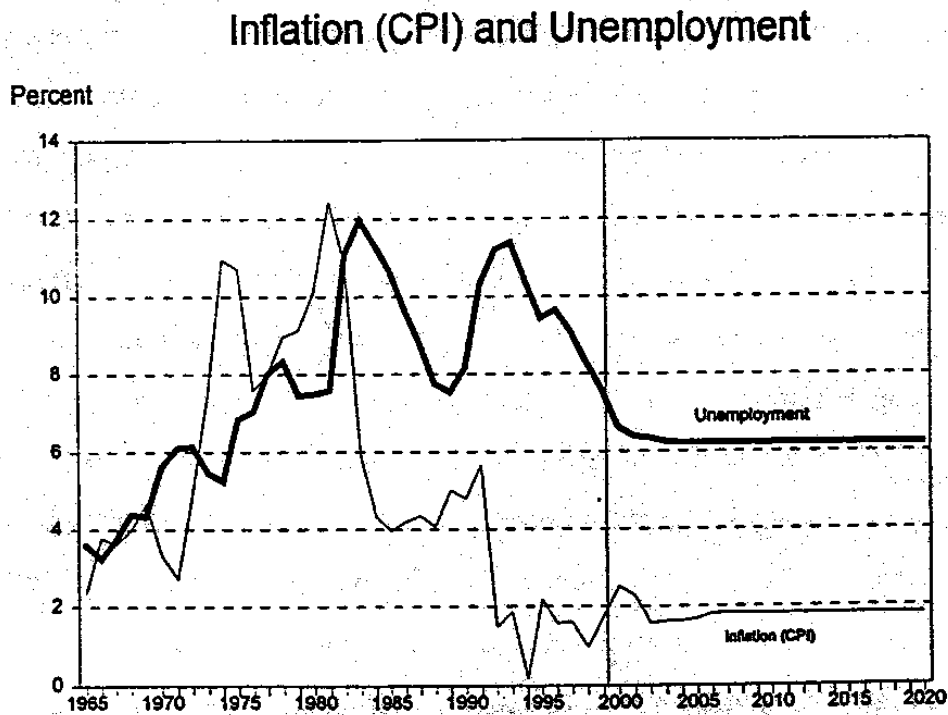
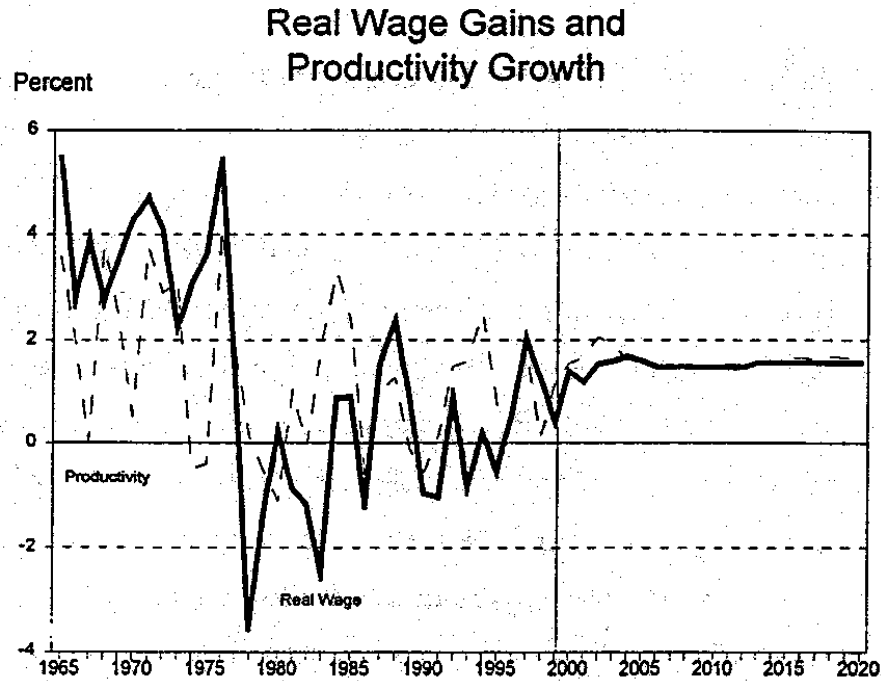


Figure 17



The average cumulative inflation rate in the projection for both the GDP deflator and the CPI from 1996 through 2020 is well below 2%. Based on real and nominal government bonds maturing in 2021 and 2026 a very rough estimate of the average compound inflation rate expected by financial markets over the next 30 years can be obtained. Based on data to mid-July 2000, this rate is now roughly 1.5% (vs 2.0% seen in November 1999, 1.3% seen in March 1999, 1.25% seen in September 1998, 1.5% seen in March 1998, 2.4% seen in June 1997 and 4.2% seen in January 1995).

### III.7 The Government Sector

We now turn to a more detailed examination of the government sector, beginning with the federal government.

### III.7.a The Federal Government

Figures 18 through 21 and Tables 7 and 8 show detailed expenditure, revenue, budget balance and debt projections for the federal government. Federal spending on current and capital goods and services (see Figure 18) is expected to grow roughly in line with GDP throughout the projection. Transfers to persons (including EI payments) continue to fall from their 1991-92 recession peak just as they did after the 1981-82 recession. Transfers to other levels of government (primarily the provinces) jumped in 1999 due to unexpectedly high equalization payments and the injection of cash into health care. Over the near term funding pressures at lower levels of government combined with increasing fiscal good health at the federal level should lead to irresistible pressures for further increasing transfers. Finally, interest on the federal debt as a share of GDP is expected to fall throughout the rest of the projection period as the debt comes to be increasingly re-financed at lower interest rates, and as the ratio of debt to GDP continues to fall.

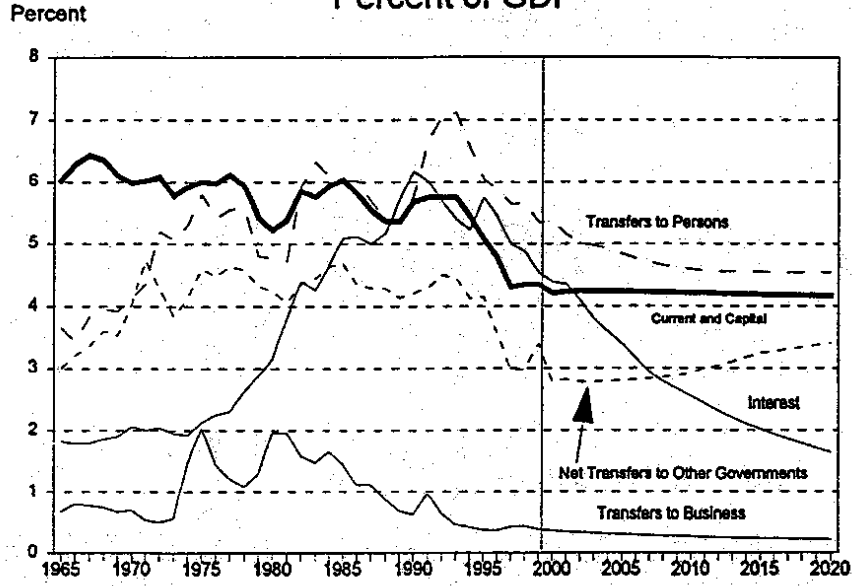
Figure 19 shows the major federal revenue categories as shares of GDP. The personal-tax share continues to decline as full indexation of the tax system and announced and expected further tax cuts kick in.<sup>3</sup> Federal indirect taxes are fairly stable over the projection period even with the expected tobacco tax increase, as the indirect-tax base is not expected to grow faster than GDP. This is because neither investment nor exports are subject to federal indirect taxes under the GST. Finally, the share of corporate tax revenue is projected to continue to grow over the near term as corporate profits continue to be strong. As the announced tax cuts kick in, however, and as corporate profit growth slows somewhat, corporate tax revenues return to the levels seen in the early 1980s.

The projection for the federal government budget balance is shown in Figure 20. The federal budget balance as a ratio to GDP continues its rapid improvement. The national accounts budget balance has now been positive for three years (1997-1999, and as announced in recent federal budgets, the federal budget balance on a public accounts basis is in surplus). We had previously assumed that national accounts surpluses in our projection would be sufficient to produce a roughly \$5-10 billion surplus on

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<sup>3</sup> Due to revisions noted in footnote 2, pension contributions are no longer considered as federal government tax revenue and the underlying National Accounts budget surplus drops. Instead, personal income of persons rises, but so does the personal savings rate.

**Figure 18**  
**Federal Expenditure Items:**  
**Percent of GDP**



**Figure 19**  
**Federal Revenue Items:**  
**Percent of GDP**

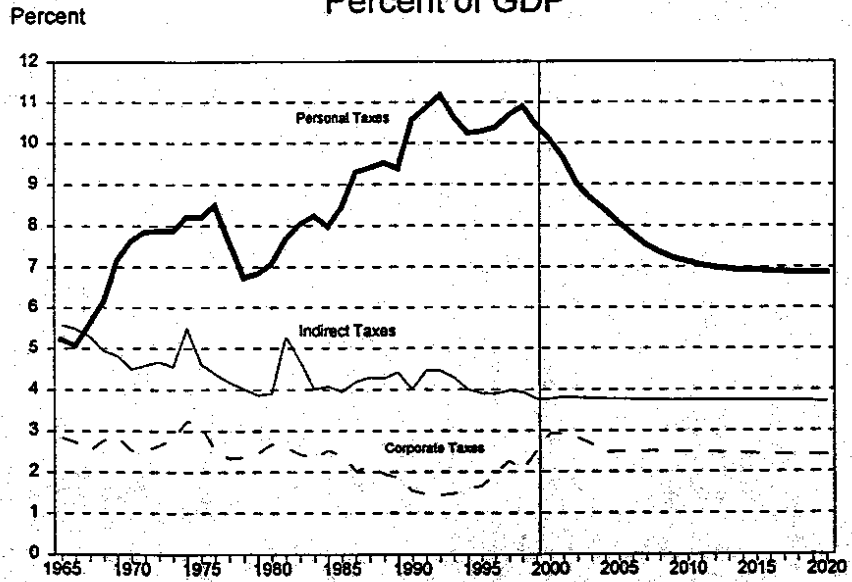


Table 7

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Federal Gov't Balance, Revenue and Expenditure Shares of GDP	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Federal Surplus/Deficit</b>	-0.054	-0.051	-0.055	-0.046	-0.039	-0.020	0.005	0.005	0.006	0.016
<b>Federal Expenditure</b>	0.242	0.241	0.236	0.221	0.217	0.201	0.182	0.181	0.179	0.169
Current G&S Expenditure	0.053	0.052	0.052	0.049	0.047	0.044	0.040	0.041	0.041	0.039
Capital Expenditure	0.005	0.005	0.005	0.005	0.004	0.004	0.003	0.003	0.003	0.003
Transfers to Persons	0.066	0.071	0.071	0.065	0.061	0.059	0.056	0.056	0.054	0.054
Net Transfers to P&L Gov'ts	0.042	0.044	0.044	0.040	0.041	0.035	0.029	0.029	0.033	0.027
Other Expenditure	0.016	0.011	0.009	0.008	0.007	0.007	0.003	0.003	0.002	0.002
Interest on the Debt	0.060	0.057	0.054	0.052	0.057	0.054	0.050	0.049	0.045	0.044
<b>Federal Revenue</b>	0.184	0.186	0.178	0.172	0.174	0.178	0.183	0.183	0.182	0.183
Direct Taxes - Persons	0.109	0.112	0.106	0.103	0.103	0.104	0.107	0.109	0.104	0.101
Direct Taxes - Corporations	0.014	0.014	0.015	0.016	0.017	0.019	0.023	0.020	0.025	0.029
Indirect Taxes	0.044	0.044	0.043	0.040	0.039	0.039	0.040	0.039	0.038	0.038
Other Revenue (Int & NonRes)	0.010	0.010	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.010
<b>Federal Capital Consumption Allowances</b>	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.003
<b>Federal Debt (NA basis)</b>	0.573	0.615	0.654	0.667	0.681	0.686	0.652	0.626	0.585	0.531
<b>Federal Surplus/Deficit (PA Basis)</b>	-0.049	-0.056	-0.058	-0.050	-0.038	-0.017	0.000	0.003	0.005	0.010
<b>Federal Debt (PA Basis)</b>	0.610	0.653	0.687	0.699	0.703	0.697	0.661	0.640	0.598	0.547
<b>Federal Surplus/Deficit</b>	0.013	0.009	0.007	0.005	0.005	0.004	0.004	0.004	0.004	0.004
<b>Federal Expenditure</b>	0.168	0.163	0.160	0.157	0.154	0.151	0.149	0.147	0.146	0.145
Current G&S Expenditure	0.039	0.040	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039
Capital Expenditure	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Transfers to Persons	0.052	0.050	0.050	0.049	0.048	0.048	0.047	0.047	0.046	0.046
Net Transfers to P&L Gov'ts	0.028	0.027	0.027	0.027	0.027	0.028	0.028	0.028	0.028	0.029
Other Expenditure	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Interest on the Debt	0.043	0.041	0.038	0.036	0.034	0.031	0.029	0.028	0.026	0.025
<b>Federal Revenue</b>	0.178	0.170	0.164	0.159	0.156	0.153	0.151	0.149	0.147	0.146
Direct Taxes - Persons	0.096	0.090	0.086	0.084	0.081	0.078	0.075	0.073	0.072	0.071
Direct Taxes - Corporations	0.029	0.028	0.027	0.025	0.025	0.025	0.025	0.025	0.025	0.025
Indirect Taxes	0.038	0.038	0.038	0.038	0.038	0.037	0.037	0.037	0.037	0.037
Other Revenue (Int & NonRes)	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
<b>Federal Capital Consumption Allowances</b>	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002
<b>Federal Debt (NA basis)</b>	0.491	0.457	0.429	0.404	0.382	0.362	0.343	0.325	0.309	0.294
<b>Federal Surplus/Deficit (PA Basis)</b>	0.010	0.007	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002
<b>Federal Debt (PA Basis)</b>	0.509	0.478	0.452	0.430	0.409	0.390	0.372	0.355	0.340	0.325

