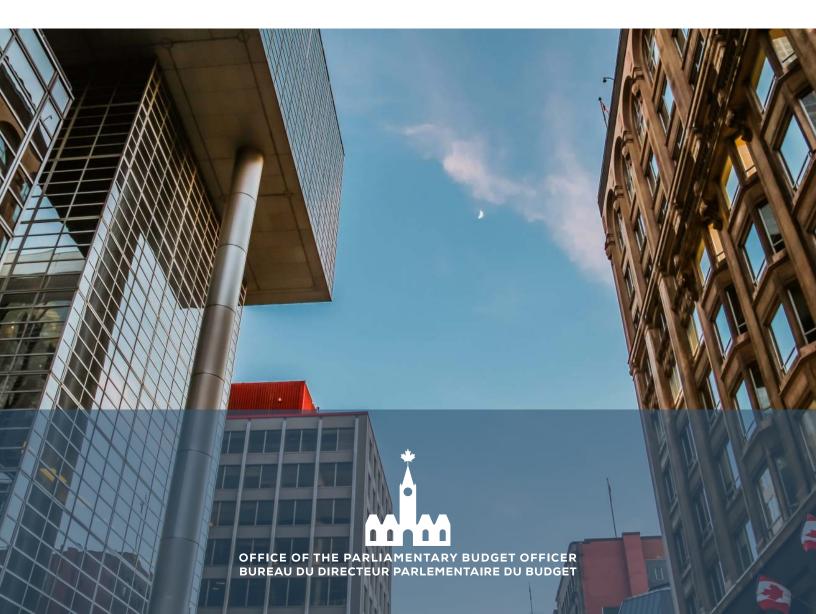
REVIEW OF PBO ECONOMIC AND FISCAL PROJECTIONS



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.

This report provides a qualitative and quantitative analysis of the economic and fiscal projections of the PBO and Finance Canada since 2011.

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Executive summary

This report provides an analysis of the economic and fiscal projections of the Office of the Parliamentary Budget Officer (PBO) since 2011 and compares them with Finance Canada projections for 6 economic variables and 4 fiscal variables. It follows up on a similar report that was released in 2017¹.

At that time, PBO projections of nominal gross domestic product (GDP) and the budgetary balance were analyzed and compared with those of Finance Canada. This time, more variables were included in the analysis. Two criteria were used to assess the performance of the projections: bias and accuracy. However, the number of observations was limited. Therefore, the results lack a high degree of statistical significance. Nevertheless, they provide a rough indication of the performance of the projections to date.

The following variables were analyzed:

Economic variables:

- real GDP growth
- nominal GDP growth
- Consumer Price Index (CPI) inflation
- three-month Treasury bill interest rate
- 10-year government bond interest rate
- unemployment rate

Fiscal variables:

- federal government revenues
- program expenses
- public debt charges
- budgetary balance.

In general, the PBO and Finance Canada projections for economic variables show a positive bias. On balance, this bias is more pronounced for Finance Canada than for the PBO. With regard to the accuracy of the economic variable projections, the PBO and Finance Canada appear to do equally well.

With respect to fiscal variables, Finance Canada's projections are generally less biased and more accurate. Both the PBO and Finance Canada tend to underestimate the budgetary balance in the short term and overestimate it in the long term.

The PBO will use these results—along with the other results in this report—to improve its economic and fiscal projection models.

Because of the unprecedented impact of the COVID-19 pandemic and the high level of uncertainty resulting from it, PBO projections for 2020, particularly those in the scenario analyses, were not included in this analysis.

1. Introduction

The Office of the Parliamentary Budget Officer (PBO) began making independent projections in 2011. The purpose of this report is to revise these projections and compare them with public- and private-sector projections, as compiled by Finance Canada through a survey.

Two criteria are used to measure the performance of the PBO projections: bias and accuracy. These two criteria are assessed using the projection error, which is calculated by taking the difference between the projected value and the observed value for a given variable and projection horizon.² If the projections are below the observed values, the projection error is negative. The projection error is positive if the projections are higher than the observed values.

Bias is measured using the average projection error. A negative bias means that the projections are generally too low, while a positive bias means that the projections are generally too high. Unbiased projections have an average projection error of zero.

However, in terms of assessing accuracy, unbiased projections can be misleading. For example, a projection that is much too low one year may be offset by a projection that is much too high the next year, which could result in an average error equal to zero. Yet, this does not mean that they are accurate projections. Therefore, another criterion is needed to assess accuracy.

The criterion used for this is average absolute error, which is calculated by taking the average of the absolute values of the error. By doing this, positive errors are not offset by negative errors. Because it is not realistic to aim for exact accuracy (i.e., an average absolute error equal to 0), it is more appropriate to look at the *relative* accuracy of the projections made by each institution.

