



Economic and Fiscal Outlook

April 2019



OFFICE OF THE PARLIAMENTARY BUDGET OFFICER
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The Parliamentary Budget Officer (PBO) supports Parliament by providing economic and financial analysis for the purposes of raising the quality of parliamentary debate and promoting greater budget transparency and accountability.

Consistent with the Parliamentary Budget Officer's legislated mandate, this report provides PBO's economic and fiscal outlook. This report incorporates data available up to and including 12 April 2019. Unless otherwise specified, all rates are reported at annual rates.

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Executive Summary

PBO projects growth in the Canadian economy to slow from 1.8 per cent in 2018 to 1.6 per cent in 2019. This slowdown primarily reflects the impacts of transitory factors related to the collapse in Canadian crude oil prices in late 2018.

As these impacts dissipate, we project that quarterly real GDP growth will rebound through 2020 as business and residential investment recover and exports provide a boost. Economic growth is then projected to downshift somewhat—to 1.7 per cent in 2021 and 1.6 per cent in 2022—as growth in exports and business investment moderates.

Summary Table 1 Economic outlook

%	2018	Projection		
		2019	2020	2021-2023
Real GDP growth	1.8	1.6	1.9	1.6
Consumer price inflation	2.2	1.7	2.0	2.1
Unemployment rate	5.8	5.9	5.7	5.4
Bank of Canada policy rate	1.75	2.00	2.75	2.75

Sources: Statistics Canada and Parliamentary Budget Officer.

Note: The Bank of Canada policy rate is presented on an end-of-period basis.

With the economy rising above potential GDP and inflation edging above target, we assume that the Bank of Canada will resume raising its policy rate in October, increasing it by 25 basis points and then gradually raising it until it reaches the neutral rate of 2.75 per cent in mid-2020.

PBO's economic outlook reflects the view that possible upside and downside outcomes are, broadly speaking, equally likely. In terms of downside risks, we continue to judge that the most important risk is weaker export performance due to rising protectionism in global trade policies. In terms of upside risks, we maintain that the most important risk is stronger household spending fuelled by increased household indebtedness.

PBO's fiscal outlook accounts for all policy actions taken since the 2018 Fall Economic Statement, which amount to \$27.0 billion over 2018-19 to 2023-24 (\$4.5 billion per year, on average). Our projections reflect PBO's own independent cost estimates for 11 measures included in Budget 2019. Altogether, PBO's costing of new measures is \$0.3 billion (1 per cent) higher than the Government's estimates provided in Budget 2019.

For 2018-19, we expect that the budgetary balance will show a deficit of \$15.7 billion (0.7 per cent of GDP). We project the budgetary deficit to increase to \$22.3 billion in 2020-21 due, in part, to foregone revenues from introducing accelerated expensing of capital investment for businesses.

The budgetary deficit is then projected to decline to \$11.9 billion (0.4 per cent of GDP) in 2023-24 as growth in the Government's personnel costs (mostly related to pension liabilities) is restrained. We project the federal debt-to-GDP ratio to decline over the medium term, falling to 28.9 per cent in 2023-24.

Summary Table 2 Fiscal outlook

<i>\$ billions</i>	Projection						
	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Budgetary revenues	311.2	330.6	338.7	350.4	365.1	379.5	393.1
Program expenses	308.3	323.0	332.3	345.0	350.0	359.9	371.2
Public debt charges	21.9	23.4	24.1	27.6	30.3	32.2	33.7
Total expenses	330.2	346.3	356.4	372.6	380.3	392.1	405.0
Budgetary balance	-19.0	-15.7	-17.7	-22.3	-15.2	-12.6	-11.9
Federal debt	671.3	686.5	704.2	726.4	741.6	754.2	766.1
Federal debt (% of GDP)	31.3	31.0	30.8	30.5	30.0	29.4	28.9

Sources: Statistics Canada, Finance Canada and Parliamentary Budget Officer.

Without further policy actions, and based on the uncertainty surrounding our economic outlook, we estimate that there is approximately a 15 per cent chance that the budget will be balanced or in surplus in 2021-22. The probability of budgetary balance/surplus rises to 30 per cent in 2023-24. In addition, we estimate it is likely that the federal debt-to-GDP ratio will be below the Government's anchor level of 31.9 per cent over the period 2019-20 to 2023-24.

Budget 2019: Key Issues for Parliamentarians

Economic and fiscal outlook comparison

PBO's outlook for nominal GDP is \$4 billion lower annually, on average, over 2019 to 2023 compared to the private sector forecast in Budget 2019. This difference is due to GDP inflation and real GDP growth in the fourth quarter of 2018 that was weaker than anticipated in Finance Canada's survey of private sector forecasters.

PBO's estimate of the budgetary deficit in 2018-19 (\$15.7 billion) is \$0.8 billion higher compared to Budget 2019. Our higher deficit estimate reflects lower expected revenue in 2018-19.

Over 2019-20 to 2023-24, PBO is projecting budgetary deficits that are \$0.7 billion higher per year, on average, compared to Budget 2019. Our higher deficit forecast over this period reflects lower GST and non-resident income tax revenues as well as higher operating expenses.

Budget-Estimates alignment

The Government made significant changes to the Estimates process last year with the goal to better align the Estimates with the budget. To address concerns raised by parliamentarians last year, the 2019-20 Main Estimates creates individual votes within departments and agencies for Budget 2019 measures. While this is an important improvement to the process, it does not address the issue of parliamentarians voting on items which have yet to be scrutinized or refined by the Treasury Board.

Operating expense details

Budget 2019 provides information on key growth components within Finance Canada's outlook for operating expenses. The disclosure of information related to departmental expenses in Budget 2019 is a step forward but is less than ideal.

Parliamentarians may wish to seek more quantifiable details on the major cost components within Finance Canada's outlook for operating expenses, especially for pension and benefit expenses.

Non-announced measures

Budget 2019 provisions -\$3.8 billion for non-announced measures. Explicit reporting of these measures is an improvement upon prior practice, under which unannounced measures were included with other fiscal developments. The negative amount indicates a net source of funds, which suggests either increased taxes and/or reductions in expenses.

Budget 2019 funding for non-announced measures includes "provisions for anticipated Cabinet decisions not yet made". However, this masks important details on the source of funds for up to \$3.9 billion in support for farmers in supply managed sectors, as well as from anticipated revenue due to limiting benefits of employee stock option deductions for high-income individuals.

Given their materiality, parliamentarians may wish to seek quantifiable details regarding the spending envelopes for non-announced measures in Budget 2019, particularly the amounts allocated to future Cabinet funding decisions.

The Government's fiscal anchors

PBO has been monitoring the Government's progress in meeting the two fiscal anchors it identified in 2015: balancing the budget in 2019-20 and continuing to reduce the federal debt-to-GDP ratio throughout its mandate.

Budget 2019 does not mention the Government's commitment to balancing the budget in 2019-20 nor does it mention committing to return to a balanced budget. That said, it does note that the federal debt-to-GDP ratio is projected to decline continuously over the projection horizon.

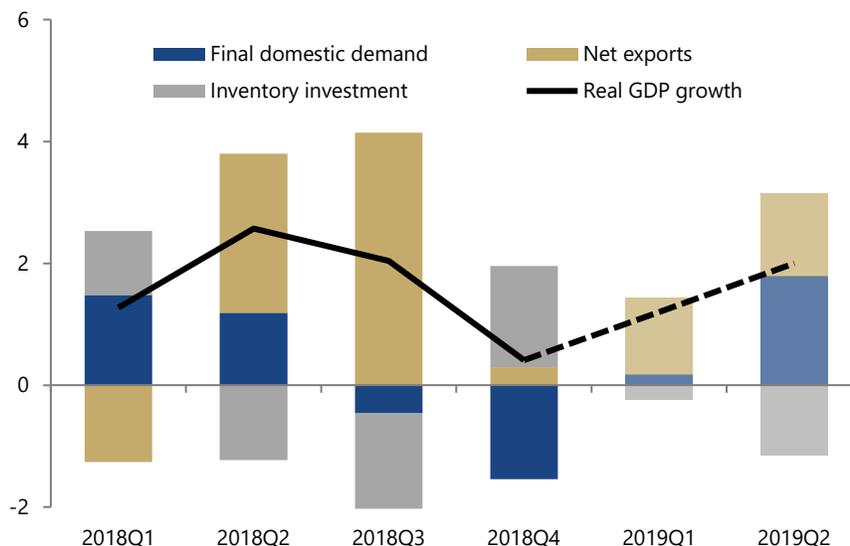
Without further policy actions, and based on the uncertainty surrounding our economic outlook, we estimate there is a near-zero likelihood that the budget would be balanced in 2019-20 and an 80 per cent likelihood that the federal debt ratio would be below the Government's anchor of 31.9 per cent of GDP in 2020-21.

Parliamentarians may wish to request regular and realistic reporting on the Government's progress against consistent and measurable fiscal anchors in its budgets and Fall Economic Statements.

Economic Outlook

Figure 1 Economic developments in Canada

Contributions to real GDP growth, percentage points



Sources: Statistics Canada and Parliamentary Budget Officer.

Growth in the Canadian economy slowed sharply in the final quarter of 2018 as export performance stalled and both residential and business investment declined. Based on our estimate of potential GDP, the economy was operating slightly (0.2 per cent) below its sustainable productive capacity in the fourth quarter.

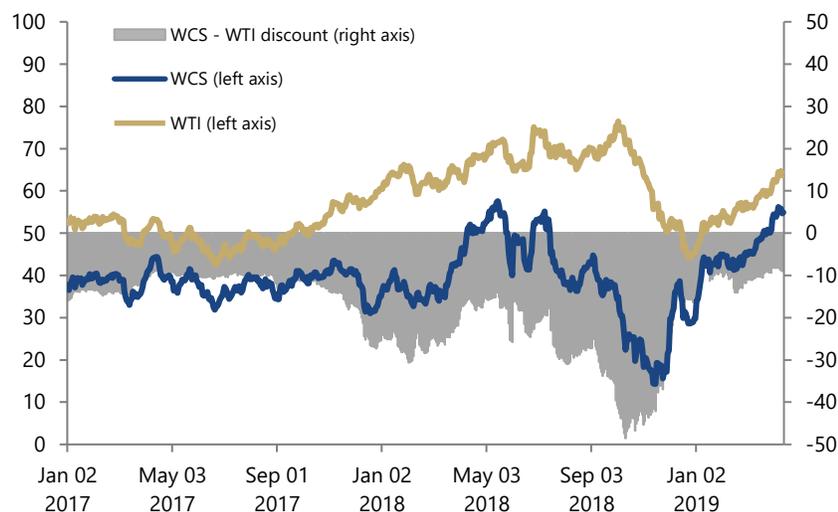
While we expected slower growth following the collapse of Western Canadian Select oil prices in the fourth quarter, the slowdown was more abrupt than anticipated in our February monitoring¹ due to sharper declines in investment, as well as weaker consumer spending.

Based on recent data, we expect real GDP growth to remain subdued in the first quarter of 2019. This weakness reflects, in part, the curtailment of oil production in Alberta and the impact of the partial shutdown of the U.S. government. We estimate that the curtailment and U.S. shutdown reduced real GDP growth in the first quarter by 0.5 percentage points and 0.2 percentage points, respectively.

We expect real GDP growth to rebound to 2.0 per cent in the second quarter as the impacts of the oil production curtailment and U.S. government shutdown dissipate and business investment surges, contributing 0.7 percentage points to growth in the quarter.

Figure 2 Canadian and U.S. crude oil prices

Crude oil prices, US\$ per barrel



Sources: CME Group and Parliamentary Budget Officer.

Note: WTI refers to West Texas Intermediate; WCS refers to Western Canadian Select. The period shown covers 2 January 2017 to 12 April 2019.

The price of West Texas Intermediate (WTI) crude oil fell from US\$76 per barrel in October to US\$44 at the end of December largely due to excess supply in global markets. WTI prices have since picked up considerably, reaching US\$64 in early April, reflecting the efforts of major oil suppliers, including OPEC and Russia, to curb production.