Table 7 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Federal Gov't Balance, Revenue and Expenditure Shares of GDP</b>										
<b>Federal Surplus/Deficit</b>	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
<b>Federal Expenditure</b>	0.144	0.143	0.143	0.142	0.142	0.141	0.141	0.140	0.140	0.139
Current G&S Expenditure	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039
Capital Expenditure	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Transfers to Persons	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.045	0.046	0.046
Net Transfers to P&L Gov'ts	0.029	0.030	0.031	0.031	0.032	0.032	0.033	0.033	0.033	0.034
Other Expenditure	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Interest on the Debt	0.024	0.023	0.022	0.021	0.020	0.019	0.019	0.018	0.017	0.016
<b>Federal Revenue</b>	0.145	0.145	0.144	0.143	0.143	0.143	0.143	0.142	0.142	0.142
Direct Taxes - Persons	0.070	0.070	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069
Direct Taxes - Corporations	0.025	0.025	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
Indirect Taxes	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037
Other Revenue (Int & NonRes)	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
<b>Federal Capital Consumption Allowances</b>	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.000	0.000	0.000
<b>Federal Debt (NA basis)</b>	0.280	0.266	0.253	0.241	0.230	0.219	0.208	0.199	0.189	0.180
<b>Federal Surplus/Deficit (PA Basis)</b>	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001
<b>Federal Debt (PA Basis)</b>	0.312	0.299	0.287	0.275	0.264	0.253	0.243	0.233	0.224	0.215



Table 8

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Federal Government Revenues and Expenditures (Millions of Dollars)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Total Revenues</b>	125833 ( 4.10)	130069 ( 3.37)	128715 ( -1.04)	131911 ( 2.48)	140313 ( 6.37)	147954 ( 5.45)	160908 ( 8.76)	165289 ( 2.72)	173962 ( 5.25)	188027 ( 8.09)
Indirect Taxes	30367 ( 11.81)	30998 ( 2.08)	31069 ( 0.23)	30682 ( -1.25)	31503 ( 2.68)	32410 ( 2.88)	34771 ( 7.28)	35428 ( 1.89)	36030 ( 1.70)	38691 ( 7.39)
Direct Taxes - Corp. & Gov't. Bus. Ent.	9892 ( -5.27)	9981 ( 0.90)	10695 ( 7.15)	12200 ( 14.07)	13372 ( 9.61)	16225 ( 21.34)	19786 ( 21.95)	18438 ( -6.81)	23868 ( 29.45)	30268 ( 26.81)
Direct Taxes & Transfers from Persons	74143 ( 3.41)	78039 ( 5.25)	77072 ( -1.24)	78690 ( 2.10)	83104 ( 5.61)	86561 ( 4.16)	93594 ( 8.12)	98154 ( 4.87)	100030 ( 1.91)	103787 ( 3.76)
Direct Taxes on Non-residents	1514	1576	1649	1698	1964	2844	2957	2695	3159	4055
Transfers from Other Levels of Government	461	523	539	555	757	667	664	651	657	753
Investment Income	5613	5224	4137	4092	5383	4750	4989	5540	5599	5773
Sales of Goods and Services	3843	3728	3554	3994	4230	4497	4147	4383	4619	4699
<b>Program Expenditures</b>	121994 ( 8.62)	126298 ( 3.53)	129192 ( 2.29)	126842 ( -1.82)	125759 ( -0.85)	119559 ( -4.93)	112787 ( -5.66)	116678 ( 3.45)	124521 ( 6.72)	126136 ( 1.30)
Current Exp. on Goods & Services	35910 ( 2.40)	36498 ( 1.64)	37690 ( 3.27)	37912 ( 0.59)	37887 ( -0.07)	36704 ( -3.12)	34905 ( -4.90)	36648 ( 4.99)	38810 ( 5.90)	40140 ( 3.43)
Gross Capital Formation	3263 ( -1.15)	3554 ( 8.92)	3860 ( 8.61)	3896 ( 0.93)	3138 ( -19.46)	3087 ( -1.63)	2796 ( -9.43)	2442 ( -12.66)	2665 ( 9.13)	2970 ( 11.46)
Transfers to Persons	45395 ( 16.38)	49317 ( 8.66)	51600 ( 4.63)	50166 ( -2.78)	48879 ( -2.57)	48752 ( -0.26)	49376 ( 1.28)	50874 ( 3.03)	51291 ( 0.82)	55273 ( 7.76)
Subsidies	6604 ( 53.83)	4587 ( -30.54)	3586 ( -21.82)	3439 ( -4.10)	3270 ( -4.91)	3252 ( -0.55)	3996 ( 22.88)	4218 ( 5.56)	3974 ( -5.78)	4006 ( 0.80)
Transfers to Non-residents	3086	3091	2886	2784	2747	2671	2577	2490	2623	2711
Transfers to Provinces and Locals	29276 ( 2.85)	31496 ( 7.58)	32320 ( 2.62)	31545 ( -2.40)	33463 ( 6.08)	29449 ( -12.00)	25990 ( -11.75)	26871 ( 3.39)	32328 ( 20.31)	28523 ( -11.77)
Net Capital Transfers	950	251	-137	-62	-691	22	-3831	-3863	-4209	-4536
Capital Formation - Existing Assets	6	20	21	18	27	-1464	-19	-7	0	22
Capital Consumption Allowances (-)	2486	2516	2634	2856	2961	2914	3003	2995	2961	2973
<b>Interest on the Public Debt</b>	41053 ( -1.97)	39558 ( -3.64)	39219 ( -0.86)	40157 ( 2.39)	46254 ( 15.18)	45352 ( -1.95)	43775 ( -3.48)	43958 ( 0.42)	43507 ( -1.03)	45143 ( 3.76)
<b>Surplus(+) or Deficit(-) : Nat'l Accts</b>	-37214	-35787	-39696	-35088	-31700	-16957	4346	4653	5934	16748
Debt : Nat'l Accts	391399	429753	474122	512294	549709	571894	572788	564673	560461	545967
<b>Surplus(+) or Deficit(-) : Public Accts</b>	-33768	-39355	-41764	-38600	-30828	-13827	384	3033	4722	10184
Debt : Public Accts	416588	455943	497707	536307	567135	580962	580578	577545	572823	562639

Note - Percent Changes (or levels changes) in parentheses

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Federal Government Revenues and Expenditures (Millions of Dollars)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Total Revenues</b>	192458 ( 2.36)	193222 ( 0.40)	196008 ( 1.44)	198391 ( 1.22)	203515 ( 2.58)	208484 ( 2.44)	213648 ( 2.48)	219498 ( 2.74)	225838 ( 2.89)	232819 ( 3.09)
Indirect Taxes	41207 ( 6.50)	43059 ( 4.49)	44943 ( 4.37)	46828 ( 4.19)	48826 ( 4.27)	50851 ( 4.15)	52912 ( 4.05)	54981 ( 3.91)	57177 ( 3.99)	59334 ( 3.77)
Direct Taxes - Corp. & Gov't. Bus. Ent.	31726 ( 4.82)	32136 ( 1.29)	31820 ( -0.98)	30596 ( -3.85)	32174 ( 5.16)	33683 ( 4.69)	35230 ( 4.59)	36704 ( 4.18)	38066 ( 3.71)	39394 ( 3.49)
Direct Taxes & Transfers from Persons	104218 ( 0.42)	102219 ( -1.92)	102961 ( 0.73)	104235 ( 1.24)	105120 ( 0.85)	105897 ( 0.74)	106770 ( 0.82)	108395 ( 1.52)	110508 ( 1.95)	113330 ( 2.55)
Direct Taxes on Non-residents	4030 ( 0.42)	4300 ( 0.42)	4537 ( 0.42)	4744 ( 0.42)	4959 ( 0.42)	5168 ( 0.42)	5387 ( 0.42)	5595 ( 0.42)	5779 ( 0.42)	5959 ( 0.42)
Transfers from Other Levels of Government	600 ( 0.42)	600 ( 0.42)	600 ( 0.42)	600 ( 0.42)	600 ( 0.42)	600 ( 0.42)	600 ( 0.42)	600 ( 0.42)	600 ( 0.42)	600 ( 0.42)
Investment Income	5955 ( 0.42)	6164 ( 0.42)	6379 ( 0.42)	6603 ( 0.42)	6834 ( 0.42)	7073 ( 0.42)	7320 ( 0.42)	7577 ( 0.42)	7842 ( 0.42)	8116 ( 0.42)
Sales of Goods and Services	4718 ( 0.42)	4741 ( 0.42)	4765 ( 0.42)	4789 ( 0.42)	5003 ( 0.42)	5211 ( 0.42)	5427 ( 0.42)	5644 ( 0.42)	5864 ( 0.42)	6082 ( 0.42)
<b>Program Expenditures</b>	131470 ( 4.23)	136075 ( 3.50)	142060 ( 4.40)	148001 ( 4.18)	153875 ( 3.97)	159901 ( 3.92)	166217 ( 3.95)	172738 ( 3.92)	179442 ( 3.88)	186766 ( 4.08)
Current Exp. on Goods & Services	42632 ( 6.21)	44951 ( 5.44)	47034 ( 4.63)	49206 ( 4.62)	51403 ( 4.46)	53548 ( 4.17)	55766 ( 4.14)	57998 ( 4.00)	60255 ( 3.89)	62492 ( 3.71)
Gross Capital Formation	3094 ( 4.17)	3222 ( 4.14)	3342 ( 3.71)	3459 ( 3.49)	3595 ( 3.95)	3738 ( 3.98)	3893 ( 4.14)	4049 ( 4.00)	4206 ( 3.89)	4362 ( 3.71)
Transfers to Persons	55920 ( 1.17)	57067 ( 2.05)	59203 ( 3.74)	61133 ( 3.26)	62873 ( 2.85)	64728 ( 2.95)	66703 ( 3.05)	68809 ( 3.16)	71030 ( 3.23)	73329 ( 3.24)
Subsidies	4023 ( 0.42)	4063 ( 1.00)	4103 ( 1.00)	4144 ( 1.00)	4186 ( 1.00)	4228 ( 1.00)	4270 ( 1.00)	4334 ( 1.00)	4399 ( 1.50)	4465 ( 1.50)
Transfers to Non-residents	2875 ( 0.42)	2945 ( 1.00)	3004 ( 1.00)	3064 ( 1.00)	3125 ( 1.00)	3188 ( 1.00)	3252 ( 1.00)	3317 ( 1.00)	3383 ( 1.50)	3451 ( 1.50)
Transfers to Provinces and Locals	30467 ( 6.81)	31385 ( 3.02)	32957 ( 5.01)	34608 ( 5.01)	36341 ( 5.01)	38162 ( 5.01)	40073 ( 5.01)	42024 ( 4.87)	44022 ( 4.76)	46591 ( 5.83)
Net Capital Transfers	-4552 ( 0)	-4548 ( 0)	-4544 ( 0)	-4540 ( 0)	-4536 ( 0)	-4532 ( 0)	-4528 ( 0)	-4524 ( 0)	-4520 ( 0)	-4516 ( 0)
Capital Formation - Existing Assets	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
Capital Consumption Allowances (-)	2988 ( 0)	3011 ( 0)	3039 ( 0)	3073 ( 0)	3112 ( 0)	3158 ( 0)	3211 ( 0)	3271 ( 0)	3338 ( 0)	3411 ( 0)
<b>Interest on the Public Debt</b>	47104 ( 4.34)	46430 ( -1.43)	45289 ( -2.46)	44465 ( -1.82)	43750 ( -1.61)	42700 ( -2.40)	41549 ( -2.69)	40873 ( -1.63)	40511 ( -0.88)	40186 ( -0.80)
<b>Surplus(+) or Deficit(-) : Nat'l Accts</b>	13884 ( 0)	10717 ( 0)	8659 ( 0)	5925 ( 0)	5890 ( 0)	5884 ( 0)	5883 ( 0)	5886 ( 0)	5884 ( 0)	5867 ( 0)
<b>Debt : Nat'l Accts</b>	532029 ( 0)	520250 ( 0)	510759 ( 0)	503473 ( 0)	497571 ( 0)	491684 ( 0)	485800 ( 0)	479916 ( 0)	474031 ( 0)	468158 ( 0)
<b>Surplus(+) or Deficit(-) : Public Accts</b>	10884 ( 0)	7717 ( 0)	5659 ( 0)	2925 ( 0)	2890 ( 0)	2884 ( 0)	2883 ( 0)	2886 ( 0)	2884 ( 0)	2867 ( 0)
<b>Debt : Public Accts</b>	551755 ( 0)	544038 ( 0)	538380 ( 0)	535455 ( 0)	532565 ( 0)	529681 ( 0)	526798 ( 0)	523912 ( 0)	521027 ( 0)	518161 ( 0)

