OFFICE OF
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# Comparing the Federal Fiscal Sustainability Analyses of PBO and Finance Canada

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The mandate of the Parliamentary Budget Officer (PBO) is to provide independent analysis to Parliament on the state of the nation's finances, the government's estimates and trends in the Canadian economy; and upon request from a committee or parliamentarian, to estimate the financial cost of any proposal for matters over which Parliament has jurisdiction.

Following the publication of PBO's Fiscal Sustainability Report 2012, the Department of Finance Canada released its report on the economic and fiscal implications of Canada's ageing population. This note compares the reports' long-term projections and sustainability assessments as well as the assumptions and methodologies that drive their similarities and differences.

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# Summary

Through its annual Fiscal Sustainability Reports, PBO provides independent analysis for parliamentarians to enhance their understanding of the state of the nation's finances and trends in the national economy. According to the Organisation for Economic Co-operation and Development (OECD), such reports "offer invaluable signposts to help current governments to respond to known fiscal pressures and risks in a gradual manner, earlier rather than later, and help future governments avoid being forced to adopt sudden policy changes."[1]

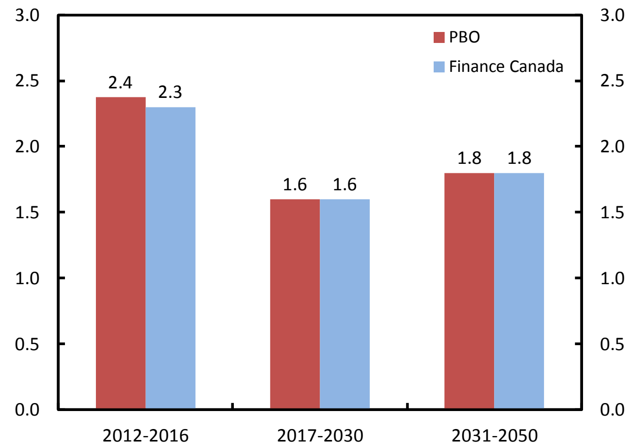
Following the 2012 Fall Report of the Auditor General of Canada, Finance Canada published its first sustainability report presenting its long-run economic and fiscal projections for the federal government. Finance Canada's report is a welcome contribution to the discussion of the demographic challenges facing the Canadian economy and the sustainability of the federal government's finances over the long term; however, this report falls short of the Government's Budget 2007 commitment to provide a "comprehensive fiscal sustainability and intergenerational report" and only partially fulfills the recommendations of the Auditor General. Nonetheless, PBO is now able to compare Finance Canada's long-term economic and (federal) fiscal projections with PBO's 2012 Fiscal Sustainability Report (FSR 2012).

Finance Canada's analysis uses a similar projection framework and similar (and in many cases the same) assumptions as PBO has used in its annual Fiscal Sustainability Reports over the past three years. As a result, Finance Canada has provided projections that very closely resemble those in PBO's FSR 2012, including projections for real GDP growth (Summary Figure 1) and federal government debt relative to GDP (Summary Figure 2).

**Summary Figure 1**

**Comparison of Real GDP Growth Projections**

per cent, annual average

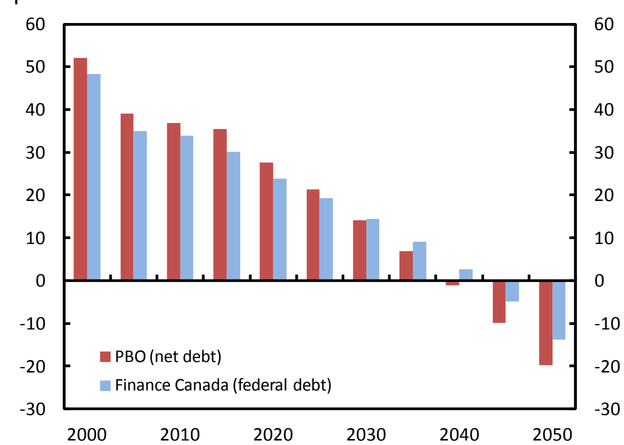



Sources: Office of the Parliamentary Budget Officer; Finance Canada.
Note: Growth rates are rounded to the nearest tenth of a percentage point.

**Summary Figure 2**

**Comparison of Federal Government Debt**

per cent of GDP




Sources: Office of the Parliamentary Budget Officer; Finance Canada.
Note: PBO projections are on a National Accounts basis; Finance Canada projections are on a Public Accounts basis.

Despite the challenges of slower GDP growth from a declining labour force and increased pressures on program spending from population ageing, PBO and Finance Canada both assess the federal fiscal structure to be sustainable over the long term.

[1] See *The Benefits of Long-term Fiscal Projections*, available at: http://www.oecd.org/governance/budgetingandpublicexpenditures/43836144.pdf.

PBO estimates program spending could be increased and/or revenues could be decreased by up to 1.3 per cent of GDP while maintaining long-term debt-to-GDP stability, while Finance Canada estimates there is fiscal room for policy measures of up to 1 per cent of GDP. Further, Finance Canada's estimates support PBO's conclusion that the federal fiscal structure was rendered sustainable by the Government's change to the Canada Health Transfer (CHT) announced in December 2011.

