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Economic and Fiscal Assessment 2010

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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. This report provides PBO's current assessment of the economic and fiscal outlook, including the uncertainty and risks surrounding the projection.

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* The authors would like to thank Mostafa Askari and Kevin Page for their helpful comments. Any errors or omissions are the responsibility of the authors.

Summary

This report assesses the current economic and fiscal outlook, including the uncertainty and risks surrounding the projection. PBO has prepared its fiscal outlook based on the economic planning assumptions used by the Department of Finance Canada to prepare the October 2010 Update of Economic and Fiscal Projections (*Update*). Both PBO and Finance Canada translate the average of private sector *economic* forecasts into a *fiscal* projection, based on their own assumptions. Therefore, the source of the difference between PBO's fiscal projections and those in the *Update* is limited to these assumptions.

Economic Developments and Outlook

Although the Canadian economy has expanded in each of the previous four quarters and real gross domestic product (GDP) has (almost) returned to its pre-recession peak, Canadian economic activity still remains below its level of full capacity, i.e. potential GDP. At the same time, the level of employment has returned to its pre-recession peak, however, total hours worked remains below its pre-recession level and well below its trend. PBO monitoring suggests that growth in the Canadian economy moderated further in the third quarter with real GDP expected to increase by 1.3 per cent at an annual rate. Real GDP growth is then expected to increase modestly to 2.1 per cent at an annual rate in the fourth quarter.

Over the medium term, the Government's planning assumption for nominal GDP – the broadest measure of the Government's tax base – is essentially unchanged from the Budget 2010 outlook. The forecast of real GDP growth consistent with this assumption implies – given PBO's estimate of potential GDP – that the output gap will narrow gradually over the medium term and that the economy will reach its potential by the end of 2016.

Fiscal Projections

Based on the Government's planning assumption for nominal GDP, PBO projects budgetary deficits that are moderately larger, on average, than those presented in PBO's March assessment of the Budget 2010 economic and fiscal outlook, owing primarily to higher operating expenses. Given the lack of detail regarding the Government's expenses subject to the operating freeze, PBO has assumed that these expenses will grow in line with population growth and inflation – equal to 3.2 per cent on average – over 2010-11 to 2015-16.[1]

PBO projects a budgetary deficit of $40.0 billion (2.5 per cent of GDP) in 2010-11, declining to $11.0 billion (0.5 per cent of GDP) in 2015-16. This results in a projected cumulative increase in federal debt of $139.0 billion. Combined with the $61.4 billion in budgetary deficits realized in 2008-09 and

[1] The PBO requested details regarding how the Government intends to achieve its planned operating budget freeze over the projection horizon. However, the Government has indicated that this information is a Cabinet confidence and therefore will not be released. A similar request was recently made by the House of Commons Standing Committee on Government Operations and Estimates and is currently being considered by the Government.

2009-10, this would increase the federal debt to $658.1 billion (32.4 per cent of GDP) by 2015-16 from its 2007-08 level of $457.6 billion (29.9 per cent of GDP).

Summary of Fiscal Projections

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
			($ billions)			
Budgetary revenues	235.4	248.9	262.2	277.0	289.8	303.8
Program expenses	243.9	244.6	250.3	257.4	263.6	272.6
Public debt charges	31.6	33.9	36.5	38.9	40.8	42.2
Total expenses	275.5	278.5	286.7	296.3	304.4	314.8
Budgetary balance	-40.0	-29.6	-24.5	-19.2	-14.6	-11.0
Federal debt	559.1	588.7	613.3	632.5	647.1	658.1

Structural Budget Balance Estimate

The projected reduction in the budgetary deficit over the medium term largely reflects a cyclical improvement in the economy. PBO estimates that the Government's structural deficit will decline only gradually to $10.2 billion in 2015-16 or 0.5 per cent of potential income, which is significantly smaller than the structural deficits observed in 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 policy actions to increase revenues and/or reduce spending relative to their projected paths would be required to ensure that the budget is balanced once the economy returns to its potential.

Structural Budget Balance Estimate

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
			($ billions)			
Structural balance	-15.0	-16.7	-15.7	-14.4	-12.1	-10.2

To assess whether a government's fiscal structure is sustainable, however, requires looking beyond projections of budget deficits and debt over a medium-term horizon to take into account the economic and fiscal implications of population ageing. PBO's 2010 Fiscal Sustainability Report concluded that the Government's current fiscal structure is not sustainable over the long term. PBO will be providing an update of its assessment of the Government's finances over the long term in its annual Fiscal Sustainability Report.

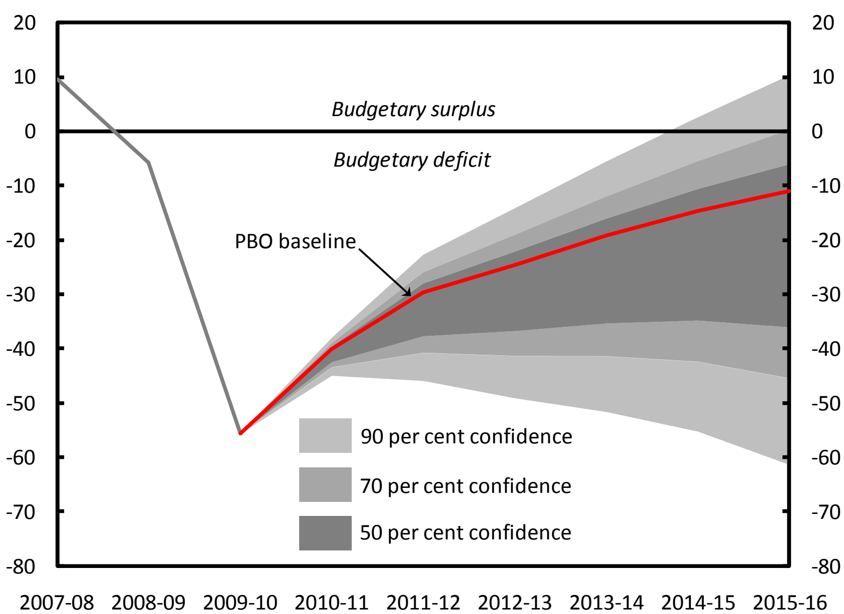
Uncertainty and Risks Surrounding the Outlook

In PBO's judgment, the balance of risks to the current economic outlook is heavily weighted to the downside. These downside risks include both external and domestic risks, each of which could have a substantial negative impact on economic growth in the near and medium term. External risks relate to the U.S. outlook; the recent appreciation of the Canadian dollar and ongoing global currency tensions; and, sovereign debt concerns. Domestic risks relate primarily to the high level of household debt in Canada.

Following the Office for Budget Responsibility (OBR) in the United Kingdom and the International Monetary Fund (IMF), PBO has attempted to quantify the uncertainty and risks surrounding the outlook in the form of a probability distribution or 'fan chart' that provides confidence levels associated with its projection. Reflecting PBO's judgment regarding the downside balance of risks, there is a greater than 50 per cent chance that the budgetary deficit will be larger than projected under PBO's baseline.

On a status quo basis, based on the probability distributions underlying the confidence intervals shown below, the likelihood that the budget will be in a balance or surplus position over the period 2010-11 to 2013-14 is effectively nil and there is a 85 per cent chance (or probability) that the budget will be in deficit in 2015-16. Further, the probability that the budgetary balance in 2015-16 is lower than the $2.6 billion surplus projected in the *Update* is 88 per cent.

Budgetary Balance Outcomes Given Economic Uncertainty and Downside Risks ($ billions)

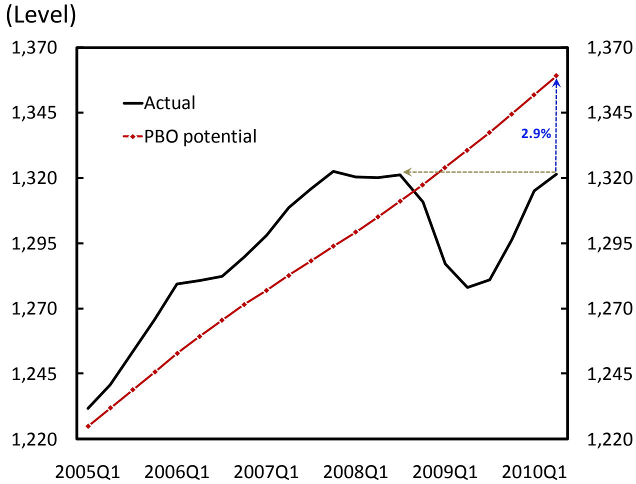


1. Economic Developments

The Canadian economy began to recover from the global economic recession in the third quarter of 2009. Following a peak-to-trough decline in real GDP of 3.4 per cent, the Canadian economy has expanded in each of the previous four quarters. While real GDP has almost recouped all the losses from 2008Q1 to 2009Q2, Canadian economic activity still remains well below (2.9 per cent) PBO's estimate of potential GDP (Figure 1-1).[2]