Note - Percent Changes (or levels changes) in parentheses

Table 8 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

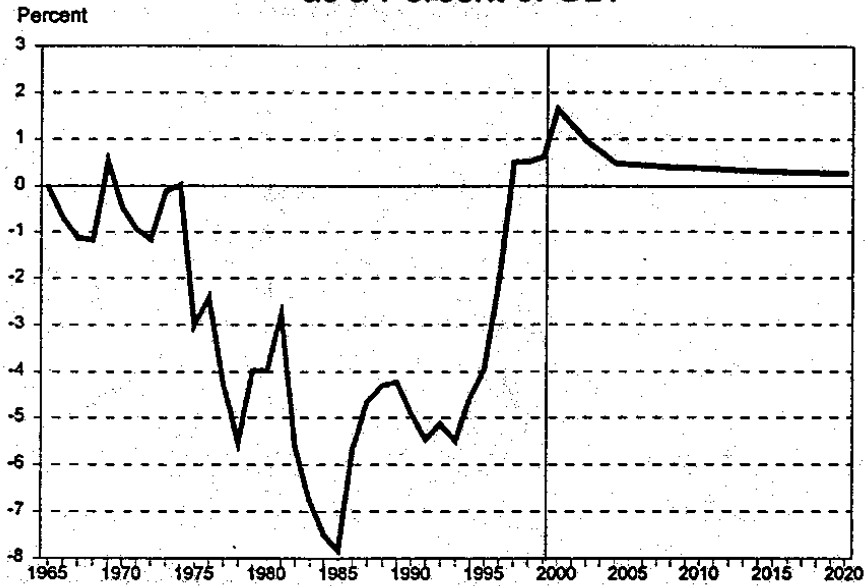
Federal Government Revenues and Expenditures (Millions of Dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Total Revenues</b>	240125 ( 3.14)	247831 ( 3.21)	255952 ( 3.28)	264269 ( 3.25)	273508 ( 3.50)	282746 ( 3.38)	292231 ( 3.35)	302032 ( 3.35)	312184 ( 3.36)	322734 ( 3.38)
<b>Indirect Taxes</b>	61552 ( 3.74)	63811 ( 3.67)	66148 ( 3.66)	68562 ( 3.65)	71011 ( 3.57)	73502 ( 3.44)	76033 ( 3.44)	78621 ( 3.40)	81274 ( 3.37)	84012 ( 3.37)
<b>Direct Taxes - Corp. &amp; Gov't. Bus. Ent.</b>	40808 ( 3.59)	42159 ( 3.31)	43494 ( 3.17)	44768 ( 2.93)	46268 ( 3.35)	47794 ( 3.30)	49324 ( 3.20)	50960 ( 3.32)	52599 ( 3.22)	54262 ( 3.16)
<b>Direct Taxes &amp; Transfers from Persons</b>	116294 ( 2.62)	119676 ( 2.91)	123398 ( 3.11)	127301 ( 3.16)	131816 ( 3.55)	136251 ( 3.36)	140872 ( 3.39)	145607 ( 3.36)	150605 ( 3.43)	155867 ( 3.49)
<b>Direct Taxes on Non-residents</b>	6160 ( 0.00)	6354 ( 0.00)	6542 ( 0.00)	6718 ( 0.00)	6918 ( 0.00)	7117 ( 0.00)	7315 ( 0.00)	7533 ( 0.00)	7752 ( 0.00)	7971 ( 0.00)
<b>Transfers from Other Levels of Government</b>	600 ( 0.00)	600 ( 0.00)	600 ( 0.00)	600 ( 0.00)	600 ( 0.00)	600 ( 0.00)	600 ( 0.00)	600 ( 0.00)	600 ( 0.00)	600 ( 0.00)
<b>Investment Income</b>	8400 ( 0.00)	8694 ( 0.00)	8999 ( 0.00)	9313 ( 0.00)	9639 ( 0.00)	9977 ( 0.00)	10326 ( 0.00)	10687 ( 0.00)	11061 ( 0.00)	11449 ( 0.00)
<b>Sales of Goods and Services</b>	6309 ( 0.00)	6535 ( 0.00)	6769 ( 0.00)	7007 ( 0.00)	7254 ( 0.00)	7505 ( 0.00)	7762 ( 0.00)	8027 ( 0.00)	8299 ( 0.00)	8580 ( 0.00)
<b>Program Expenditures</b>	194398 ( 4.09)	202428 ( 4.13)	210875 ( 4.17)	219517 ( 4.10)	229073 ( 4.35)	238629 ( 4.17)	248429 ( 4.11)	258542 ( 4.07)	269007 ( 4.05)	279869 ( 4.04)
<b>Current Exp. on Goods &amp; Services</b>	64820 ( 3.72)	67144 ( 3.58)	69569 ( 3.58)	71990 ( 3.51)	74525 ( 3.52)	77105 ( 3.46)	79746 ( 3.42)	82461 ( 3.41)	85249 ( 3.38)	88134 ( 3.38)
<b>Gross Capital Formation</b>	4525 ( 3.72)	4687 ( 3.58)	4855 ( 3.58)	5025 ( 3.51)	5202 ( 3.52)	5383 ( 3.46)	5567 ( 3.42)	5756 ( 3.41)	5951 ( 3.38)	6152 ( 3.38)
<b>Transfers to Persons</b>	75691 ( 3.22)	78369 ( 3.54)	81221 ( 3.64)	84107 ( 3.55)	87054 ( 3.50)	90088 ( 3.49)	93217 ( 3.47)	96479 ( 3.50)	99916 ( 3.56)	103519 ( 3.61)
<b>Subsidies</b>	4532 ( 1.50)	4600 ( 1.50)	4669 ( 1.50)	4739 ( 1.50)	4810 ( 1.50)	4882 ( 1.50)	4955 ( 1.50)	5030 ( 1.50)	5105 ( 1.50)	5182 ( 1.50)
<b>Transfers to Non-residents</b>	3520 ( 4.93)	3590 ( 5.21)	3662 ( 5.09)	3735 ( 5.18)	3810 ( 5.64)	3886 ( 4.99)	3964 ( 4.86)	4043 ( 4.82)	4124 ( 4.52)	4206 ( 4.53)
<b>Transfers to Provinces and Locals</b>	49311 ( 5.84)	52123 ( 5.70)	55091 ( 5.69)	58189 ( 5.62)	61471 ( 5.64)	64294 ( 5.59)	67224 ( 5.56)	70277 ( 5.54)	73454 ( 5.52)	76780 ( 5.52)
<b>Net Capital Transfers</b>	-4512 ( 0.00)	-4508 ( 0.00)	-4503 ( 0.00)	-4499 ( 0.00)	-4495 ( 0.00)	-4490 ( 0.00)	-4486 ( 0.00)	-4482 ( 0.00)	-4477 ( 0.00)	-4473 ( 0.00)
<b>Capital Formation - Existing Assets</b>	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)
<b>Capital Consumption Allowances (-)</b>	3491 ( 0.00)	3578 ( 0.00)	3671 ( 0.00)	3771 ( 0.00)	3307 ( 0.00)	2520 ( 0.00)	1759 ( 0.00)	1023 ( 0.00)	312 ( 0.00)	-374 ( 0.00)
<b>Interest on the Public Debt</b>	39862 ( -0.81)	39538 ( -0.81)	39215 ( -0.82)	38892 ( -0.82)	38570 ( -0.83)	38247 ( -0.84)	37924 ( -0.84)	37601 ( -0.85)	37277 ( -0.86)	36951 ( -0.87)
<b>Surplus(+) or Deficit(-) : Nat'l Accts</b>	5865 ( 4.62)	5865 ( 4.62)	5862 ( 4.50)	5861 ( 4.47)	5865 ( 4.38)	5870 ( 4.32)	5878 ( 4.27)	5889 ( 4.23)	5900 ( 4.18)	5913 ( 4.14)
<b>Surplus(+) or Deficit(-) : Public Accts</b>	2865 ( 5.15)	2865 ( 5.15)	2862 ( 5.03)	2861 ( 4.99)	2865 ( 4.95)	2870 ( 4.90)	2878 ( 4.85)	2889 ( 4.81)	2900 ( 4.76)	2913 ( 4.72)
<b>Debt : Public Accts</b>	515295 ( 11.24)	512430 ( 11.18)	509567 ( 11.12)	506707 ( 11.06)	503842 ( 11.00)	500972 ( 10.94)	498094 ( 10.88)	495205 ( 10.82)	492305 ( 10.76)	489391 ( 10.70)

Note - Percent Changes (or Levels changes) in parentheses

Table 8 cont'd

**Figure 20**  
**Federal Budget Balance**  
**as a Percent of GDP**

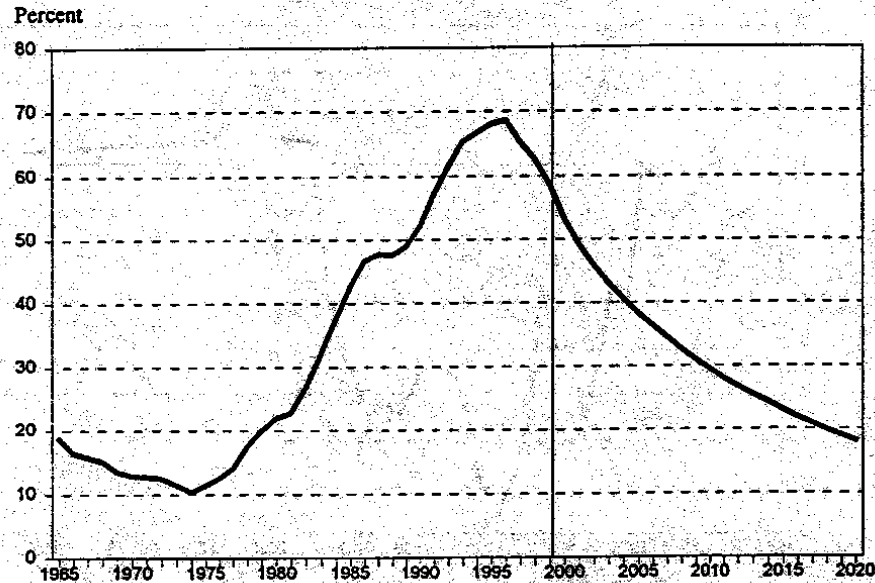


a public accounts basis. Given recent evidence, we now feel that there appears to be little desire to run surpluses much above \$4.5 to \$6 billion on a public accounts basis over the longer term (although in 1999-2000 it now appears, even with billions of dollars of “pre-booking” of government spending and transfers the public accounts surplus could hit \$8 billion).

Figure 21 shows past and projected ratios of the federal debt to GDP, where the debt is defined as the accumulation of national income accounts (NIA) deficits. The federal debt/GDP ratio<sup>4</sup> peaked in 1996 (at 68.7%), falling rapidly since to 58.5% in 1999. This measure then diminishes significantly under the assumed settings for expenditure and taxation. At the projection horizon it is back to a level comparable to that of the economy in the late 1970s.

<sup>4</sup> The revisions to the National Accounts and National Balance Sheets mean that the debt (and government balance) numbers on a national and public accounts are much more comparable than they were previously. As a result, the national accounts peak debt/gdp ratio (1996) has been revised upward by over 13 percentage points.