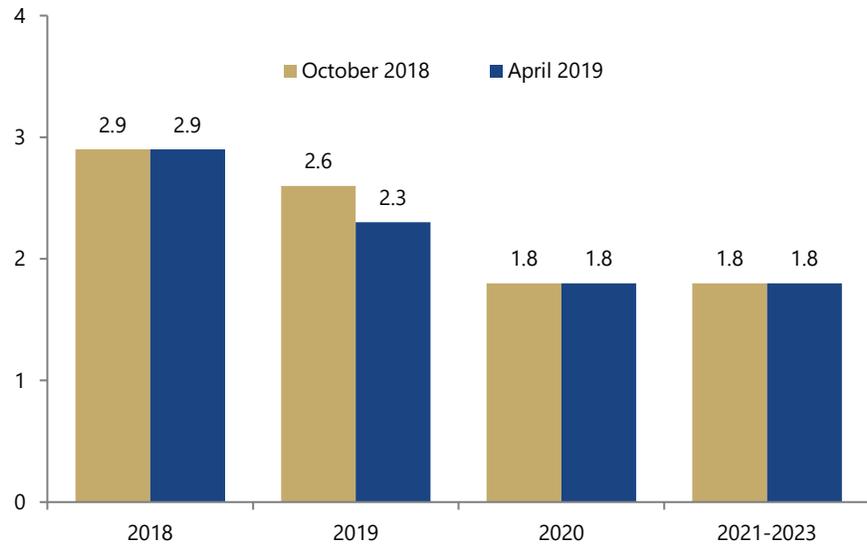
Following the Government of Alberta's curtailment that was introduced in early December, the price of Western Canadian Select (WCS) recovered from near-record lows. This recovery helped narrow the WTI-WCS differential to US\$8 per barrel in April from US\$49 in October.

We project WTI oil prices to rise to US\$66 per barrel by the end of 2023. This is US\$6 per barrel lower, on average, than our October outlook. However, our outlook for WCS oil prices has been revised up by US\$2 per barrel, with WCS rising to US\$44 by the end of 2023. The WTI-WCS differential is projected to average US\$20 over 2019 to 2023.

Our outlook for energy prices is down 5 per cent, on average, over 2019 to 2023 compared to October. We have also revised up our outlook for non-energy commodity prices by 4 per cent, on average. Overall, our outlook for the Bank of Canada's commodity price index is 1 per cent lower over 2019 to 2023 compared to October.

Figure 3 External economic outlook

U.S. real GDP growth, per cent



Sources: Bureau of Economic Analysis and Parliamentary Budget Officer.

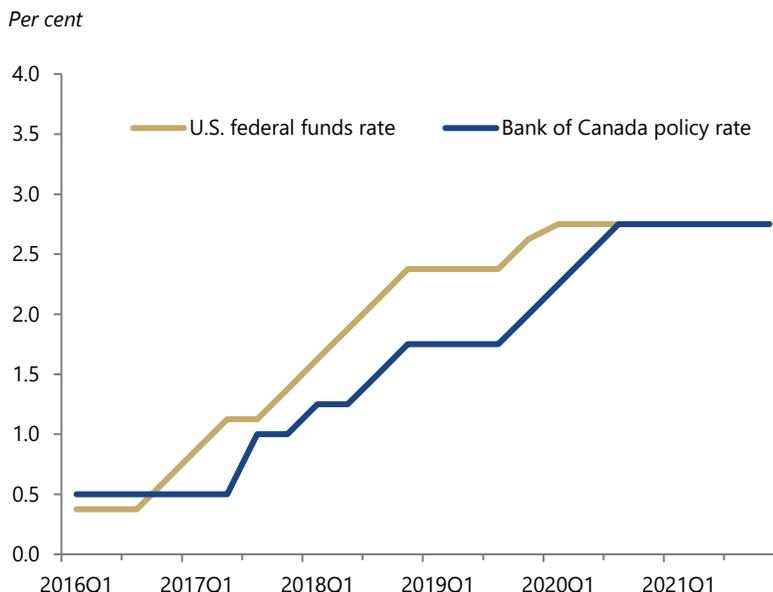
In its April 2019 World Economic Outlook, the International Monetary Fund (IMF) projected that global economic growth will continue to slow, falling to 3.3 per cent in 2019 from 3.6 per cent in 2018. The IMF projects global growth to pick up in 2020, returning to 3.6 per cent. The IMF continues to flag downside risks related to trade negotiations and financial market sentiment.

We project U.S. real GDP growth to moderate from 2.9 per cent in 2018 to 2.3 per cent in 2019 as growth in business investment and exports slow. This is 0.3 percentage points lower than our October outlook, largely due to weaker-than-expected first quarter real GDP growth. Over the medium term (2020 to 2023), we continue to project U.S. real GDP growth to average 1.8 per cent annually, which is broadly consistent with external projections.²

With solid U.S. growth and the Canadian dollar fluctuating around 75-76 US cents, we project quarterly growth in Canada’s non-energy export volumes to average 2.0 per cent over 2020 to 2023.³

As Alberta’s oil production curtailment unwinds over the course of the year and global oil prices continue to firm, we project that Canadian energy export volumes will begin to pick up in 2020, growing at 1.5 per cent, quarterly, on average, over 2020 to 2023.

Figure 4 Monetary policy assumptions



Sources: Bank of Canada, Federal Reserve Board and Parliamentary Budget Officer.

Note: The projection period covers 2019Q2 to 2021Q4. The series are presented on an end-of-period basis.

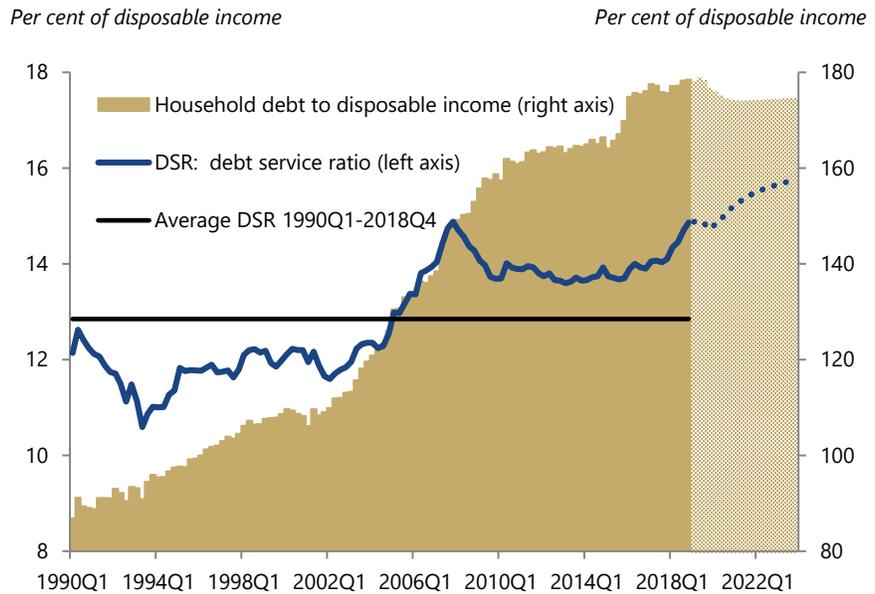
We expect the Bank of Canada and U.S. Federal Reserve to continue increasing policy interest rates to their “neutral” level.⁴ However, given downside risks to the global economy, we assume that the Bank of Canada and U.S. Federal Reserve will gradually raise their policy rates going forward.

We assume that the Bank of Canada will resume raising its policy rate in October, increasing it by 25 basis points to 2.0 per cent, and then follow with 25-basis point hikes every quarter thereafter until it reaches the neutral rate of 2.75 per cent in July 2020.⁵ We assume that the Federal Reserve will increase its policy rate by 25 basis points in October and reach its neutral rate of 2.75 per cent in early 2020.⁶

Our interest rate outlook (see Appendix A) takes into consideration the recent yield curve inversion both in Canada and in the U.S. as rates on long-term (10-year) government bonds dipped below short-term (3-month) treasury bill yields.

This inversion primarily reflects financial market concerns about global economic weakness, with the expectation that policy interest rates will need to be cut in the future. As these concerns diminish and the term premium decompresses, longer-term interest rates are projected to rise more than short rates, re-establishing the yield curve’s upward slope.⁷

Figure 5 Household indebtedness and consumer spending



Sources: Statistics Canada and Parliamentary Budget Officer.

Note: The projection period covers 2019Q1 to 2023Q4.

Growth in real consumer spending has moderated significantly since mid-2017 as household indebtedness remained at near-record levels. Rising interest rates have slowed the flow of household credit, particularly for mortgage debt. Further, increases in the market value of households' assets have trended down over the same period.

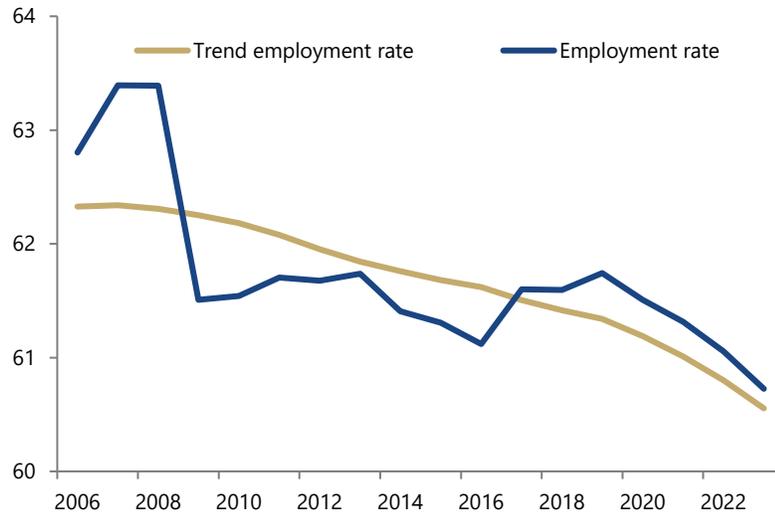
We project real consumer spending to grow by 1.6 per cent annually over 2019 to 2023, which is significantly slower than average annual growth of 2.5 per cent observed over the past five years. Household indebtedness is expected to decline modestly and then stabilize around 175 per cent of household disposable income.

Households' debt service ratio (DSR) has increased such that for every \$100 of disposable income, households had \$14.87 of debt payments (required principal plus interest) in the fourth quarter of 2018. The increase broadly coincides with the rise in the Bank of Canada's policy rate that commenced in the second half of 2017.

Debt servicing costs are projected to grow more slowly than disposable income in 2019 as the Bank of Canada maintains its policy rate at 1.75 per cent until October. As interest rates rise thereafter, we project the household DSR to reach 15.76 per cent by the end of 2023. Households that are required to devote a substantial portion of their disposable income to service their debts will become more vulnerable to adverse income and interest rate shocks, and more likely to be delinquent in their debt payments.

Figure 6 Labour market prospects

Employment rate, per cent



Sources: Statistics Canada and Parliamentary Budget Officer.

Note: The employment rate is defined as the number of employed persons relative to the total population 15 years of age and older. The projection period covers 2019 to 2023.

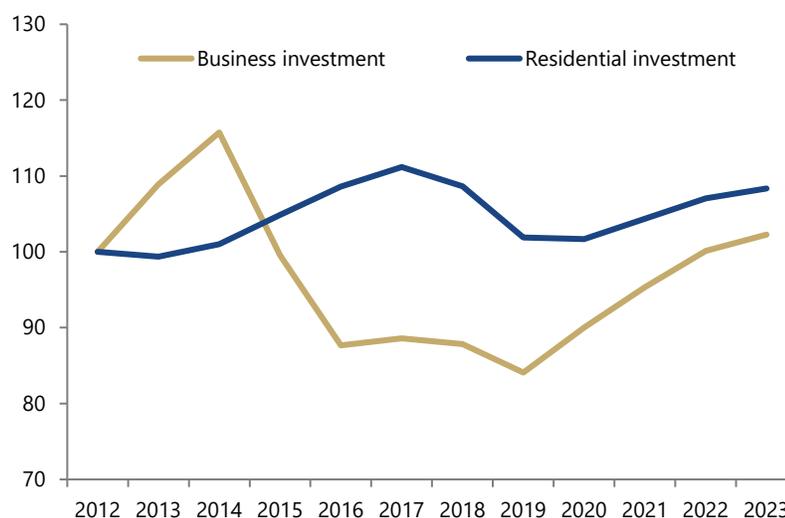
From October 2018 to March 2019, monthly (net) job gains averaged 35,500 and were driven by both part-time and full-time employment. The unemployment rate remained close to historically-low levels at the end of 2018 but ticked up to 5.8 per cent in the first quarter as more people were drawn into the labour force. Despite these robust job gains, total hours worked in March was only 0.7 per cent higher compared to October.

Over the medium term, we project that the employment rate will decline from its recent peak of 61.9 per cent in the first quarter of 2019 to 60.6 per cent by the end of 2023. This decline largely reflects demographic factors as an increasing number of baby-boomers leave the labour force. However, employment levels will continue to increase over this period given solid population growth averaging 1.2 per cent annually.

Growth in hourly (nominal) wages averaged 2.6 per cent (year-over-year) through 2018. We expect that hourly wage growth will pick up through 2019 and average 3.0 per cent over the projection horizon. As a share of the economy, the compensation of employees is projected to remain slightly above current levels (see Appendix B).