Figure 1-1

Real and Potential GDP

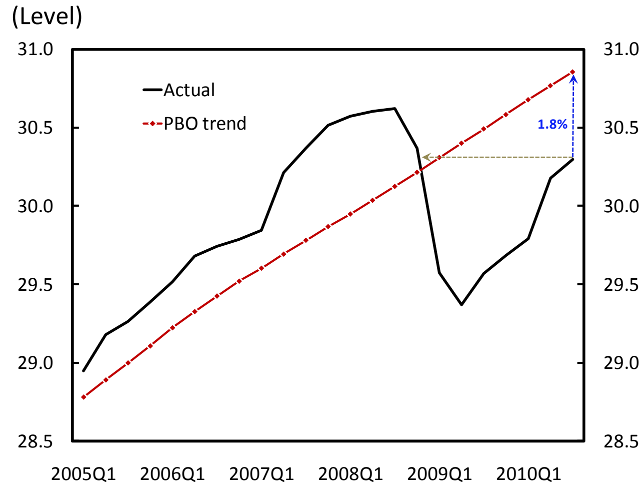


Source: Office of the Parliamentary Budget Officer; Statistics Canada.
Note: Actual and potential GDP are expressed in billions of 2002 chained dollars.

Over the same period employment in Canada has also rebounded, returning to pre-recession levels. Specifically, employment in Canada has increased by 422,900 since hitting a cyclical low in July 2009. However, while the level of employment has returned to its pre-recession peak it is important to recognize that total labour input, as measured by total hours worked, remains below its pre-recession level and 1.8 per cent below its trend (Figure 1-2). The low level of labour utilization reflects, in part, the fact that recent employment gains have been disproportionately in part-time work with the level of full-time employment still well below its peak level.[3]

Figure 1-2

Total Hours Worked



Source: Office of the Parliamentary Budget Officer; Statistics Canada.
Note: Total hours worked is expressed in millions of hours.

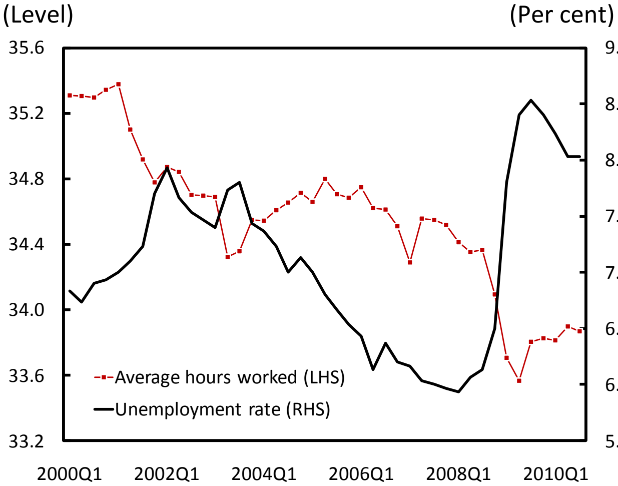
Other labour market indicators also suggest that there is a significant amount of excess capacity in the Canadian labour market. The unemployment rate remained at 8 per cent in 2010Q3, well above most estimates of the natural rate of unemployment; and, average weekly hours worked, a measure of labour intensity, also remains well below pre-recession levels, due to widespread declines across both the service and goods sectors (Figure 1-3).

[2] PBO has recently updated its estimate of potential GDP, both over history and the projection horizon. The revisions over history reflect new information and updated estimation of PBO models, while the majority of the revisions over the projection horizon reflect new population projections from Statistics Canada (2010). Revisions over history have lowered PBO's estimate of potential GDP, which suggests that the economy was operating further above its potential heading into the current recession. Over the projection, potential GDP is projected to grow by 2.1 per cent, on average, compared to 1.8 per cent previously. The upward revision to potential GDP growth is almost entirely attributable to faster growth in the working-age population.

[3] According to the Labour Force Survey, the level of full-time employment in Canada declined significantly during the recent recession falling by 482,600 between October 2008 and July 2009. Since July 2009, 333,400 full-time jobs, on net a basis, have been recovered leaving the level of full-time employment 149,200 below its pre-recession level. In contrast, part-time employment has increased by 154,600 over the same period.

Figure 1-3

Unemployment Rate and Average Hours Worked

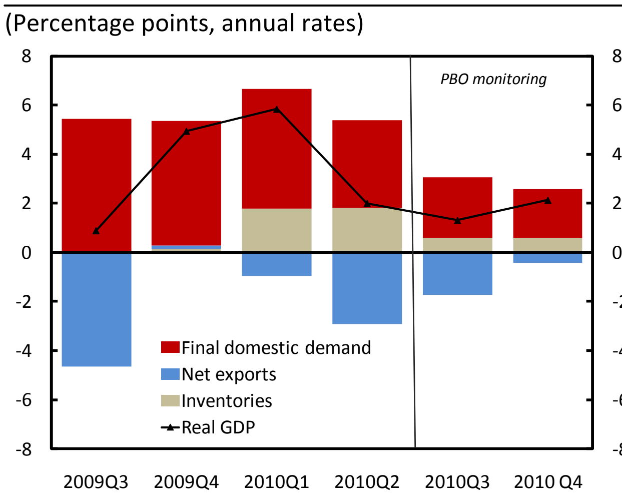


Source: Office of the Parliamentary Budget Officer; Statistics Canada.
Note: Average hours worked is measured on a weekly basis and include hours worked in all jobs.

The rebound in Canadian real GDP growth since the second quarter of 2009 has largely reflected a significant bounce back in final domestic demand and to a lesser extent an increase in inventory investment, which offset drag from net exports (Figure 1-4).

Figure 1-4

Contributions to Real GDP Growth



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

The bounce back in final domestic demand has reflected an important contribution from government spending in the third and fourth quarters of 2009; a significant rebound in residential investment following a substantial decline at the end of 2008 and early 2009; and, a rebound in personal expenditures, with business investment only becoming a major contributor to growth in the second quarter of 2010.

However, growth in final domestic demand began to moderate in the second quarter of this year and recent indicators suggest that this moderation has continued into the third quarter. PBO's monitoring suggests that final domestic demand growth slowed to roughly 2 ½ per cent in 2010Q3 from 3 ½ per cent at an annual rate in the second quarter.[4] The slowdown reflects a significant decline in residential investment in the third quarter.

Overall, PBO monitoring suggests that growth in the Canadian economy has moderated further in the third quarter with real GDP expected to increase by 1.3 per cent at an annual rate (Figure 1-4). Real GDP growth is then expected to increase modestly to 2.1 per cent at an annual rate in the fourth quarter as final domestic demand and inventory investment are expected to continue to offset drag from net exports.

2. Economic Outlook 2010-2015

Finance Canada's September survey of private sector forecasters indicates that the outlook for nominal GDP – the broadest measure of the Government's tax base – is little changed from the forecast on which Budget 2010 was based (see Table A-1 in Annex A for a more detailed comparison of the two forecasts). While the level of nominal GDP in 2010 is projected to be $17 billion higher compared to Budget 2010, downward revisions to the outlook for real GDP growth and GDP inflation leave the level of nominal GDP over 2011-2014 essentially unchanged from the budget forecast.

[4] For more details on the methodology underlying PBO's monitoring see PBO (2009a).

However, private sector forecasters have revised down significantly their outlook for interest rates with both short- and long-term rates lower by approximately 80 basis points, on average, over 2011-2014. The near-term (2010-2011) outlook for the unemployment rate has been revised down somewhat although private sector forecasters now expect a slightly higher rate of unemployment in the medium-term (2013-2014).