**Figure 21**  
**Federal Debt**  
**as a Percent of GDP**

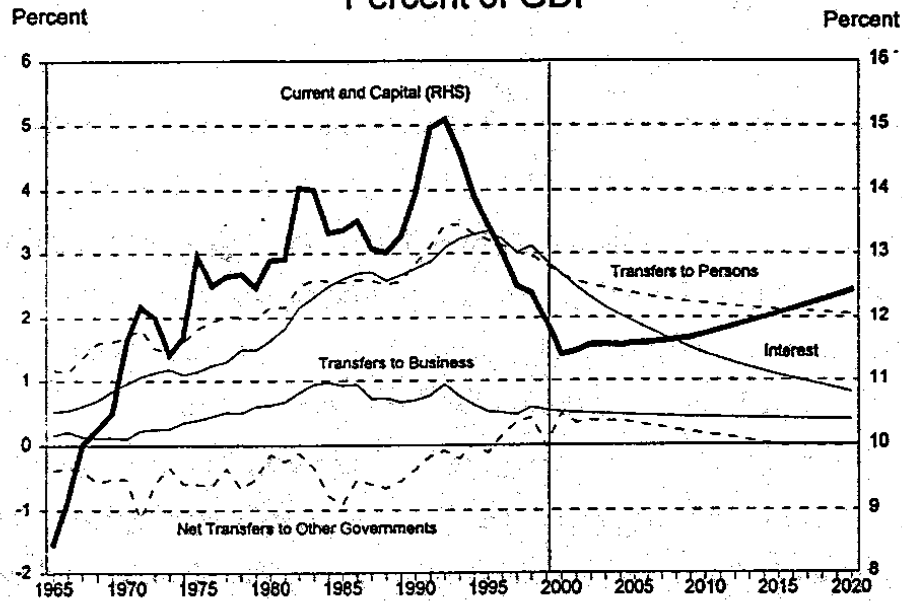


### **III.7.b The Provincial Government (including Hospitals) Sector; Municipalities**

Figures 22 through 25 and Tables 9 and 10 show detailed expenditure, revenue, budget balance and debt projections for the provincial governments in aggregate. Since the fiscal fate of the provinces is intimately connected with that of the municipalities, a summary of their expenditure and revenue shares of GDP is presented in Table 11 with detailed levels and rates of change in Tables 12 and 13. Current and capital spending at the local level is compared with provincial and federal current and capital spending in Figure 26, while Figure 27 shows local government taxes (largely property taxes) in relation to federal and provincial income taxes and CPP/QPP contributions.

On the provincial expenditure side, current and capital spending by provinces (now including the hospital sector) rose by over 4 % of GDP from the mid-1960s through 1980, and then another 1% point in the recession in the early 1980s. With the recovery of the 1980s, this share was almost back to its 1980 level by 1989 but increased sharply (over 2% points) when GDP began to fall in the recent recession. With significant current and capital spending restraint (particularly in Ontario) and with the

Figure 22  
 Provincial Expenditure Items:  
 Percent of GDP



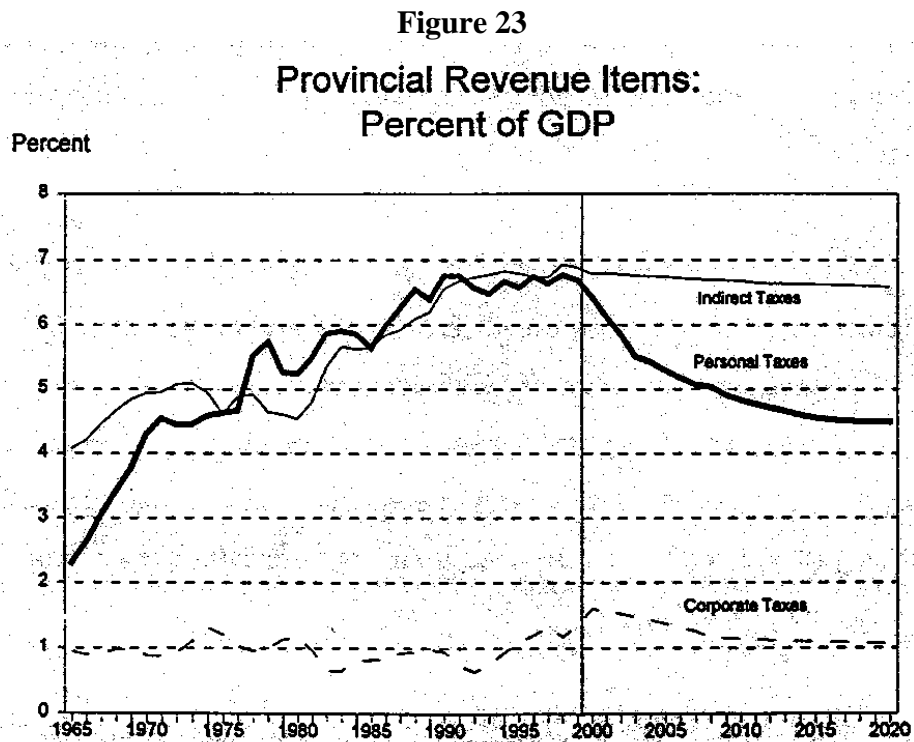
recovery of GDP growth, the share of this spending to GDP has fallen dramatically in recent years. But with the strong fiscal balances in most provinces, and pressure to spend on health care and, in the short term, education, this share is expected to begin to recover in 2001, increasing through the projection horizon.

Provincial transfers to persons are expected to continue to fall as a share of GDP due to the improving economy and continued restraints on the generosity of some provincial programs. Net transfers to other levels of government as a share of GDP are expected show improvement for the provincial governments as increased transfers to local governments are offset by expected higher transfers from the federal government for health care. As can be seen from Table 11 and Figure 26, local government current spending is assumed to be restrained in line with provincial spending, reducing its share of GDP as the recovery proceeds.

Finally, interest on the debt as a share of GDP is expected to continue its downward path after peaking in 1995 reflecting the improvements in provincial balances. The runup in debt payments was not as

severe as it was for the federal government in the 1980s, because the deficits were brought under control earlier and nominal interest rates are not nearly as high.

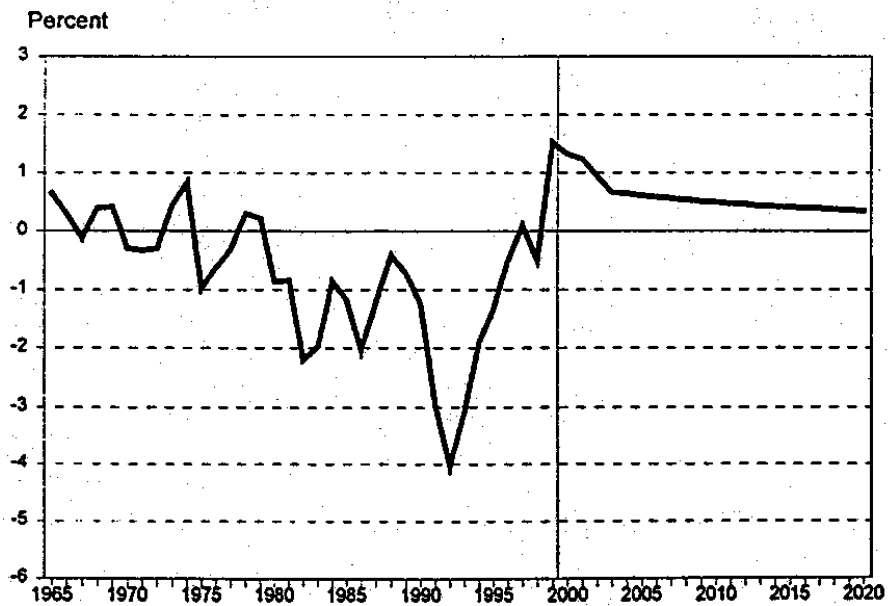
Provincial revenues (Figure 23) show that personal taxes as a percent of GDP will fall over the projection period with personal income tax rates being reduced as budget balances continue to improve. One should note however that personal taxes as a share of GDP at the provincial level do not fall as much in absolute terms as they do at the federal level. Spending pressures are greater at the provincial level and the federal government is now cutting taxes quite aggressively. Indirect taxes (including the expected increases in tobacco taxes) remain at a more than thirty year high, however, as a percent of GDP in the near term before only gradually falling to the projection horizon. Corporate taxes remain a small part of provincial government revenues but have recovered in relation to GDP at the same time that corporate profits have. As at the federal level the share of corporate tax revenues will fall with tax rate cuts and moderating corporate profits. Finally, local taxes must figure in the provincial calculations as the provinces are ultimately responsible for the local governments' fiscal health. As can be seen in Figure 27, local taxes as a share of GDP have been falling since hitting a peak in 1992.



We see this continuing until after the turn of the century when the rate will stabilize at just over 3% (a low level judged in relation to the rates experienced over the last thirty-five years, but roughly comparable to the levels seen in the late 1970s through the late 1980s) through to the projection horizon.

The impact of these estimates and assumptions, combined with the expected economic recovery, yield the budget balance path of Figure 24. Many of the provincial governments have solved their deficit problems, while the rest have announced plans to do so, thus the provinces as a whole ran a solid national accounts budget surplus in 1999. We have assumed that the provinces will run balances on a national accounts basis that yield a modest surplus on a public accounts basis throughout the projection period. The resulting debt/GDP ratio for the provinces is shown in Figure 25<sup>5</sup>: the National Accounts debt/GDP ratio level is already on a downward path and declines to a level at the projection horizon last seen in the early 1970s.

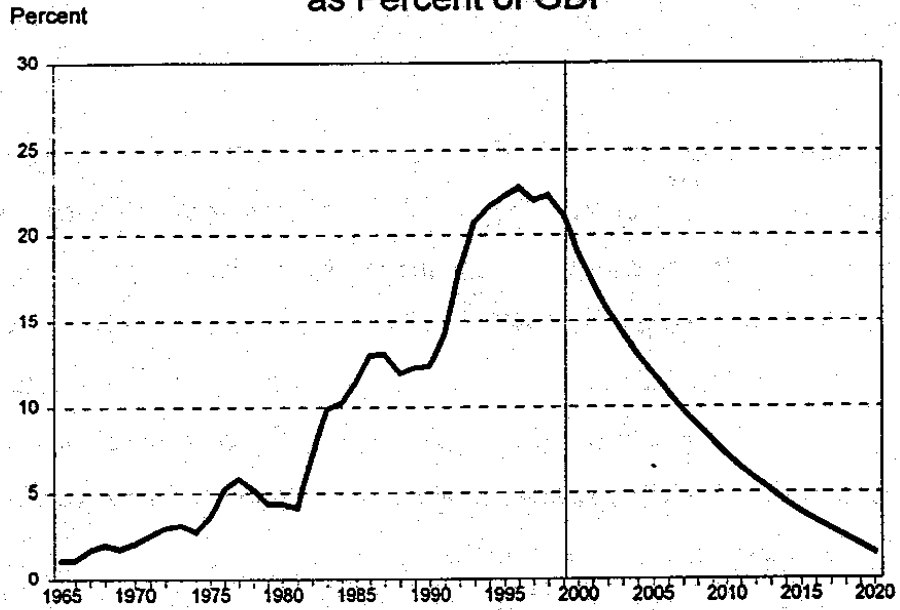
**Figure 24**  
**Total Provincial Budget Balance**  
**as Percent of GDP**



<sup>5</sup> With this long term projection we have moved to the National Balance Sheet definition of the provincial government debt. This number is much lower than the estimate previously used.

