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Assessment of the Budget 2010 Economic and Fiscal Outlook

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The *Parliament of Canada Act* mandates the Parliamentary Budget Officer (PBO) to provide independent analysis to the Senate and House of Commons on the state of the nation's finances, government estimates and trends in the national economy. The following note provides an assessment of the economic and fiscal outlook presented in Budget 2010.

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the 1980s and early 1990s. PBO's estimate of the structural deficit does not mean that the Government's budget will not return to balance. Rather it suggests that achieving budgetary balance would require: the economy operating significantly above its potential; actions to increase revenues or reduce spending relative to their projected paths; or, some combination thereof.

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
			(\$ billions)			
Structural balance	-15.6	-16.6	-13.8	-13.2	-13.7	-13.7

Based on the private sector economic forecast presented in Budget 2010, PBO and the Government project the federal debt-to-GDP ratio to decline gradually over the medium term to 32.8 and 31.9 per cent respectively, in 2014-15. This level is relatively low on a historical basis and likely significantly lower than other central governments when put on a comparable basis. However, despite the savings measures announced in Budget 2010, and based on the assumptions and projections presented in PBO's recent Fiscal Sustainability Report, the Government's fiscal structure remains unsustainable over the long term.

1. Objective

The purpose of this note is to assess the economic and fiscal outlook presented in Budget 2010. To this end, PBO has prepared a fiscal outlook based on the same private sector economic forecast used by the Department of Finance Canada for Budget 2010. PBO's intention is to limit the source of the differences between the two outlooks to the assumptions used to translate the economic forecast into fiscal projections. However, PBO's assessment of the Budget 2010 economic and fiscal outlook is limited by the lack of detailed information and data pertaining to the Government's assumptions that underlie the translation of the private sector economic forecast into the fiscal forecast presented in Budget 2010.

2. Economic and Fiscal Forecasting

The fiscal projections presented in Budget 2010, as well as those produced by PBO for this note, are based on the results of the Department of Finance Canada's survey of *economic* forecasts produced by private sector organizations. The survey is used to provide average forecasts for key macroeconomic indicators that are required for producing fiscal projections. The Department of Finance Canada then translates the average of private sector forecasts of these macroeconomic indicators into a fiscal forecast, based on its own assumptions, which are not disclosed. For example, producing fiscal projections requires assumptions about the composition of nominal GDP. As highlighted in PBO (2009a), these assumptions play an important role in fiscal projections because different components of GDP are taxed at different rates. Annex A provides PBO's assumptions regarding the income composition of GDP.¹

¹ In 2008 and 2009, PBO requested from the Department of Finance Canada the income and expenditure assumptions underlying nominal GDP (as well as the data to calculate effective tax rates) that were used to develop their status quo fiscal projections. This information was deemed a Cabinet confidence by the Privy Council Office and therefore was not provided.

The practice of using private sector economic forecasts in the preparation of fiscal projections has been adopted by successive governments and has been strongly supported by the International Monetary Fund (IMF). That said, although the use of private sector forecasts enhances the independence and, therefore, the credibility of the Government's fiscal projections, the Government's established practice of not providing the assumptions used by the Department of Finance Canada to translate the private sector economic forecast of these indicators into fiscal projections, as well as details regarding planned and approved program spending by departments, impedes a complete assessment of the reasonableness of the Government's fiscal projections.

This lack of transparency was highlighted in the 2005 Review of Canadian Fiscal Forecasting and IMF staff have also noted that the Government "could enhance the understanding of budgetary forecasts by providing more information on the assumptions and methods underlying the translation of the macroeconomic outlook into fiscal projections."² A complete assessment of the fiscal outlook presented in Budget 2010 requires this additional information.

3. Economic Outlook

PBO believes that the economic outlook, on which Budget 2010 fiscal projections are based, provides a reasonable basis for fiscal planning. That said, PBO disagrees with the overall characterization of the Canadian economic situation and outlook in Budget 2010.