The Government's risk adjustment to nominal GDP for fiscal planning purposes

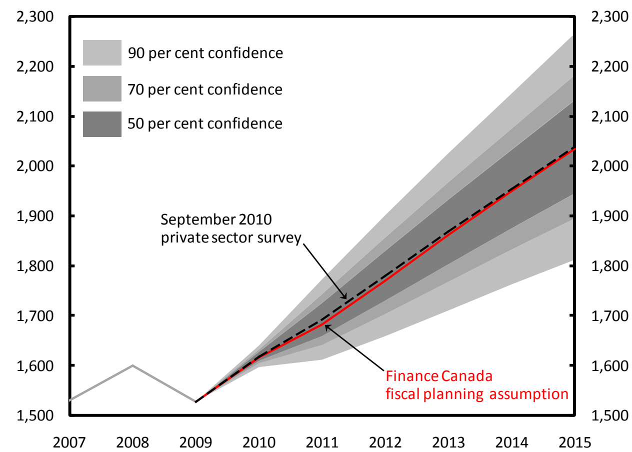
In light of the downside risks to the global outlook identified in the October *Update* the Government has judged it appropriate for its fiscal planning purposes to adjust downward the private sector forecast of nominal GDP from Finance Canada's September survey. This risk adjustment results in nominal GDP that is $10 billion lower in 2011 and 2012 relative to the September survey. The risk adjustment is reduced to $7.5 billion in 2013 and remains at $5 billion in 2014 and 2015.[5]

To help put the magnitude of the Government's risk adjustment into context, Figure 2-1 presents both the unadjusted and adjusted private sector forecasts of nominal GDP along with confidence intervals based on the historical forecast accuracy of Finance Canada's survey of private sector forecasters, which provide a measure of the uncertainty surrounding the outlook (see Box 5-1 for additional detail).[6] As illustrated by Figure 2-1, relative to the uncertainty surrounding the private sector outlook for nominal GDP, as well as relative to the size of the economy, PBO believes the magnitude of the Government's risk adjustment is minimal and does not adequately reflect the magnitude of the downside risks to the economic outlook.[7]

Figure 2-1

Nominal GDP Forecasts

($ billions)



Source: Office of the Parliamentary Budget Officer; Finance Canada.

To prepare its fiscal projections, PBO has based its economic assumptions on the Government's risk-adjusted forecast of nominal GDP and Finance Canada's September survey of private sector forecasters. As a result, the source of the difference between PBO's fiscal projections and those in the *Update* is limited to the assumptions used to translate the *economic* forecast into *fiscal* projections.

In incorporating the Government's adjustment for risk and consistent with the downside risks identified in the *Update* PBO has adjusted the private sector outlook for real GDP growth such that the level of nominal GDP matches the Government's assumptions. Table 2-1 presents a comparison of the real GDP growth forecasts in Budget 2010, Finance Canada's September private sector survey and the survey's forecast adjusted to match Finance Canada's planning assumption for nominal GDP in the *Update*.

[5] The *Update* expresses the risk adjustment to nominal GDP in terms of reductions in economic growth (i.e., real GDP growth) amounting to "about 0.5 percentage points, at annual rates, for four quarters starting in the third quarter of 2010."

[6] Following the Office for Budget Responsibility (OBR) and the IMF, PBO uses the historical forecast errors of the Department of Finance's survey of private sector forecasters as an estimate of the uncertainty surrounding the private sector economic outlook (see PBO (2010f)). As noted in OBR (2010) this approach has its limitations in that the past forecast performance "is only an imperfect guide to the future" nevertheless, it does provide a "clear, transparent and objective method for quantifying the degree of uncertainty".

[7] Relative to the September private sector forecast of nominal GDP, the Government's risk adjustment amounts to 0.12 per cent in 2010 and peaks at 0.59 per cent in 2011 before declining to 0.25 per cent in 2015.

Table 2-1

Real GDP Growth Forecasts

(Per cent)

	2010	2011	2012	2013	2014
Budget 2010	2.6	3.2	3.0	2.8	2.6
Finance Canada September survey	3.0	2.5	2.8	2.9	2.6
Risk-adjusted forecast	2.9	2.0	2.8	3.1	2.7

Source: Office of the Parliamentary Budget Officer; Finance Canada.
Note: Given the forecast of GDP inflation from Finance Canada's September survey, the survey's forecast of real GDP growth is adjusted such that the outlook for nominal GDP (the product of real GDP and the GDP deflator) matches the planning assumption in the *Update*.

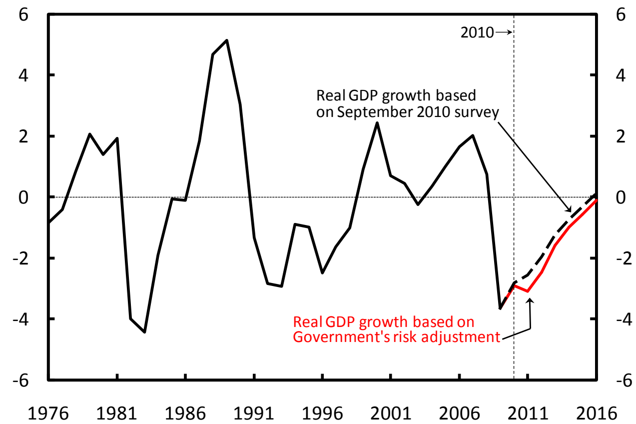
Incorporating the Government's risk adjustment requires revising the survey's forecast of real GDP growth *downward* over 2010-2011. However, since the risk adjustment declines beyond 2012, the survey's forecast must then be adjusted *upward* to match the Government's fiscal planning assumption for nominal GDP. Moreover, the upward adjustment to the September survey's forecast of real GDP growth in 2013 and 2014 results in growth that exceeds the forecast presented in Budget 2010.

The risk-adjusted private sector forecast of real GDP growth implies – given PBO's estimates of potential GDP – that the output gap will narrow gradually over the medium term and that the economy will reach its potential by the end of 2016 (Figure 2-2). Based on the (unadjusted) real GDP growth forecast in Finance Canada's September survey of private sector forecasters, the output gap would close in early 2016, which is only marginally earlier than under the risk-adjusted forecast.

Figure 2-2

Output Gap

(Per cent of potential GDP)



Source: Office of the Parliamentary Budget Officer.

PBO's fiscal projections presented in Section 3 are based on the Government's planning assumption for nominal GDP, which as Table 2-2 shows is only marginally lower over 2011-2014 than the planning assumption used in Budget 2010. Table A-2 in Annex A provides PBO's assumptions regarding the income composition of GDP which are essentially unchanged over the medium term compared to the assumptions presented in PBO's March 2010 assessment of the Budget 2010 outlook.[8]

Table 2-2

Nominal GDP Planning Assumptions

($ billions)

	2010	2011	2012	2013	2014
Budget 2010	1,601	1,688	1,778	1,865	1,953
Update 2010	1,616	1,682	1,770	1,861	1,949
difference from Budget 2010	*15*	*-6*	*-8*	*-4*	*-4*

Source: Office of the Parliamentary Budget Officer; Finance Canada.

[8] Producing fiscal projections requires assumptions about the composition of nominal GDP. These assumptions play an important role in fiscal projections because different components of GDP are taxed at different rates. In 2008 and 2009, PBO requested from Finance Canada the income and expenditure assumptions underlying its nominal GDP forecast (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.

3. Fiscal Projections

Fiscal forecasting process

The fiscal projections presented in this report, as well as those in the *Update*, are based on the results 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 (see PBO (2010c)). It should be noted that Finance Canada does not survey private sector organizations regarding their *fiscal* forecasts. Both PBO and Finance Canada translate the average of private sector *economic* forecasts into a *fiscal* projection, based on their own assumptions.

Comparison of actual budgetary outcome to projected results for 2009-10

PBO's March 2010 assessment of Budget 2010 (March report) projected a budgetary deficit of $53.0 billion for 2009-10. Excluding the impact of a change in accounting for Harmonized Sales Tax (HST) transitional assistance, the actual budgetary deficit for 2009-10 was $49.9 billion, $3 billion lower than projected, solely attributable to higher-than-anticipated budgetary revenues (Table 3-1).

Table 3-1

Comparison of 2009-10 Budgetary Outcomes to PBO's March 2010 Report

($ billions)

	Actual	March Report	Difference
Budgetary revenues	218.6	215.6	3.0
Program expenses	244.8	239.1	5.7
Public debt charges	29.4	29.4	0.0
Budgetary outcome/estimate	-55.6	-53.0	-2.6
HST transitional assistance	*5.6*		
Budgetary outcome/estimate excluding accounting change	-49.9	-53.0	3.0

Source: Office of the Parliamentary Budget Officer; Finance Canada.
Note: Numbers may not add due to rounding.

Fiscal projections 2010-11 to 2015-16

Based on the revised economic outlook, program changes announced since Budget 2010, and changes to the outlook for operating expenses, PBO projects budgetary deficits that are moderately larger, on average, than those presented in PBO's March report. PBO projects a deficit of $40.0 billion in 2010-11 which gradually declines over the projection to $11.0 billion in 2015-16 (Table 3-2). The $11.0 billion deficit in 2015-16 contrasts with the $2.6 billion surplus projected in the *Update*. Relative to the size of the economy, PBO projects the budgetary deficit to decline to 0.5 per cent of GDP by 2015-16 from 2.5 per cent of GDP in 2010-11.

Persistent deficits over the projection period increase the level of federal debt to $658.1 billion in 2015-16 from $519.1 in 2009-10, an increase of $139.0 billion. As a percentage of nominal GDP, the federal debt is projected to decrease to 32.4 per cent of GDP in 2015-16 from 34.0 per cent of GDP in 2009-10. A more detailed comparison of PBO's March projection and its current projection is provided in Table A-3 of Annex A.