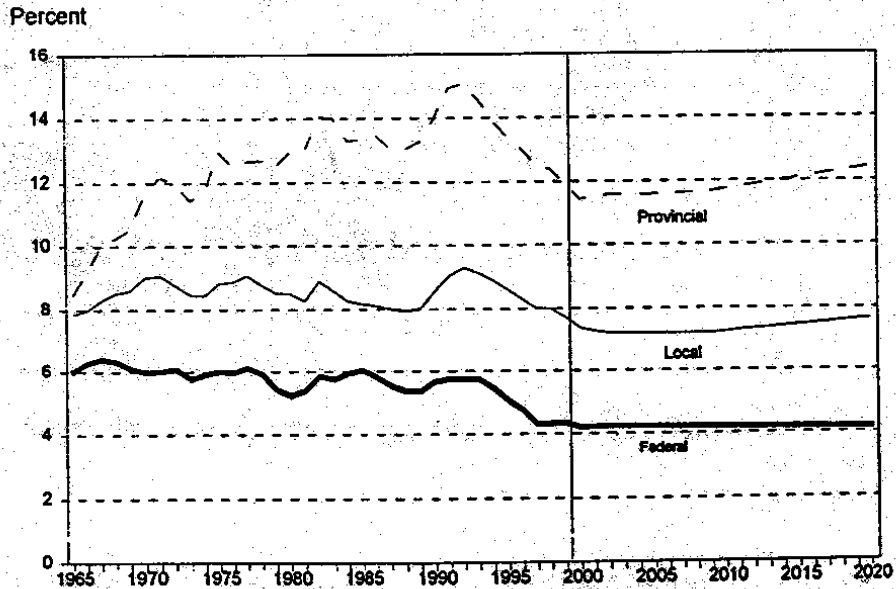


**Figure 25**  
**Provincial Debt**  
**as Percent of GDP**

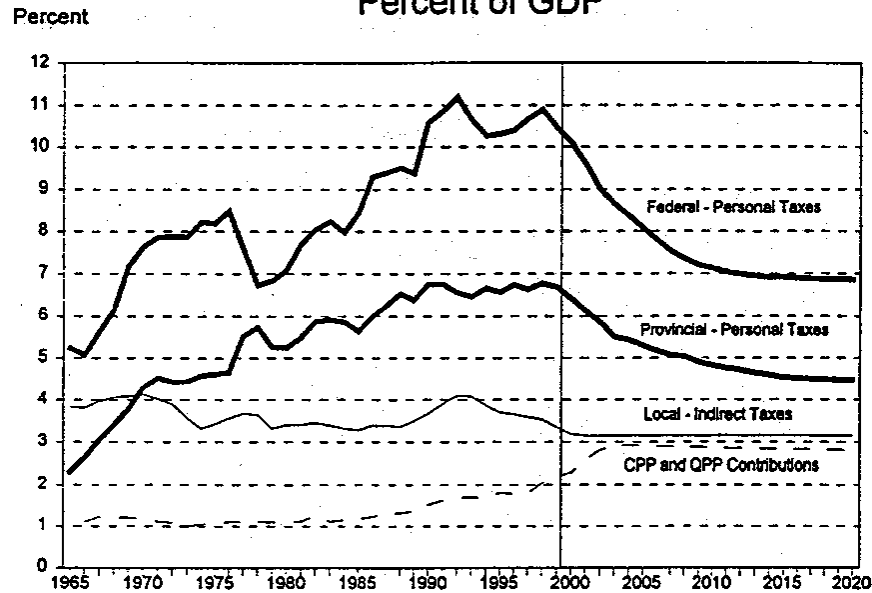


**Figure 26**

**Current & Capital Spending by Level of Government (as Percent of GDP)**



**Figure 27**  
**Government Revenue Items:**  
**Percent of GDP**



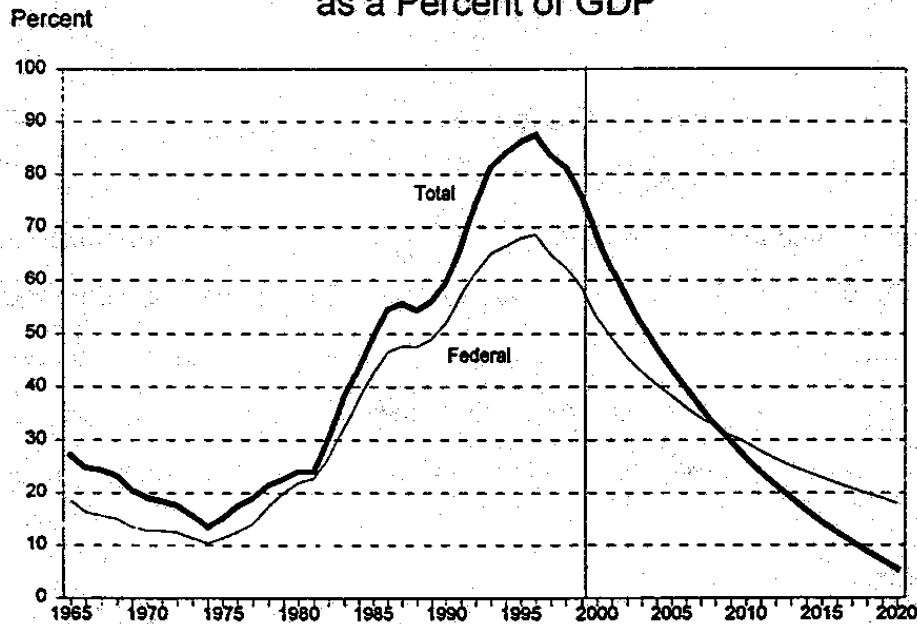
### III.7.c The Government Sector Combined

We conclude this section by examining the budget balance and debt situation of the consolidated government sector, which includes the Canada and Quebec Pension Plans as well as all levels of government and hospitals. We have assumed that the municipal sector will run a National Accounts “balanced budget” throughout the projection period. In the model, the provincial governments, through their transfers to these levels of government, are ultimately responsible for attaining this fiscal objective.

As noted under our fiscal assumptions, the Canada and Quebec pension plans, as a result of the 1997 federal-provincial agreement, will increase their contribution rates to build up their surpluses to meet the pension requirements of retiring baby boomers. Figure 27 shows federal and provincial personal taxes together with the pension plan contributions. As can be seen, while there is room for the federal and provincial governments to reduce taxes, these tax cuts will be partially offset as pension plan contributions “ramp up” to their steady state level of contributions (reached in 2003).

Finally, Figure 28 plots both federal and total government debt/GDP ratios. Each debt is calculated on an accumulated National Accounts budget balance basis. Because the Local and Pension Plan levels of government have typically run surpluses (often quite large surpluses in the case of the Pension Plans) the accumulated National Accounts debt of the non-federal government levels has been much smaller than the National Accounts federal debt. This position has unwound in the face of recent provincial deficits and the disappearance of the Pension Plan surpluses. Total government National Accounts debt (see Figure 28 and Table 14) hit its peak of 87.6% of GDP in 1996, but has since declined to 76.0% in 1999, and is expected to continue to fall throughout the projection period as government and pension plan surpluses build up.<sup>6</sup>

**Figure 28**  
**Government Debt**  
**as a Percent of GDP**



<sup>6</sup> In our debt measures for the federal, provincial and consolidated government accounts we have used accumulated NIA measures as these are the most easily calculated within the model and, in our view, give the best picture of government debts in relation to GDP and other NIA income measures. With the most recent National Account revisions the differences between the national accounts and public accounts are now relatively small. Note that all of the debt measures so far mentioned are gross debts. No attempt has been made in any of these calculations to value the stocks of government assets (which include port facilities, airports, highways and hospitals).





Table 10

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Provincial Government Revenues and Expenditures (Millions of Dollars)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Total Revenues</b>	150848 ( 1.00)	154807 ( 2.62)	161771 ( 4.50)	171988 ( 6.32)	180936 ( 5.20)	184684 ( 2.07)	189353 ( 2.53)	195064 ( 3.02)	210462 ( 7.89)	217124 ( 3.17)
Indirect Taxes	45559 ( 2.59)	47025 ( 3.22)	49100 ( 4.41)	52449 ( 6.82)	54885 ( 4.64)	56174 ( 2.35)	59086 ( 5.18)	62566 ( 5.89)	65939 ( 5.39)	69827 ( 5.90)
Direct Taxes - Corp. & Gov't. Bus. Ent.	5123 (-19.85)	4536 (-11.46)	5568 ( 22.75)	7142 ( 28.27)	8766 ( 22.74)	10014 ( 14.24)	11674 ( 16.58)	10630 ( -8.94)	13001 ( 22.30)	16467 ( 26.66)
Direct Taxes & Transfers from Persons	46150 ( 0.78)	45809 ( -0.74)	46857 ( 2.29)	51126 ( 9.11)	53007 ( 3.68)	56145 ( 5.92)	58196 ( 3.65)	61032 ( 4.87)	64031 ( 4.91)	65905 ( 2.93)
Investment Income	14600 ( -3.79)	14857 ( 1.76)	16179 ( 8.90)	17772 ( 9.85)	17928 ( 0.88)	19496 ( 8.75)	20169 ( 3.45)	18976 ( -5.92)	19755 ( 4.11)	20806 ( 5.32)
Transfers from Fed'l and Local Gov't	29135 ( 3.52)	31232 ( 7.20)	32130 ( 2.88)	31120 ( -3.14)	33162 ( 6.56)	28996 (-12.56)	25681 (-11.43)	26714 ( 4.02)	32342 ( 21.07)	28579 (-11.64)
Sales of Goods and Services	10281 ( 9.03)	11348 ( 6.46)	11937 ( -0.30)	12379 ( 0.34)	13188 ( 1.96)	13859 ( -1.46)	14547 ( -0.04)	15146 ( 5.72)	15394 ( -1.71)	15539 ( 4.55)
<b>Program Expenditures</b>	151576 ( 9.03)	161369 ( 6.46)	160880 ( -0.30)	161431 ( 0.34)	164593 ( 1.96)	162185 ( -1.46)	162122 ( -0.04)	171388 ( 5.72)	168465 ( -1.71)	176136 ( 4.55)
Current Exp. on Goods & Services	94117 ( 8.54)	98147 ( 4.28)	98733 ( 0.60)	99255 ( 0.53)	100963 ( 1.72)	101224 ( 0.26)	102717 ( 1.47)	104763 ( 1.99)	106322 ( 1.49)	108819 ( 2.35)
Gross Capital Formation	8059 ( 1.45)	7289 ( -9.55)	6988 ( -4.13)	7332 ( 7.78)	7453 ( -1.05)	7173 ( -3.76)	6896 ( -3.86)	6834 ( -0.90)	7963 ( 16.52)	8650 ( 8.63)
Transfers to Persons	21257 ( 10.59)	24010 ( 12.95)	24996 ( 4.11)	25249 ( 1.01)	25856 ( 2.40)	26041 ( 0.72)	26392 ( 1.35)	26820 ( 1.62)	26890 ( 0.26)	27251 ( 1.34)
Subsidies	5307 ( 9.06)	6541 ( 23.25)	5553 ( -15.10)	4963 ( -10.62)	4264 ( -14.08)	4242 ( -0.52)	4183 ( -1.39)	5414 ( 29.43)	5307 ( -1.98)	5388 ( 1.53)
Transfers to Local and Federal	27979 ( 9.34)	30687 ( 9.68)	30653 ( -0.11)	31247 ( 1.94)	32233 ( 3.16)	30085 ( -6.66)	28784 ( -4.32)	30569 ( 6.20)	32086 ( 4.96)	33601 ( 4.72)
Net Capital Transfers	836 ( -40)	629 ( 148)	543 ( -347)	44 ( -356)	481 ( 98)	322 ( 7)	235 ( 27)	4097 ( 10)	194 ( -3048)	184 ( -206)
Capital Formation - Existing Assets	5939	6082	6239	6503	6755	6909	7112	7119	7249	7551
Interest on the Public Debt	19587 ( 4.83)	21594 ( 10.25)	23337 ( 8.07)	25221 ( 8.07)	26957 ( 6.88)	26756 ( -0.75)	26431 ( -1.21)	28111 ( 6.36)	27513 ( -2.13)	27370 ( -0.52)
<b>Surplus (+) or Deficit (-)</b>	-20315	-28156	-22446	-14664	-10614	-4257	800	-4435	14484	13617