Both economic and fiscal projections were assessed. The following variables were analyzed:

Economic variables:

- real gross domestic product (GDP) growth
- nominal GDP growth
- Consumer Price Index (CPI) inflation
- three-month Treasury bill interest rate
- 10-year government bond interest rate
- unemployment rate

Fiscal variables:

- federal government revenues
- program expenses
- public debt charges
- budgetary balance.

In terms of economic projections, PBO projections are compared with the average projections of about 15 private institutions. These projections are compiled by Finance Canada through a survey. They are then published and Finance Canada uses them as the basis for its fiscal projections. For the sake of simplicity, these projections are referred to here as those of Finance Canada.³

For economic variables, PBO projections are generally published in the October Economic and Fiscal Outlook (EFO). Finance Canada fall surveys are generally conducted in September.

PBO fiscal projections are compared directly with those of Finance Canada. For fiscal variables, the focus is on fall projections. In the case of Finance Canada, these are the projections included in the Fall Economic Statement, while for the PBO, these are the projections included in the EFO, generally released in October.

Certain caveats should be noted with respect to this revision of the PBO projections. First, the number of observations is limited, as the PBO only began to make independent projections in 2011. As such, the average error or average absolute error can be influenced greatly by a single projected value that was significantly different from the observed value.

Moreover, while the average error or average absolute error may appear to be larger for either Finance Canada or the PBO, because of the limited number of observations, the difference may not be statistically significant.

In addition, the PBO—like most institutions—is constantly working to improve its economic and fiscal projection models. Therefore, projection errors made in the early years of the office will not necessarily be repeated in the future. This is especially true since the PBO has many more resources now than it did a few years ago.

2. Economic projections

Projections of 6 variables are analyzed: real GDP growth, nominal GDP growth, CPI growth, the interest rate on three-month Treasury bills, the interest rate on 10-year bonds and the unemployment rate.

In the following charts, 4 projection horizons are considered, ranging from the current year to 3 years ahead. A summary measure—the average projection over these 4 years—is added to each chart. Projections for a current year are defined by a projection horizon of 0 years. Because the PBO began making projections in June 2011, the number of observations is small. The first projections that are analyzed were made in fall 2011, and the latest projections were made in fall 2019.⁴

The average error and average absolute error are calculated for each projection horizon and for the 4-year average projections. Two types of variables are analyzed: growth variables (e.g., real GDP growth) and ratios (e.g., unemployment rate).

For projection errors over a given time horizon, the PBO subtracts the observed growth or ratio from the projected growth or ratio.⁵ For the 4-year average projection error, following the methodology of the U.S. Congressional Budget Office,⁶ the PBO uses the geometric average to compare the projected average growth with the observed average growth.⁷ The PBO uses the arithmetic average to compare the projected average ratios with the observed average ratios.⁸

2.1. Real GDP growth

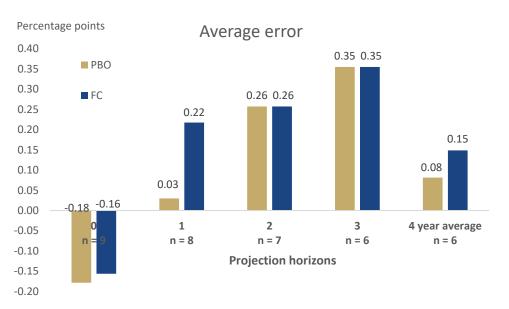
Annual real GDP growth between 2011 and 2019 averaged just over 2 per cent. Growth was weakest in 2015, when falling oil prices negatively affected the Canadian economy, leading to growth of only 0.7 per cent.

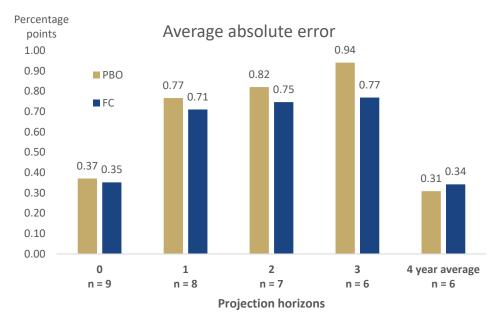
That said, the PBO and Finance Canada's real GDP projections for the current year are generally negatively biased. However, they show a positive bias for the 1-, 2-, and 3-year horizons, as well as for the 4-year average. Finance Canada projections are more biased for the 1-year horizon and 4-year average (Figure 2-1).

The accuracy of Finance Canada's projections of real GDP is higher than that of the PBO's projections for all projection horizons and for the 4-year average projections. It may seem counterintuitive that the accuracy of the 4year average growth is higher than the accuracy of each projection horizon. This is because the 4-year average growth is calculated using a geometric average, implying that positive errors can offset negative errors (and vice versa).