PBO is committed to supporting Parliament in exercising its oversight role in the Government of Canada's stewardship of public funds by ensuring budget transparency and promoting informed public dialogue. PBO therefore encourages parliamentarians—individually and/or through their committees—to request that Finance Canada provide the fiscal sustainability analyses of the provincial-territorial government sector that it has prepared.

Further, PBO encourages parliamentarians to request that Finance Canada fulfil the Auditor General's recommendation in its entirety to "provide from time to time an analysis for all governments combined, including the federal, provincial, and territorial governments, to give a total Canada perspective."[2]

Publishing assessments of the general government sector would bring Finance Canada's analysis in line with the practice of most member countries of the OECD that prepare sustainability assessments.[3] PBO also recommends that provincial-territorial assessments be included along with federal projections on an annual basis (rather than from "time to time"), in accordance with the guidance of the OECD that "fiscal projections should be prepared on an annual basis to draw attention to the long-term fiscal consequences of current policies and to eliminate discretion over when projections are produced."[4] Periodic analysis of the collective sustainability of all levels of government is particularly important in the context of major changes to programs which interact with provincial budgetary responsibilities, such as recent changes to the CHT.

[2] See *2012 Fall Report of the Auditor General of Canada*. Available at: http://www.oag bvg.gc.ca/internet/English/parl_oag_201210e-_37321.html.

[3] See *Fiscal Futures, Institutional Budget Reforms, and Their Effects: What Can Be Learned?* Available at: http://www.oecd.org/gov/budgetingandpublicexpenditures/46051529.pdf.

[4] *Ibid.*

## 1 Fiscal Sustainability Reporting

Consistent with its mandate, PBO provides annual reports to Parliament on the long-term sustainability of the nation's finances and trends in the national economy. PBO released its first Fiscal Sustainability Report (FSR) of the federal government in February 2010.[1] Because of the important interactions between federal policy and other levels of government, FSR 2011 and FSR 2012 broadened the sustainability analysis to include the provincial-territorial and local governments and public pension plans.[2]

The 2012 Fall Report of the Auditor General of Canada included a performance audit of Finance Canada's long-term fiscal sustainability analysis which concluded with the recommendation:

> The Department of Finance Canada should publish yearly the overall long-term fiscal sustainability analyses for the federal government and provide from time to time an analysis for all governments combined, including the federal, provincial, and territorial governments, to give a total Canada perspective.[3]

Finance Canada has partially responded to the Auditor General's recommendation by publishing its first fiscal sustainability report for the federal government: *Economic and Fiscal Implications of Canada's Aging Population*.[4] Finance Canada does not intend to act on the Auditor General's recommendation to include regular reports on the fiscal positions of provinces and territories and all governments combined.[5]

Long-term economic and fiscal projections are subject to considerable uncertainty. Assumptions for the economic outlook and future program parameters can significantly influence the projected path of a government's debt, especially over long time horizons. Transparent and comprehensive reporting of assumptions and methodologies, along with an open public dialogue, is essential to sound fiscal sustainability analysis.

Previously, PBO was the only organization reporting regularly on federal fiscal sustainability. With the release of Finance Canada's report, PBO is now able to compare its latest FSR 2012 projections and assumptions for the federal government with those of Finance Canada.

This note begins with a discussion of PBO's and Finance Canada's demographic and economic projections and assumptions in Section 2. Section 3 compares long-term fiscal outlooks. Section 4 compares assessments of federal fiscal sustainability and the effects of recent policy changes. Section 5 concludes with recommendations to further improve fiscal sustainability reporting.

## 2 Demographic and Economic Projections, Methodologies and Assumptions

PBO and Finance Canada use Statistics Canada's medium-growth population scenario in their respective demographic projections.[6] As a result, the projected ratio of working-age Canadians (those aged 15-64) to those 65 and over is the same for both PBO and Finance Canada.

Table 2-1 presents some of the key assumptions underlying the medium-growth population projection published by Statistics Canada.

[1] http://www.pbo-dpb.gc.ca/files/files/Publications/FSR_2010.pdf.
[2] http://www.pbo-dpb.gc.ca/files/files/Publications/FSR_2011.pdf and http://www.pbo-dpb.gc.ca/files/files/FSR_2012.pdf.
[3] See Chapter 7, p. 23, available at: http://www.oag-bvg.gc.ca/internet/docs/parl_oag_201210_07_e.pdf.
[4] http://www.fin.gc.ca/pub/eficap-rebvpc/eficap-rebvpc-eng.pdf.
[5] Finance Canada's response to the OAG's recommendation: "Given that the federal government is not accountable for the fiscal situation of the provinces and territories, the Department will publish long-term fiscal analyses for the federal government on an annual basis […]" see Chapter 7, p. 23, available at: http://www.oag-bvg.gc.ca/internet/docs/parl_oag_201210_07_e.pdf.

[6] Available at: http://www.statcan.gc.ca/pub/91-520-x/91-520-x2010001-eng.pdf. Both Finance Canada and PBO have updated their projections to reflect the most recent population data available.