Budget 2010 asserts that Canada has been able to weather the global economic recession "better than all other major industrialized countries" (p. 24), presenting comparisons of the contractions in GDP across G7 countries. However, because each country has different trends in labour supply and productivity growth, an appropriate comparison must examine how each economy has performed relative to its trend/potential GDP. Such

² See O'Neill (2005) and Mühleisen et al. (2005).

comparisons can be made using IMF estimates and projections of each country's GDP relative to its potential GDP, which is referred to as the output gap (Table 3-1).

Table 3-1

G7 Output Gap Comparison

(Per cent of potential GDP)

	2007	2008	2009	2010	2011	2012	2013	2014
Canada	1.2	-0.5	-4.6	-4.1	-2.2	-0.8	-0.2	0.0
France	1.0	0.0	-3.2	-3.2	-2.4	-1.6	-0.7	0.3
Germany	0.9	1.0	-3.6	-3.3	-2.4	-1.5	-0.6	0.0
Italy	1.6	-0.1	-3.4	-3.5	-3.1	-2.2	-1.2	0.0
Japan	0.2	-1.7	-7.0	-5.5	-3.6	-2.1	-1.0	-0.4
United Kingdom	0.4	-0.1	-4.9	-4.7	-3.5	-2.2	-1.0	0.0
United States	0.7	-0.8	-4.5	-3.9	-2.2	-0.9	-0.1	0.0

Source: International Monetary Fund.

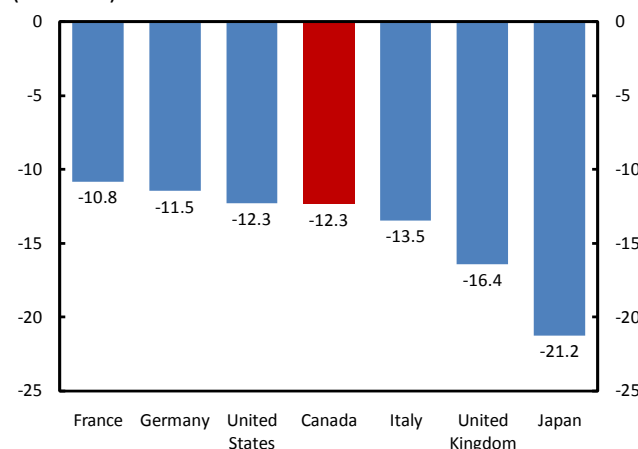
Note: The output gap estimate for Canada is the IMF's estimate.

Despite the fact that the global recession originated outside of Canada, the IMF estimates that the severity of the recession in Canada is in line with the experience of other G7 countries. IMF estimates also show that the Canadian economy will incur a cumulative 12.3 per cent loss in GDP relative to its potential over 2009 to 2014, which would place Canada fourth relative to its G7 counterparts (Figure 3-1).

Figure 3-1

Cumulative GDP Loss Relative to Potential GDP

(Per cent)



Source: International Monetary Fund.

PBO believes the measure and characterization of uncertainty in Budget 2010 to be inappropriate. Budget 2010 states that “the uncertainty surrounding the medium-term outlook has diminished significantly since the September Update” (p. 34) and illustrates this by showing the difference between the high and low levels of the nominal GDP forecasts in 2013. PBO finds this conclusion inappropriate since no additional analysis has been provided to show that the dispersion of private sector forecasts is a reasonable and statistically significant measure of forecast uncertainty. In fact, research examining the dispersion of private sector forecasts as a measure of uncertainty for Canada and other countries is not conclusive. As a result, more thorough analysis is required to draw the conclusion that there has indeed been a reduction in forecast uncertainty.

PBO also believes that the dispersion of private sector forecasts likely underestimates the actual magnitude of uncertainty surrounding the economic outlook. For example, work done at the Department of Finance Canada estimates that the 90 per cent confidence interval for the level of nominal GDP in the fourth year of the forecast horizon to be approximately plus or minus seven per cent of nominal GDP.³ This confidence interval is significantly larger than the dispersion of private sector forecasts presented in either the September 2009 Update of Economic and Fiscal Projections or Budget 2010.