Figure 7 Business and residential investment

2012 = 100, level of investment in chained dollars



Sources: Statistics Canada and Parliamentary Budget Officer.

Note: Business investment includes investment in non-residential structures, machinery and equipment as well as intellectual property and products. Residential investment includes new housing construction, renovations and ownership transfer costs. The projection period covers 2019 to 2023.

Both business and residential investment contracted in the second half of 2018 as a combination of slowing consumer demand, higher interest rates and falling energy prices contributed to a weaker investment climate. More stringent mortgage regulations have also contributed to the weakness in residential investment.⁸ While we expected a correction in residential activity, we did not anticipate the sharp decline in business investment in our October outlook.

We project business investment to pick up in the second quarter of 2019 as energy prices recover, interest rates remain steady and the labour market remains strong. Despite this rebound, we project that business investment will only return to 2012 levels by the end of 2022.

Business investment will be supported by the Government's recent capital expensing and accelerated depreciation measures, which we estimate will boost the level of real GDP by 0.4 per cent on average.⁹ In addition, the large-scale project LNG Canada will help drive business investment and lift real GDP by an estimated 0.2 per cent on average.

Residential investment is projected to continue to contract through 2019 before recovering in 2020. That said, we project that residential investment will decline from its record peak of 7.7 per cent of GDP in 2017 to 6.8 per cent of GDP in 2020 and remain around 7.0 per cent thereafter (Appendix B).

Table 1 Outlook for Canadian real GDP growth

Contributions to real GDP growth, percentage points

	2018	Projection			
		2019	2020	2021	2022-2023
Consumption	1.2	0.9	1.0	0.9	0.9
Housing	-0.2	-0.5	0.0	0.2	0.1
Business investment	0.2	-0.2	0.7	0.5	0.4
Government	0.7	0.2	0.1	0.1	0.2
Exports	1.0	1.1	1.2	0.6	0.5
Imports	-0.9	0.3	-0.9	-0.7	-0.7
Inventory investment	-0.2	-0.4	-0.2	0.1	0.1
Real GDP growth	1.8	1.6	1.9	1.7	1.5
<i>Additional indicators, %</i>					
Potential GDP growth	1.6	1.6	1.5	1.6	1.7
Output gap	0.0	0.0	0.4	0.6	0.3

Sources: Statistics Canada and Parliamentary Budget Officer.

We project annual growth in the Canadian economy to slow from its above-potential pace of 1.8 per cent in 2018 to 1.6 per cent in 2019. This slowdown primarily reflects the impacts of transitory factors related to the collapse in Canadian crude oil prices in late 2018 and the partial shutdown of the U.S. government.

As these impacts dissipate, we project that quarterly real GDP growth will rebound, averaging 1.9 per cent through 2020, as business and residential investment recover and exports provide a boost. Economic growth is then projected to downshift somewhat—to 1.7 per cent in 2021 and 1.6 per cent in 2022—as growth in exports and business investment moderates.¹⁰

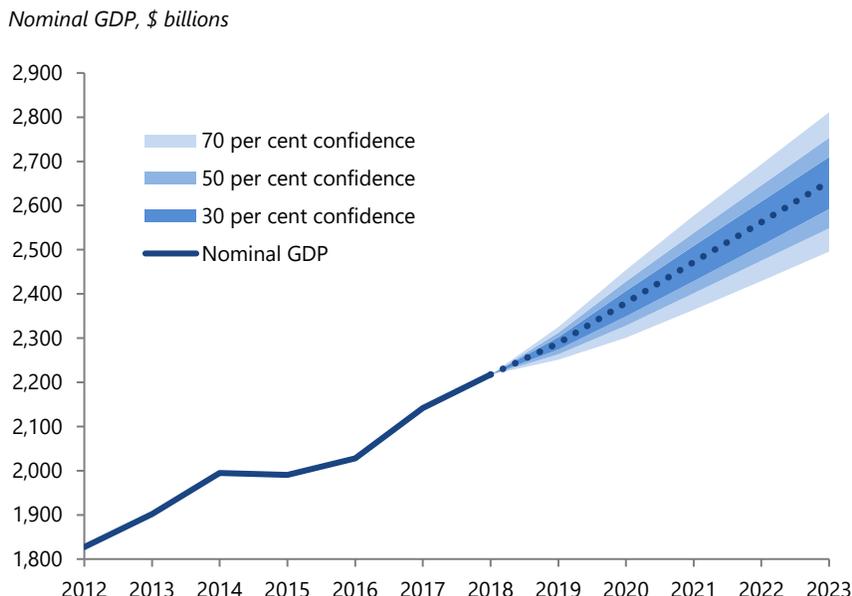
We project the economy to operate slightly above its sustainable productive capacity (that is, potential GDP) over 2020 to 2023. This reflects the rebound in real GDP growth combined with a temporary slowdown in potential GDP growth due to the recent sharp declines in business investment.

With the recovery in business investment, we expect potential GDP growth to improve from 1.5 per cent in 2020 to 1.7 per cent in 2022. This improvement stems from stronger growth in trend labour productivity, which more than offsets slower growth in trend labour input (that is, total hours worked).

Inflation is projected to remain well-anchored and close to the Bank of Canada's 2 per cent target over the medium term.

Appendix A includes PBO's detailed economic outlook.

Figure 8 Uncertainty around PBO’s nominal GDP projection



Sources: Statistics Canada and Parliamentary Budget Officer.

Over 2019 to 2023, we project nominal GDP growth to average 3.7 per cent annually, with real GDP growth averaging 1.7 per cent and GDP inflation averaging 2.0 per cent. Adjusted for historical revisions, the annual level of nominal GDP is, on average, \$8.2 billion lower over 2019 to 2023 compared to our October projection. This downward revision is entirely attributable to weaker-than-expected nominal GDP growth in the second half of 2018.¹¹

PBO’s economic outlook reflects the view that possible upside and downside outcomes are, broadly speaking, equally likely. Further, to illustrate the uncertainty around our nominal GDP projection, we construct a fan chart that provides confidence intervals based on historical forecasting errors.¹²

In terms of downside risks, we continue to judge that the most important downside risk is weaker export performance due to rising protectionism in global trade policies, which would dampen global trade and economic growth. Another key downside risk is a weaker-than-expected rebound in business investment.

In terms of upside risks, we maintain that the most important risk is stronger household spending. Given elevated levels of household indebtedness and projected increases in interest rates, we project a deceleration in consumer spending. However, it is possible that growth in consumer spending slows less than expected as households take on more debt to maintain higher levels of consumption. Another key upside risk is stronger-than-expected provincial-territorial government spending.

Fiscal Outlook

Table 2 Economic and fiscal developments since October 2018

<i>\$ billions</i>	Projection					
	2018- 2019	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024
Budgetary balance in October 2018 EFO	-19.4	-21.3	-17.4	-14.8	-11.2	-9.4
Economic and fiscal developments	13.2	15.8	7.5	8.6	6.9	5.7
Status quo balance, before policy actions	-6.2	-5.5	-9.9	-6.2	-4.3	-3.7
Policy actions in FES 2018	-3.9	-7.1	-6.1	-5.6	-4.6	-5.1
Policy actions in Budget 2019	-5.6	-5.0	-6.4	-3.4	-3.6	-3.0
Budgetary balance in April 2019 EFO	-15.7	-17.7	-22.3	-15.2	-12.6	-11.9

Sources: Finance Canada and Parliamentary Budget Officer.

Note: Policy actions in Fall Economic Statement 2018 in this table include measures announced after Budget 2018 and reflect PBO's *Costing 2018 Fall Economic Statement and Off-Cycle Measures*. Policy actions in Budget 2019 include measures announced after Fall Economic Statement 2018 and before Budget 2019 and reflect PBO cost estimates from Table 3.

Compared to our October outlook, we are projecting budgetary deficits that are \$0.3 billion higher, on average, over 2018-19 to 2023-24.

Revisions to our outlook for the Canadian economy contribute \$0.2 billion per year, on average, to increasing projected budget deficits over 2018-19 to 2023-24. Fiscal developments contribute \$9.8 billion annually, on average, to reducing projected budget deficits.

Strong in-year revenue data for 2018-19 have led us to revise our revenue outlook \$5.3 billion higher than our October estimates.¹³ Some revenue strength reflects temporary factors, such as large corporate income tax reassessments. Other revenue growth reflects more permanent changes. We believe that a portion of higher-than-expected income tax and GST revenues will persist beyond the current year, partly owing to tax enforcement measures. We have also enhanced our corporate income tax (CIT) projection to better account for lower-than-expected loss carry-forwards to project tax revenue, resulting in higher CIT revenues.

Our fiscal outlook also updates our projection for operating expenses. In October 2018, the Government changed its discounting methodology for future liabilities, increasing amounts owed for pension costs. These costs are highly sensitive to interest rates. Our current outlook also updates our assumptions for how the costs of plan amendments are spread through future years, leading to a lower expense outlook, all else equal.

We estimate that policy actions taken since our October outlook cost on net \$9.9 billion per year, on average, over 2018-19 to 2023-24.¹⁴

Appendices C and D provide a detailed summary of the fiscal outlook.

Table 3 Policy actions since Fall Economic Statement 2018

<i>\$ millions</i>	Projection					
	2018- 2019	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024
Budget 2019 - Chapter 1						
First-Time Homebuyer Incentive	0	3	21	39	40	40
Modernizing the Home Buyers' Plan: Withdrawal Limit	0	15	15	16	16	16
Rental Construction Financing Initiative	0	7	17	46	81	134
Canada Training Credit	0	36	180	207	228	245
<i>Less: projected revenues</i>	<i>0</i>	<i>-5</i>	<i>-26</i>	<i>-29</i>	<i>-32</i>	<i>-34</i>
Employment Insurance Training Benefit	0	7	77	195	211	227
<i>Less: projected revenues</i>	<i>0</i>	<i>-44</i>	<i>-179</i>	<i>-185</i>	<i>-192</i>	<i>-199</i>
<i>Less: projected savings</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Making Canada Student Loans More Affordable	0	124	373	476	496	516
<i>Less: projected savings</i>	<i>0</i>	<i>-1</i>	<i>-3</i>	<i>-4</i>	<i>-6</i>	<i>-8</i>
Making Canada Student Loans More Accessible	0	14	21	23	24	25
<i>Less: projected savings</i>	<i>0</i>	<i>-15</i>	<i>-19</i>	<i>-19</i>	<i>-20</i>	<i>-21</i>
Budget 2019 - Chapter 4						
Journalism Organizations Tax Credit	27	108	109	110	111	112
Digital News Subscription Tax Credit	0	9	38	39	40	41
Journalism Organization Tax Incentive	0	7	21	5	5	5
Mutual Funds: Allocation to Redeemer	0	-19	-75	-69	-57	-47
Other policy actions*	5,601	4,750	5,783	2,511	2,699	1,990
Total	5,628	4,997	6,354	3,361	3,644	3,042

Sources: Finance Canada and Parliamentary Budget Officer.

Note: * Estimates of other policy actions are from Finance Canada.

PBO has independently estimated the fiscal impact of 11 revenue and spending measures announced in Budget 2019. Detailed cost estimates are available on our website.

Altogether, PBO's costing of new measures is 0.3 billion (1 per cent) higher than the Government's estimates provided in Budget 2019. Most notably, PBO estimates that the gross costs of the Employment Insurance Training Benefit are \$80 million lower, on average, than estimates in Budget 2019.

Our estimates of the new measures are fully reflected in our fiscal outlook.

Table 4 Summary of the fiscal outlook

<i>\$ billions</i>	Projection						
	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Budgetary revenues	311.2	330.6	338.7	350.4	365.1	379.5	393.1
Program expenses	308.3	323.0	332.3	345.0	350.0	359.9	371.2
Public debt charges	21.9	23.4	24.1	27.6	30.3	32.2	33.7
Total expenses	330.2	346.3	356.4	372.6	380.3	392.1	405.0
Budgetary balance	-19.0	-15.7	-17.7	-22.3	-15.2	-12.6	-11.9
Federal debt	671.3	686.5	704.2	726.4	741.6	754.2	766.1
<i>% of GDP</i>							
Budgetary revenues	14.5	14.9	14.8	14.7	14.8	14.8	14.8
Program expenses	14.4	14.6	14.5	14.5	14.2	14.0	14.0
Public debt charges	1.0	1.1	1.1	1.2	1.2	1.3	1.3
Total expenses	15.4	15.6	15.6	15.7	15.4	15.3	15.3
Budgetary balance	-0.9	-0.7	-0.8	-0.9	-0.6	-0.5	-0.4
Federal debt	31.3	31.0	30.8	30.5	30.0	29.4	28.9

Sources: Finance Canada and Parliamentary Budget Officer.