Table 3-2

Summary of Fiscal Projections

($ billions)

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Budgetary revenues	235.4	248.9	262.2	277.0	289.8	303.8
Program expenses	243.9	244.6	250.3	257.4	263.6	272.6
Public debt charges	31.6	33.9	36.5	38.9	40.8	42.2
Total expenses	275.5	278.5	286.7	296.3	304.4	314.8
Budgetary balance	-40.0	-29.6	-24.5	-19.2	-14.6	-11.0
Federal debt	559.1	588.7	613.3	632.5	647.1	658.1
Per cent of GDP						
Budgetary revenues	14.6	14.8	14.8	14.9	14.9	14.9
Program expenses	15.1	14.5	14.1	13.8	13.5	13.4
Public debt charges	2.0	2.0	2.1	2.1	2.1	2.1
Budgetary balance	-2.5	-1.8	-1.4	-1.0	-0.7	-0.5
Federal debt	34.6	35.0	34.6	34.0	33.2	32.4

Source: Office of the Parliamentary Budget Officer.
Note: Numbers may not add due to rounding.

Outlook for budgetary revenues

PBO's projection of budgetary revenues remains roughly in line with the revenues projected in PBO's March report (Table 3-3). Total income tax revenues are projected to be slightly lower over the projection horizon as higher corporate income tax revenues are more than offset by lower personal and non-resident income tax revenues.[9] Excise taxes and duties are projected to be slightly higher over the projection period compared to those projected in March.

Table 3-3

Outlook for Budgetary Revenues

($ billions)

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Income taxes						
Personal income tax	114.5	125.1	133.2	141.2	149.0	156.9
Corporate income tax	29.6	27.7	27.2	29.1	30.5	31.9
Non-resident income tax	5.8	6.2	6.5	7.0	7.4	7.8
Total income tax	150.0	159.0	166.9	177.2	186.9	196.6
Excise taxes/duties						
Goods and Services Tax	27.4	28.9	30.5	31.9	33.2	34.6
Custom import duties	3.5	3.6	3.8	4.0	4.1	4.3
Other excise taxes/duties	10.5	10.7	10.8	10.7	10.4	10.4
Total excise taxes/duties	41.4	43.2	45.1	46.5	47.7	49.3
Total tax revenues	191.4	202.2	212.0	223.8	234.6	245.9
EI premium evenues	17.6	19.0	20.9	23.1	25.5	27.2
Other revenues	26.4	27.7	29.3	30.1	29.7	30.7
Total budgetary revenues	235.4	248.9	262.2	277.0	289.8	303.8

Source: Office of the Parliamentary Budget Officer.
Note: Numbers may not add due to rounding.

Other revenues are projected to be $0.8 billion higher, on average, than at the time of PBO's March report due to the reclassification of the Canadian Commercial Corporation (CCC) from an enterprise Crown corporation to a consolidated Crown corporation.[10] Lower other revenues in 2014-15 compared to 2013-14 reflect the unwinding of the Insured Mortgage Purchasing Program (IMPP) and the corresponding loss of revenue from these investments.[11]

One of the main contributing factors to lower budgetary revenues is lower Employment Insurance (EI) premium revenues resulting from smaller-than-projected increases in EI premium rates. Beginning in 2011, premium rates were to be set by the Canadian Employment Insurance Financing Board (CEIFB) and PBO expected the Board would recommend the maximum allowable premium rate increase of $0.15 for every $100 of insurable earnings for 2011 and each of the subsequent three years.[12] However, on September 30, 2010 the Government announced that, "the increase in EI premiums for 2011 will be limited to 5 cents per $100 of insurable earnings and 10 cents for subsequent years."[13] As a result, PBO is now projecting one $0.05 increase followed by four consecutive $0.10 increases. This contributes to reducing EI premium revenues by $1.1 billion, on average, over 2010-11 to 2014-15 compared to PBO's March report.

PBO projects the EI Operating (EIO) account to remain in deficit until 2015.[14] Despite smaller premium rate increases the EIO account emerges from deficit in 2015 – the same year as previously estimated by PBO due primarily to lower projected EI expenditures and the incorporation of a change to the CEIFB Act that removed the interest accumulation on EIO account deficits. Both of

[9] Effective tax rates for personal income taxes and corporate income taxes are unchanged from PBO's March report so all changes to income tax revenues result from changes to projections of their underlying tax bases. For further detail see PBO (2009b).

[10] Only the profits of enterprise Crown corporations appear as other revenue whereas all revenues of consolidated Crown corporations appear as other revenues. PBO assumes that other revenues from the CCC grow in line with population plus inflation. Because CCC expenditures grow in an identical manner there is no impact on the budget balance.

[11] IMPP revenues are also marginally lower throughout the projection due to lower projected interest rates.

[12] The CEIFB has yet to make an official recommendation contrary to what has been widely reported. Given that no changes to the CEIFB Act have been made, PBO believes that the CEIFB will recommend a $0.15 increase in premium rates when it publishes its first report in November 2010.

[13] Finance Canada: http://www.fin.gc.ca/n10/10-088-eng.asp.

[14] This projection includes transfers totalling $2.9 billion from the Government of Canada to the CEIFB to compensate the Board for some of the EI stimulus measures announced in Budget 2009. The CEIFB is not compensated for the premium rate freezes nor the additional measures contained in Budget 2010 despite the fact that both were identified as stimulus by the Government.

these changes reduce EI reserve deficits over the projection.[15]

Outlook for program expenses

PBO projects program expenses to be $1.8 billion higher, on average, due almost exclusively to higher projected direct program expenses (Table 3-4). Major transfers to persons are slightly lower, on average, as lower elderly benefits and EI benefits are only partially offset by higher children's benefits. Major transfers to other levels of government (OLG) are relatively unchanged from PBO's March report, after accounting for the change in accounting for Harmonized Sales Tax (HST) transitional assistance.

Table 3-4

Outlook for Program Expenses

($ billions)	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Major transfers to persons						
Elderly benefits	35.3	37.0	39.2	41.5	43.8	46.2
EI benefits	20.8	19.4	19.5	19.8	19.8	20.2
Children's benefits	13.0	13.4	13.7	13.8	13.9	13.9
Total	69.2	69.8	72.4	75.0	77.4	80.2
Major transfers to OLG	53.1	54.2	56.8	59.5	62.1	65.1
Direct program expenses	121.6	120.6	121.1	122.9	124.0	127.2
Total program expenses	243.9	244.6	250.3	257.4	263.6	272.6

Source: Office of the Parliamentary Budget Officer.
Note: Numbers may not add due to rounding.

Elderly benefits which include payments for Old Age Security, the Guaranteed Income Supplement and the Spousal Allowance are projected to be lower than those presented in PBO's March report due mainly to changes in the methodology PBO uses to project these payments.

Employment Insurance benefits for 2010-11 to 2012-2013 are projected to be lower than in PBO's March report owing to lower forecasted unemployment rates. Unemployment rates are expected to be higher for 2013-14 and 2014-15 – increasing PBO's projection of EI benefits for those years relative to the projection in PBO's March report.[16]

Major transfers to other levels of government are nearly unchanged from PBO's March report, except for a change in accounting treatment for transitional assistance payments related to the implementation of HST in Ontario and British Columbia. This has the effect of lowering major transfers to other levels of government over the projection period relative to PBO's March report. The net impact of this change over the period 2009-10 to 2011-12 is zero, excluding the impact on public debt charges.

The major difference between program expenses in the March report and the current projection stems from changes to direct program expenses. PBO is now projecting direct program expenses which are, on average, $3.7 billion higher than previously projected. This difference is due exclusively to PBO's assumption regarding the Government's operating expenses that are subject to freeze. In the October *Update* the Government's freeze of certain operating expenses is projected to restrain growth to approximately 1.4 per cent per year, on average, over 2010-11 to 2015-16.

Based on historical growth in other program expenses, which consists of operating expenses and capital amortization, it is evident that the Government's freeze on operating expenses represents a material reduction in its recent growth rate. Figure 3-1 shows that the Government's assumed growth rate is significantly lower than the average growth rate of 6.4 per cent per year in operating expenses and capital amortization over the five-year period immediately preceding the Economic Action Plan (2004-05 to 2008-09). However, the Government's projected growth in operating expenses is larger than the

[15] PBO has also made model changes, resulting in higher EI premium revenues and therefore lower EIO account deficits.