Figure 2-1

Projection errors - Real GDP growth





Sources: Parliamentary Budget Officer (PBO) and Finance Canada.

Note: *n* refers to the number of observations, i.e., the number of projections for each horizon. Finance Canada's projections are derived from the average of 15 private-sector forecasts. These projections are generally published and compiled in September. PBO projections are released in October.

2.2. Nominal GDP growth

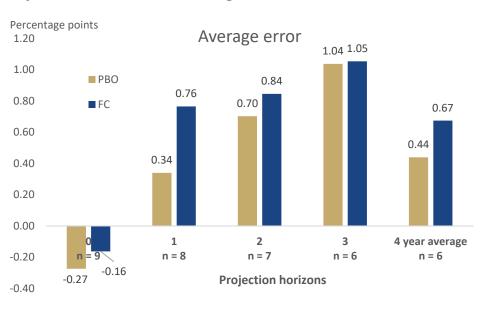
Annual nominal GDP growth between 2011 and 2019 averaged slightly less than 4 per cent. As with real GDP, 2015 was the weakest year, when nominal GDP declined by 0.2 per cent. Because nominal GDP is generally higher than real GDP, errors are larger for nominal GDP than for real GDP.

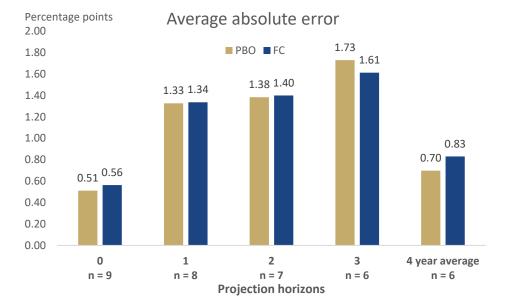
PBO and Finance Canada projections of nominal GDP show a positive bias for each projection horizon, except for the current year (Figure 2-2). The bias associated with the PBO's projections is less pronounced than that associated with Finance Canada's projections, with the exception once again of the current year.

The accuracy of the PBO and Finance Canada projections is similar for most projection horizons, but the accuracy of the PBO's 4-year average projections is higher than that of Finance Canada's projections.



Projection errors – Nominal GDP growth





Sources: Parliamentary Budget Officer (PBO) and Finance Canada.

Note: *n* refers to the number of observations, i.e., the number of projections for each horizon. Finance Canada's projections are derived from the average of 15 private-sector forecasts. These projections are generally published and compiled in September. PBO projections are released in October.

2.3. CPI inflation

The average annual increase in consumer prices between 2011 and 2019 was 1.7 per cent, which is below the Bank of Canada's target of 2 per cent inflation. As might be expected, for each projection horizon, as well as for the 4-year average, both the PBO and Finance Canada projections show a positive bias. The PBO's projections are generally less biased than those of Finance Canada (Figure 2-3).

On balance, the PBO's projections for CPI inflation are more accurate than those of Finance Canada.

Figure 2-3

0.20 0.15

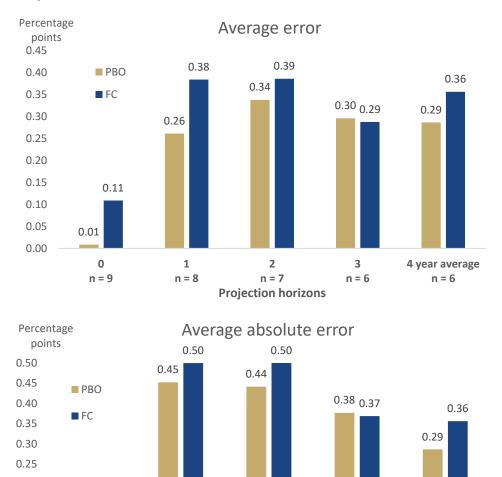
0.10 0.05 0.00 0.11

0.07

0

n = 9







1

n = 8

Note: *n* refers to the number of observations, i.e., the number of projections for each horizon. Finance Canada's projections are derived from the average of 15 private-sector forecasts. These projections are generally published and compiled in September. PBO projections are released in October.