Budget 2010 notes the stronger-than-expected nominal GDP growth in the fourth quarter of 2009 and the apparent inclusion of medium-term downside risks to the outlook. However, PBO continues to view the risks to the private sector outlook for nominal GDP – the broadest measure of the Government's tax base – as roughly balanced, with the downside risks to real GDP growth offset by upside risks to GDP inflation (see PBO (2009b)).⁴ The fiscal implications of these

³ For more details see Robbins, Torgunrud and Matier (2007).

⁴ On the downside, the main risk is that real GDP growth could be lower, reflecting a weaker-than-anticipated global economic recovery,

risks, however, are not symmetric and therefore not offsetting. That is, lower real GDP growth could be offset by higher GDP inflation leaving nominal GDP growth unchanged; however, the Government's budgetary balance would be (negatively) impacted since shocks to real GDP growth typically have a larger fiscal impact than shocks to GDP inflation (e.g., see pp. 188-191 in Budget 2010).

Further, in the recent past, prudence had been explicitly included in the forecast by incorporating a downward adjustment to nominal GDP, as was done in Budget 2009, or through the inclusion of an explicit contingency reserve and economic prudence as had been the case in past budgets. No such explicit adjustments have been made to the economic or fiscal projection.

As a result, PBO would not characterize the private sector economic outlook as a 'prudent' basis for fiscal planning.

4. Fiscal Outlook

Based on the private sector economic forecasts presented in Budget 2010, the Government's estimates of savings and policy measures, as well as the Government's forecast of underlying direct program spending (DPS), PBO projects budgetary deficits that are on average in line with the Budget 2010 forecast from 2009-10 to 2012-13 (Table 4-1). However, over the medium term, PBO projects budgetary deficits that are somewhat larger. For 2013-14 and 2014-15, PBO projects budgetary deficits of \$16.3 billion and \$12.3 billion (0.9 and 0.6 per cent of GDP) respectively compared to budgetary deficits of \$8.5 billion and \$1.8 billion (0.5 and 0.1 per cent of GDP) respectively in Budget 2010. Further, while PBO views the risks to the private sector outlook for nominal GDP in Budget 2010 to be roughly balanced, PBO believes

particularly given the synchronized and financial nature of the downturn. On the upside, the outlook for GDP inflation could exceed private sector forecasts in Budget 2010, reflecting uncertainties in mapping expected commodity price and terms of trade movements into GDP inflation forecasts. Emerging market economies could also recover faster than expected, pushing commodity prices higher and putting upward pressure on GDP inflation in Canada.

that there is additional downside risk to the medium-term fiscal outlook stemming from measures related to containing the Government's administrative costs. PBO is unable however to quantify this risk due to the lack of sufficient information with respect to the Government's projection of its operating expenses.

Table 4-1
Comparison of Budgetary Balances

		(\$ billions)					
		2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Budgetary balance:		(\$ billions)					
PBO		-53.0	-46.9	-27.0	-20.6	-16.3	-12.3
Budget 2010		-53.8	-49.2	-27.6	-17.5	-8.5	-1.8
	difference	0.8	2.3	0.6	-3.1	-7.8	-10.5

Sources: Office of the Parliamentary Budget Officer; Budget 2010.

Details of PBO's fiscal projections, compared to those of Budget 2010, are shown in Annex B. These projections are based on similar assumptions regarding effective tax rates, which were published in PBO's July 2009 Economic and Fiscal Assessment and were also incorporated in PBO's November 2009 Economic and Fiscal Assessment and Update. PBO projects a budgetary balance with a peak deficit of \$53.0 billion in 2009-10, improving to \$12.3 billion in 2014-15. Compared to Budget 2010, PBO's projected deficit is \$10.5 billion larger in the final year of the projection period, owing to projected revenues that are \$6.0 billion lower and expenditures that are \$4.5 billion higher.

The lower projected revenues are largely a result of lower projected corporate income tax revenues, which are, after taking into account measures introduced in Budget 2010, \$2.8 billion lower in 2014-15 than those presented in the budget. The remainder of the difference is accounted for by lower personal income tax revenue and 'other' revenues, which includes revenues of Crown corporations and revenues from sales of goods and services, among others.

Key differences exist between PBO and Budget 2010 estimates of DPS (\$2.1 billion in 2014-15).