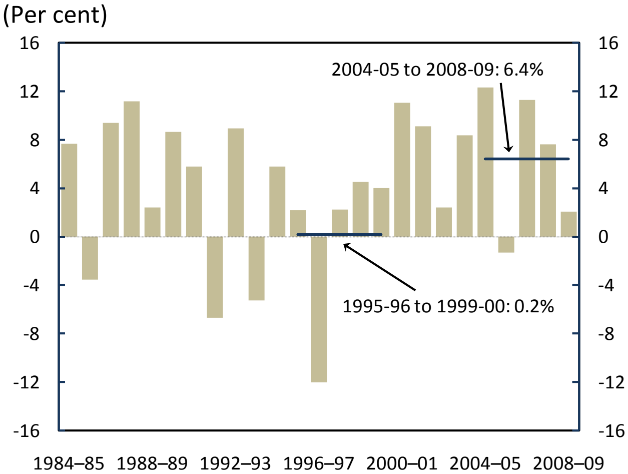
[16] PBO has also incorporated the latest population projections from Statistics Canada. The rate of growth in the population is higher than previously projected, which for a given level of the unemployment rate, increases the number of unemployed and therefore EI benefits.

average growth rate of 0.2 per cent experienced in the second half of the 1990s, which occurred during a period of fiscal retrenchment.

Figure 3-1

Growth in Operating Expenses and Capital Amortization

(Per cent)



Source: Office of the Parliamentary Budget Officer.
Note: Growth is the average growth over the period indicated.

In light of the size of the required reduction in the growth of operating expenses, PBO requested details regarding how the Government intends to achieve its planned operating budget freeze over the projection period. However, the Government has indicated that this information is a Cabinet confidence and will not be released to the public.[17] A similar request was recently made by the House of Commons Standing Committee on Government Operations and is currently being considered by the Government.[18] Given the lack of detail regarding the Government's expenses subject to the operating freeze, PBO has assumed that these expenses will grow in line with population growth and inflation – equal to 3.2 per cent on average – over 2010-11 to 2015-16 (Table 3-5).[19] This assumption is significantly lower than nominal GDP growth over the same period (4.9 per cent).

Table 3-5

Operating Expenses Subject to Freeze

($ billions)

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
October 2010 Update	56.4	53.6	53.9	55.0	56.3	57.8
PBO November Report	55.1	56.9	58.7	60.6	62.5	64.5
difference	*-1.3*	*3.3*	*4.8*	*5.6*	*6.2*	*6.7*

Source: Office of the Parliamentary Budget Officer; Finance Canada.
Note: Numbers may not add due to rounding.

Public debt charges

Since PBO's March report the outlook for short-term and long-term interest rates – based on Finance Canada's survey of private sector forecasters – has been lowered significantly which has reduced PBO's projection of the effective interest rate on federal debt. The lower effective rate reduces public debt charges by $1.6 billion, on average, compared to PBO's March report.[20]

Comparison of fiscal projections

Table 3-6 provides a comparison between PBO's fiscal outlook and the Government's outlook presented in the October *Update*.[21] PBO is projecting budgetary revenues that are in line with the Government's projections – only $0.1 billion higher, on average, over the projection horizon. As noted above, PBO is projecting higher direct program expenses over the projection horizon resulting in (total) program expenses that exceed the Government's projection by $3.8 billion, on average, over the projection horizon.

[17] http://www2.parl.gc.ca/sites/pbo-dpb/documents/Response_IR009B.pdf
[18] http://www2.parl.gc.ca/HousePublications/Publication.aspx?DocId=4689970&Language=E&Mode=1&Parl=40&Ses=3
[19] The assumption that these expenses grow in line with population plus inflation has also been used in the Government's previous economic and fiscal updates (e.g., see the 1999 *Update* (p. 81) http://www.collectionscanada.gc.ca/webarchives/20071127005833/http://www.fin.gc.ca/update99/update99-e.pdf and the 2004 *Update* (p. 69) http://www.fin.gc.ca/ec2004/ec04e.pdf).
[20] A change in the level of federal debt could also impact public debt charges however PBO's projection of federal debt is little changed from its March report and therefore this impact is minimal.
[21] See Table A-4 in Annex A for a more detailed comparison of the two outlooks.

Compared to the *Update*, PBO projects public debt charges to be higher over the projection horizon by $1.6 billion, on average. This is a result of differences in the sensitivity of the effective interest rate on federal debt to changes in market interest rates, as well as PBO's larger projected budgetary deficits.

Higher public debt charges and program expenses contribute to budgetary deficits that are projected to be higher by $5.3 billion, on average, over the projection horizon. This results in an additional $32.0 billion in debt accumulation over the projection relative to the Government's projection.

Table 3-6

Comparison of Fiscal Projections (PBO-*Update*)

($ billions)

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Budgetary revenues	2.9	2.6	1.0	-0.7	-3.4	-2.1
Program expenses	-2.6	1.9	4.3	5.7	6.5	7.2
Public debt charges	0.3	0.5	0.1	1.4	3.0	4.4
Total expenses	-2.3	2.4	4.3	7.1	9.5	11.6
Budgetary balance	5.4	0.2	-3.3	-7.7	-12.9	-13.6
Federal debt	-5.4	-5.5	-2.2	5.5	18.4	32.0

Source: Office of the Parliamentary Budget Officer; Finance Canada.
Note: Table is displayed as the PBO projection minus the *Update* projection.
Numbers may not add due to rounding.

PBO estimates the cost of lower maximum allowable EI premium rates to be $8.8 billion over 2010-11 to 2014-15 (Table 3-7).[22] This contrasts with a cost estimate of $5.0 billion presented in the *Update*. Clearly, PBO and the Government have divergent premium rate projections; however, it is not possible to ascertain the exact difference because the Government did not publish its projection of EI premium rates in either Budget 2010 or the *Update*.

[22] For details regarding the model PBO uses to forecast EI premium revenues, expenses and premium rates see PBO (2010d).

Table 3-7

Employment Insurance Premium Revenues

($ per $100 of insurable earnings)

	2010	2011	2012	2013	2014	2015	2016
PBO Premium Rates							
March Report	1.73	1.88	2.03	2.18	2.33	2.18	2.03
November Report	1.73	1.78	1.88	1.98	2.08	2.18	2.08
difference	0.00	-0.10	-0.15	-0.20	-0.25	0.00	0.05
Impact on premium revenues							
			($ billions)				
PBO November report	-0.3	-1.3	-2.0	-2.7	-2.5	0.2	
Government *Update*	-0.3	-1.3	-1.9	-1.8	0.3	--	

Source: Office of the Parliamentary Budget Officer; Finance Canada.
Note: Premium rates are rates paid by employees in provinces that do not have a provincial plan. Employers pay 1.4 times the amount paid by employees.
Impacts on premium revenues are displayed for fiscal years (e.g. -0.3 in 2010 is for fiscal year 2010-11).

4. Structural Budget Balance Estimates

Estimating a government's structural budget balance is crucial because, while the cyclical component of the budgetary balance may be expected to dissipate over a medium-term horizon as the economy returns to its potential, the structural component may necessitate policy actions.[23]

The projected reduction in the budgetary deficit over the medium term largely reflects a cyclical improvement in the economy. Figure 4-1 shows that on a fiscal-year basis the income gap is projected to be closed by 2015-16. While GDP is moderately below its potential in 2015-16 (the *output* gap is -0.5 per cent), PBO estimates that the trading gain (i.e., GDP price relative to the price of final domestic demand) is above its trend by the same magnitude (+0.5 per cent), which results in a closed *income* gap.[24]

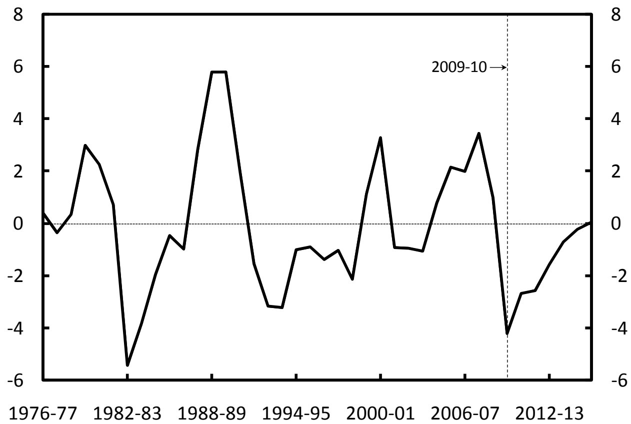
[23] Despite acknowledging the importance of avoiding structural deficits and providing an estimate of the Government's structural balance over history on a National Accounts basis, Finance Canada has not provided an estimate of the Government's structural balance over its fiscal planning horizon. See PBO (2010e) for further discussion.

[24] The output gap – real GDP relative to its potential – is a production-based measure of the economy's capacity. The trading gain gap is measured as the trading gain (i.e., GDP price relative to the price of final domestic demand) relative to its trend. The income gap represents the sum of the output gap and the trading gain gap, which

Figure 4-1

Income Gap

(Per cent of potential income)



Source: Office of the Parliamentary Budget Officer.