2

n = 7

Projection horizons

3

n = 6

4 year average

n = 6

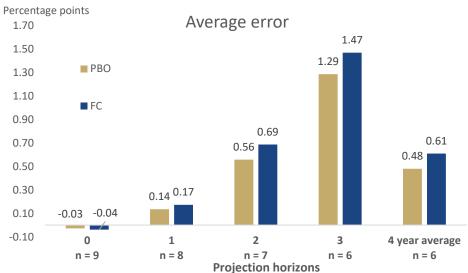
2.4. Three-month Treasury bill interest rate

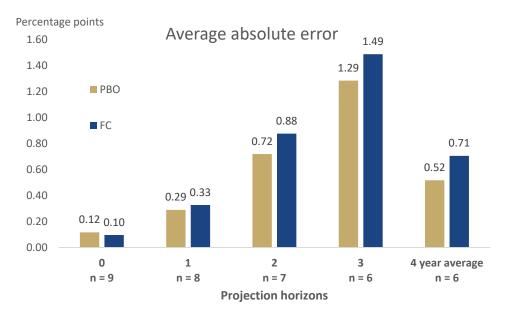
Over the period from 2011 to 2019, interest rates on three-month Treasury bills averaged 1 per cent. They reached a low of 0.5 per cent in 2015 and 2016 before rising and peaking at 1.7 per cent in 2018 and 2019. From a historical perspective, interest rates have remained low over the past decade, despite the fact that many observers projected that they would rise to a so-called "normal" rate.

As a result, with the exception of the current year, short-term interest rate projections show a positive bias for both the PBO and Finance Canada (Figure 2-4), although it is generally lower for the PBO.

This positive bias means a similar lack of accuracy for both the PBO and Finance Canada. The average error and average absolute error are the same for the 2- and 3-year horizons, meaning that, for these projection horizons, the PBO and Finance Canada consistently overestimated interest rates. PBO forecasts of short-term interest rates are generally more accurate.

Projection errors – Interest rate on three-month Treasury bills





Sources: Parliamentary Budget Officer (PBO) and Finance Canada.

Note: *n* refers to the number of observations, i.e., the number of projections for each horizon. Finance Canada's projections are derived from the average of 15 private-sector forecasts. These projections are generally published and compiled in September. PBO projections are released in October.

Figure 2-4

2.5. 10-year government bond interest rate

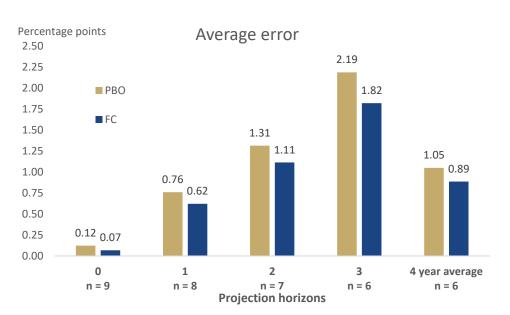
For interest rates on 10-year bonds, the average rate from 2011 to 2019 was 1.9 per cent. This rate remained low throughout the decade.

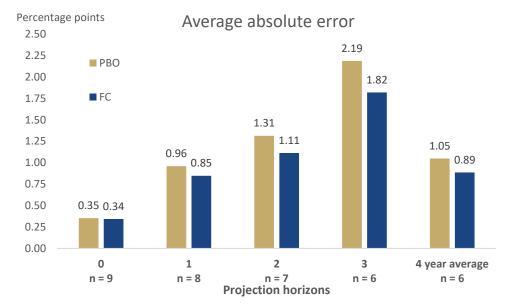
Therefore, the finding is the same for both long-term and short-term interest rates, except that now it is Finance Canada's projections that are less biased than those of the PBO. Once again, the bias increases as the projection horizon expands (Figure 2-5).

As with short-term rates, the accuracy and bias of the long-term rate projections are the same for the 2- and 3-year horizons. However, for the current year and for the 1-year horizon, overestimates of interest rates were partially offset by underestimates, for example, in 2013 and 2015. This translates into an average absolute error that is higher than the average error for both the PBO and Finance Canada. On balance, the PBO's projections are less accurate than those of Finance Canada.

Figure 2-5

Projection errors – 10-year government bond interest rate





Sources: Parliamentary Budget Officer (PBO) and Finance Canada.

Note: *n* refers to the number of observations, i.e., the number of projections for each horizon. Finance Canada's projections are derived from the average of 15 private-sector forecasts. These projections are generally published and compiled in September. PBO projections are released in October.

2.6. Unemployment rate

The unemployment rate declined continuously over the period from 2011 to 2019, except in 2016, when the Canadian economy was affected by the oil prices plummeting the previous year. It fell from 7.5 per cent in 2011 to 5.7 per cent in 2019, averaging 6.7 per cent over the period.

PBO projections for the unemployment rate show a significant positive bias. As evidence of the fact that the steady decline in the unemployment rate over the past decade has surprised many observers, Finance Canada's projections of the unemployment rate also show a positive bias across all projection horizons, but this bias is less pronounced than that of the PBO (Figure 2-6).

The PBO's unemployment rate projections are less accurate than Finance Canada's for all projection horizons, as well as for the 4-year average.