**Table 2-1**

**Demographic Projections**

| | | 2011 | 2030 | 2050 |
|---|---|---|---|---|
| **Life expectancy at birth** | Female | 83.8 | 86.5 | 88.9 |
| | Male | 79.3 | 83.0 | 86.0 |
| **Total Fertility Rate*** | | 1.7 | 1.7 | 1.7 |
| **Immigration Rate**** | | 7.3 | 7.5 | 7.5 |

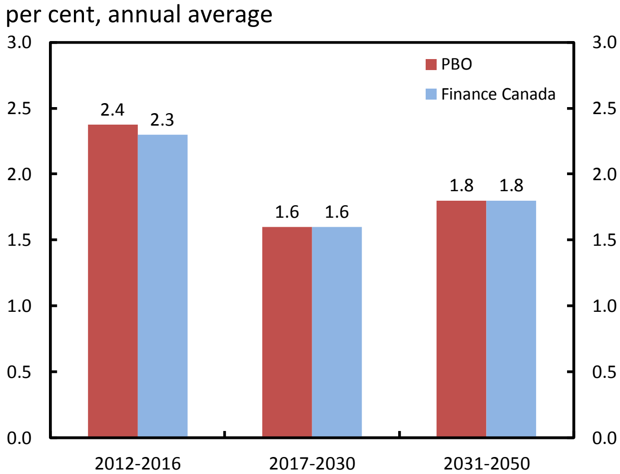
Source: Statistics Canada.
Note: *Number of children per woman of child-bearing age.
**Per thousand persons

PBO and Finance Canada also follow a similar approach to projecting real GDP. Both PBO and Finance Canada use a growth accounting approach to determine real GDP growth, which is a function of growth in the labour supply (total hours worked) and labour productivity growth. Both organizations project real GDP growth to average 1.6 and 1.8 per cent annually over the periods 2017-2030 and 2031-2050, respectively (Figure 2-1).[7]

**Figure 2-1**

**Comparison of Real GDP Growth Projections**

per cent, annual average




Sources: Office of the Parliamentary Budget Officer; Finance Canada.
Note: Growth rates are rounded to the nearest tenth of a percentage point

The similar long-term outlooks for real GDP growth reflect similar assumptions for labour productivity growth and projected growth in labour supply (Table 2-2). Both PBO and Finance Canada assume labour productivity grows over the projection at its historical annual average of 1.2 per cent.[8] PBO and Finance Canada also use similar models for projecting labour supply growth, which both organizations project to average 0.4 and 0.6 per cent annually over the periods 2017-2030 and 2031-2050, respectively.

**Table 2-2**

**Comparison of Real GDP Growth Projections and Components**

per cent, annual average

| | 2012-2016 | 2017-2030 | 2031-2050 |
|---|---|---|---|
| **PBO** | | | |
| **Real GDP growth** | **2.4** | **1.6** | **1.8** |
| Labour supply growth | 1.0 | 0.4 | 0.6 |
| Labour productivity | 1.3 | 1.1 | 1.2 |
| **Finance Canada** | | | |
| **Real GDP growth** | **2.3** | **1.6** | **1.8** |
| Labour supply growth | 1.1 | 0.4 | 0.6 |
| Labour productivity | 1.2 | 1.2 | 1.2 |
| **Difference** | | | |
| **Real GDP growth** | **0.1** | **0.0** | **0.0** |
| Labour supply growth | -0.1 | 0.0 | 0.0 |
| Labour productivity | 0.1 | -0.1 | 0.0 |

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

That being said, the underlying growth composition of the labour supply differs somewhat between PBO and Finance Canada. These differences are due to different assumptions and model specifications, although both PBO and Finance Canada use a birth cohort model to estimate and project labour force participation rates and, in the case of PBO, labour force

[7] Both PBO's and Finance Canada's projections assume that there is no feedback to the economy from public sector debt accumulation. Rising debt-to-GDP ratios could reduce GDP by crowding out private sector investment and/or putting upward pressure on interest rates. Incorporating these effects would accelerate projected increases in debt-to-GDP ratios.

[8] PBO and Finance Canada calculate the historical average over the periods 1976-2012 and 1972-2011, respectively. Although some research suggests that labour productivity growth would rise due to capital deepening and increased incentives for younger workers to invest in human capital, other research finds that labour productivity could decline across older age groups thus suggesting that population ageing will put downward pressure on productivity. By assuming labour productivity growth returns to its long-term historical average, PBO has taken a neutral assumption with respect to the impact of population ageing on labour productivity growth.

employment rates by age and sex.[9] Further, both PBO and Finance Canada use similar models, excluding birth cohort effects, to estimate and project average hours worked by age and sex.

Over the long term, PBO projects average hours worked to remain relatively stable while Finance Canada projects a continued decline. This difference offsets PBO's larger projected decline in the participation rate, resulting in the same projected growth in labour supply (Table 2-3).