PBO estimates that the structural deficit will decline only gradually from $16.7 billion in 2011-12 to $10.2 billion in 2015-16 (Table 4-1).[25] Although the income gap is projected to be closed in 2015-16, the cyclical deficit is not entirely eliminated as the cyclical balance is more sensitive to the output gap than the trading gain gap.

Table 4-1

Structural and Cyclical Balance Estimates

($ billions)

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Budgetary balance	-55.6	-40.0	-29.6	-24.5	-19.2	-14.6	-11.0
Structural balance	-22.2	-15.0	-16.7	-15.7	-14.4	-12.1	-10.2
Cyclical balance	-33.4	-25.1	-12.9	-8.8	-4.9	-2.5	-0.8

Source: Office of the Parliamentary Budget Officer; Finance Canada.

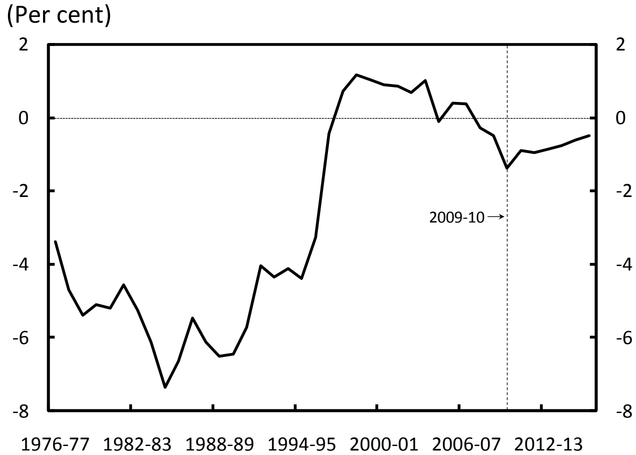
PBO's estimate of the structural deficit does not mean that the Government's budget will not return to balance. Rather, it suggests that policy actions to increase revenues and/or reduce spending relative to their projected paths would be required to ensure that the budget is balanced once the economy returns to its potential. The Government did not provide estimates of the economy's potential GDP and the structural budget balance in its October *Update*.

Figure 4-2 shows the structural balance relative to potential income over 1976-77 to 2015-16. PBO projects that the structural deficit will decline from 1.0 per cent of potential income in 2011-12 to 0.5 per cent of potential income in 2015-16, which is significantly smaller than the structural deficits observed in the 1980s and early 1990s. The reduction in the structural deficit over the period 2011-12 to 2015-16 is due to a 0.6-percentage point reduction in structural program expenses relative to potential income. Over the same period, relative to potential income, the reduction in the corporate income tax rate in 2012 puts downward pressure on structural revenues and the projected accumulation of federal debt increases public debt charges.

Figure 4-2

Structural Balance Relative to Potential Income

(Per cent)



Source: Office of the Parliamentary Budget Officer.

reflects the purchasing power of income generated in Canada relative to its trend. See PBO (2010a) for further details.

[25] 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.

Fiscal sustainability

Based on the Government's planning assumption presented in the *Update*, PBO projects the federal debt-to-GDP ratio to decline gradually over the medium term to 32.4 per cent in 2015-16. This level is relatively low on a historical basis and likely significantly lower than other central governments when put on a comparable basis.

To assess whether a government's fiscal structure is sustainable, however, requires looking beyond projections of budget deficits and debt over a medium-term horizon to take into account the economic and fiscal implications of population ageing.[26] PBO's 2010 Fiscal Sustainability Report concluded that the Government's current fiscal structure is not sustainable over the long term and that achieving sustainability would require permanent fiscal actions – either through increased taxes or reduced program spending, or some combination of both – amounting to 1.0 and 1.9 per cent of GDP under a baseline and an alternative scenario.

The *Update* does not provide an assessment of the sustainability of the Government's finances over the long term. PBO will be providing an update of its assessment of the Government's finances over the long term in its annual Fiscal Sustainability Report.

5. Risk Assessment

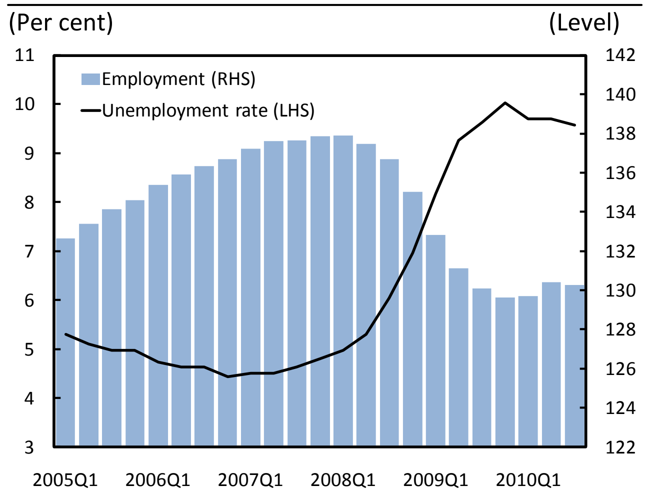
PBO judges that the balance of risks to the current economic outlook is heavily weighted to the downside. These downside risks include both external and domestic risks, each of which could have a substantial negative impact on economic growth in the near and medium term. External risks relate to the U.S. outlook; the recent appreciation of the Canadian dollar and ongoing global currency tensions; and, sovereign debt concerns. Domestic risks relate primarily to the high level of household debt in Canada.

The U.S. economic outlook

The outlook for Canadian real GDP is highly dependent on the U.S. economic outlook due to the direct impact on Canada's exports via the typical trade channel, as well as through the direct and indirect financial linkages channel.[27] Over recent quarters real GDP growth in the U.S. has slowed, employment growth has remained weak and the unemployment rate has remained well above 9 per cent (Figure 5-1). This slowdown in activity has led to discussions of another round of quantitative easing by the Federal Reserve. In PBO's view the balance of risks to the U.S. outlook are clearly to the downside, which could have an important impact on Canadian exporters, as well as Canadian corporations that rely primarily on U.S. capital markets for their funding requirements.

Figure 5-1

U.S. Employment and Unemployment Rate



Source: Office of the Parliamentary Budget Officer; Bureau of Labour Statistics.
Note: The employment figures are from the U.S. establishment survey and are expressed in millions.
Unemployment rate figures are from U.S. household survey.

[26] A sustainable fiscal structure is one that does not lead to substantial and sustained increases in a government's debt relative GDP over the long term (see PBO (2010b)).

[27] For more detail on the direct and indirect financial linkages between Canada and the United States see Klyuev (2008) and Duttagupta and Barrera (2010).

Currency issues

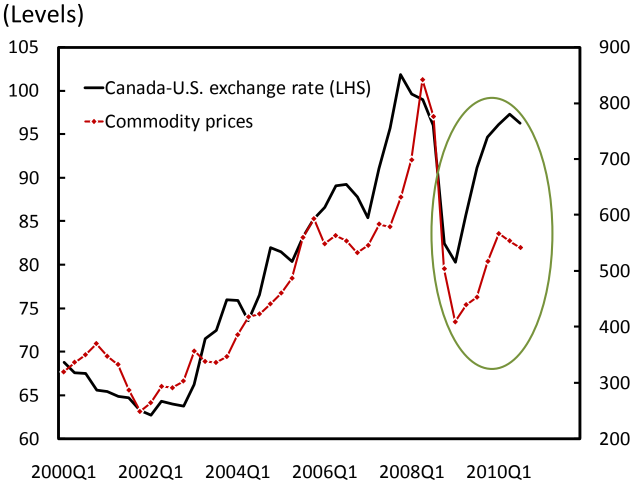
PBO sees two major currency issues that currently pose downside risks to the Canadian outlook. First, currency tensions among countries have escalated in recent months, prompting discussions of competitive devaluations and tariff barriers. This could pose a downside risk to the global economic outlook, which would directly affect Canada, as well as potentially imposing larger exchange rate adjustments on countries, like Canada, that allow their currencies to float freely. Recent discussions at the G-20 in preparation for the Seoul Summit have tried to address these issues with the IMF being called on to provide its independent assessment of key issues.[28]

The second currency risk relates to the strong rebound in the Canadian dollar since the first quarter of 2009. Specifically, the rebound in the Canadian dollar has significantly outpaced the movement in commodity prices (Figure 5-2).

Figure 5-2

Canada-U.S. Exchange Rate and Commodity Prices

(Levels)



Source: Office of the Parliamentary Budget Officer; Bank of Canada; Statistics Canada.

Note: Commodity prices are based on the Bank of Canada's new commodity price index which is expressed in U.S. dollars (January 1972 = 100).
The exchange rate is expressed in U.S. cents.

The strong link between commodity prices and the Canadian dollar is well documented and the divergent trends recently would suggest that the negative impact on real GDP growth from the appreciation may not be offset by a compensating positive income effect from rising commodity prices.[29] Indeed, a decomposition of Canadian real GDP growth using an augmented version of the aggregate demand equation described in Duguay (1994) suggests that the impacts on growth from movements in the exchange rate and commodity prices over the 2000 and 2009 period were essentially offsetting. However, recent and projected movements in the exchange rate and commodity prices, based on the current private sector outlook, are estimated to restrain growth significantly over the next two years.