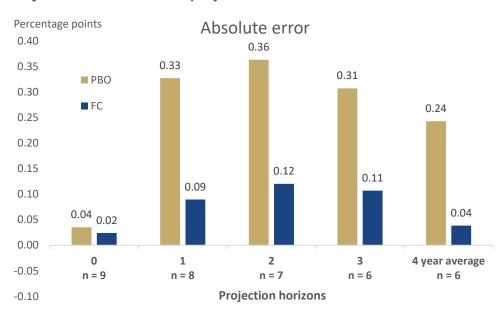
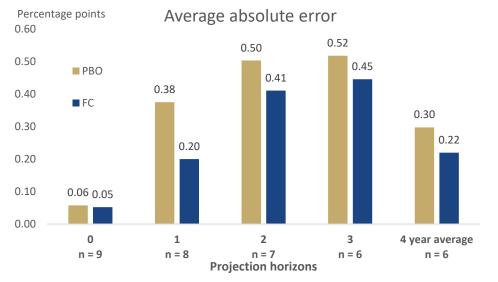


Figure 2-6 Projection errors – Unemployment rate



Sources: Parliamentary Budget Officer (PBO) and Finance Canada.

Note: *n* refers to the number of observations, i.e., the number of projections for each horizon. Finance Canada's projections are derived from the average of 15 private-sector forecasts. These projections are generally published and compiled in September. PBO projections are released in October.

3. Fiscal projections

In this section, the fiscal projections for 4 variables are examined: budgetary revenues, program expenses, public debt charges and the budgetary balance. The PBO's projections are compared with those of Finance Canada.

For the first 3 variables, the focus is on the projection error as a percentage of the observed value. For the budgetary balance, the focus is the projection error in billions of dollars.⁹ The PBO calculates the projection error by comparing the projected level with the observed level for a given time horizon. As in the previous section, the PBO also looks at the difference between the 4-year average of the projected level and the 4-year average of the observed level.¹⁰

Because fiscal policy is discretionary and depends on the preferences of the government, it can be quite difficult to predict fiscal variables at longer term horizons. Fiscal projections are constructed on a status quo basis to provide a planning framework for parliamentarians rather than to predict what new sources of revenue or spending are likely to be used.¹¹

Finance Canada is expected to have an advantage because the officials who make the fiscal projections have information that is not available publicly, such as the government's short- and medium-term intentions, new programs under consideration, and items on the Cabinet's agenda. Furthermore, PBO fiscal projections are generally made in October, prior to the release of the Fall Economic Statement, which is generally released in November. This also gives Finance Canada an advantage, as any government measures announced in the statement that affect government revenues or expenditures cannot be included in the PBO's projections.

Lastly, as mentioned in the previous section, the number of observations is small, as the PBO produced its first independent projections in fall 2011.¹²

3.1. Budgetary revenues

The federal government's budgetary revenues increased from \$237 billion in 2011–12 to \$334 billion in 2019–20. Although the COVID-19 pandemic began to take hold in March 2020 (the last month of the 2019–20 fiscal year), its effect on budgetary revenues in 2019–20 seems rather modest, at least when compared with the overall impact of the pandemic on public finances in 2020–21. In fall 2019, both the PBO and Finance Canada projected that revenues for 2019–20 would be about \$340 billion.

Up to and including 2016, Finance Canada deliberately lowered its revenue projections by a certain amount as a risk adjustment. For example, in 2016, Finance Canada lowered its revenue projections by \$6 billion. For comparability, we do not include these risk adjustments in Finance Canada's projections.

In general, both the PBO and Finance Canada tend to underestimate budgetary revenues for short-term horizons. For these horizons, the PBO's projections are more biased than those of Finance Canada (Figure 3-1). For longer projection horizons, as well as for the 4-year average, the PBO appears to be more likely to underestimate revenues, while Finance Canada appears to be more likely to overestimate them.

In terms of average absolute error, Finance Canada outperforms the PBO, except for the 3-year horizon.

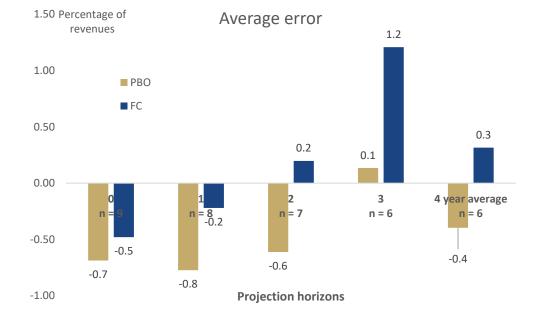
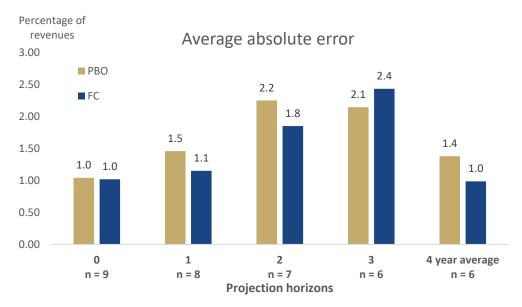


Figure 3-1 Projection errors – Budgetary revenues



Sources: Parliamentary Budget Officer (PBO) and Finance Canada.