**Table 2-3**

**Comparison of Labour Supply Growth Projections and Components**

per cent, annual average

| | 2012-2016 | 2017-2030 | 2031-2050 |
|---|---|---|---|
| **PBO** | | | |
| **Labour supply growth** | **1.0** | **0.4** | **0.6** |
| Working-age population | 1.1 | 0.9 | 0.8 |
| Labour force participation | -0.4 | -0.6 | -0.2 |
| Unemployment rate | 0.1 | 0.0 | 0.0 |
| Average hours per worker | 0.2 | 0.0 | 0.0 |
| **Finance Canada** | | | |
| **Labour supply growth** | **1.1** | **0.4** | **0.6** |
| Working-age population | 1.1 | 1.0 | 0.8 |
| Labour force participation | 0.0 | -0.4 | -0.1 |
| Unemployment rate | 0.2 | 0.0 | 0.0 |
| Average hours per worker | -0.2 | -0.1 | -0.1 |
| **Difference** | | | |
| **Labour supply growth** | **-0.1** | **0.0** | **0.0** |
| Working-age population | 0.0 | -0.1 | 0.0 |
| Labour force participation | -0.4 | -0.2 | -0.1 |
| Unemployment rate | -0.1 | 0.0 | 0.0 |
| Average hours per worker | 0.4 | 0.1 | 0.1 |

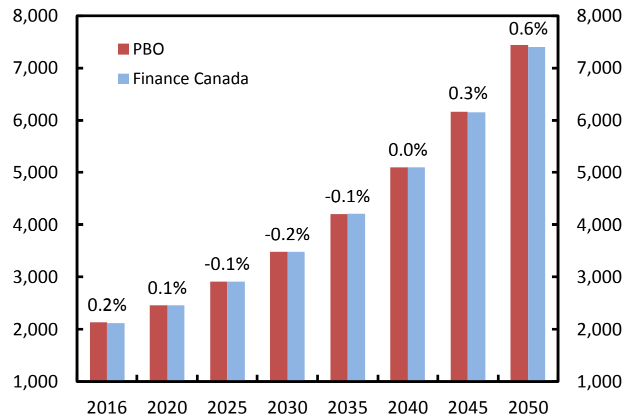
Sources: Office of the Parliamentary Budget Officer; Finance Canada.

In addition to the similarity of real GDP growth projections, the projections of nominal GDP (the broadest measure of the tax base) are also very close. Although not explicitly stated by Finance Canada, this likely reflects a GDP inflation projection comparable to an outlook for Consumer Price Index inflation that is consistent with the Bank of Canada's 2 per cent policy target (as is the case for PBO). Figure 2-2 compares PBO's and Finance Canada's projections of nominal GDP, including the difference in the projections as a per cent of the Finance Canada nominal GDP level projection.

**Figure 2-2**

**Comparison of Nominal GDP Level Projections**

billions of dollars




Sources: Office of the Parliamentary Budget Officer; Finance Canada.
Note: Data labels represent the difference, in percentage terms, between PBO's and Finance Canada's nominal GDP projections.

## 3 Fiscal Projections, Methodologies and Assumptions

PBO assesses long-term fiscal sustainability on a calendar year basis using net debt within Statistics Canada's preliminary Government Finance Statistics (GFS) framework, which is based on the Canadian System of National Accounts. This allows PBO to compare Canada's fiscal aggregates across other countries and to compare PBO's consolidated government long-term sustainability assessments with the assessments of international institutions such as the International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD). In contrast, Finance Canada reports the federal debt (accumulated deficit) on a fiscal year Public Accounts basis.[10]

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[9] See http://www.pbo-dpb.gc.ca/files/files/Publications/Potential-_CABB_EN.pdf and http://www.fin.gc.ca/pub/pdfs/wp2007-01e.pdf for more details.

[10] Net debt is calculated by subtracting financial assets from total liabilities (gross debt). The federal debt (accumulated deficit*)* concept further subtracts non-financial assets (tangible capital) from liabilities.

Although PBO and Finance Canada use different accounting frameworks, PBO is able to provide a comparison of the projections for federal debt and the fiscal gap, along with the underlying long-term budgetary trends and the assumptions used to produce them. PBO is also able to compare PBO and Finance Canada assessments of the effect on long-term sustainability of recent changes to the Canada Health Transfer (CHT), Old Age Security (OAS), and direct program expenses.

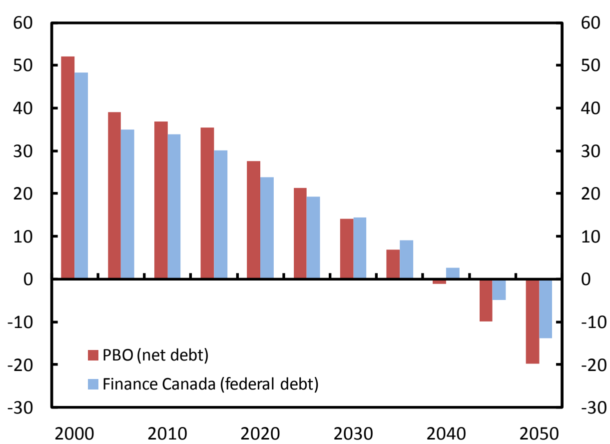
*Federal debt*

Figure 3-1 compares PBO's projection of federal debt to the projection published by Finance Canada. PBO's long-term projection of net debt returns to a net asset position in 2040. Finance Canada projects federal debt to reach an asset position slightly later, by 2045-46 (Finance Canada reports projections only at 5-year intervals).