For 2018-19, we expect that the budgetary balance will show a deficit of \$15.7 billion (0.7 per cent of GDP). We project the budgetary deficit to increase to \$22.3 billion in 2020-21 due, in part, to foregone revenues from introducing accelerated expensing of capital investment for businesses. The budgetary deficit is then projected to decline to \$11.9 billion (0.4 per cent of GDP) in 2023-24 as growth in program expenses is restrained.

PBO projects that the fiscal impact of the business investment incentives announced in the Fall Economic Statement will be front-loaded, that is, the cost of these measures declines over the medium term, from a high of \$4.9 billion in 2019-20 to \$1.4 billion by 2023-24.¹⁵ Over the medium term, revenues are projected to grow broadly in line with nominal GDP.

On the other side of the ledger, we project that growth in program expenses will lag growth in the economy, even after accounting for new policy actions. Relative to the size of the economy, the projected decline in program expenses mainly reflects limited growth in the Government's operating expenses (see Appendix E).

Public debt charges are projected to increase from a low of 1.1 per cent of GDP in 2018-19 to 1.3 per cent in 2023-24 as interest rates continue to rise and the stock of interest-bearing debt increases (see Appendix F). The federal debt-to-GDP ratio is projected to decline over the medium term, falling to 28.9 per cent in 2023-24.

Appendix G provides a comparison to our October 2018 outlook.

Table 5 Outlook for revenues

\$ billions	Projection						
	2017- 2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024
Income taxes							
Personal income tax	153.6	161.8	169.2	177.6	185.8	193.8	201.9
Corporate income tax	47.8	51.5	48.0	47.7	50.8	52.4	54.0
Non-resident income tax	7.8	8.9	8.4	8.3	8.4	8.7	9.0
Total income tax	209.3	222.1	225.6	233.5	245.0	254.9	264.9
Excise taxes/duties							
Goods and Services Tax	36.8	38.5	39.7	40.8	41.9	43.2	44.7
Custom import duties	5.4	7.2	7.0	6.7	5.5	5.7	5.8
Other excise taxes/duties	11.7	12.0	12.7	12.8	13.1	13.4	13.6
Total excise taxes/duties	53.8	57.7	59.4	60.2	60.5	62.3	64.1
Fuel charge proceeds	0.0	0.0	2.6	3.9	5.1	6.2	6.2
EI premium revenues	21.1	22.4	22.5	23.0	23.7	24.7	25.6
Other revenues							
Enterprise Crown corporations	7.7	8.1	8.1	8.2	8.5	8.8	9.1
Other programs*	17.8	18.0	17.8	18.2	18.8	19.0	19.4
Net foreign exchange	1.5	2.3	2.6	3.4	3.5	3.6	3.7
Total other revenues	27.0	28.5	28.6	29.8	30.9	31.4	32.2
Total budgetary revenues	311.2	330.6	338.7	350.4	365.1	379.5	393.1

Sources: Finance Canada and Parliamentary Budget Officer.

Note: * Includes consolidated Crown corporation revenues, returns on investments and proceeds from the sales of goods and services.

We are projecting revenues of \$330.6 billion in 2018-19. This is \$5.3 billion higher compared to our October outlook, mainly due to upward revisions to our estimates for personal and corporate income tax revenues.¹⁶

Revenue growth slows somewhat in our forecast starting in 2019-20, mostly owing to foregone revenues from introducing accelerated expensing of capital investment for businesses. These new measures are temporary, so the downward pressure is not anticipated to persist.¹⁷ By 2023-24, total revenues are projected to reach \$393.1 billion (14.8 per cent of GDP).

Our fiscal outlook considers the tariff countermeasures on the imports of steel, aluminum, and other products from the United States. Net of surtaxes and remissions, we estimate that this will generate additional revenue of \$1.1 billion in 2018-19.¹⁸ The Government intends to transfer all countermeasure revenues to industry. However, these revenues have accrued faster than transfers thus far, resulting in a net fiscal windfall for the Government in 2018-19.

Table 6 Outlook for EI premiums and the EI Operating Account

<i>\$ billions</i>	Projection								
	2017- 2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024		
Revenues	21.6	22.8	22.9	23.4	24.1	25.1	26.0		
Premium revenues	21.1	22.4	22.5	23.0	23.7	24.7	25.6		
Contributions for federal employees	0.4	0.4	0.4	0.4	0.4	0.4	0.4		
Expenses	21.6	21.5	22.8	24.0	25.0	25.7	26.2		
Benefits	19.7	19.6	20.9	22.0	22.8	23.5	24.0		
Administration expenses	1.9	1.9	2.0	2.1	2.1	2.2	2.2		
	2017	2018	2019	2020	2021	2022	2023	(..)	2026
Annual balance	-0.2	1.0	0.3	-0.7	-1.0	-0.8	-0.4	(..)	0.5
Cumulative balance	1.6	2.6	2.8	2.1	1.1	0.3	-0.1	(..)	0.8
(per \$100 of insurable earnings)	Actual		Projection						
	2018	2019	2020	2021	2022	2023	2024	(..)	2026
Premium rate (PBO)	1.66	1.62	1.59	1.59	1.59	1.59	1.59	(..)	1.59
Premium rate (Budget 2019)	1.66	1.62	1.61	1.61	1.61	1.61	1.61	(..)	1.61

Sources: Office of the Chief Actuary, Finance Canada and Parliamentary Budget Officer.

Employment Insurance (EI) program revenues and expenses are consolidated and managed within the EI Operating Account.¹⁹

Beyond 2021, the annual balance in the Account improves steadily for two reasons: EI benefits grow at a modest pace despite recent enrichments to the program because the number of unemployed peaks in 2019 before plateauing over the medium term. Conversely, on the revenue side, EI revenues grow in line with an increasing number of workers and rising wages, which drive growth in insurable earnings.

The EI premium rate in 2019 is set at \$1.62 (per \$100 of insurable earnings). PBO estimates that the 7-year break-even rate would be \$1.59 in 2020 through 2026 or \$0.02 (per \$100 of insurable earnings) lower than projected in Budget 2019.²⁰

Table 7 Outlook for program expenses

\$ billions	Projection						
	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Major transfers to persons							
Elderly benefits	50.6	53.3	56.4	60.1	63.7	67.4	71.2
Employment Insurance	19.7	19.6	20.9	22.0	22.8	23.5	24.0
Children's benefits	23.4	23.6	24.2	24.9	25.7	26.4	27.1
Total	93.8	96.5	101.5	106.9	112.2	117.3	122.3
Major transfers to other levels of government	70.5	75.5	76.7	79.7	82.4	84.7	87.6
Direct program expenses							
Fuel charge proceeds returned	0.0	0.7	3.0	4.2	5.4	6.2	6.3
Other transfer payments	47.1	53.8	53.1	55.9	54.5	55.1	56.4
Operating and capital expenses	96.8	96.4	98.0	98.3	95.5	96.5	98.7
Total direct program expenses	144.0	150.9	154.1	158.4	155.5	157.9	161.4
Total program expenses	308.3	323.0	332.3	345.0	350.0	359.9	371.2

Sources: Finance Canada and Parliamentary Budget Officer.

We project that total program expenses will be \$323.0 billion (14.6 per cent of GDP) in 2018-19.

Transfers to persons, such as elderly benefits, are the fastest growing category in our expense outlook. Growth in elderly benefits outpaces nominal GDP growth because of growth in the population 65 years of age and over.

Since Budget 2018, the Government has introduced policy actions that will increase direct program expenses by \$6.4 billion annually, on average, over 2018-19 to 2023-24.²¹ More than half of this amount (\$3.9 billion) will be spent as transfer payments. The remaining amount is projected to increase operating expenses by \$2.5 billion annually, on average.

After accounting for these policy actions, our overall outlook for operating and capital expenses is restrained, growing by 0.3 per cent per year, on average, from 2018-19 to 2023-24. Falling expenses for future benefits are the main factor driving PBO's outlook for slow-growing direct program expenses over the medium term (see Appendix E). These expenses are highly sensitive to interest rate revaluations and are the largest source of variation in our projection for program expenses.

Over the medium term, we project that total program expenses will decline relative to nominal GDP, from 14.6 per cent of GDP in 2018-19 to 14.0 per cent of GDP in 2023-24.

Table 8 Sensitivity of the budgetary balance to economic shocks

<i>\$ billions</i>	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024
1 per cent decrease in real GDP	-4.1	-3.2	-3.2	-3.5	-3.6
1 per cent decrease in GDP price level	-2.0	-2.3	-2.3	-2.4	-2.5
100-basis point increase in interest rates	-1.2	-0.4	-0.9	-1.9	-2.8

Source: Parliamentary Budget Officer.

Three key economic indicators drive our overall federal fiscal projection: real GDP growth, GDP inflation and interest rates. Following Finance Canada's approach to assessing fiscal sensitivity, we have estimated the impacts of three key economic shocks on our fiscal outlook:

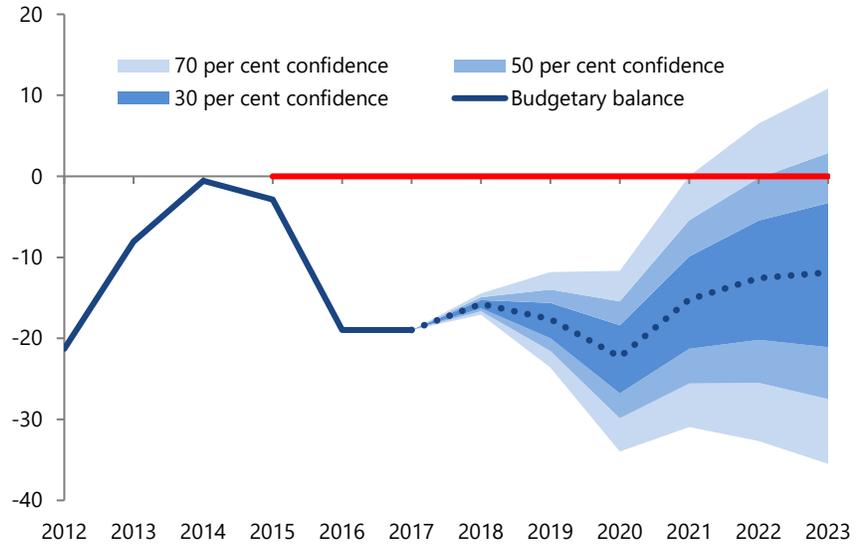
- i. A permanent 1 per cent decrease in real GDP driven equally by lower productivity and employment.
- ii. A permanent 1 per cent decrease in the GDP price level, assuming the Consumer Price Index moves in line with the decrease in the GDP price level.
- iii. A permanent 1-percentage point (100-basis points) increase in all interest rates.

In constructing our sensitivity estimates, we assume that changes in nominal GDP are proportional across income and expenditure components. Further, it is important to note that these economic shocks are illustrative and simplifications of a complex and endogenous system. As such, these estimates should be considered stylized rules of thumb.

See Appendices H to J for the impacts on revenue and spending categories.

Figure 9 Budgetary balance outcomes under alternative economic scenarios

Budgetary balance, \$ billions



Sources: Finance Canada and Parliamentary Budget Officer.

Note: The series are presented on a fiscal-year basis where 2012 refers to 2012-13. Projection period covers fiscal years 2018-19 to 2023-24. The red line corresponds to a balanced budget.

To illustrate the fiscal implications of the uncertainty surrounding our economic outlook, using our fiscal sensitivities, we mapped the distributions of economic scenarios into budgetary components and constructed fan charts with confidence intervals around our baseline fiscal projection.

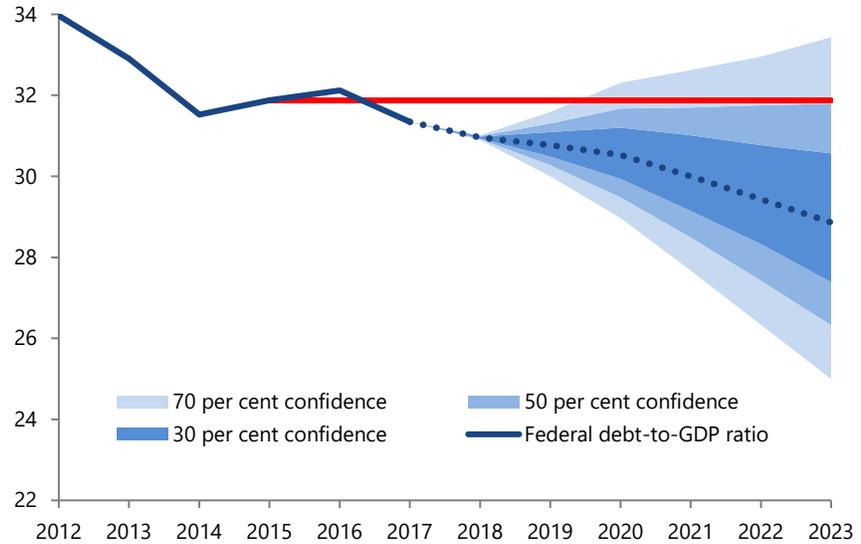
A key limitation of these charts and distributions is that they reflect only the uncertainty related to our economic outlook. They do not reflect uncertainty related to the translation of economic projections into fiscal projections; discretionary fiscal policy responses to different economic outcomes; or, non-economic risks (for example, expenses related to legal liabilities).