Note - Percent Changes (or levels changes) in parentheses

Table 10 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Provincial Government Revenues and Expenditures (Millions of Dollars)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Total Revenues</b>	224411 ( 3.36)	230178 ( 2.57)	235585 ( 2.35)	243690 ( 3.44)	252101 ( 3.45)	260522 ( 3.34)	269275 ( 3.36)	278098 ( 3.28)	287100 ( 3.24)	297397 ( 3.59)
<b>Indirect Taxes</b>	73691 ( 5.53)	77122 ( 4.66)	80619 ( 4.54)	84059 ( 4.27)	87661 ( 4.28)	91317 ( 4.17)	95031 ( 4.07)	98598 ( 3.75)	102444 ( 3.90)	106219 ( 3.69)
<b>Direct Taxes - Corp. &amp; Gov't. Bus. Ent.</b>	16834 ( 2.23)	17326 ( 2.92)	17638 ( 1.80)	17786 ( 0.84)	17903 ( 0.66)	17939 ( 0.20)	17940 ( 0.01)	17993 ( -4.72)	17633 ( 3.16)	18155 ( 2.96)
<b>Direct Taxes &amp; Transfers from Persons</b>	66377 ( 0.72)	66477 ( 0.15)	65619 ( -1.29)	67572 ( 2.98)	68960 ( 2.05)	70280 ( 1.91)	71762 ( 2.11)	74225 ( 3.43)	75111 ( 1.19)	76786 ( 2.23)
<b>Investment Income</b>	21432 ( 3.01)	22191 ( 3.54)	23012 ( 3.70)	23863 ( 3.70)	24746 ( 3.70)	25662 ( 3.70)	26612 ( 3.70)	27597 ( 3.70)	28619 ( 3.70)	29678 ( 3.70)
<b>Transfers from Fed'l and Local Gov't</b>	30477 ( 6.64)	31383 ( 2.97)	32939 ( 4.96)	34573 ( 4.96)	36289 ( 4.96)	38090 ( 4.96)	39982 ( 4.97)	41915 ( 4.84)	43896 ( 4.73)	46442 ( 5.80)
<b>Sales of Goods and Services</b>	15602 ( 4.55)	15680 ( 4.94)	15758 ( 4.46)	15837 ( 4.18)	16544 ( 4.26)	17232 ( 4.02)	17946 ( 4.03)	18665 ( 3.91)	19391 ( 3.82)	20112 ( 4.20)
<b>Program Expenditures</b>	184157 ( 4.55)	193262 ( 4.94)	201887 ( 4.46)	210336 ( 4.18)	219290 ( 4.26)	228101 ( 4.02)	237288 ( 4.03)	246560 ( 3.91)	255979 ( 3.82)	266731 ( 4.20)
<b>Current Exp. on Goods &amp; Services</b>	115293 ( 5.95)	122137 ( 5.94)	128169 ( 4.94)	133828 ( 4.42)	140211 ( 4.77)	146488 ( 4.48)	153003 ( 4.45)	159592 ( 4.31)	166290 ( 4.20)	173648 ( 4.42)
<b>Gross Capital Formation</b>	9024 ( 4.33)	9398 ( 4.14)	9756 ( 3.81)	10116 ( 3.69)	10546 ( 4.25)	10998 ( 4.28)	11487 ( 4.45)	11982 ( 4.31)	12485 ( 4.20)	13037 ( 4.42)
<b>Transfers to Persons</b>	27738 ( 1.79)	28365 ( 2.26)	29144 ( 2.75)	29947 ( 2.75)	30772 ( 2.76)	31623 ( 2.76)	32499 ( 2.77)	33400 ( 2.77)	34329 ( 2.78)	35285 ( 2.79)
<b>Subsidies</b>	5521 ( 2.47)	5660 ( 2.50)	5801 ( 2.50)	5946 ( 2.50)	6095 ( 2.50)	6247 ( 2.50)	6403 ( 2.50)	6563 ( 2.50)	6727 ( 2.50)	6896 ( 2.50)
<b>Transfers to Local and Federal</b>	34257 ( 1.95)	35706 ( 4.23)	37353 ( 4.61)	39176 ( 4.88)	40696 ( 3.88)	42142 ( 3.55)	43678 ( 3.64)	45206 ( 3.50)	46751 ( 3.42)	48907 ( 4.61)
<b>Net Capital Transfers</b>	187 ( 0.00)	188 ( 0.00)	190 ( 0.00)	192 ( 0.00)	194 ( 0.00)	196 ( 0.00)	198 ( 0.00)	200 ( 0.00)	202 ( 0.00)	204 ( 0.00)
<b>Capital Formation - Existing Assets</b>	7864 ( 2.07)	8191 ( -1.95)	8527 ( -1.84)	8870 ( -1.78)	9224 ( -1.77)	9593 ( -1.75)	9980 ( -1.77)	10384 ( -1.78)	10805 ( -1.81)	11245 ( -1.84)
<b>Capital Consumption Allowances</b>	26804 ( -2.07)	26282 ( -1.95)	25797 ( -1.84)	25337 ( -1.78)	24889 ( -1.77)	24454 ( -1.75)	24022 ( -1.77)	23595 ( -1.78)	23188 ( -1.81)	22740 ( -1.84)
<b>Interest on the Public Debt</b>	13451 ( 2.07)	10634 ( -1.95)	7901 ( -1.84)	8017 ( -1.78)	7922 ( -1.77)	7967 ( -1.75)	7965 ( -1.77)	7944 ( -1.78)	7953 ( -1.81)	7925 ( -1.84)
<b>Surplus (+) or Deficit (-)</b>										

Note - Percent Changes (or Levels changes) in parentheses

Table 10 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Provincial Government Revenues and Expenditures (Millions of Dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Total Revenues</b>	308224 ( 3.64)	319167 ( 3.55)	330647 ( 3.60)	342434 ( 3.56)	354773 ( 3.60)	367469 ( 3.58)	380596 ( 3.57)	394219 ( 3.58)	408332 ( 3.58)	423047 ( 3.60)
Indirect Taxes	109925 ( 3.49)	113652 ( 3.39)	117732 ( 3.59)	121935 ( 3.57)	126282 ( 3.57)	130726 ( 3.52)	135235 ( 3.45)	139866 ( 3.42)	144627 ( 3.40)	149529 ( 3.39)
Direct Taxes - Corp. & Gov't. Bus. Ent.	18727 ( 3.15)	19275 ( 2.93)	19809 ( 2.77)	20309 ( 2.53)	20913 ( 2.97)	21532 ( 2.96)	22146 ( 2.85)	22804 ( 2.97)	23462 ( 2.89)	24124 ( 2.82)
Direct Taxes & Transfers from Persons	78790 ( 2.61)	80785 ( 2.53)	82750 ( 2.43)	84750 ( 2.42)	86797 ( 2.41)	89488 ( 3.10)	92374 ( 3.23)	95395 ( 3.27)	98578 ( 3.34)	101987 ( 3.46)
Investment Income	30778 ( 3.70)	31918 ( 3.70)	33100 ( 3.70)	34327 ( 3.71)	35599 ( 3.71)	36919 ( 3.71)	38287 ( 3.71)	39707 ( 3.71)	41180 ( 3.71)	42707 ( 3.71)
Transfers from fed'l and Local Gov't	49139 ( 5.81)	51926 ( 5.67)	54869 ( 5.67)	57939 ( 5.60)	61192 ( 5.61)	63985 ( 4.56)	66883 ( 4.53)	69903 ( 4.52)	73046 ( 4.49)	76335 ( 4.50)
Sales of Goods and Services	20862 ( 4.22)	21611 ( 4.10)	22385 ( 4.11)	23171 ( 4.05)	23988 ( 4.06)	24819 ( 4.01)	25669 ( 3.99)	26544 ( 3.97)	27443 ( 3.96)	28373 ( 3.97)
<b>Program Expenditures</b>	277990 ( 4.22)	289389 ( 4.10)	301274 ( 4.11)	313465 ( 4.05)	326202 ( 4.06)	339298 ( 4.01)	352825 ( 3.99)	366848 ( 3.97)	381365 ( 3.96)	396487 ( 3.97)
Current Exp. on Goods & Services	181351 ( 4.44)	189142 ( 4.30)	197263 ( 4.29)	205588 ( 4.22)	214292 ( 4.23)	223235 ( 4.17)	232467 ( 4.14)	242038 ( 4.12)	251941 ( 4.09)	262259 ( 4.10)
Gross Capital Formation	13615 ( 4.44)	14200 ( 4.30)	14810 ( 4.29)	15435 ( 4.22)	16089 ( 4.23)	16760 ( 4.17)	17453 ( 4.14)	18172 ( 4.12)	18915 ( 4.09)	19690 ( 4.10)
Transfers to Persons	36270 ( 2.79)	37284 ( 2.80)	38329 ( 2.80)	39405 ( 2.81)	40513 ( 2.81)	41655 ( 2.82)	42831 ( 2.82)	44042 ( 2.83)	45291 ( 2.83)	46577 ( 2.84)
Subsidies	7068 ( 2.50)	7245 ( 2.50)	7426 ( 2.50)	7611 ( 2.50)	7802 ( 2.50)	7997 ( 2.50)	8197 ( 2.50)	8402 ( 2.50)	8612 ( 2.50)	8827 ( 2.50)
Transfers to Local and Federal	51185 ( 4.66)	53495 ( 4.51)	55922 ( 4.54)	58421 ( 4.47)	61043 ( 4.49)	63750 ( 4.43)	66558 ( 4.40)	69481 ( 4.39)	72521 ( 4.37)	75701 ( 4.39)
Net Capital Transfers	206 ( 0)	208 ( 0)	210 ( 0)	212 ( 0)	214 ( 0)	217 ( 0)	219 ( 0)	221 ( 0)	223 ( 0)	225 ( 0)
Capital Formation - Existing Assets	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
Capital Consumption Allowances	11705 ( 2.23)	12185 ( 2.18)	12686 ( 2.17)	13208 ( 2.14)	13750 ( 2.11)	14314 ( 2.08)	14900 ( 2.05)	15507 ( 2.02)	16138 ( 1.99)	16792 ( 1.96)
Interest on the Public Debt	22315 ( -1.87)	21891 ( -1.90)	21470 ( -1.92)	21049 ( -1.96)	20627 ( -2.00)	20204 ( -2.05)	19778 ( -2.11)	19351 ( -2.16)	18920 ( -2.22)	18488 ( -2.29)
<b>Surplus (+) or Deficit (-)</b>	7919	7887	7903	7920	7944	7968	7993	8021	8047	8072

Note - Percent Changes (or levels changes) in parentheses



Table 11

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Other Gov't Revenue and Expenditure Shares of GDP										
Municipal										
Surplus/Deficit	-0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000
Current G&S Expenditure	0.079	0.081	0.080	0.077	0.074	0.072	0.070	0.070	0.067	0.063
Capital Expenditure	0.011	0.011	0.011	0.012	0.012	0.011	0.010	0.010	0.010	0.010
Transfers to Persons	0.004	0.005	0.005	0.005	0.005	0.004	0.003	0.005	0.004	0.004
Net Transfers to/from Gov'ts	-0.040	-0.044	-0.042	-0.041	-0.039	-0.036	-0.032	-0.033	-0.033	-0.032
Interest on the Debt	0.006	0.006	0.006	0.005	0.005	0.005	0.005	0.004	0.004	0.004
Indirect Taxes	0.039	0.041	0.041	0.039	0.037	0.037	0.036	0.035	0.034	0.032
Interest & Royalties	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002
Municipal Capital Consumption Allowances	0.007	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.007
Pension Plans										
Surplus/Deficit	0.002	0.000	-0.001	-0.002	-0.001	-0.003	-0.003	-0.001	0.001	0.002
Payments to Persons	0.022	0.024	0.025	0.026	0.026	0.026	0.026	0.026	0.026	0.025
Direct Taxes - Persons	0.016	0.017	0.017	0.017	0.018	0.018	0.018	0.020	0.022	0.023
Interest	0.008	0.008	0.008	0.007	0.007	0.006	0.005	0.005	0.005	0.005

Table 11 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Other Gov't Revenue and Expenditure Shares of GDP										
Municipal										
Surplus/Deficit	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Current G&S Expenditure	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062
Capital Expenditure	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Transfers to Persons	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Net Transfers to/from Gov'ts	-0.031	-0.031	-0.031	-0.031	-0.031	-0.031	-0.030	-0.030	-0.030	-0.030
Interest on the Debt	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002
Indirect Taxes	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032
Interest & Royalties	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Municipal Capital Consumption Allowances	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Pension Plans										
Surplus/Deficit	0.005	0.008	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.009
Payments to Persons	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.026	0.026	0.026
Direct Taxes - Persons	0.026	0.028	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029
Interest	0.005	0.005	0.005	0.006	0.006	0.006	0.007	0.007	0.007	0.007



Table 12

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Local Government Revenues and Expenditures (Millions of Dollars)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Total Revenues</b>	64216 ( 6.53)	69132 ( 7.66)	70453 ( 1.91)	71755 ( 1.85)	73157 ( 1.95)	71861 ( -1.77)	72071 ( 0.29)	74814 ( 3.81)	76148 ( 1.78)	78186 ( 2.68)
<b>Indirect Taxes</b>	26582 ( 6.98)	28565 ( 7.46)	29505 ( 3.29)	29607 ( 0.35)	29761 ( 0.52)	30422 ( 2.22)	31611 ( 3.91)	31941 ( 1.04)	32326 ( 1.21)	32905 ( 1.79)
<b>Direct Taxes &amp; Transfers from Persons</b>	374	395	428	466	447	453	465	493	488	490
<b>Transfers from Provinces and Fed'l</b>	27790 ( 7.74)	30573 ( 10.01)	30484 ( -0.29)	31289 ( 2.64)	31888 ( 1.91)	30056 ( -5.75)	28749 ( -4.35)	30475 ( 6.00)	31703 ( 4.03)	33056 ( 4.27)
<b>Investment Income</b>	2366	2251	2284	2331	2553	2482	2312	2478	2279	2286
<b>Sales of Goods and Services</b>	7104	7348	7752	8062	8508	8448	8934	9427	9352	9450
<b>Program Expenditures</b>	61410 ( 8.53)	65107 ( 6.02)	66462 ( 2.08)	67802 ( 2.02)	68680 ( 1.29)	67731 ( -1.38)	68372 ( 0.95)	68175 ( -0.29)	72765 ( 6.73)	74354 ( 2.18)
<b>Current Exp. on Goods &amp; Services</b>	53741 ( 7.84)	56806 ( 5.70)	58223 ( 2.49)	59098 ( 1.50)	59773 ( 1.14)	60254 ( 0.80)	61439 ( 1.97)	63055 ( 2.63)	63925 ( 1.38)	65096 ( 1.83)
<b>Gross Capital Formation</b>	7850 ( -2.70)	7953 ( 1.31)	7707 ( -3.09)	8869 ( 15.08)	9475 ( 6.83)	8892 ( -6.15)	8847 ( -0.51)	8918 ( 0.80)	9558 ( 7.18)	10362 ( 8.41)
<b>Transfers to Persons</b>	2700 ( 57.62)	3410 ( 26.30)	3899 ( 14.34)	3949 ( 1.28)	3738 ( -5.34)	2950 ( -21.08)	2674 ( -9.36)	4206 ( 57.29)	4049 ( -3.73)	4046 ( -0.09)
<b>Transfers to Provinces</b>	131	145	180	172	111	185	320	400	288	263
<b>Net Capital Transfers</b>	295	335	320	382	488	472	475	-3045	606	600
<b>Capital Formation - Existing Assets</b>	857	569	412	-44	100	240	200	166	145	128
<b>Interest on the Public Debt</b>	3886 ( 4.41)	4089 ( 5.22)	4295 ( 5.04)	4219 ( -1.77)	4316 ( 2.30)	4176 ( -3.24)	4034 ( -3.40)	3921 ( -2.80)	3769 ( -3.88)	3701 ( -1.82)
<b>Capital Consumption Allowances</b>	5107	5306	5522	5830	6217	6478	6803	7010	7298	7636
<b>Surplus (+) or Deficit (-)</b>	-1080	-64	-304	-266	161	-46	-335	2718	-386	132