**Figure 3-1**

**Comparison of Federal Government Debt**

per cent of GDP




Sources: Office of the Parliamentary Budget Officer; Finance Canada.
Note: PBO projections are on a National Accounts basis; Finance Canada projections are on a Public Accounts basis.

The path of the Government's debt is driven by the projections of future operating balances (revenues less program expenses) and interest rate assumptions, which are used to calculate public debt charges. The dynamics of government debt relative to GDP are determined by the size of the operating balance (as a share of GDP) relative to the difference between the effective interest rate on debt and the rate of GDP growth (i.e., the interest rate-growth rate differential). Since both PBO and Finance Canada project similar interest rate-growth differentials over the long term, differences in the projected dynamics of the Government's debt relative to the size of the economy largely reflect differences in projected operating balances.[11]

*Operating balance*

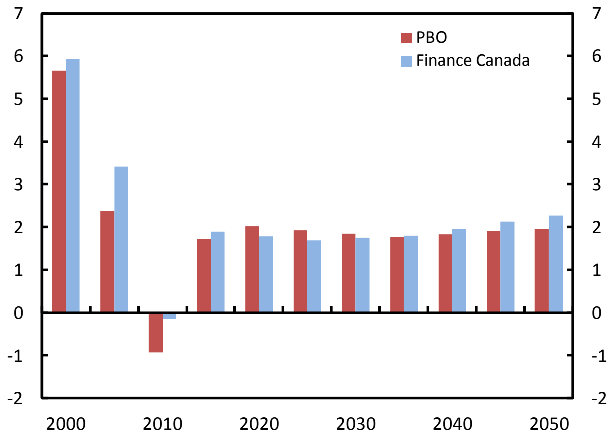
PBO's and Finance Canada's operating balance projections are compared in Figure 3-2. PBO's steeper decline in the debt-to-GDP ratio reflects larger operating surpluses until 2030 (driven by a higher assumed revenue-to-GDP ratio when the economy returns to full capacity). Beyond 2030, Finance Canada's projection of program expenses as a share of GDP declines to a greater extent than PBO's projection, resulting in a larger projected operating surplus relative to GDP for the remainder of the horizon.

[11] PBO's long-term interest rate assumption on interest-bearing debt (i.e., market and non-market debt combined) and average nominal GDP growth projection are 4.9 per cent and 3.8 per cent, respectively. Finance Canada projects both market and non-market debt individually—its long-term interest rate assumption for market debt is 5.0 per cent and its assumption for non-market debt is 5.1 per cent. Finance Canada's long-term average nominal GDP growth projection is 3.8 per cent.

**Figure 3-2**

**Comparison of Federal Operating Balance**

per cent of GDP




Sources: Office of the Parliamentary Budget Officer; Finance Canada.
Note: PBO projections are on a National Accounts basis; Finance Canada projections are on a Public Accounts basis.

Understanding the differences in the projected paths of the operating balances requires examining the underlying revenue and expenses projection in greater detail.

*The medium-term federal outlook*

PBO's long-term federal fiscal projections in FSR 2012 are extended from PBO's medium-term outlook published in the April 2012 *Economic and Fiscal Outlook* (EFO), while Finance Canada's report extends the outlook from the Budget 2012 fiscal planning framework.[12] The differences between the medium-term budgetary projections in the April 2012 EFO and Budget 2012 are small (Table 3-1).

**Table 3-1**

**Comparison of Federal Fiscal Projections for 2016**

per cent of GDP

| | PBO | Finance Canada |
|---|---|---|
| **Revenues** | **14.9** | **14.8** |
| Personal income tax | 7.6 | 7.4 |
| Corporate income tax | 1.7 | 1.9 |
| Goods and Services Tax | 1.7 | 1.8 |
| EI premium revenues | 1.3 | 1.1 |
| **Program expenditures** | **12.7** | **12.7** |
| Elderly benefits | 2.4 | 2.4 |
| Children's benefits | 0.7 | 0.7 |
| EI benefits | 0.9 | 0.9 |
| Canada Health Transfer | 1.6 | 1.7 |
| Canada Social Transfer | 0.6 | 0.6 |
| Fiscal transfers | 1.0 | 0.9 |
| **Direct program spending** | **5.5** | **5.5** |
| **Public debt charges** | **1.7** | **1.7** |
| **Budgetary balance** | **0.5** | **0.4** |
| **Federal debt** | **28.6** | **28.5** |

Sources: Office of the Parliamentary Budget Officer; Finance Canada.
Note: PBO projections are on a National Accounts basis; Finance Canada projections are on Public Accounts basis.

*Long-term federal revenue projection*

PBO assumes that once the economy has returned to its potential output, budgetary revenues (consisting of income and excise taxes, EI premiums, and other revenues) grow in line with nominal GDP, resulting in a constant share of 15.0 per cent of GDP. Over the long term, this reflects the assumption that tax policy parameters will be adjusted so that the "tax burden" (revenue relative to GDP) is the same as is reached at the end of the medium-term outlook when the economy has fully recovered.