Given the possible scenarios surrounding our economic outlook, and on a status quo basis, it is unlikely that the budget will be balanced, or in a surplus position, over the medium term.²² We estimate that the probability the budget will be in balance or in a surplus position in 2019-20 and 2020-21 is effectively nil.

However, we estimate that in 2021-22 there is, approximately, a 15 per cent chance that the budget will be balanced or in a surplus position. The probability of budgetary balance/surplus rises to 30 per cent in 2023-24.

Figure 10 Federal debt-to-GDP outcomes under alternative economic scenarios

Federal debt-to-GDP ratio, per cent



Sources: Finance Canada, Statistics Canada and Parliamentary Budget Officer.

Note: The series are presented on a fiscal-year basis where 2012 refers to 2012-13. Projection period covers fiscal years 2018-19 to 2023-24. The red line corresponds to the level of the federal debt-to-GDP anchor for 2020-21.

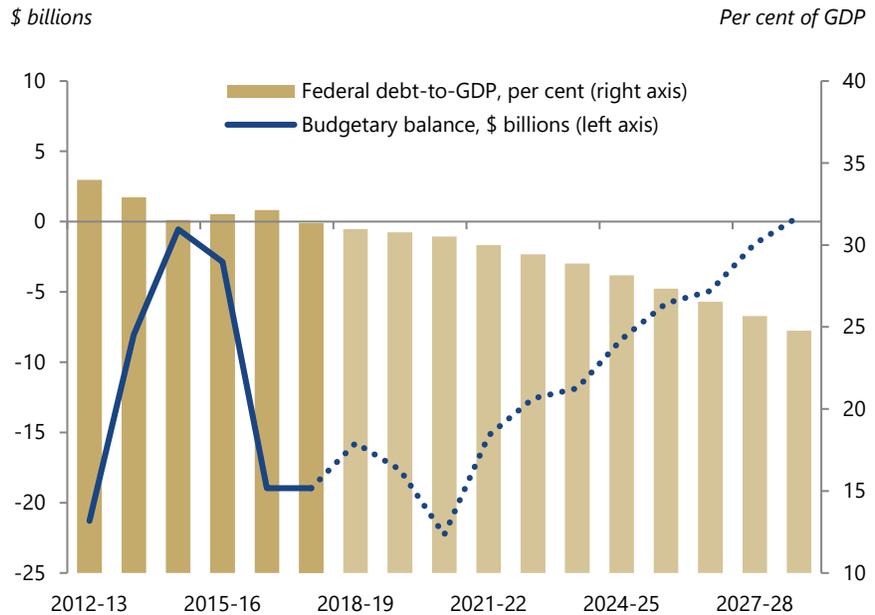
Given the possible scenarios surrounding our economic outlook and status quo fiscal policy assumption, we estimate that a 70 per cent confidence interval for the federal debt-to-GDP ratio in 2023-24 is 8.4 percentage points. This is approximately ± 4.2 percentage points relative to our baseline federal debt-to-GDP projection in 2023-24.

In Budget 2016 the Government committed to reducing the federal debt-to-GDP ratio “to a lower level over a five-year period, ending in 2020-21”. This translates into a federal debt-to-GDP anchor of 31.9 per cent in 2020-21.

Given the possible scenarios surrounding our economic outlook, and on a status quo basis, it is likely that the federal debt-to-GDP ratio will fall below 31.9 per cent over the period 2018-19 to 2023-24.

We estimate that in 2020-21 there is approximately a 80 per cent chance that the federal debt-to-GDP ratio will be below its anchor level.

Figure 11 PBO extended fiscal outlook



Sources: Finance Canada, Statistics Canada and Parliamentary Budget Officer.

Note: The projection period covers 2018-19 to 2028-29.

In January 2018, the PBO provided guidelines about how it plans to implement the financial costing of election campaign proposals made by political parties during the 120 days before the 2019 general election.

Prior to the start of the pre-election period, in early June 2019, the PBO will publish a 10-year economic and fiscal projection based on an update of our April 2019 outlook.

This outlook is intended to provide a more comprehensive fiscal planning framework and to more transparently account for the budgetary implications of multi-year spending commitments. The PBO will also provide independent line-item costing of measures in Budget 2019 along with its 10-year outlook.

Political parties may choose to use the economic and fiscal projections in preparing their own cost estimates. Further, political parties may choose to remove some, or all, of the costed Budget 2019 measures to construct their own fiscal planning frameworks.

Without further policy actions, we project the budgetary balance to continue to rise and the federal debt-to-GDP ratio to fall through 2028-29. See Appendices K and L for a detailed summary of the extended economic and fiscal outlook.

Budget 2019: Key Issues for Parliamentarians

Economic outlook comparison

The economic outlook presented in Budget 2019 is based on Finance Canada's February 2019 survey of private sector forecasters. Appendix M provides a detailed comparison to our April economic outlook.

The private sector outlook for nominal GDP in Budget 2019 is \$4 billion higher annually, on average, over 2019 to 2023 compared to PBO's April outlook (Table 9). This difference is due to GDP inflation and real GDP growth in the fourth quarter of 2018 that was lower than anticipated in Finance Canada's February 2019 survey of private sector forecasters.²³

Table 9 Nominal GDP outlook comparison

	2018	Projection				
		2019	2020	2021	2022	2023
Nominal GDP (\$ billions)						
PBO April 2019	2,218	2,288	2,380	2,472	2,562	2,654
Budget 2019	2,223	2,298	2,379	2,467	2,564	2,667
Difference	-5	-10	1	5	-2	-13

Sources: Finance Canada and Parliamentary Budget Officer.

Note: The Budget 2019 outlook is based on historical data up to and including the third quarter of 2018. PBO's outlook includes historical data up to and including the fourth quarter of 2018.

PBO judges that there is downside risk to the private sector outlook for real GDP growth in 2022 and 2023. PBO projects real GDP growth in 2022 and 2023 that is 0.35 percentage points lower per year, on average (Table 10). This difference reflects, in part, the private sector outlook for employment growth, which is 0.1 percentage points higher, on average, over this period.

Table 10 Real GDP growth outlook comparison

	2018	Projection				
		2019	2020	2021	2022	2023
Real GDP growth (%)						
PBO April 2019	1.8	1.6	1.9	1.7	1.6	1.5
Budget 2019	1.9	1.8	1.6	1.7	1.9	1.9
Difference	-0.1	-0.2	0.3	0.0	-0.3	-0.4

Sources: Finance Canada and Parliamentary Budget Officer.

PBO projects higher short- and long-term interest rates. Over 2018 to 2023, PBO projects the 3-month treasury bill rate to be 20 basis points higher and the 10-year government bond rate to be 40 basis points higher, on average,

compared to the average private sector forecast. This difference could reflect differing views on the neutral interest rate as well as the term premium.

Fiscal outlook comparison

For 2018-19, we project a budgetary deficit of \$15.7 billion, which is \$0.8 billion higher than the Government's estimate in Budget 2019 (Table 11). We are projecting lower income tax revenues (\$2.2 billion) but similar levels of spending for 2018-19.

Beyond 2018-19, PBO is projecting budgetary deficits that are \$0.7 billion higher per year, on average, compared to Budget 2019. Our higher deficit forecast reflects lower projections for revenues from GST and non-resident income taxes. On the spending side, we have higher medium-term projections for operating expenses.

Table 11 PBO fiscal outlook compared to Budget 2019

	Projection					
	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Budgetary balance (\$ billions)						
PBO April 2019	-15.7	-17.7	-22.3	-15.2	-12.6	-11.9
Budget 2019	-14.9	-19.8	-19.7	-14.8	-12.1	-9.8
Difference	-0.8	2.1	-2.6	-0.4	-0.5	-2.1
Federal debt (% of GDP)						
PBO April 2019	31.0	30.8	30.5	30.0	29.4	28.9
Budget 2019	30.1	29.8	29.4	28.9	28.4	29.4
Difference	0.9	1.0	1.1	1.1	1.0	-0.5

Sources: Finance Canada and Parliamentary Budget Officer.

We believe that the primary difference between PBO and Finance Canada projections for operating expenses is our higher outlook for pensions and employee future benefits.²⁴ These projections are highly sensitive to interest rates and assumptions on amortization and other charges.

Finance Canada does not provide projections of public service pension and benefit expenses in budgets and updates, so we are unable to fully reconcile differences in our outlooks for operating expenses.

That said, in Budget 2019, the Government—for the first time—provided information on its outlook for “departmental expenses”, which it estimates will grow by about 3 per cent per year, on average, between 2018-19 and 2023-24. This growth is somewhat higher than PBO's outlook for growth in operational spending (excluding pension and benefit expenses), which is projected to grow at 1.6 per cent per year, on average, over the same period.

Appendix N provides a detailed comparison of our April fiscal outlook and Budget 2019.

Budget-Estimates alignment

The Government made significant changes to the Estimates process last year with the goal to better align the Estimates with the budget. It delayed the tabling of the Main Estimates by several weeks to include budget measures via a new Treasury Board managed central vote. However, this resulted in parliamentarians voting on items which had not gone through the Treasury Board submission process, and only being referred to one parliamentary committee.

To address concerns raised by parliamentarians last year, the 2019-20 Main Estimates eliminates the central vote, instead creating individual votes within departments and agencies for Budget 2019 measures. This is an improvement as it allows different parliamentary committees to examine these measures, as well as permit parliamentarians to vote on the specific measures, rather than one central vote.

While these are important improvements to the process, it does not address the issue of parliamentarians voting on items which have yet to be scrutinized or refined by the Treasury Board. Therefore, parliamentarians will still be asked to approve Budget 2019 measures without having complete information on these new measures.

It is ultimately up to parliamentarians to decide whether these procedural improvements outweigh the loss of some financial precision in order to help the Government expedite the implementation of budget measures.

Operating expenses details

Budget 2019 provides information on key growth components within Finance Canada's outlook for operating expenses. The budget text distinguishes growth in "departmental expenses" (of about 3 per cent per year) from projected pension and benefit expenses. Since overall operating and capital expenses are projected to grow by roughly 0.1 per cent per year over the same period in Budget 2019, we can infer that Finance Canada forecasts pension and benefit expenses to decline over 2018-19 to 2023-24.

The disclosure of information related to departmental expenses in Budget 2019 is a step forward but is less than ideal. Parliamentarians may wish to seek more quantifiable details on the major cost components within Finance Canada's outlook for operating expenses, especially for pension and benefit expenses.

Non-announced measures

Budget 2019 provisions -\$3.8 billion for non-announced measures (Table 12). The negative amount indicates a net source of funds, which suggests either increased taxes and/or reductions in expenses. Explicit reporting of these measures is an improvement upon prior practice, under which unannounced measures were included with other fiscal developments.

That said, the IMF Manual on Fiscal Transparency recommends that changes to the budget outlook “should incorporate estimates of the separate impact of each new program on revenue and expenditure [to provide] a clear picture of the factors that may cause budget outcomes to diverge from planned spending and thus improve accountability for fiscal policy implementation.”²⁵

Budget 2019 funding for non-announced measures includes “provisions for anticipated Cabinet decisions not yet made”. However, this masks important details on the source of funds for up to \$3.9 billion in support for farmers in supply managed sectors, as well as from anticipated revenue due to limiting benefits of employee stock option deductions for high-income individuals.

Table 12 Non-announced measures

<i>\$ millions</i>	2016- 2017	2017- 2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024	Total
2016 FES	54	291	268	130	217	189			1,151
2017 Budget	-900	300	300	200	300	100			300
2017 FES		611	114	707	610	449	377		2,868
2018 Budget		1,263	-8	-1,711	-1,424	-1,221	254		-2,845
2018 FES			1,754	527	541	2,090	1,849	2,777	9,538
2019 Budget			930	-83	-158	1,884	-1,003	-1,612	-3,810
Since 2018 FES			1,197	450	165	172	-25	-27	1,932
Other measures*			-267	-533	-323	-2,056	-978	-1,585	-5,742

Sources: Finance Canada and Parliamentary Budget Officer.