The DPS projection used by PBO for fiscal projection is simply that presented in Budget 2010, adjusted for the unidentified planned savings that remain from those recorded in the 2008 Economic and Fiscal Statement (\$0.6 billion in 2014-15) as well as the \$1.5 billion reduction in projected DPS attributed to a change in the assumption regarding departmental lapses of appropriations presented in the 2009 Update of Economic and Fiscal Projections. All of the Budget 2010 savings measures have been incorporated into the PBO forecast. However, it is not possible to assess the reasonableness of the projected savings attributable to containing the administrative cost of government as doing so would require details of the Government's projection of departmental operating expenditures. The details of departmental expenditure projections were the subject of a PBO information request in June 2009. The information requested was not provided.⁵

Substantial differences also exist between PBO and Budget 2010 projections of public debt charges. PBO's current projection of debt charges is consistently higher than the Budget 2010 projection, by as much as \$1.9 billion in the final year of the forecast period. PBO is planning to undertake a more in-depth analysis to better understand the source of this difference.

The remainder of the difference on the expenditure side is due to higher projected major transfers to persons (\$0.7 billion in 2014-15) as a result of higher projected Employment Insurance benefit payments.

5. Budget 2010 Plan for Returning to Balance

The projected reduction in the budgetary deficit over 2011-12 to 2014-15 largely reflects a cyclical improvement in the economy. Based on the private sector forecast presented in Budget 2010 and PBO's estimate of potential GDP (see PBO (2010a)), PBO projects that the economy would reach its potential GDP by the end of 2014. Despite announced savings measures of \$17.6 billion in Budget 2010, PBO estimates that the structural deficit will decline only gradually to \$13.7 billion in 2014-15 (Table 5-1). The structural deficit in 2014-15 is slightly larger than the projection of the budgetary deficit of \$12.3 billion in the same year. While the *output* gap is essentially closed in 2014-15 (-0.1 per cent), PBO estimates that the trading gain (i.e., GDP price relative to the price of final domestic demand) is above its trend (0.6 per cent), which results in a positive *income* gap in 2014-15 (Figure 5-1).⁶ This contributes to a small cyclical surplus (\$1.4 billion).

Table 5-1
Structural and Cyclical Balance Estimates
(\$ billions)

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Budgetary balance	-53.0	-46.9	-27.0	-20.6	-16.3	-12.3
Structural balance	-15.6	-16.6	-13.8	-13.2	-13.7	-13.7
Cyclical balance	-37.4	-30.3	-13.2	-7.4	-2.7	1.4

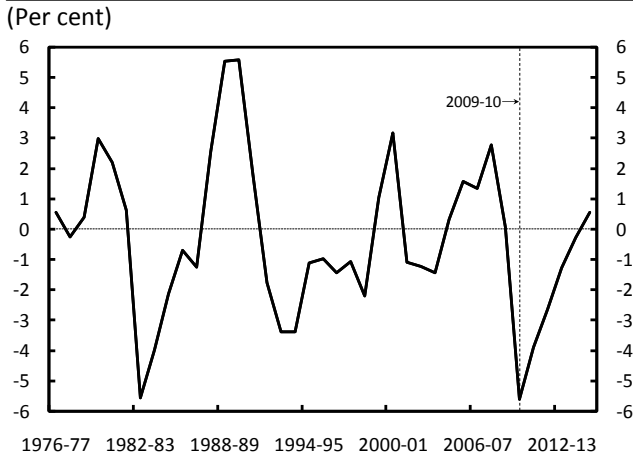
Source: Office of the Parliamentary Budget Officer.

⁵ See: http://www2.parl.gc.ca/sites/pbo-dpb/documents/PBO_Info_Request_009.pdf and: http://www2.parl.gc.ca/sites/pbo-dpb/documents/Response_009.pdf.

⁶ See PBO (2010a) for a description of the methodology used to estimate the Government's structural budget balance. In addition to adjusting the budget balance for GDP relative to its potential, PBO's methodology further adjusts the budgetary balance to account for terms of trade or 'trading gain' effects.

Figure 5-1

Income Gap



Source: Office of the Parliamentary Budget Officer.