Note: *n* refers to the number of observations, i.e., the number of projections for each horizon. Finance Canada projections are released in the Fall Economic Statement, usually in November. PBO projections are released in October.

3.2. Program expenses

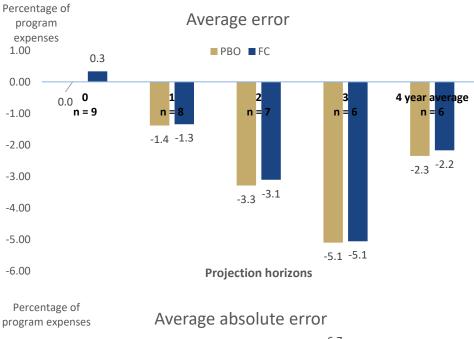
The federal government's program expenses increased from \$240 billion in 2011–12 to \$338 billion in 2019–20, \$7.2 billion of which was allocated to exceptional programs put in place to respond to the COVID-19 pandemic.¹³ Therefore, program expenses excluding the COVID-19 response plan were \$331 billion in 2019–20. We use this amount to measure the exactitude of the projections, as it was not possible to anticipate additional expenses of this magnitude at the time the projections were made.

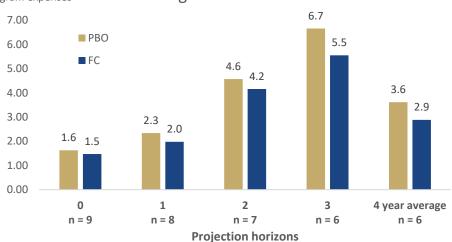
PBO and Finance Canada projections for program expenses are negatively biased, except for the current year. This means that government spending has been underestimated (Figure 3-2). On balance, PBO and Finance Canada projections show a broadly similar bias.

In terms of accuracy, Finance Canada outperforms the PBO across all projection horizons.

Figure 3-2

Projection errors – Program expenses





Sources: Parliamentary Budget Officer (PBO) and Finance Canada.

Note: *n* refers to the number of observations, i.e., the number of projections for each horizon. Finance Canada projections are released in the Fall Economic Statement, usually in November. PBO projections are released in October.

3.3. Public debt charges

Projections of public debt charges are very sensitive to interest rate projections. With rates remaining low from 2011 to 2019, in addition to a budget that was balanced temporarily in 2015–16, public debt charges fell from \$31 billion in 2011–12 to \$24 billion in 2019-20, hitting a low of \$22 billion in 2017–18.

As mentioned earlier, both the PBO and Finance Canada have consistently overestimated interest rates over the past decade. As a result, public debt charges have been overestimated for each projection horizon (Figure 3-3).

This overestimate can be substantial—for the 3-year projection horizon, the average error is 35.6 per cent for the PBO and 31.1 per cent for Finance Canada. On a debt of hundreds of billions of dollars, overestimating interest rates by a few percentage points will have a significant impact on the bias and accuracy of interest charge projections.

As with interest rates, because almost all public debt charge projections were overestimated, the average absolute error and average error are practically identical.

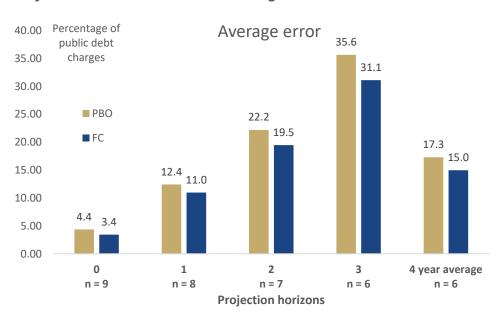
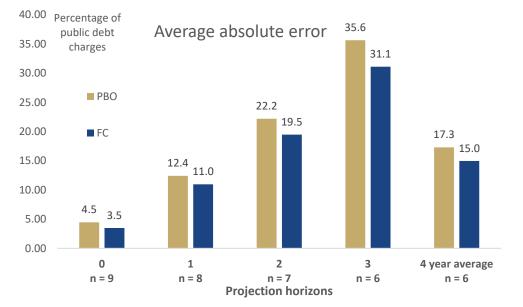


Figure 3-3 Projection errors – Public debt charges



Sources: Parliamentary Budget Officer (PBO) and Finance Canada.

Note: *n* refers to the number of observations, i.e., the number of projections for each horizon. Finance Canada projections are released in the Fall Economic Statement, usually in November. PBO projections are released in October.