Note: FES refers to Fall Economic Statement. * Other measures include non-announced measures in Budget 2019 that were not presented in budget chapters. Totals may not add due to rounding.

Given their materiality, parliamentarians may wish to seek quantifiable details regarding the spending envelopes for non-announced measures in Budget 2019, particularly the amounts allocated to future Cabinet funding decisions.

The Government’s fiscal anchors

The 12 November 2015 mandate letter from the Prime Minister identified meeting the Government’s fiscal anchors as one of the top priorities for the Minister of Finance:

Ensure that our fiscal plan is sustainable by meeting our fiscal anchors of balancing the budget in 2019/20 and continuing to reduce the federal debt-to-GDP ratio throughout our mandate.

The Government has inconsistently reported on progress toward meeting these two fiscal anchors in budgets and Fall Economic Statements. Moreover, important details have been removed, redefined and reintroduced.

In Budget 2016, the Government redefined its fiscal anchors to “returning to balanced budgets” at an unspecified date and committed to reduce the federal debt-to-GDP ratio “to a lower level over a five-year period, ending in 2020-21”. In the 2018 Fall Economic Statement, the Government recommitted to a “balanced budget in 2019-20” and again redefined its debt anchor as “continue to reduce the federal debt-to-Gross Domestic Product ratio”.

Budget 2019 does not mention the Government’s commitment to balancing the budget in 2019-20 nor does it mention committing to return to a balanced budget. That said, it does note that the federal debt-to-GDP ratio is projected to decline continuously over the projection horizon.

PBO has regularly monitored the Government’s progress in meeting its measurable and time-specific fiscal anchors (Table 13). We estimate that under alternative economic scenarios without further policy actions, there is a near-zero likelihood that the Government would balance the budget in 2019-20 and an 80 per cent likelihood that the federal debt ratio would be below the Government’s anchor of 31.9 per cent of GDP in 2020-21.

Table 13 Assessment of the Government’s progress in meeting its fiscal anchors

Fiscal anchor	Status	
	Government assessment	PBO estimated likelihood
Balance the budget in 2019-20	Actions taken, progress made, facing challenges	Nil
Federal debt-to-GDP below 31.9 per cent in 2020-21	Actions taken, progress made	80%

Sources: Finance Canada and Parliamentary Budget Officer.

Note: The Government committed to “balance the budget in 2019-20” in the Minister of Finance’s mandate letter. It committed to reducing the federal debt-to-GDP to below 31.9 per cent in 2020-21 in Budget 2016.

The Government’s reporting on achieving its fiscal anchors states that “actions taken, progress made, facing challenges” with respect to balancing the budget in 2019-20.²⁶ This is a mischaracterization given the remote possibility of achieving balance in that year without additional policy actions.

Parliamentarians may wish to request regular and realistic reporting on the Government's progress against consistent and measurable fiscal anchors in its budgets and Fall Economic Statements.

Appendices

A: Detailed PBO economic outlook

% unless otherwise indicated	2018	Projection				
		2019	2020	2021	2022	2023
Real GDP growth						
April 2019	1.8	1.6	1.9	1.7	1.6	1.5
October 2018	2.1	1.8	1.5	1.5	1.5	1.5
Potential GDP growth						
April 2019	1.6	1.6	1.5	1.6	1.7	1.7
October 2018	1.6	1.7	1.7	1.7	1.7	1.6
GDP inflation						
April 2019	1.7	1.6	2.0	2.1	2.1	2.0
October 2018	1.9	2.2	2.0	1.9	2.1	2.0
Nominal GDP growth						
April 2019	3.6	3.2	4.0	3.9	3.7	3.6
October 2018	4.0	4.0	3.5	3.4	3.6	3.6
Nominal GDP (\$ billions)						
April 2019	2,218	2,288	2,380	2,472	2,562	2,654
October 2018*	2,223	2,311	2,392	2,474	2,564	2,656
3-month treasury rate						
April 2019	1.4	1.7	2.5	2.7	2.7	2.7
October 2018	1.4	2.3	3.0	3.0	3.0	3.0
10-year government bond rate						
April 2019	2.3	2.1	3.4	3.8	3.8	3.8
October 2018	2.3	3.3	4.0	4.0	4.0	4.0
Exchange rate (US\$/C\$)						
April 2019	77.2	75.5	75.2	75.6	75.8	75.9
October 2018	77.6	77.6	77.4	77.1	77.1	77.1
Unemployment rate						
April 2019	5.8	5.9	5.7	5.5	5.4	5.4
October 2018	5.9	6.0	5.8	5.7	5.7	5.6
CPI inflation						
April 2019	2.2	1.7	2.0	2.1	2.1	2.0
October 2018	2.2	2.1	2.1	2.1	2.1	2.1
U.S. real GDP growth						
April 2019	2.9	2.3	1.8	1.8	1.8	1.8
October 2018	2.9	2.6	1.8	1.8	1.8	1.8
WTI oil price (\$US)						
April 2019	65	61	62	63	65	66
October 2018	68	71	68	67	69	70

Sources: Statistics Canada and Parliamentary Budget Officer.

Note: * October 2018 nominal GDP levels have been adjusted for historical revisions.

B: Expenditure and income composition of nominal GDP

% of GDP	2018	Projection				
		2019	2020	2021	2022	2023
Expenditure share						
Final household consumption	56.7	56.7	56.5	56.4	56.3	56.3
Nonprofit serving households expenditures	1.7	1.7	1.7	1.8	1.8	1.8
Government consumption expenditure	20.8	21.0	20.7	20.4	20.1	20.0
Government investment	3.9	3.8	3.7	3.7	3.7	3.6
Residential investment	7.4	6.9	6.8	6.9	7.0	7.0
Business investment	11.1	10.7	11.1	11.4	11.8	12.0
Inventory investment	0.6	0.1	0.0	0.1	0.2	0.3
Exports of goods and services	31.8	32.6	33.1	33.0	32.9	32.9
Imports of goods and services	34.0	33.6	33.7	33.7	33.8	33.9
Statistical discrepancy	0.0	0.0	0.0	0.0	0.0	0.0
Income share						
Compensation of employees	50.5	51.0	51.0	50.9	50.8	50.8
Net mixed income	9.0	8.9	8.8	9.0	9.0	9.0
Corporate profits before tax	10.2	9.8	10.1	10.3	10.4	10.3
Investment income	2.5	2.6	2.7	2.7	2.7	2.7
Consumption of fixed capital	16.5	16.4	16.2	16.0	16.1	16.2
Taxes less subsidies on production	4.4	4.4	4.4	4.4	4.4	4.4
Taxes less subsidies on products and imports	6.9	6.9	6.8	6.7	6.7	6.7
Statistical discrepancy	0.0	0.0	0.0	0.0	0.0	0.0

Sources: Statistics Canada and Parliamentary Budget Officer.

C: Detailed PBO fiscal outlook

<i>\$ billions</i>	2017- 2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024
Income taxes							
Personal income tax	153.6	161.8	169.2	177.6	185.8	193.8	201.9
Corporate income tax	47.8	51.5	48.0	47.7	50.8	52.4	54.0
Non-resident income tax	7.8	8.9	8.4	8.3	8.4	8.7	9.0
Total income tax	209.3	222.1	225.6	233.5	245.0	254.9	264.9
Excise taxes/duties							
Goods and Services Tax	36.8	38.5	39.7	40.8	41.9	43.2	44.7
Custom import duties	5.4	7.2	7.0	6.7	5.5	5.7	5.8
Other excise taxes/duties	11.7	12.0	12.7	12.8	13.1	13.4	13.6
Total excise taxes/duties	53.8	57.7	59.4	60.2	60.5	62.3	64.1
Fuel charge proceeds	0.0	0.0	2.6	3.9	5.1	6.2	6.2
EI premium revenues	21.1	22.4	22.5	23.0	23.7	24.7	25.6
Other revenues	27.0	28.5	28.6	29.8	30.9	31.4	32.2
Total budgetary revenues	311.2	330.6	338.7	350.4	365.1	379.5	393.1
Major transfers to persons							
Elderly benefits	50.6	53.3	56.4	60.1	63.7	67.4	71.2
Employment Insurance	19.7	19.6	20.9	22.0	22.8	23.5	24.0
Children's benefits	23.4	23.6	24.2	24.9	25.7	26.4	27.1
Total	93.8	96.5	101.5	106.9	112.2	117.3	122.3
Major transfers to other levels of government							
Canada Health Transfer	37.1	38.6	40.4	42.0	43.5	45.1	46.9
Canada Social Transfer	13.7	14.2	14.6	15.0	15.5	15.9	16.4
Equalization	18.3	19.0	19.8	20.7	21.4	22.2	23.0
Territorial Formula Financing	3.7	3.8	3.9	4.0	4.0	4.0	4.1
Gas Tax Fund	2.1	4.3	2.2	2.3	2.3	2.3	2.4
Home care and mental health	0.3	0.9	1.1	1.3	1.5	1.2	1.2
Other fiscal arrangements	-4.7	-5.0	-5.3	-5.6	-5.8	-6.1	-6.3
Total	70.5	75.5	76.7	79.7	82.4	84.7	87.6
Direct program expenses							
Fuel charge proceeds returned	0.0	0.7	3.0	4.2	5.4	6.2	6.3
Other transfer payments	47.1	53.8	53.1	55.9	54.5	55.1	56.4
Operating and capital expenses	96.8	96.4	98.0	98.3	95.5	96.5	98.7
Total direct program expenses	144.0	150.9	154.1	158.4	155.5	157.9	161.4
Total program expenses	308.3	323.0	332.3	345.0	350.0	359.9	371.2
Public debt charges	21.9	23.4	24.1	27.6	30.3	32.2	33.7
Total expenses	333.2	346.3	356.4	372.6	380.3	392.1	405.0
Budgetary balance	-19.0	-15.7	-17.7	-22.3	-15.2	-12.6	-11.9
Federal debt	671.3	686.5	704.2	726.4	741.6	754.2	766.1

Sources: Finance Canada and Parliamentary Budget Officer.

D: Detailed PBO fiscal outlook (per cent of GDP)

<i>% of GDP</i>	2017- 2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024
Income taxes							
Personal income tax	7.2	7.3	7.4	7.5	7.5	7.6	7.6
Corporate income tax	2.2	2.3	2.1	2.0	2.1	2.0	2.0
Non-resident income tax	0.4	0.4	0.4	0.3	0.3	0.3	0.3
Total income tax	9.8	10.0	9.9	9.8	9.9	9.9	10.0
Excise taxes/duties							
Goods and Services Tax	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Custom import duties	0.3	0.3	0.3	0.3	0.2	0.2	0.2
Other excise taxes/duties	0.5	0.5	0.6	0.5	0.5	0.5	0.5
Total excise taxes/duties	2.5	2.6	2.6	2.5	2.4	2.4	2.4
Fuel charge proceeds	0.0	0.0	0.1	0.2	0.2	0.2	0.2
EI premium revenues	1.0						
Other revenues	1.3	1.3	1.2	1.3	1.2	1.2	1.2
Total budgetary revenues	14.5	14.9	14.8	14.7	14.8	14.8	14.8
Major transfers to persons							
Elderly benefits	2.4	2.4	2.5	2.5	2.6	2.6	2.7
Employment Insurance	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Children's benefits	1.1	1.1	1.1	1.0	1.0	1.0	1.0
Total	4.4	4.4	4.4	4.5	4.5	4.6	4.6
Major transfers to other levels of government							
Canada Health Transfer	1.7	1.7	1.8	1.8	1.8	1.8	1.8
Canada Social Transfer	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Equalization	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Territorial Formula Financing	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Gas Tax Fund	0.1	0.2	0.1	0.1	0.1	0.1	0.1
Home care and mental health	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Other fiscal arrangements	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Total	3.3	3.4	3.4	3.3	3.3	3.3	3.3
Direct program expenses							
Fuel charge proceeds returned	0.0	0.0	0.1	0.2	0.2	0.2	0.2
Other transfer payments	2.2	2.4	2.3	2.3	2.2	2.2	2.1
Operating and capital expenses	4.5	4.3	4.3	4.1	3.9	3.8	3.7
Total direct program expenses	6.7	6.8	6.7	6.7	6.3	6.2	6.1
Total program expenses	14.4	14.6	14.5	14.5	14.2	14.0	14.0
Public debt charges	1.0	1.1	1.1	1.2	1.2	1.3	1.3
Total expenses	15.4	15.6	15.6	15.7	15.4	15.3	15.3
Budgetary balance	-0.9	-0.7	-0.8	-0.9	-0.6	-0.5	-0.4
Federal debt	31.3	31.0	30.8	30.5	30.0	29.4	28.9

Sources: Finance Canada and Parliamentary Budget Officer.