PBO's estimate of the structural deficit does not mean that the Government's budget will not return to balance. Rather it suggests that achieving budgetary balance would require: the economy operating significantly above its potential; actions to increase revenues or reduce spending relative to their projected paths; or, some combination thereof. The Government's estimates of the economy's potential GDP and the structural budget balance are not presented in Budget 2010.

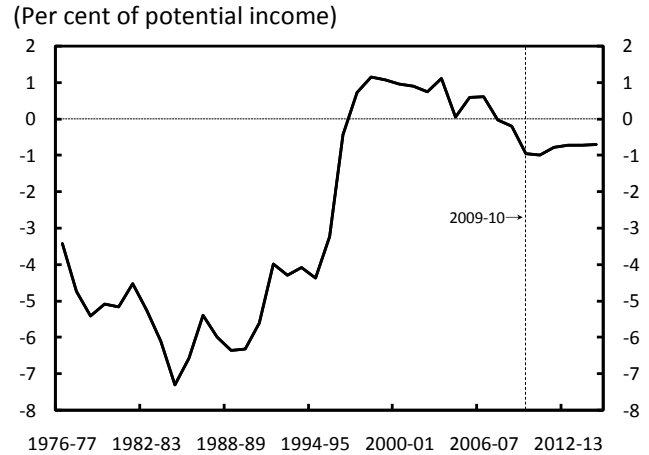
In November 2009, PBO estimated the Government's structural deficit at \$18.9 billion in 2013-14 based on its economic and fiscal outlook at the time and estimates of potential GDP and trend trading gains (see PBO (2009b)). The downward revision to \$13.7 billion in 2013-14 reflects the inclusion of the Government's net savings measures of \$4.0 billion (see p. 173 in Budget 2010) and lower public debt charges (down \$1.7 billion) which are treated as structural spending.⁷

Figure 5-2 shows the structural balance relative to potential income over 1976-77 to 2014-15. PBO projects that the structural deficit over the

medium term will reach 0.7 per cent of potential income in 2014-15, significantly smaller than the structural deficits observed in the 1980s and early 1990s.

Figure 5-2

Structural Balance Relative to Potential Income



Source: Office of the Parliamentary Budget Officer.

6. Fiscal Sustainability

Based on the private sector economic forecast presented in Budget 2010, PBO and the Government project the federal debt-to-GDP ratio to decline gradually over the medium term to 32.8 and 31.9 per cent respectively, in 2014-15. This level is relatively low on a historical basis and likely significantly lower than other central governments when put on a comparable basis. However, despite the savings measures announced in Budget 2010, and based on the assumptions and projections presented in PBO's recent Fiscal Sustainability Report, the Government's fiscal structure remains unsustainable over the long term.

Based on PBO estimates, the Government's structural operating balance (i.e., revenues less program expenditures) in 2014-15 is 1.5 per cent of GDP. PBO (2010b) estimated the structural operating balance at 1.3 per cent of GDP in 2013-14 and projected a 1.9-percentage point decline in the operating balance-to-GDP ratio over the long

⁷ The remainder of the revision stems from changes to PBO's estimate of the structural operating balance (i.e., revenues less program expenditures), which has been revised down slightly by \$0.5 billion.

term in its baseline scenario. Assuming a similar deterioration in the operating balance from its revised level would result in substantial and sustained increases in the debt-to-GDP ratio over the long term, indicating that the Government's fiscal structure remains unsustainable.

Budget 2010 does not provide an assessment of the sustainability of the Government's finances over the long term.

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Annex A

Table A-1 – Nominal GDP Income Shares

PBO March 2010 Assumptions

(Per cent of nominal GDP)	(actual)							
	2008	2009	2010	2011	2012	2013	2014	2015
Wages, salaries and supplementary labour income	51.4	54.0	53.5	53.0	52.5	52.3	52.2	52.2
Corporation profits before taxes	13.5	9.3	10.1	10.9	11.4	11.5	11.6	11.6
Government business enterprise profits before taxes	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0
Interest and miscellaneous investment income	5.1	4.5	4.7	4.8	4.9	5.0	5.0	5.0
Accrued net income of farm operators from farm production	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Net income of non-farm unincorporated business, including rent	5.8	6.4	6.3	6.3	6.3	6.3	6.3	6.3
Inventory valuation adjustment	-0.4	0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Taxes less subsidies on factors of production and products	10.3	10.6	10.3	10.4	10.4	10.5	10.5	10.6
Capital consumption allowances	13.0	14.2	14.0	13.6	13.5	13.4	13.4	13.3
Statistical discrepancy	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Office of the Parliamentary Budget Officer; Statistics Canada.