3.4. Budgetary balance

The budgetary balance is calculated by subtracting program expenses and public debt charges from revenues. When the budgetary balance is positive, it is a surplus; when it is negative, it is a deficit. The budgetary balance has fluctuated over the past decade, starting at a deficit of \$33 billion in 2011–12, rising to a surplus of \$1.9 billion in 2014–15 and then falling to a deficit of \$39 billion in 2019–20. The deficit not including the COVID-19 response plan is -\$32 billion for 2019–20, which is the amount we use in our assessment.¹⁴

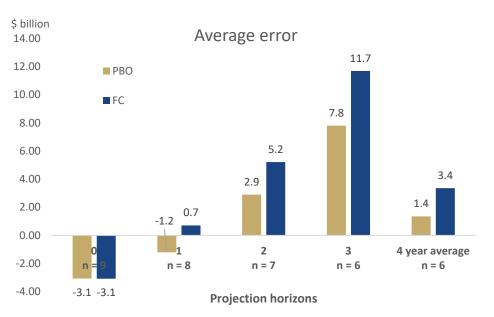
Finance Canada adjusted its budget balance projections by a certain amount as a risk adjustment. For example, in 2016, Finance Canada lowered its budget balance projection by \$6 billion. For comparability, we have not included these risk adjustment amounts in Finance Canada's budget balance projections.

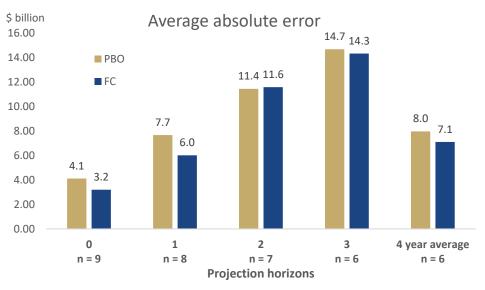
Because the average error is negative, both the PBO and Finance Canada underestimate the budgetary balance (and so, in general, *overestimate* the deficit) for the current year and—in the case of the PBO—over a 1-year horizon (Figure 3-4). The PBO and Finance Canada overestimate the budget balance for longer projection horizons (and so, in general, *underestimate* the deficit), partly because fiscal policy changed with the government following the 2015 federal election.

PBO projections are slightly more biased than Finance Canada projections for the current year and a 1-year horizon, while the opposite is true for the 2 and 3-year horizons and for the 4-year average. On balance, the PBO's projections are less accurate than those of Finance Canada.

Figure 3-4

Projection errors – Budgetary balance





Sources: Parliamentary Budget Officer (PBO) and Finance Canada.

Note: *n* refers to the number of observations, i.e., the number of projections for each horizon. Finance Canada projections are released in the Fall Economic Statement, usually in November. PBO projections are released in October.

4. Efficiency

Another measure of the quality of economic and fiscal projections is efficiency. A projection is said to be efficient if it takes into account all available information.

Efficiency can be measured by looking at whether projection errors, i.e., the differences between projected and observed values, show predictable behaviour. If the errors show predictable behavior, then theoretically it would be possible to adjust the projections to account for this recurring pattern in the errors.

Measuring efficiency quantitatively can be done using relatively simple statistical techniques, but they require a sufficient number of observations. Because the PBO only began making independent projections in 2011, the number of observations is too small to analyze efficiency in this regard.

However, some qualitative conclusions can be drawn by analyzing the average projection error. In cases where the average projection error is significant in either direction, this means that the projection is biased. For example, in the case of interest rates, the projections show a positive bias over each time horizon, meaning that they have been overestimated consistently over the past decade.

This consistent overestimating is information that was available and it may not have been used to its full extent at the time the projections were made. Therefore, the PBO and Finance Canada interest rate projections are unlikely to be statistically efficient.

The fact that this information exists does not necessarily mean that it should be incorporated into the projections. Continuing with the example of interest rates, the majority of institutions that prepare economic projections routinely assume that rates will move back toward a so-called "normal" rate. However, interest rates are greatly influenced by central bank decisions, which are difficult to predict given their discretionary nature. Rather than being the result of rigorous statistical analysis, the prediction of such a normalization is more a matter of judgment.