E: Detailed direct program expense outlook

<i>\$ billions</i>	Projection						
	2017- 2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024
Fuel charge proceeds returned	0.0	0.7	3.0	4.2	5.4	6.2	6.3
Other transfer payments	47.1	53.8	53.1	55.9	54.5	55.1	56.4
Operating expenses							
Personnel - current costs	45.3	46.4	46.3	46.7	47.7	48.8	50.0
Personnel - future and other benefits	13.3	10.1	10.4	9.7	6.5	5.1	5.2
Enterprise Crown corporations	2.7	2.2	2.1	2.0	1.9	1.9	2.0
Consolidated Crown corporations	7.0	7.0	7.2	8.0	8.2	8.5	8.7
Other operating expenses	23.7	25.6	24.1	23.8	25.4	26.1	26.9
Policy actions	0.0	-0.1	2.3	2.7	-0.4	-0.5	-1.1
Total operating expenses	92.0	91.2	92.5	92.8	89.3	89.9	91.7
Capital amortization expenses	4.8	5.2	5.6	5.5	6.3	6.6	6.9
Total direct program expenses	144.0	150.9	154.1	158.4	155.5	157.9	161.4

Sources: Finance Canada and Parliamentary Budget Officer.

F: PBO debt projection

	Projection						
	2017- 2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024
\$ billions							
Federal debt	671.3	686.5	704.2	726.4	741.6	754.2	766.1
Interest-bearing debt	1,002.6	1,053.1	1,085.1	1,116.7	1,138.7	1,156.7	1,173.3
<i>Market debt: Government</i>	704.3	719.6	737.2	759.5	774.7	787.3	799.1
<i>Non-market debt</i>	281.4	316.6	331.0	340.3	347.1	352.5	357.2
<i>Other debt</i>	16.9	16.9	16.9	16.9	16.9	16.9	16.9
Market debt: agent Crown corporations	291.9	299.7	304.3	312.0	311.2	317.7	324.4
Borrowing requirements, as per the Borrowing Authority Act	996.2	1,019.2	1,041.5	1,071.5	1,085.9	1,105.0	1,123.6
% of GDP							
Federal debt	31.3	31.0	30.8	30.5	30.0	29.4	28.9
Interest-bearing debt	46.8	47.5	47.4	46.9	46.1	45.1	44.2
<i>Market debt: Government</i>	32.9	32.4	32.2	31.9	31.3	30.7	30.1
<i>Non-market debt</i>	13.1	14.3	14.5	14.3	14.0	13.8	13.5
<i>Other debt</i>	0.8	0.8	0.7	0.7	0.7	0.7	0.6
Market debt: agent Crown corporations	13.6	13.5	13.3	13.1	12.6	12.4	12.2
Borrowing requirements, as per the Borrowing Authority Act	46.5	46.0	45.5	45.0	43.9	43.1	42.3

Sources: Finance Canada and Parliamentary Budget Officer.

G: Comparison to PBO's October 2018 fiscal outlook

<i>\$ billions</i>	2018- 2019	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024
Income taxes						
Personal income tax	1.7	0.9	1.3	2.3	2.7	2.9
Corporate income tax	5.7	1.0	-1.6	-0.6	-1.1	-1.6
Non-resident income tax	0.5	0.3	0.0	-0.1	-0.1	-0.1
Total income tax	7.8	2.2	-0.3	1.6	1.6	1.2
Excise taxes/duties						
Goods and Services Tax	0.7	0.7	0.4	0.1	0.0	0.0
Custom import duties	0.4	-0.1	-0.4	-1.1	-1.2	-1.2
Other excise taxes/duties	-0.5	-0.3	-0.3	-0.4	-0.4	-0.5
Total excise taxes/duties	0.6	0.3	-0.4	-1.4	-1.6	-1.7
Fuel charge proceeds	0.0	2.6	3.9	5.1	6.2	6.2
El premium revenues	0.0	-0.2	-0.7	-0.7	-0.7	-0.8
Other revenues	-3.2	-3.8	-4.2	-3.6	-3.8	-4.0
Total budgetary revenues	5.3	1.1	-1.7	1.0	1.6	1.1
Major transfers to persons						
Elderly benefits	0.0	-0.2	0.1	0.3	0.4	0.4
Employment Insurance	-1.1	-1.2	-0.6	-0.4	-0.3	-0.2
Children's benefits	0.0	-0.3	-0.3	-0.3	-0.2	-0.2
Total	-1.2	-1.8	-0.8	-0.4	-0.1	0.1
Major transfers to other levels of government						
Canada Health Transfer	0.0	0.3	0.2	0.1	0.1	0.2
Canada Social Transfer	0.0	0.0	0.0	0.0	0.0	0.0
Equalization	0.0	0.2	0.1	0.0	0.0	0.1
Territorial Formula Financing	0.0	0.1	0.1	0.1	0.1	0.1
Gas Tax Fund	2.1	0.0	0.0	0.0	0.0	0.0
Home care and mental health	0.0	0.0	0.0	0.0	0.0	0.0
Other fiscal arrangements	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2
Total	2.0	0.5	0.3	0.1	0.1	0.3
Direct program expenses						
Fuel charge proceeds returned	0.7	3.0	4.2	5.4	6.2	6.3
Other transfer payments	4.3	-0.3	0.9	0.7	1.4	1.8
Operating and capital expenses	-3.9	-0.6	1.9	-1.4	-1.5	-1.7
Total direct program expenses	1.1	2.1	7.0	4.8	6.2	6.3
Total program expenses	1.9	0.8	6.5	4.5	6.1	6.6
Public debt charges	-0.3	-3.4	-3.2	-3.1	-3.1	-3.1
Total expenses	1.6	-2.6	3.3	1.4	3.0	3.5
Budgetary balance	3.6	3.6	-4.9	-0.4	-1.3	-2.5
Federal debt	-4.1	-7.7	-2.8	-2.4	-1.1	-1.4

Source: Parliamentary Budget Officer.

H: Fiscal impact of 1 per cent decrease in real GDP

<i>\$ billions</i>	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024
Income taxes					
Personal income tax	-2.3	-2.4	-2.5	-2.6	-2.7
Corporate income tax	-0.4	-0.5	-0.6	-0.6	-0.6
Non-resident income tax	-0.1	-0.1	-0.1	-0.1	-0.1
Total income tax	-2.8	-3.0	-3.2	-3.3	-3.4
Excise taxes/duties					
Goods and Services Tax	-0.4	-0.4	-0.4	-0.4	-0.4
Custom import duties	-0.1	-0.1	-0.1	-0.1	-0.1
Other excise taxes/duties	0.0	0.0	0.0	0.0	0.0
Total excise taxes/duties	-0.5	-0.5	-0.5	-0.5	-0.5
Fuel charge proceeds	0.0	0.0	0.0	0.0	0.0
El premium revenues	0.1	1.1	1.1	1.1	1.1
Other revenues	-0.2	-0.2	-0.2	-0.2	-0.2
Total budgetary revenues	-3.3	-2.6	-2.8	-2.9	-3.1
Major transfers to persons					
Elderly benefits	0.0	0.0	0.0	0.0	0.0
Employment Insurance	0.9	0.9	0.9	1.0	1.0
Children's benefits	0.1	0.1	0.1	0.1	0.1
Total	1.0	1.0	1.0	1.1	1.1
Major transfers to other levels of government					
Canada Health Transfer	0.0	-0.2	-0.4	-0.5	-0.5
Canada Social Transfer	0.0	0.0	0.0	0.0	0.0
Equalization	0.0	-0.1	-0.2	-0.2	-0.2
Territorial Formula Financing	0.0	0.0	0.0	0.0	0.0
Gas Tax Fund	0.0	0.0	0.0	0.0	0.0
Home care and mental health	0.0	0.0	0.0	0.0	0.0
Other fiscal arrangements	0.0	0.0	0.0	0.1	0.1
Total	0.0	-0.3	-0.6	-0.6	-0.6
Direct program expenses	-0.2	-0.2	-0.2	-0.2	-0.3
Total program expenses	0.7	0.5	0.2	0.2	0.2
Public debt charges	0.0	0.1	0.2	0.3	0.3
Total expenses	0.8	0.6	0.4	0.5	0.6
Budgetary balance	-4.1	-3.2	-3.2	-3.5	-3.6

Source: Parliamentary Budget Officer.

I: Fiscal impact of 1 per cent decrease in GDP price level

<i>\$ billions</i>	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024
Income taxes					
Personal income tax	-1.8	-1.9	-2.1	-2.1	-2.1
Corporate income tax	-0.3	-0.4	-0.5	-0.5	-0.6
Non-resident income tax	-0.1	-0.1	-0.1	-0.1	-0.1
Total income tax	-2.2	-2.4	-2.6	-2.7	-2.8
Excise taxes/duties					
Goods and Services Tax	-0.4	-0.4	-0.4	-0.4	-0.4
Custom import duties	-0.1	-0.1	-0.1	-0.1	-0.1
Other excise taxes/duties	0.0	0.0	0.0	-0.1	-0.1
Total excise taxes/duties	-0.5	-0.5	-0.5	-0.5	-0.6
Fuel charge proceeds	0.0	0.0	0.0	0.0	0.0
EI premium revenues	-0.1	-0.2	-0.2	-0.3	-0.3
Other revenues	-0.2	-0.2	-0.2	-0.2	-0.2
Total budgetary revenues	-2.9	-3.3	-3.6	-3.8	-3.9
Major transfers to persons					
Elderly benefits	-0.6	-0.6	-0.6	-0.7	-0.7
Employment Insurance	-0.2	-0.2	-0.2	-0.2	-0.2
Children's benefits	0.0	0.2	0.2	0.2	0.2
Total	-0.8	-0.6	-0.7	-0.7	-0.7
Major transfers to other levels of government					
Canada Health Transfer	0.0	-0.2	-0.4	-0.5	-0.5
Canada Social Transfer	0.0	0.0	0.0	0.0	0.0
Equalization	0.0	-0.1	-0.2	-0.2	-0.2
Territorial Formula Financing	0.0	0.0	0.0	0.0	0.0
Gas Tax Fund	0.0	0.0	0.0	0.0	0.0
Home care and mental health	0.0	0.0	0.0	0.0	0.0
Other fiscal arrangements	0.0	0.0	0.1	0.1	0.1
Total	0.0	-0.3	-0.5	-0.6	-0.6
Direct program expenses	-0.2	-0.2	-0.2	-0.2	-0.3
Total program expenses	-1.0	-1.1	-1.4	-1.5	-1.6
Public debt charges	0.0	0.1	0.1	0.2	0.2
Total expenses	-0.9	-1.0	-1.3	-1.3	-1.4
Budgetary balance	-2.0	-2.3	-2.3	-2.4	-2.5

Source: Parliamentary Budget Officer.

J: Fiscal impact of 100-basis point interest rate increase

<i>\$ billions</i>	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024
Income taxes	0.0	0.0	0.0	0.0	0.0
Excise taxes/duties	0.0	0.0	0.0	0.0	0.0
Fuel charge proceeds	0.0	0.0	0.0	0.0	0.0
EI premium revenues	0.0	0.0	0.0	0.0	0.0
Other revenues	0.6	0.6	0.7	0.7	0.7
Total budgetary revenues	0.6	0.6	0.7	0.7	0.7
Major transfers to persons	0.0	0.0	0.0	0.0	0.0
Major transfers to other levels of government	0.0	0.0	0.0	0.0	0.0
Direct program expenses	-1.1	-3.3	-3.9	-4.0	-4.1
Public debt charges	3.0	4.3	5.5	6.6	7.6
Total expenses	1.8	1.0	1.6	2.6	3.5
Budgetary balance	-1.2	-0.4	-0.9	-1.9	-2.8

Source: Parliamentary Budget Officer.

K: PBO extended economic baseline

<i>% unless indicated otherwise</i>	Projection											
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Real GDP growth	1.8	1.6	1.9	1.7	1.6	1.5	1.6	1.6	1.6	1.6	1.5	1.5
Potential GDP growth	1.6	1.6	1.5	1.6	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.5
GDP inflation	1.7	1.6	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Nominal GDP growth	3.6	3.2	4.0	3.9	3.7	3.6	3.7	3.7	3.7	3.6	3.6	3.6
Nominal GDP (\$ billions)	2,218	2,288	2,380	2,472	2,562	2,654	2,752	2,853	2,958	3,065	3,175	3,288
3-month treasury rate	1.4	1.7	2.5	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
10-year government bond rate	2.3	2.1	3.4	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Exchange rate (US cents/C\$)	77.2	75.5	75.2	75.6	75.8	75.9	75.9	75.9	75.9	75.9	75.8	75.8
Unemployment rate	5.8	5.9	5.7	5.5	5.4	5.4	5.4	5.3	5.3	5.3	5.3	5.3
CPI inflation	2.2	1.7	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0
U.S. real GDP growth	2.9	2.3	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.8
WTI oil price (\$US per barrel)	65	61	62	63	65	66	67	69	70	71	73	74

Sources: Statistics Canada and Parliamentary Budget Officer.