Annex B

Table B1 – Revenue Outlook Comparison

PBO March 2010 Assessment and Budget 2010

(\$ billions)

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total budgetary revenues						
PBO March 2010	215.6	234.3	250.4	263.8	278.1	290.5
Budget 2010	213.9	231.3	249.0	266.5	282.7	296.5
difference from Budget 2010	1.7	3.0	1.4	-2.7	-4.6	-6.0
<i>Personal income tax</i>						
PBO March 2010	109.7	118.3	126.8	134.2	141.6	149.4
Budget 2010	108.2	117.0	124.5	133.3	141.9	150.6
difference from Budget 2010	1.5	1.3	2.3	0.9	-0.3	-1.2
<i>Corporate income tax</i>						
PBO March 2010	23.6	26.0	27.0	27.1	29.0	30.4
Budget 2010	22.3	25.5	28.9	29.5	31.6	33.2
difference from Budget 2010	1.3	0.5	-1.9	-2.4	-2.6	-2.8
<i>Goods and Services Tax</i>						
PBO March 2010	24.7	27.0	29.2	30.7	31.9	33.2
Budget 2010	25.8	27.3	28.8	30.5	32.1	33.7
difference from Budget 2010	-1.1	-0.3	0.4	0.2	-0.2	-0.5
<i>Employment Insurance premiums</i>						
PBO March 2010	16.2	17.3	19.7	22.4	25.2	27.1
Budget 2010	16.6	17.6	20.0	22.6	25.2	26.6
difference from Budget 2010	-0.4	-0.3	-0.3	-0.2	0.0	0.5
<i>All other revenues</i>						
PBO March 2010	41.4	45.7	47.7	49.5	50.5	50.4
Budget 2010	41.0	44.0	46.7	50.7	51.8	52.3
difference from Budget 2010	0.4	1.7	1.0	-1.2	-1.3	-1.9

Sources: Office of the Parliamentary Budget Officer; Budget 2010.

Table B2 – Expenditure Outlook Comparison

PBO March 2010 Assessment and Budget 2010

(\$ billions)

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total program expenses						
PBO March 2010	239.1	249.2	241.7	245.8	253.6	260.3
Budget 2010	237.8	249.2	241.4	245.2	251.4	257.7
difference from Budget 2010	1.3	0.0	0.3	0.6	2.2	2.6
<i>Major transfers to persons</i>						
PBO March 2010	69.1	70.5	70.9	73.2	75.2	77.8
Budget 2010	69.7	72.0	71.4	72.9	74.8	77.1
difference from Budget 2010	-0.6	-1.5	-0.5	0.3	0.4	0.7
<i>Major transfers to other levels of government</i>						
PBO March 2010	51.2	56.8	56.0	56.8	59.6	62.2
Budget 2010	51.4	56.8	56.3	57.1	59.8	62.4
difference from Budget 2010	-0.2	0.0	-0.3	-0.3	-0.2	-0.2
<i>Direct program expenses</i>						
PBO March 2010	118.8	121.9	114.8	115.8	118.8	120.3
Budget 2010	116.8	120.4	113.7	115.2	116.7	118.2
difference from Budget 2010	2.0	1.5	1.1	0.6	2.1	2.1
Public debt charges						
PBO March 2010	29.4	32.0	35.7	38.7	40.9	42.5
Budget 2010	29.9	31.3	35.3	38.9	39.8	40.6
difference from Budget 2010	-0.5	0.7	0.4	-0.2	1.1	1.9

Sources: Office of the Parliamentary Budget Officer; Budget 2010.