Note - Percentage Changes are written in parentheses

Table 12 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

## Local Government Revenues and Expenditures (Millions of Dollars)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Total Revenues</b>	80544 ( 3.02)	83867 ( 4.13)	87409 ( 4.22)	91103 ( 4.23)	94980 ( 4.25)	98800 ( 4.02)	102758 ( 4.01)	106730 ( 3.86)	110754 ( 3.77)	115384 ( 4.18)
Indirect Taxes	34294 ( 4.22)	36006 ( 4.99)	37733 ( 4.80)	39442 ( 4.53)	41220 ( 4.51)	43025 ( 4.38)	44859 ( 4.26)	46711 ( 4.13)	48586 ( 4.01)	50453 ( 3.84)
Direct Taxes & Transfers from Persons	490 ( 2.58)	510 ( 4.31)	530 ( 4.70)	551 ( 4.97)	573 ( 3.96)	596 ( 3.62)	620 ( 3.72)	645 ( 3.56)	671 ( 3.47)	697 ( 4.68)
Transfers from Provinces and Fed'l	33907 ( 2.58)	35368 ( 4.31)	37032 ( 4.70)	38871 ( 4.97)	40409 ( 3.96)	41874 ( 3.62)	43429 ( 3.72)	44975 ( 3.56)	46537 ( 3.47)	48715 ( 4.68)
Investment Income	2358	2440	2526	2614	2706	2800	2898	3000	3105	3213
Sales of Goods and Services	9488	9535	9583	9631	10071	10500	10945	11394	11849	12302
<b>Program Expenditures</b>	76903 ( 3.43)	80258 ( 4.36)	83809 ( 4.42)	87510 ( 4.42)	91378 ( 4.42)	95185 ( 4.17)	99141 ( 4.16)	103117 ( 4.01)	107139 ( 3.90)	111785 ( 4.34)
Current Exp. on Goods & Services	67511 ( 3.71)	70573 ( 4.56)	73843 ( 4.63)	77254 ( 4.62)	80781 ( 4.57)	84234 ( 4.27)	87809 ( 4.24)	91412 ( 4.10)	95063 ( 3.99)	99269 ( 4.42)
Gross Capital Formation	10706 ( 3.32)	11127 ( 3.94)	11540 ( 3.71)	11966 ( 3.69)	12451 ( 4.05)	12959 ( 4.08)	13509 ( 4.24)	14063 ( 4.10)	14625 ( 3.99)	15272 ( 4.42)
Transfers to Persons	4100 ( 1.35)	4244 ( 3.50)	4392 ( 3.50)	4546 ( 3.50)	4705 ( 3.50)	4870 ( 3.50)	5040 ( 3.50)	5216 ( 3.50)	5399 ( 3.50)	5588 ( 3.50)
Transfers to Provinces	260	260	260	260	260	260	260	260	260	260
Net Capital Transfers	600	606	612	618	624	631	637	643	650	656
Capital Formation - Existing Assets	130	130	130	130	130	130	130	130	130	130
Interest on the Public Debt	3643 ( -1.56)	3610 ( -0.91)	3601 ( -0.25)	3601 ( 0.00)	3601 ( 0.00)	3601 ( 0.00)	3601 ( 0.00)	3601 ( 0.00)	3601 ( 0.00)	3601 ( 0.00)
<b>Capital Consumption Allowances</b>	7922	8223	8532	8851	9184	9533	9903	10292	10697	11125
<b>Surplus (+) or Deficit (-)</b>	0	0	0	0	0	0	0	0	0	0

Note - Percentage Changes are written in parentheses

Table 12 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Local Government Revenues and Expenditures (Millions of Dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Total Revenues</b>	120238 ( 4.21)	125131 ( 4.07)	130235 ( 4.08)	135459 ( 4.01)	140917 ( 4.03)	146518 ( 3.98)	152298 ( 3.94)	158286 ( 3.93)	164479 ( 3.91)	170930 ( 3.92)
<b>Indirect Taxes</b>	52394 ( 3.85)	54338 ( 3.71)	56349 ( 3.70)	58395 ( 3.63)	60524 ( 3.65)	62697 ( 3.59)	64926 ( 3.55)	67224 ( 3.54)	69588 ( 3.52)	72041 ( 3.52)
<b>Direct Taxes &amp; Transfers from Persons</b>	725 ( 0.00)	754 ( 0.00)	785 ( 0.00)	816 ( 0.00)	849 ( 0.00)	882 ( 0.00)	918 ( 0.00)	954 ( 0.00)	993 ( 0.00)	1032 ( 0.00)
<b>Transfers from Provinces and Fed'l</b>	51017 ( 4.73)	53352 ( 4.58)	55805 ( 4.60)	58331 ( 4.53)	60982 ( 4.54)	63719 ( 4.49)	66558 ( 4.46)	69515 ( 4.44)	72589 ( 4.42)	75807 ( 4.43)
<b>Investment Income</b>	3326 ( 0.00)	3442 ( 0.00)	3563 ( 0.00)	3688 ( 0.00)	3817 ( 0.00)	3950 ( 0.00)	4088 ( 0.00)	4232 ( 0.00)	4380 ( 0.00)	4533 ( 0.00)
<b>Sales of Goods and Services</b>	12773 ( 10.60)	13244 ( 10.60)	13732 ( 10.60)	14228 ( 10.60)	14743 ( 10.60)	15269 ( 10.60)	15807 ( 10.60)	16362 ( 10.60)	16932 ( 10.60)	17523 ( 10.60)
<b>Program Expenditures</b>	116640 ( 4.34)	121537 ( 4.20)	126637 ( 4.20)	131856 ( 4.12)	137311 ( 4.14)	142911 ( 4.08)	148488 ( 4.04)	154675 ( 4.03)	160869 ( 4.00)	167321 ( 4.01)
<b>Current Exp. on Goods &amp; Services</b>	103672 ( 4.44)	108126 ( 4.30)	112769 ( 4.29)	117528 ( 4.22)	122504 ( 4.23)	127616 ( 4.17)	132894 ( 4.14)	138365 ( 4.12)	144026 ( 4.09)	149925 ( 4.10)
<b>Gross Capital Formation</b>	15949 ( 4.44)	16634 ( 4.30)	17349 ( 4.29)	18081 ( 4.22)	18846 ( 4.23)	19633 ( 4.17)	20445 ( 4.14)	21286 ( 4.12)	22157 ( 4.09)	23065 ( 4.10)
<b>Transfers to Persons</b>	5783 ( 3.50)	5986 ( 3.50)	6195 ( 3.50)	6412 ( 3.50)	6637 ( 3.50)	6869 ( 3.50)	7109 ( 3.50)	7358 ( 3.50)	7616 ( 3.50)	7892 ( 3.50)
<b>Transfers to Provinces</b>	260 ( 0.00)	260 ( 0.00)	260 ( 0.00)	260 ( 0.00)	260 ( 0.00)	260 ( 0.00)	260 ( 0.00)	260 ( 0.00)	260 ( 0.00)	260 ( 0.00)
<b>Net Capital Transfers</b>	663 ( 0.00)	669 ( 0.00)	676 ( 0.00)	683 ( 0.00)	690 ( 0.00)	697 ( 0.00)	704 ( 0.00)	711 ( 0.00)	718 ( 0.00)	725 ( 0.00)
<b>Capital Formation - Existing Assets</b>	130 ( 0.00)	130 ( 0.00)	130 ( 0.00)	130 ( 0.00)	130 ( 0.00)	130 ( 0.00)	130 ( 0.00)	130 ( 0.00)	130 ( 0.00)	130 ( 0.00)
<b>Interest on the Public Debt</b>	3601 ( 0.00)	3601 ( 0.00)	3601 ( 0.00)	3601 ( 0.00)	3601 ( 0.00)	3601 ( 0.00)	3601 ( 0.00)	3601 ( 0.00)	3601 ( 0.00)	3601 ( 0.00)
<b>Capital Consumption Allowances</b>	11579 ( 0.00)	12057 ( 0.00)	12557 ( 0.00)	13080 ( 0.00)	13624 ( 0.00)	14191 ( 0.00)	14779 ( 0.00)	15390 ( 0.00)	16023 ( 0.00)	16680 ( 0.00)
<b>Surplus (+) or Deficit (-)</b>	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)

Note - Percentage Changes are written in parentheses

Table 13

Focus Model - Institute for Policy Analysis  
 CANADA: Base Projection - July 13, 2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Canada & Quebec Pension Plan Revenues and Expenditures (Millions of Dollars)										
Total Revenues	16475 ( 4.81)	17117 ( 3.90)	17651 ( 3.12)	18257 ( 3.43)	19831 ( 8.62)	19796 ( -0.18)	20339 ( 2.74)	22932 ( 12.75)	25499 ( 11.19)	28457 ( 11.60)
Employer & Employee Contributions	10847 ( 7.22)	11625 ( 7.17)	12208 ( 5.02)	12931 ( 5.92)	14456 ( 11.79)	14761 ( 2.11)	15600 ( 5.68)	18280 ( 17.18)	20963 ( 14.68)	23520 ( 12.20)
Investment Income	5628 ( 0.46)	5492 ( -2.42)	5443 ( -0.89)	5326 ( -2.15)	5375 ( 0.92)	5035 ( -6.33)	4739 ( -5.88)	4652 ( -1.84)	4536 ( -2.49)	4937 ( 8.83)
Total Expenditures	15124 ( 10.65)	17039 ( 12.66)	18559 ( 8.92)	19923 ( 7.35)	20859 ( 4.70)	21982 ( 5.38)	23062 ( 4.91)	24032 ( 4.21)	24849 ( 3.40)	26016 ( 4.70)
Current Exp. on Goods & Services	225	235	227	243	250	266	311	354	307	615
Transfers to Persons	14808 ( 10.76)	16999 ( 12.77)	18221 ( 9.11)	19565 ( 7.38)	20489 ( 4.72)	21587 ( 5.36)	22612 ( 4.75)	23534 ( 4.08)	24394 ( 3.65)	25238 ( 3.46)
Transfers to NonResidents	91	105	111	115	120	129	139	144	148	163
Surplus (+) or Deficit (-)	1351	78	-908	-1666	-1028	-2186	-2723	-1100	650	2440
Total Revenues	32974 ( 15.87)	37381 ( 13.37)	41079 ( 9.89)	43203 ( 5.17)	45432 ( 5.16)	47747 ( 5.10)	50096 ( 4.92)	52493 ( 4.79)	54953 ( 4.69)	57431 ( 4.51)
Employer & Employee Contributions	27769 ( 18.06)	31720 ( 14.23)	34804 ( 9.72)	36236 ( 4.12)	37727 ( 4.12)	39260 ( 4.06)	40796 ( 3.91)	42358 ( 3.83)	43955 ( 3.77)	45540 ( 3.61)
Investment Income	5205 ( 5.44)	5661 ( 8.76)	6275 ( 10.85)	6967 ( 11.02)	7705 ( 10.59)	8487 ( 10.16)	9300 ( 9.58)	10135 ( 8.98)	10998 ( 8.52)	11891 ( 8.12)
Total Expenditures	27228 ( 4.66)	28637 ( 5.17)	30116 ( 5.16)	31642 ( 5.07)	33224 ( 5.00)	34882 ( 4.99)	36624 ( 4.99)	38450 ( 4.99)	40367 ( 4.98)	42377 ( 4.98)
Current Exp. on Goods & Services	631	653	673	694	725	755	786	818	849	881
Transfers to Persons	26421 ( 4.68)	27794 ( 5.20)	29240 ( 5.20)	30731 ( 5.10)	32267 ( 5.00)	33881 ( 5.00)	35575 ( 5.00)	37354 ( 5.00)	39221 ( 5.00)	41182 ( 5.00)
Transfers to NonResidents	176	190	203	217	232	247	262	279	296	313
Surplus (+) or Deficit (-)	5746	8744	10963	11561	12208	12865	13472	14043	14586	15055