Notes

- See section 3 of this report: <u>https://www.pbo-</u> <u>dpb.gc.ca/web/default/files/Documents/Reports/2017/FES%202017/FES 201</u> <u>7 EN.pdf</u>, p. 6–10.
- 2. For several variables, the current values have been revised one or more times over the years. In this report, we use revised data that were as recent as possible at the time of publication.
- 3. The number of institutions that participate in this survey may vary from year to year. In 2018, the institutions included in the survey were as follows:
 - BMO Capital Markets
 - Caisse de dépôt et placement du Québec
 - Canadian Federation of Independent Business
 - CIBC World Markets
 - Conference Board of Canada
 - Desjardins
 - IHS Global Insight
 - Industrial Alliance Insurance and Financial Services Inc.
 - Laurentian Bank Securities
 - National Bank Financial Markets
 - Royal Bank of Canada
 - Scotiabank
 - TD Bank Financial Group
 - University of Toronto (Policy and Economic Analysis Program).
- 4. The number of observations is 9 for the current-year projections and 8 for those with a 1-year horizon. The number of observations is 7 for a 2-year horizon, and 6 for a 3-year horizon and for 4-year average projections. Specifically, the first projection for the current year was made in fall 2011 for 2011, and the last projection was made in fall 2019 for 2019. For the 1-year horizon, the first projection was made in fall 2011 for 2012, and the last one was made in fall 2018 for 2019, and so on.
- 5. For example, the PBO projected in fall 2015 that GDP growth in 2015 would be 1.1 per cent. Since the observed GDP growth in 2015 was 0.7 per cent, the projection error for the current year in 2015 was 0.4 per cent. The PBO also projected in fall 2015 that GDP growth in 2016 would be 2 per cent, while the observed growth was 1 per cent. Therefore, the projection error on a 1year horizon is 1 per cent. The principle is the same for 2- and 3-year projection horizons.
- For example, see <u>https://www.cbo.gov/system/files/2019-10/55505-CBO-forecasting-record.pdf</u>, published by the Congressional Budget Office in October 2019.
- 7. For example, take total growth over 4 years of 8.24 per cent. Using a geometric average implies that the average annual growth will be 2 per cent $(1.0824^{1/4} = 1.02)$. Since the average real GDP growth between 2015 and

2018 was 1.7 per cent and the PBO projected in fall 2015 that the average growth between 2015 and 2018 would be 1.79 per cent, the 4-year average projection error for this period is 0.09 per cent.

- 8. For example, take ratios for 3 different years of 7 per cent, 6.5 per cent and 6 per cent. Using an arithmetic average implies an average ratio over these 3 years of 6.5 per cent ((7 + 6.5 + 6)/3 = 6.5). Since the average unemployment rate between 2015 and 2018 was 6.52 per cent and the PBO projected in fall 2015 that the average unemployment rate between 2015 and 2018 would be 6.7 per cent, the average 4-year projection error for this period is 0.18 per cent.
- 9. For example, given that in fall 2015 the PBO projected that revenues would be \$291.6 billion in 2015–16 and revenues actually reached \$295.5 billion, the projection error as a percentage of observed revenues is -1.3 per cent for the current year. Furthermore, given that in fall 2015 the PBO projected the deficit to be \$1.0 billion in 2015–16 and it was ultimately reduced to -\$1.2 billion, the projection error of the deficit for the current year is \$2.2 billion. For a 1-year horizon, the PBO will compare its fall 2015 projections for 2016–17 with the values observed in 2016–17. The principle is the same for 2- and 3-year horizons.
- The average 4-year level will be calculated using an arithmetic average. For example, because average revenue between 2015–16 and 2018–19 was \$308.7 billion and the PBO projected in fall 2015 that average revenue between 2015–16 and 2018–19 would be \$304.2 billion, the 4-year projection error as a percentage of the current value is -1.45 per cent ((304.2 308.7)/308.7 = -0.0145).
- 11. In particular, this status quo hypothesis is unlikely to prove true in the event of a change in government. For example, in October 2015, Canada moved from a government that aimed to balance its budget to a government that decided to pursue an expansionary fiscal policy. It is important to keep this in mind when analyzing the performance of PBO and Finance Canada projections.
- 12. Therefore, the number of observations is 9 for the current-year projections, 8 and 7 for 1- and 2-year projection horizons, respectively, and 6 for a 3-year horizon and for 4-year average projections. The first fiscal projection for the current year was made in fall 2011 for fiscal year 2011–12, and the last one was made in fall 2019 for fiscal year 2019–20. The first 1-year fiscal projection was made in fall 2011 for fiscal year 2012–13, and the last one was made in fall 2019 for fiscal year 2012–13, and the last one was made in fall 2019 for fiscal year 2012–13, and the last one was made in fall 2018 for fiscal year 2019–20, and so on.
- 13. See the Government of Canada's annual financial report, <u>https://www.canada.ca/content/dam/fin/publications/afr-rfa/2020/afr-2019-</u> <u>20-eng.pdf</u>, p. 6.
- 14. While we have isolated the expenses of programs put in place to respond to the COVID-19 pandemic, we were not able to isolate the effect of the pandemic on government revenues in fiscal year 2019–20. This means that the effect of COVID-19 on the 2019–20 budgetary balance has been only partially eliminated.