Sovereign debt issues

Sovereign debt concerns peaked earlier this summer and put upward pressure on risk premium for countries where markets became worried about the sustainability of their fiscal positions and banking sectors. These concerns have led to discussions of the need for fiscal consolidation in some countries, which culminated in the G-20 agreement that "advanced economies have committed to fiscal plans that will at least halve deficits by 2013 and stabilize or reduce government debt-to-GDP ratios by 2016."[30]

While these concerns have receded somewhat in recent months, as noted in the Bank of Canada's October 2010 Monetary Policy Report, credit spreads remain elevated for some European countries and "a negative shock would risk triggering renewed strains in global financial markets." Therefore, there is a risk that should the global economy not recover as quickly as expected, or fiscal consolidation efforts not succeed in bringing budget deficits under control, risk premiums could increase once again and put

[28] For more detail see G-20 Communiqué: http://www.seoulsummit.kr/eng/boardDetailView.g20?boardDTO.board_category=BD02&boardDTO.board_seq=2010100000002689.

[29] Many papers have highlighted the link between commodity prices and the Canadian dollar, for example see Amano and van Norden (1995); and Issa, Lafrance and Murray (2005).

[30] For more detail see G-20 Communiqué: http://www.g20.org/Documents/g20_declaration_en.pdf.

upward pressure on global interest rates. Although PBO does not see this as a significant risk, PBO is cognisant that Canada is a small open economy and would not be immune to upward pressure on interest rates in such an environment. Since the cost of servicing the debt remains a significant expenditure by the Government, any increase in borrowing costs would pose a downside risk to the Government's fiscal position.

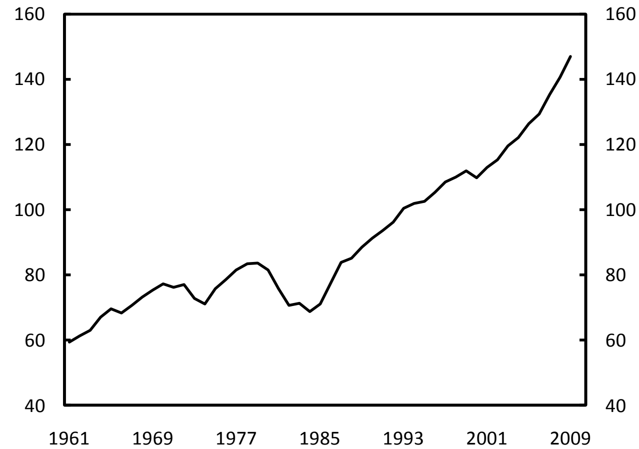
Canadian household debt

One of the risks highlighted in PBO's July 2009 Economic and Fiscal Assessment was the high level of debt-to-personal disposable income of Canadian households (see PBO (2009b)). Since that time the upward trend in household debt has continued, reaching 147 per cent of personal disposable income in 2009, putting households in an even more vulnerable position (Figure 5-3). For example, as noted in a recent speech by the Governor of the Bank of Canada, "in a series of analyses over the past year the Bank has found that Canadian households are increasingly vulnerable to an adverse shock and that this vulnerability is rising more quickly than had been previously anticipated."[31] However, even in the event that the outlook evolves as anticipated the high level of debt of Canadian households will likely constrain growth in consumption and housing investment over the projection horizon.

Figure 5-3

Household Debt-to-Personal Disposable Income

(Percent)



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

Quantifying uncertainty and risks to the outlook

Following the Office for Budget Responsibility (OBR) in the United Kingdom and the IMF the uncertainty surrounding the economic outlook can be quantified using the historical forecast errors of Finance Canada's surveys of private sector forecasters (see PBO (2010f) and Box 5-1 for further detail).[32] For key indicators such as real GDP growth, GDP inflation and interest rates, the (symmetric) distributions of their possible future outcomes reflect the dispersion of their historical forecast errors at various horizons.[33] The fiscal implications of the distribution of possible outcomes for key economic indicators can then be quantified using the fiscal sensitivities published in the *Update* and Budget 2010.

Following Elekdag and Kannan (2009) and the IMF, the balance of risks to the outlook can be incorporated by 'skewing' the distributions surrounding the baseline forecast. In the case of a

[31] See Remarks by Mark Carney, Governor of the Bank of Canada to Windsor-Essex Regional Chamber of Commerce: http://www.bankofcanada.ca/en/speeches/2010/sp300910.html.

[32] See OBR (2010), Elekdag and Kannan (2009) and IMF (2009).

[33] By construction, these distributions are symmetric around the baseline forecast and the outcomes are normally distributed. The dispersion of possible outcomes (measured by the standard deviation) reflects the degree of uncertainty. That is, a wide dispersion and large standard deviation indicates a high degree of uncertainty. The symmetry of these distributions indicates that outcomes greater than or less than the baseline value are equally likely.

negatively skewed distribution, the expected outcome is less than the baseline forecast, which suggests that the balance of risks is tilted to the downside. Thus the skewness value (positive or negative) of the distribution of possible outcomes reflects the balance of risks (upside or downside) to the baseline forecast. These distributions can then be used to construct a probability distribution or 'fan chart' that provides confidence levels around the baseline forecast.

Box 5-1: Constructing PBO's Fan Chart of the Budgetary Balance

Following the information request by PBO (http://www2.parl.gc.ca/sites/pbo-dpb/documents/Info_Request_030_R.pdf), Finance Canada released its archive of private sector economic forecasts (http://www.fin.gc.ca/pub/psf-psp/index-eng.asp). PBO has used these forecasts to calculate the historical forecast errors at various horizons (i.e., one-year ahead, two-year ahead etc.) and seasonal vintages (i.e. fall surveys, winter surveys etc.); their standard deviations and the correlations across errors for real GDP growth, GDP inflation and interest rates.

Using the Government's fiscal sensitivities for real GDP growth, GDP inflation and interest rates, PBO has developed a stochastic simulation model of the Government's budget that maps the distributions of the possible economic outcomes into distributions for budgetary revenues, program expenditure, public debt charges and the corresponding budgetary balance. By construction, these distributions are symmetric; however, using the 'two-piece' normal distribution, PBO incorporates a degree of skewness to adjust the distribution of the budgetary balance based on its assessment of the balance of risks to the economic outlook. This adjustment is proportional to the standard deviation of the budgetary balance generated by the stochastic simulation model.

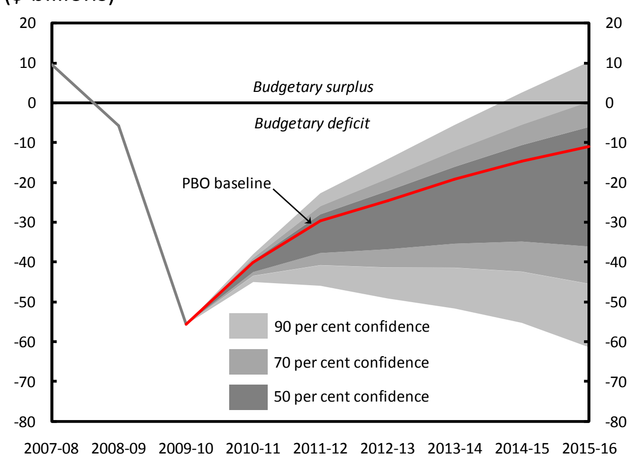
A key limitation of this fan chart, however, is that it reflects only uncertainty and risks related to the economic outlook and does not reflect uncertainty related to the translation of economic forecasts into fiscal forecasts (i.e., fiscal sensitivities) nor non-economic risks to budgetary revenues and expenses (e.g., expenses related to the Government's legal liabilities).

Figure 5-4 shows the fan chart for PBO's baseline budgetary balance projection constructed using the distributions and correlations of private sector forecast errors for real GDP growth, GDP growth and interest rates; the Government's fiscal sensitivities; and, PBO's adjustment for the downside balance of risks described above.[34] With the balance of risks to the economic outlook tilted to the downside, there is a greater than 50 per cent chance that the budgetary deficit will be larger than projected under PBO's baseline. Indeed, PBO's baseline projection lies close to the upper bound of the 50 per cent confidence interval as opposed to its midpoint.

Figure 5-4

Budgetary Balance Outcomes Given Economic Uncertainty and Downside Risks

($ billions)



Source: Office of the Parliamentary Budget Officer; Finance Canada.