Table 13 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Canada &amp; Quebec Pension Plan Revenues and Expenditures (Millions of Dollars)</b>										
Total Revenues	59982 ( 4.44)	62556 ( 4.29)	65193 ( 4.21)	67904 ( 4.16)	70681 ( 4.09)	73510 ( 4.00)	76404 ( 3.94)	79331 ( 3.83)	82318 ( 3.76)	85386 ( 3.73)
Employer & Employee Contributions	47171 ( 3.58)	48802 ( 3.46)	50475 ( 3.43)	52205 ( 3.43)	53987 ( 3.41)	55811 ( 3.38)	57693 ( 3.37)	59609 ( 3.32)	61588 ( 3.32)	63658 ( 3.36)
Investment Income	12811 ( 7.74)	13755 ( 7.36)	14718 ( 7.00)	15699 ( 6.66)	16694 ( 6.34)	17699 ( 6.02)	18711 ( 5.72)	19723 ( 5.41)	20730 ( 5.11)	21727 ( 4.81)
Total Expenditures	44487 ( 4.98)	46700 ( 4.98)	49024 ( 4.98)	51462 ( 4.97)	54021 ( 4.97)	56706 ( 4.97)	59525 ( 4.97)	62483 ( 4.97)	65587 ( 4.97)	68846 ( 4.97)
Current Exp. on Goods & Services	914	947	980	1015	1051	1087	1124	1162	1202	1242
Transfers to Persons	43242 ( 5.00)	45404 ( 5.00)	47674 ( 5.00)	50057 ( 5.00)	52560 ( 5.00)	55188 ( 5.00)	57948 ( 5.00)	60845 ( 5.00)	63887 ( 5.00)	67082 ( 5.00)
Transfers to NonResidents	332	350	370	389	410	431	453	475	498	522
Surplus (+) or Deficit (-)	15495	15856	16169	16442	16660	16804	16880	16849	16731	16540



Table 14

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Total Gov't Balance, Debt, Revenue and Expend Shares of GDP (Per Cent)</b>										
<b>Total Gov't Surplus/Deficit (NIA)</b>	-8.4	-9.2	-8.7	-6.7	-5.4	-2.8	0.2	0.2	2.2	3.2
<b>Public Sector (NIA) Debt/GDP</b>	66.4	74.6	81.4	84.2	86.4	87.6	83.8	81.3	76.0	68.4
<b>Primary Surp/Def (Def ex Interest Paid) Interest on the Debt</b>	1.1 9.4	0.2 9.3	0.5 9.2	2.3 9.1	4.3 9.6	6.3 9.2	8.7 8.5	8.6 8.4	10.0 7.8	10.6 7.4
<b>Total Expenditure (ex Inter-Gov Trans)</b>	54.3	55.3	54.2	51.8	50.5	48.5	45.8	46.1	43.7	42.3
Current G&S Expenditure	23.8	24.2	23.7	22.4	21.4	20.6	19.6	19.5	18.8	18.0
Capital Expenditure	2.8	2.7	2.6	2.6	2.5	2.3	2.1	2.0	2.1	2.1
Transfers to Persons	12.3	13.4	13.6	12.9	12.3	11.9	11.5	11.7	11.1	10.9
Interest on the Debt	9.4	9.3	9.2	9.1	9.6	9.2	8.5	8.4	7.8	7.4
Subsidies	1.9	1.8	1.4	1.3	1.1	1.0	1.1	1.2	1.1	1.1
Other Expenditure	4.0	3.9	3.7	3.6	3.6	3.5	3.1	3.2	2.7	2.8
<b>Total Revenue (ex Inter-Gov Trans)</b>	43.9	44.2	43.5	43.1	43.2	43.8	44.1	44.4	44.0	43.7
Direct Taxes - Persons	19.2	19.5	18.8	18.7	18.7	19.0	19.1	19.7	19.4	18.8
Direct Taxes - Corporations	2.2	2.1	2.2	2.5	2.7	3.1	3.6	3.2	3.8	4.5
Indirect Taxes	15.0	15.3	15.1	14.7	14.4	14.3	14.3	14.4	14.0	13.8
Interest and Royalties	4.1	4.0	3.9	3.8	3.9	3.8	3.7	3.5	3.4	3.3
Other Revenue	3.3	3.4	3.4	3.4	3.5	3.6	3.5	3.5	3.4	3.3
<b>Gov't Capital Consumption Allowances</b>	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.8	1.8
<b>Interest as Share of Expenditures Interest as Share of Revenues</b>	17.4 21.5	16.9 21.1	17.0 21.2	17.5 21.0	19.0 22.3	18.9 20.9	18.4 19.2	18.3 19.0	17.9 17.7	17.5 17.0

Table 14 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Total Gov't Balance, Debt, Revenue and Expend Shares of GDP (Per Cent)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Govt Surplus/Deficit (NIA)	3.1	2.6	2.3	2.0	2.0	2.0	1.9	1.9	1.9	1.8
Public Sector (NIA) Debt/GDP	62.2	56.8	51.8	47.4	43.4	39.7	36.1	32.8	29.7	26.8
Primary Surp/Def (Def ex Interest Paid) Interest on the Debt	10.2 7.2	9.4 6.7	8.6 6.3	7.9 5.9	7.5 5.5	7.2 5.2	6.8 4.9	6.5 4.6	6.2 4.4	6.0 4.2
Total Expenditure (ex Inter-Gov Trans)	41.6	41.0	40.4	39.9	39.5	39.0	38.7	38.3	38.1	37.9
Current G&S Expenditure	18.1	18.3	18.4	18.5	18.6	18.6	18.6	18.6	18.6	18.7
Capital Expenditure	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1
Transfers to Persons	10.5	10.3	10.2	10.1	10.0	9.9	9.9	9.8	9.8	9.8
Interest on the Debt	7.2	6.7	6.3	5.9	5.5	5.2	4.9	4.6	4.4	4.2
Subsidies	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.8	0.8
Other Expenditure	2.7	2.6	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Total Revenue (ex Inter-Gov Trans)	43.0	42.0	41.1	40.3	39.8	39.4	39.0	38.6	38.3	38.1
Direct Taxes - Persons	18.4	17.7	17.1	16.7	16.3	15.9	15.5	15.3	15.0	14.8
Direct Taxes - Corporations	4.5	4.3	4.1	3.9	3.8	3.8	3.8	3.6	3.6	3.6
Indirect Taxes	13.8	13.7	13.7	13.7	13.7	13.6	13.6	13.6	13.6	13.6
Interest and Royalties	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3
Other Revenue	3.1	3.0	2.9	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Gov't Capital Consumption Allowances	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6
Interest as Share of Expenditures	17.2	16.4	15.5	14.8	14.0	13.3	12.6	12.0	11.5	11.0
Interest as Share of Revenues	16.7	16.0	15.3	14.6	13.9	13.2	12.5	12.0	11.4	11.0

Table 14 cont'd

Focus Model - Institute for Policy Analysis  
CANADA: Base Projection - July 13, 2000

Total Gov't Balance, Debt, Revenue and Expend Shares of GDP (Per Cent)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Govt Surplus/Deficit (NIA)	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.3
Public Sector (NIA) Debt/GDP	24.1	21.5	19.0	16.7	14.6	12.5	10.6	8.8	7.1	5.5
Primary Surp/Def (Def ex Interest Paid)	5.7	5.5	5.3	5.1	4.9	4.7	4.5	4.3	4.1	3.9
Interest on the Debt	4.0	3.8	3.6	3.4	3.3	3.1	3.0	2.9	2.7	2.6
Total Expenditure (ex Inter-Gov Trans)	37.8	37.7	37.7	37.6	37.6	37.5	37.5	37.5	37.5	37.5
Current G&S Expenditure	18.8	18.9	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7
Capital Expenditure	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
Transfers to Persons	9.7	9.7	9.8	9.8	9.8	9.8	9.8	9.8	9.9	9.9
Interest on the Debt	4.0	3.8	3.6	3.4	3.3	3.1	3.0	2.9	2.7	2.6
Subsidies	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7
Other Expenditure	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5
Total Revenue (ex Inter-Gov Trans)	38.0	37.8	37.7	37.6	37.5	37.5	37.5	37.4	37.4	37.4
Direct Taxes - Persons	14.7	14.6	14.5	14.4	14.3	14.3	14.2	14.2	14.2	14.2
Direct Taxes - Corporations	3.6	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.5	3.4
Indirect Taxes	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.4
Interest and Royalties	3.3	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Other Revenue	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7
Gov't Capital Consumption Allowances	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5
Interest as Share of Expenditures	10.5	10.1	9.6	9.2	8.8	8.4	8.0	7.6	7.3	6.9
Interest as Share of Revenues	10.5	10.0	9.6	9.2	8.8	8.4	8.0	7.6	7.3	7.0

Presentation to Conference

“Demographic and  
Economic Perspectives to  
2050”

Thomas A. Wilson  
November 10, 2000

# 1. Major Developments Over the Past Decade Which Are Key to the Future

- Reducing inflation (and inflation expectations)
  - 1-3% is now entrenched
  - 25-30 year expected inflation  $\approx$  2% or less
- Putting our fiscal house(s) in order:
  - Deficits have generally been replaced by surpluses
  - CPP has been put on a more sustainable basis
  - Public debt still a problem but now under control
- NAFTA and reduction in trade barriers

## 2. Current Developments of Note

- Tax reductions/tax reform: corporate and capital gains tax cuts
- Growth of the “new economy” [U.S.]
- Improving prospects for the global economy [particularly the developing economies and economies in transition]

### 3. Basic Assumptions Underlying Our Projection

- Demographics
- U.S. Economy
- Policy Variables

## 3.1 Demographics

- Population growth gradually slows.
  - Avg 0.9% over the next decade, declining to 0.7% in 2010-2020
- Aging Population
  - Pop > 15 growth faster than total population until 2020
  - Overall participation rate for adult population declines
- Labour force growth will decline from 1.5% at the beginning to 0.3% in the last 5 years
- Declining LF growth alone will reduce future agg potential growth by about 0.8%



## 3.2 US Economy Assumptions

- Real Growth: ‘US soft landing’
- US growth gradually converging to 2% per year at end [conservative] of decade and beyond
- US inflation moderate (2.6% but above Canadian rate)
- US real interest rates moderate
  - 3% at short end
  - 4% at long end

## 3.3 Policy Assumptions

- Monetary Policy continues to target 1-3% Core CPI
- Fiscal Policy: government spending will grow slower than GDP through 2012, and then grow in line with GDP after that
- Taxes: we assume smooth implementation of Budget 2000
- Federal government will target surplus of about 6B NA, 3B PA basis
- Future tax cuts – (direct taxes on persons (EI & PIT) (Provincial similar)

## 3.4 Other

- NAIRU 6% (long term)  
(safety margin 6.2%)
- Productivity growth  
labour productivity 1.6 %  
MFP  $\approx$  1%
- Note these are about 0.2% higher than last year
- No policy ‘surprises’  
eg. Quebec ‘yes’ or adoption of US currency
- No major external shocks  
eg. US stock price collapse, or another energy crisis

## 4. Nature of the Long Term Projection

- Projection, rather than “forecast” except for short term
- Convergence towards “full” employment and to the potential growth path
- Except for short term, projected aggregate output is driven by the supply side
  - Labour Force Growth
  - Capital formation
  - Productivity growth

## 5. Results: Key Macro Indicators

- Real growth: above potential 2000-2002 then converging to potential growth
- Potential growth gradually slows as a result of slower LF growth and gradual decline of the capital stock
- Potential, currently about 3% slows, to about 2% after 2010
- Unemployment declines to 6.2% by 2003, then is steady
- Inflation stabilizes at 1.8% for the CPI and 1.6 for the GDP deflator (M& E prices)

## 6. Results: Exchange Rate & Interest Rates

- Slight real depreciation coupled with gradual nominal appreciation relative to \$US [difference in inflation rates]
- Interest rates: T bills stabilize at 5.0%, long term bonds at 6%
- Both are about  $\frac{1}{2}$  point lower than US [but note that real rates are almost  $\frac{1}{2}$  point higher in Canada]

## 7. Results: Composition of Demand

- Continued growth of trade shares, but at a more modest pace
- Real investment share remains at its peak

## 8. Results: Saving, Investment and Foreign Balances

- Government sector is a net source of funds over the projection
- Net private domestic saving exceeds investment after 2005
- Canada becomes a net provider of funds to R.O.W.
- Canada's current net foreign indebtedness balance should become a net asset balance after 2010



## 9. Fiscal Results:

- Persistent surpluses
- Declining Debt/GDP ratios [federal Debt/GDP ratio is restored to the level of the late 1970s]

## 9.1 How Would These Results be Altered When We Incorporate More Recent Data?

- Near term growth will be stronger and near term inflation higher
- Growth of exports, imports, and M&E stronger
- But longer term patterns won't change much

## 10. New Economy Issues

- The U.S. debate
- Relevance for Canada
- What is the upside potential if the (reasonable) optimists are correct?

### Labour Productivity if Canada Follows US

Jorgenson & Stiroh	1.8	
Oliner & Stichel	1.6	
Gordon	1.9	[of which 0.5 is 'cyclical']

## 11. What are the Major Downside Risks?

- Even higher oil prices
- US asset price bubble bursts (instead of gently deflating)
- Unsustainable US current account deficits
- Renewed inflationary pressures