Finance Canada assumes similarly that tax and other revenues (i.e. budgetary revenues excluding EI premiums) grow in line with nominal GDP. However, Finance Canada assumes EI premium rates are adjusted such that "EI revenues and expenditures break even over time (p. 59)." Together, the Finance Canada projection for budgetary revenues maintains a roughly constant 14.6 per cent share of GDP (Table 3-2).

Finance Canada's lower projection of revenues as a share of GDP is mostly a consequence of its lower medium-term outlook for EI revenue, which—

[12] PBO's medium-term projections used for the September 2012 FSR are available at: http://www.pbo dpb.gc.ca/files/files/Publications-/EFO_April_2012.pdf. Finance Canada's medium-term projections used for the October 2012 *Economic and Fiscal Impact of Canada's Aging Population* are available at: http://www.budget.gc.ca/2012/plan/pdf/Plan2012-eng.pdf.

because of a more optimistic unemployment rate projection—has a balanced EI operating account one year earlier than the PBO outlook (and therefore introduces reductions in the premium rate one year earlier).

**Table 3-2**

**Comparison of Federal Revenues**

per cent of GDP

| | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |
|---|---|---|---|---|---|---|---|
| **PBO** | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 |
| **Finance Canada** | 14.6 | 14.6 | 14.6 | 14.6 | 14.6 | 14.5 | 14.5 |

Sources: Office of the Parliamentary Budget Officer; Finance Canada.
Note: PBO projections are on a National Accounts basis; Finance Canada projections are on a Public Accounts basis.

*Long-term federal program expenses projection*

For program expenses beyond the medium term, PBO and Finance Canada both use a similar projection framework. However, differences in key assumptions cause projected program expenses to diverge modestly over the long term (Table 3-3).

**Table 3-3**

**Comparison of Federal Program Expenses**

per cent of GDP

| | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |
|---|---|---|---|---|---|---|---|
| **PBO** | 13.0 | 13.1 | 13.1 | 13.2 | 13.2 | 13.1 | 13.0 |
| **Finance Canada** | 12.8 | 12.9 | 12.8 | 12.8 | 12.6 | 12.4 | 12.3 |

Sources: Office of the Parliamentary Budget Officer; Finance Canada.
Note: PBO projections are on a National Accounts basis; Finance Canada projections are on a Public Accounts basis.

PBO and Finance Canada grow transfers to individuals by assumed program parameters and demographic shifts in recipient populations. Transfers to other levels of government are projected using legislated funding and enrichment formulas. A summary of the differences between PBO's and Finance Canada's assumptions is provided in Table 3-4.

**Table 3-4**

**Comparison of Long-term Fiscal Assumptions**

| | PBO | Finance Canada |
|---|---|---|
| **Elderly benefits** | Grow with recipient population, CPI inflation, and an enrichment factor equal to half of GDP growth. | Grow with recipient population and inflation. No enrichment factor. |
| **Employment Insurance benefits** | Grow in line with average earnings and the number of projected beneficiaries. | Grow in line with average earnings and the number of projected beneficiaries. |
| **Children's benefits** | Grow with nominal GDP per capita and the population under 18 years of age. | Grow with inflation and the population under 18 years of age. |
| **Major transfers to other levels of government** | CHT grows by a 3-year moving average of nominal GDP. CST grows by 3 per cent per year. Fiscal transfers grow in line with nominal GDP. | CHT grows by a 3-year moving average of nominal GDP. CST grows by 3 per cent per year. Fiscal transfers grow "as per formulas linked to nominal GDP growth." |
| **Direct program expenses** | Grow in line with nominal GDP. | Grow in line with nominal GDP. |

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

PBO's and Finance Canada's assumptions for program expenses over the long term are similar with two exceptions: (1) PBO assumes elderly benefits (consisting of OAS, Guaranteed Income Supplement (GIS), and the Allowance) will be enriched in excess of CPI inflation by half the growth rate of real GDP, and (2) PBO assumes children's benefits grow in line with nominal GDP growth. Finance Canada assumes no elderly benefits enrichment and assumes children's benefits grow only with inflation. These two differences in assumptions are responsible for most of the modest decline of Finance Canada's long-term program expenses projection relative to PBO's projection.

Table 3-5 shows the components of program expenses over the projection horizon as a share of GDP. PBO and Finance Canada have the same projections for transfers to other levels of government and direct program expenses (reflecting the same assumptions). PBO's projection for elderly benefits in 2050 is 0.4 percentage points higher than Finance Canada's projection. PBO's projection for children's benefits is 0.1 percentage points higher than Finance Canada's projection. The remaining difference is the effect of different underlying economic projections (in particular the effect of different labour market projections on EI benefits).