L: PBO extended fiscal baseline

<i>\$ billions</i>	Projection											
	2017- 2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024	2024- 2025	2025- 2026	2026- 2027	2027- 2028	2028- 2029
Budgetary revenues	311.2	330.6	338.7	350.4	365.1	379.5	393.1	409.3	424.8	440.8	457.2	474.1
Program expenses	308.3	323.0	332.3	345.0	350.0	359.9	371.2	382.6	394.6	408.9	421.2	435.5
Public debt charges	21.9	23.4	24.1	27.6	30.3	32.2	33.7	35.1	36.0	36.8	37.6	38.2
Total expenses	330.2	346.3	356.4	372.6	380.3	392.1	405.0	417.6	430.6	445.7	458.8	473.7
Budgetary balance	-19.0	-15.7	-17.7	-22.3	-15.2	-12.6	-11.9	-8.4	-5.8	-4.9	-1.6	0.4
Federal debt	671.3	686.5	704.2	726.4	741.6	754.2	766.1	774.5	780.3	785.2	786.8	786.4
Federal debt (% of GDP)	31.3	31.0	30.8	30.5	30.0	29.4	28.9	28.1	27.3	26.5	25.7	24.8

Sources: Finance Canada and Parliamentary Budget Officer.

M: PBO and Budget 2019 economic outlook comparison

<i>% unless otherwise indicated</i>	Projection					
	2018	2019	2020	2021	2022	2023
Real GDP growth						
PBO April 2019	1.8	1.6	1.9	1.7	1.6	1.5
Budget 2019	1.9	1.8	1.6	1.7	1.9	1.9
GDP inflation						
PBO April 2019	1.7	1.6	2.0	2.1	2.1	2.0
Budget 2019	1.9	1.6	1.9	2.0	2.0	2.0
Nominal GDP growth						
PBO April 2019	3.6	3.2	4.0	3.9	3.7	3.6
Budget 2019	3.8	3.4	3.5	3.7	3.9	4.0
Nominal GDP (\$ billions)						
PBO April 2019	2,218	2,288	2,380	2,472	2,562	2,654
Budget 2019	2,223	2,298	2,379	2,467	2,564	2,667
3-month treasury rate						
PBO April 2019	1.4	1.7	2.5	2.7	2.7	2.7
Budget 2019	1.4	1.9	2.2	2.3	2.4	2.5
10-year government bond rate						
PBO April 2019	2.2	2.3	3.5	3.8	3.8	3.8
Budget 2019	2.3	2.4	2.7	2.8	3.1	3.3
Exchange rate (US\$/C\$)						
PBO April 2019	77.2	75.5	75.2	75.6	75.8	75.9
Budget 2019	77.2	76.3	77.2	77.7	78.2	79.9
Unemployment rate						
PBO April 2019	5.8	5.9	5.7	5.5	5.4	5.4
Budget 2019	5.8	5.7	5.9	6.0	6.0	5.9
CPI inflation						
PBO April 2019	2.2	1.7	2.0	2.1	2.1	2.0
Budget 2019	2.3	1.9	2.0	1.9	2.0	2.0
U.S. real GDP growth						
PBO April 2019	2.9	2.3	1.8	1.8	1.8	1.8
Budget 2019	2.9	2.4	1.7	1.7	1.9	1.9
WTI oil price (\$US)						
PBO April 2019	65	61	62	63	65	66
Budget 2019	66	59	60	61	63	65

Sources: Finance Canada and Parliamentary Budget Officer.

N: PBO and Budget 2019 fiscal outlook comparison

<i>\$ billions, (PBO - Budget 2019)</i>	2018- 2019	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024
Income taxes						
Personal income tax	-1.0	-1.2	-0.2	0.8	1.1	0.6
Corporate income tax	-0.5	1.7	0.7	1.1	1.7	1.2
Non-resident income tax	-0.7	-1.3	-1.4	-1.3	-1.1	-0.9
Total income tax	-2.2	-0.9	-1.0	0.8	1.7	0.9
Excise taxes/duties						
Goods and Services Tax	-1.1	-1.1	-1.3	-1.7	-2.0	-2.3
Custom import duties	0.3	0.7	0.8	-0.6	-0.7	-0.5
Other excise taxes/duties	0.0	0.4	0.4	0.5	0.7	0.9
Total excise taxes/duties	-0.8	0.1	-0.2	-1.8	-2.0	-1.9
Fuel charge proceeds	0.0	0.3	0.4	0.5	0.5	0.5
EI premium revenues	1.0	0.5	0.3	0.2	0.3	0.3
Other revenues	0.6	-0.1	-0.5	-1.0	-1.8	-2.3
Total budgetary revenues	-1.6	-0.1	-1.0	-1.6	-1.2	-2.4
Major transfers to persons						
Elderly benefits	0.0	0.2	0.4	0.4	0.5	0.6
Employment Insurance	0.8	1.0	0.5	-0.2	-0.5	-0.8
Children's benefits	-0.3	-0.1	0.3	0.6	0.8	1.0
Total	0.5	1.1	1.1	0.8	0.9	0.8
Major transfers to other levels of government						
Canada Health Transfer	0.0	0.0	0.2	0.1	0.2	0.3
Canada Social Transfer	0.0	0.0	0.0	0.0	0.0	0.0
Equalization	0.0	0.0	0.2	0.1	0.1	0.1
Territorial Formula Financing	0.0	0.0	-0.2	-0.3	-0.4	-0.5
Gas Tax Fund	0.0	0.0	0.1	0.0	0.0	0.0
Home care and mental health	0.0	0.0	0.0	0.0	0.0	0.0
Other fiscal arrangements	-0.3	-0.2	-0.3	-0.3	-0.3	-0.3
Total	-0.5	-0.2	0.1	-0.2	-0.3	-0.5
Direct program expenses						
Fuel charge proceeds returned	0.1	0.4	0.4	0.5	0.5	0.6
Other transfer payments	-0.3	0.3	0.9	0.0	0.0	0.0
Operating and capital expenses	-0.3	1.3	2.9	0.5	0.3	1.4
Total direct program expenses	-0.6	2.0	4.2	1.2	1.0	2.0
Total program expenses	-0.5	2.9	5.3	1.7	1.5	2.1
Public debt charges	-0.2	-2.1	-0.9	0.1	0.8	0.5
Total expenses	-0.8	0.8	4.4	1.9	2.3	2.8
Risk adjustment	0.0	-3.0	-3.0	-3.0	-3.0	-3.0
Budgetary balance	-0.8	2.1	-2.6	-0.4	-0.5	-2.1
Federal debt	0.9	1.0	1.1	1.1	1.0	-0.5

Sources: Finance Canada and Parliamentary Budget Officer.

Notes

1. Available at: https://www.pbo-dpb.gc.ca/en/blog/news/EFM_Feb_2019.
2. For example, see real GDP growth projections prepared by the Federal Reserve and the Congressional Budget Office.
3. We have maintained our risk adjustment regarding trade policy. We continue to assume that negative trade actions will reduce Canada's GDP by 0.25 per cent by 2023.
4. That is, the level of the policy rate consistent with the economy operating at potential GDP and inflation remaining at its target on a sustained basis. See Bank of Canada *Staff Analytical Note 2018-22*, The Neutral Rate in Canada: 2018 Estimates. Available at: <https://www.bankofcanada.ca/wp-content/uploads/2018/07/san2018-22.pdf>.
5. We have revised down our assumption for the Bank of Canada's nominal neutral rate of interest by 25 basis points to 2.75 per cent from 3.0 per cent in our October outlook. Similarly, we have revised down our long-run assumptions for the 3-month treasury bill rate from 2.95 per cent to 2.70 per cent and the Government of Canada 10-year benchmark bond rate from 4.0 per cent to 3.75 per cent.
6. The Federal Open Market Committee reduced their expectation for its nominal policy rate over the long-term at their December 2018 meeting, bringing down the median estimate from 3.0 per cent to 2.8 per cent. PBO lowered its assumption of the U.S. neutral policy rate by 25-basis point to 2.75 per cent.
7. At a given point in time, the yield curve shows interest rates across different maturities from short- to long-dated government bonds. Typically, yield curves slope upward, reflecting a term premium, which is the additional return that an investor would require to bear the risk of holding a bond with a longer maturity.

This premium has been trending down since the global financial crisis. Analysis by staff at the Bank of International Settlements (available at: https://www.bis.org/publ/qtrpdf/r_qt1809h.pdf) suggests that declining uncertainty about the projected path of short rates as well as demand pressures from central banks could be potential contributing factors. PBO will be undertaking analysis of term premia in Canada in future work.
8. See the summary provided in Annex III of the 2018 Article IV IMF Staff report. Available at: <https://www.imf.org/en/Publications/CR/Issues/2018/07/16/Canada-2018-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-46084>.
9. Despite sizeable estimates of the sensitivity of investment to changes in capital cost allowances in recent studies, the magnitude of these impacts and the separation between new investment and shifted investment remains highly debated.

10. We maintain our assumption that the federal carbon levy will generate a modest headwind for the Canadian economy over the medium term as the levy rises to \$50 per tonne of CO₂ equivalent in 2022. We projected that real GDP would be 0.5 per cent lower in 2022 compared to a scenario without a carbon pricing levy. For additional detail, see: https://www.pbo-dpb.gc.ca/en/blog/news/Carbon_price_levy.
11. After adjusting for historical revisions and the unexpected weakness in the second half of 2018, our projection of nominal GDP is \$22.3 billion higher annually, on average, over 2019 to 2023 compared to our October outlook.
12. Relative to our baseline nominal GDP growth projection (3.7 per cent annually, on average, over 2019 to 2023), the 30, 50 and 70 per cent confidence intervals shown in Figure 8 are consistent with average nominal GDP growth of ± 0.5 , ± 0.8 and ± 1.2 percentage points respectively.
13. The comparison excludes roughly \$2.4 billion in revenues no longer reported due to accounting treatment changes for the Canadian Commercial Corporation.
14. Policy actions include measures in the Fall Economic Statement 2018, Budget 2019 and measures announced off-cycle (that is, in the period after FES 2018 but before Budget 2019).
15. See page 86 in Fall Economic Statement 2018.
16. Our outlook for corporate income tax revenues now more fully accounts for accounting losses in projecting tax yields.
17. The FES estimates a total cost of \$14.4 billion over this period. <https://budget.gc.ca/fes-eea/2018/home-accueil-en.html>
18. PBO estimates tariff countermeasures on the imports of steel, aluminum, and other products will generate net revenues amounting to \$1.2 billion in 2019-20 and \$1.0 billion in 2020-21.
19. Starting in 2017, EI premium rates are set each year to generate just enough premium revenue to balance the EI Operating Account over a 7-year period. The EI Operating Account had a cumulative surplus of \$2.5 billion at the end of 2016. Under law, the break-even rate must be set such that this surplus will be exhausted over the next 7 years.
20. See: <https://www.fin.gc.ca/n18/18-078-eng.asp>.
21. Figures includes spending from the Fall Economic Statement 2018 and Budget 2019.
22. Recall that in Budget 2016, the Government abandoned its fiscal anchor of balancing the budget in 2019-20 and committed to "returning to balanced budgets".
23. Adjusting for the fourth quarter data, PBO's outlook for nominal GDP would be \$15 billion higher annually, on average, over 2019 to 2023 due, in part, to higher GDP inflation projected in 2019 and 2020. While this represents an upside risk to the private sector outlook for nominal GDP, it is unlikely there would be any implications for the fiscal outlook presented in Budget 2019 given that the financial data on which Budget 2019 was based would have reflected the more recent economic data.
24. Our comparison between PBO and Finance Canada projections is suggestive, rather than conclusive because Finance Canada has not published a detailed

quantifiable breakdown of the major cost components within operating expenses in Budget 2019.

25. See: <https://www.internationalbudget.org/wp-content/uploads/IMF-Manual-on-Fiscal-Transparency.pdf>.
26. Based on information available at the Government of Canada Mandate Letter Tracker, under the objective "Balance the budget in 2019/20". See: <https://www.canada.ca/en/privy-council/campaigns/mandate-tracker-results-canadians.html>.