On a status quo basis, based on the probability distributions underlying the confidence intervals shown in Figure 5-4, the probability that the budget will be in a balance or surplus position over the period 2010-11 to 2013-14 is effectively nil (Table 5-1). Further, there is a 85 per cent chance (or probability) that the budget will be in deficit in

[34] To quantify the downside balance of risks to the current economic outlook, PBO has introduced a (negative) skewness value equal to one-half of the standard deviation of the budgetary balance outcomes (for each fiscal year) generated by its stochastic simulation model. This amounts to approximately $1 billion in 2010-11, rising to $11 billion in 2015-16.

2015-16. Even if the risks to the outlook were balanced, there would be a 69 per cent chance that the budget would be in deficit in 2015-16.

Table 5-1

Probabilities of Budgetary Balance and Deficit

(Per cent)

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Probability of balance or better	0	0	0	2	8	15
(assuming balanced risks)	*(0)*	*(0)*	*(1)*	*(9)*	*(21)*	*(31)*
Probability of deficit	100	100	100	98	92	85
(assuming balanced risks)	*(100)*	*(100)*	*(99)*	*(91)*	*(79)*	*(69)*

Source: Office of the Parliamentary Budget Officer.

These distributions can also be used to gauge the likelihood of other projections. For example, the probability that the budgetary balance in 2015-16 is lower than the $2.6 billion surplus projected in the *Update* is 88 per cent.

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Annex A

Table A-1 – Economic Outlook Comparison

September 2010 Survey and Budget 2010

	2010	2011	2012	2013	2014	2015
Real GDP growth (%)						
Budget 2010	2.6	3.2	3.0	2.8	2.6	-
September 2010 survey	3.0	2.5	2.8	2.9	2.6	2.5
difference from Budget 2010	*0.4*	*-0.7*	*-0.2*	*0.1*	*0.0*	-
GDP inflation (%)						
Budget 2010	2.2	2.1	2.2	2.1	2.0	-
September 2010 survey	2.8	2.0	2.3	2.0	2.0	1.9
difference from Budget 2010	*0.6*	*-0.1*	*0.1*	*-0.1*	*0.0*	-
Nominal GDP growth (%)						
Budget 2010	4.9	5.4	5.3	4.9	4.7	-
September 2010 survey	5.9	4.6	5.2	5.0	4.6	4.4
difference from Budget 2010	*1.0*	*-0.8*	*-0.1*	*0.1*	*-0.1*	-
Nominal GDP level ($ billions)						
Budget 2010	1,601	1,688	1,778	1,865	1,953	-
September 2010 survey	1,618	1,692	1,780	1,868	1,954	2,039
difference from Budget 2010	*17*	*4*	*2*	*3*	*1*	-
3-month treasury bill rate (%)						
Budget 2010	0.7	2.4	3.8	4.3	4.4	-
September 2010 survey	0.6	1.6	2.7	3.5	4.0	4.0
difference from Budget 2010	*-0.1*	*-0.8*	*-1.1*	*-0.8*	*-0.4*	-
10-year government bond rate (%)						
Budget 2010	3.7	4.3	4.9	5.2	5.3	-
September 2010 survey	3.2	3.3	4.0	4.6	4.8	4.9
difference from Budget 2010	*-0.5*	*-1.0*	*-0.9*	*-0.6*	*-0.5*	-
Unemployment rate (%)						
Budget 2010	8.5	7.9	7.4	6.9	6.6	-
September 2010 survey	8.0	7.7	7.4	7.0	6.8	6.6
difference from Budget 2010	*-0.5*	*-0.2*	*0.0*	*0.1*	*0.2*	-
Total CPI inflation (%)						
Budget 2010	1.7	2.2	2.1	2.1	2.1	-
September 2010 survey	1.7	2.2	2.1	2.1	2.0	2.0
difference from Budget 2010	*0.0*	*0.0*	*0.0*	*0.0*	*-0.1*	-

Source: Finance Canada.

Table A-2 – Nominal GDP Income Shares

PBO November 2010 Assumptions

(Per cent of nominal GDP)	(actual) 2009	2010	2011	2012	2013	2014	2015
Wages, salaries and supplementary labour income	53.6	52.6	52.5	52.4	52.3	52.2	52.2
Corporation profits before taxes	9.6	10.8	11.4	11.5	11.6	11.6	11.7
Government business enterprise profits before taxes	0.8	1.0	1.0	1.0	1.0	1.0	1.0
Interest and miscellaneous investment income	4.2	4.3	4.5	4.7	4.9	4.9	5.0
Accrued net income of farm operators from farm production	0.1	0.0	0.1	0.1	0.1	0.1	0.1
Net income of non-farm unincorporated business, including rent	6.5	6.5	6.3	6.3	6.2	6.2	6.2
Inventory valuation adjustment	0.2	0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Taxes less subsidies on factors of production and products	10.7	10.7	10.7	10.6	10.6	10.6	10.6
Capital consumption allowances	14.3	14.0	13.6	13.5	13.4	13.3	13.3
Statistical discrepancy	0.0	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

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

Table A-3 – Fiscal Projection Comparison

PBO November Report minus PBO March Report

($ billions)

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Income taxes						
Personal income tax	-5.8	-3.7	-1.7	-1.0	-0.4	-0.4
Corporate income tax	6.8	3.6	0.7	0.1	0.0	0.1
Non-resident income tax	0.2	-0.3	-0.4	-0.4	-0.3	-0.3
Total income tax	1.2	-0.4	-1.4	-1.3	-0.7	-0.6
Excise taxes/duties						
Goods and Services Tax	2.2	0.4	-0.3	-0.2	0.0	0.0
Custom import duties	0.0	0.1	0.1	0.1	0.1	0.1
Other excise taxes/duties	-0.1	0.2	0.4	0.5	0.4	0.0
Total excise taxes/duties	2.3	0.7	0.2	0.5	0.5	0.1
EI premium revenues	0.6	0.4	-0.8	-1.4	-2.1	-1.7
Other revenues	-1.0	0.5	0.4	0.7	1.1	1.5
Total budgetary revenues	3.0	1.2	-1.5	-1.6	-1.1	-0.7
Major transfers to persons						
Elderly benefits	0.0	-0.6	-0.8	-0.8	-0.8	-0.9
Employment Insurance benefits	-0.5	-1.1	-0.5	-0.3	0.3	0.1
Children's benefits	-0.1	0.3	0.2	0.3	0.4	0.4
Total	-0.5	-1.4	-1.1	-0.8	-0.2	-0.3
Major transfers to OLG	5.8	-3.7	-1.8	0.0	-0.1	-0.1
Direct program expenses	0.4	-0.3	5.8	5.3	4.1	3.7
Public debt charges	0.0	-0.4	-1.7	-2.2	-2.0	-1.7
Total expenses	5.6	-5.7	1.1	2.3	1.8	1.6
Budgetary balance	-2.6	6.9	-2.6	-4.0	-2.9	-2.3
Federal debt	2.4	-4.5	-1.8	2.1	5.0	7.3

Source: Office of the Parliamentary Budget Officer.

Table A-4 – Fiscal Projection Comparison

PBO November Report minus 2010 *Update*

($ billions)

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Income taxes						
Personal income tax	1.4	5.2	5.1	4.2	3.6	5.2
Corporate income tax	1.5	-3.4	-4.2	-4.6	-5.4	-5.6
Non-resident income tax	0.1	0.1	-0.1	-0.1	-0.1	0.0
Total income tax	3.2	1.9	0.7	-0.6	-1.9	-0.5
Excise taxes/duties						
Goods and Services Tax	-1.1	-0.7	-0.8	-1.2	-1.7	-2.1
Custom import duties	0.1	0.0	0.0	0.0	-0.2	-0.3
Other excise taxes/duties	0.0	0.0	0.0	0.0	0.0	0.0
Total excise taxes/duties	-1.0	-0.7	-0.8	-1.3	-1.9	-2.4
EI premium revenues	0.1	0.2	0.3	0.5	0.9	1.3
Other revenues	0.7	1.2	0.7	0.6	-0.6	-0.5
Total budgetary revenues	2.9	2.6	1.0	-0.7	-3.4	-2.1
Major transfers to persons						
Elderly benefits	-1.0	-1.1	-0.9	-0.8	-0.7	-0.5
Employment Insurance benefits	-0.3	0.0	0.7	1.3	1.2	1.3
Children's benefits	0.0	0.0	0.0	0.0	0.0	0.0
Total	-1.1	-1.1	-0.2	0.3	0.4	0.7
Major transfers to OLG	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3
Direct program expenses	-1.3	3.3	4.8	5.7	6.3	6.7
Public debt charges	0.3	0.5	0.1	1.4	3.0	4.4
Total expenses	-2.3	2.4	4.2	7.1	9.4	11.5
Budgetary balance	5.4	0.2	-3.3	-7.7	-12.9	-13.6
Federal debt	-5.4	-5.5	-2.2	5.5	18.4	32.0

Source: Office of the Parliamentary Budget Officer.