**Table 3-5**

**Comparison of Long-term Expenses Projections**

per cent of GDP

| | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |
|---|---|---|---|---|---|---|---|
| **Elderly benefits** | | | | | | | |
| PBO | 2.6 | 2.7 | 2.8 | 2.9 | 2.9 | 2.8 | 2.8 |
| Finance Canada | 2.5 | 2.7 | 2.7 | 2.7 | 2.6 | 2.5 | 2.4 |
| **Children's benefits** | | | | | | | |
| PBO | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 |
| Finance Canada | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 |
| **EI benefits** | | | | | | | |
| PBO | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| Finance Canada | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| **Major transfers to other levels of government** | | | | | | | |
| PBO | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.1 | 3.1 |
| Finance Canada | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.1 | 3.1 |
| **Direct program expenses** | | | | | | | |
| PBO | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| Finance Canada | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |

Sources: Office of the Parliamentary Budget Officer; Finance Canada.
Note: PBO projections are on National Accounts basis; Finance Canada projections are on Public Accounts basis.

*Effective interest rate on federal government debt*

PBO calculates the effective interest rate on federal debt as the interest on public debt divided by interest-bearing debt (which includes both market and non-market liabilities) of the previous year. PBO projects the federal effective interest rate to increase from 4.4 per cent in 2016 to 4.9 per cent in 2019, and is assumed to remain constant thereafter.

Finance Canada projects market debt and non-market debt individually. It assumes that market debt is subject to an average interest rate which gradually increases from 4 per cent in 2016-17 to 5 per cent by 2026-27 and remains constant thereafter. The average interest rate on non-market debt is assumed to remain constant at 5.1 per cent over the projection horizon.

## 4 Fiscal Sustainability and the Impact of Key Policy Changes

PBO's and Finance Canada's long-term projections of federal government debt relative to GDP indicate that the federal fiscal structure is sustainable over the long term. That is, the federal government's debt does not ultimately grow faster than the economy.

PBO and Finance Canada also present estimates of the federal fiscal room available to reduce revenues, increase spending on programs, or some combination of both, while maintaining fiscal sustainability. PBO's estimate of federal fiscal room is based on the fiscal gap, which is measured as the permanent change in the operating balance (relative to the baseline projection) expressed as a share of GDP which stabilizes the debt-to-GDP ratio at its current level over the long term. Finance Canada's estimate of federal fiscal room is referred to as "fiscal flexibility" but is measured in the same manner as PBO's fiscal gap (i.e., the permanent change in the operating balance, relative to the status quo projection, which stabilizes the Government's debt-to-GDP ratio at its 2016-17 level over the long term).

Finance Canada's estimate of federal fiscal room (i.e., a negative fiscal gap) indicates that the projected federal operating balance could be reduced by 1 per cent of GDP (by reducing revenues and/or increasing program expenses) annually beginning in 2017-18 while maintaining a debt-to-GDP ratio close to 28.5 per cent (the 2016-17 level) through 2050-51.

In FSR 2012, PBO published fiscal gap estimates for base year 2011 over 25-, 50-, and 75-year projection horizons. To put PBO's estimate on a projection horizon directly comparable to Finance Canada's estimate, PBO has re-calculated its federal fiscal gap using 2016 as the base year and 2050 as the endpoint year. PBO's estimate of the federal fiscal gap indicates the federal operating balance could be reduced by 1.3 per cent of GDP in 2017-18 while maintaining a stable debt-to-GDP ratio through 2050. PBO's and Finance Canada's fiscal gap estimates are summarized in Table 4-1.

**Table 4-1**

**Estimates of Federal Fiscal Room, 2017 to 2050**

per cent of GDP

| | Base year 2016 |
|---|---|
| **PBO** | 1.3 |
| **Finance Canada** | 1 |

Sources: Office of the Parliamentary Budget Officer; Finance Canada.
Note: PBO projections are on a National Accounts basis; Finance Canada projections are on a Public Accounts basis.

PBO's and Finance Canada's estimates of federal fiscal room are broadly comparable. Without additional data and information from Finance Canada, PBO is unable to identify the exact source of the discrepancy in fiscal gap estimates. That said, small differences in projected operating balances relative to GDP and/or effective interest rate-GDP growth rate differentials could account for this discrepancy.

*Impact of Key Policy Changes on Federal Fiscal Sustainability*

Both PBO and Finance Canada provide an assessment of the impact of recent policy changes on federal fiscal sustainability.

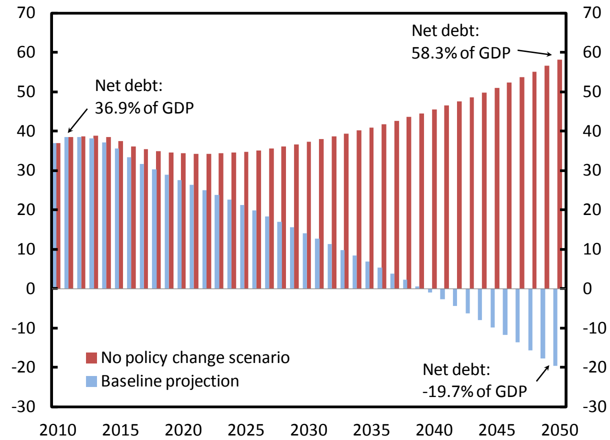
First, the Government of Canada announced in December 2011 that the Canada Health Transfer (CHT) would continue to grow at 6 per cent annually until 2016-17 and would subsequently grow in line with a 3-year moving average of nominal GDP growth. Second, Budget 2012 reduced planned direct program expenses (in addition to maintaining the existing freeze on operating expenses). Third, Budget 2012 announced that the age of eligibility for the OAS program would be increased from 65 to 67 starting in 2023, with full implementation by January 2029. PBO included estimates of the impact of these policy changes on the federal fiscal gap in FSR 2012.

Finance Canada's report provides an illustration of the impact of these key policy changes, comparing the Government's status quo projection with a scenario that does not include these policy actions.[13] For comparability, PBO has produced the same chart based on its projections (Figure 4-1).

**Figure 4-1**

**Impact of Key Policy Changes on Federal Government Debt**

per cent of GDP




Source: Office of the Parliamentary Budget Officer.

Figure 4-1 shows that the policy changes combined have reduced the federal net debt-to-GDP ratio in 2050 by 78 percentage points. In other words, in the absence of policy changes, PBO projects that the federal debt-to-GDP ratio would have increased to 58.3 per cent in 2050. The largest contributor to the reduction in the federal debt ratio is the planned reductions to direct program expenses—accounting for 52 per cent of the reduction in the federal debt ratio in 2050 (Table 4-2). Reducing the CHT escalator and increasing the age of OAS eligibility account for 36 per cent and 12 per cent, respectively, of the reduction in net debt relative to GDP in 2050.

[13] See *Economic and Fiscal Implications of Canada's Aging Population*, p. 47, available at: http://www.fin.gc.ca/pub/eficap-rebvpc/eficap-rebvpc-eng.pdf.

**Table 4-2**

**Comparison of the Impact of Key Policy Changes on Federal Debt in 2050**

per cent contribution to change in federal debt-to-GDP in 2050

| | PBO | Finance Canada |
|---|---|---|
| **CHT escalator** | 36 | 47 |
| **Spending restraint** | 52 | 43 |
| **OAS eligibility** | 12 | 10 |

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

Finance Canada estimates that the federal debt-to-GDP ratio would have reached 54.6 per cent in 2050-51 without the Government's policy actions—a difference of 68 percentage points compared to its status quo projection. Finance Canada estimates that the largest contributor to the change is the CHT escalator, which accounts for 47 per cent of the difference in the federal debt outlook in 2050-51. The policy actions related to spending restraint and changes to the OAS age of eligibility account for 43 percent and 10 per cent, respectively, of the total change in federal debt to GDP ratio in 2050-51.

Differences in the estimated contributions of policy changes to the reduction in federal government debt in 2050 likely reflect different assumptions related to the amount of spending restraint. For example, PBO measures the spending restraint related to the freeze on operating expenses relative to a projection based on increases in these expenses linked to inflation and population growth.[14] Despite these differences, the estimates of both PBO and Finance Canada suggest the federal fiscal structure became sustainable following the change to the CHT escalator.

[14] In its 2012 FSR, PBO estimated the impact of these policy changes on the 75-year federal fiscal gap. Based on a longer projection horizon and the underlying federal net debt-to-GDP projections, the policy change to the CHT makes a larger contribution to the overall debt reduction (59 per cent), while federal spending restraint and the increase in OAS age of eligibility contribute 33 and 8 per cent, respectively. In the absence of the policy change to the CHT, its continued growth at 6 per cent annually—roughly 2 percentage points faster than nominal GDP growth—would result in an ever-increasing share of nominal GDP. In contrast, in the absence of the other policy changes, increased spending in these areas relative to GDP would result in approximately the same percentage point change on an annual basis (i.e., a level shift in projected spending relative to GDP).

## 5 Additional Recommendations for Fiscal Sustainability Reporting

Finance Canada's report is a welcome contribution to the discussion of the demographic challenges facing the Canadian economy and the sustainability of the federal government's finances over the long term; however, examining the federal government in isolation falls short of the Government's Budget 2007 commitment to provide a "comprehensive fiscal sustainability and intergenerational report" including "broad analysis of current and future demographic changes and the implication of these changes for Canada's long-run economic and fiscal outlook."[15]

PBO agrees with the Government's view expressed in its commitment in Budget 2007 that "sustainable public finances at all orders of government is a critical condition to achieving intergenerational equity and strong and sustained economic growth." PBO believes that fiscal transparency and the ability of the Government to meet the challenges of ageing demographics would be improved if parliamentarians encouraged Finance Canada to act on the Auditor General's recommendation in its entirety by publishing long-term fiscal analyses of provinces and territories, as well as the consolidated government.

Additionally, PBO would be able to better provide independent analysis on the long-term sustainability of the public finances (including a more detailed comparison of PBO's and Finance Canada's long-term economic and fiscal projections) if Finance Canada's future publications were expanded to offer a more specific methodology discussion, including details on the fiscal gap estimate and its sensitivity to policy changes and projection assumptions, as well as greater information on revenue, expenditure, and debt projections (including time series for each year over the projection horizon), in particular the stocks of interest-bearing liabilities and net debt which underlie the projection of federal debt.

[15] See p. 155 in Budget 2007, available at: http://www.budget.gc.ca/2007/pdf/bp2007e.pdf.