Federal Deficits and Recession: What Could Happen

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Executive Summary

There are serious financial risks associated with running deficits during times of positive economic growth. One of the principal risks is that the budget cannot be balanced regardless of economic conditions because a permanent imbalance between how much the government spends and the amount it raises from taxes and other revenues develops. The Trudeau government took office in late 2015 and immediately increased budgeted federal program spending by $8.1 billion over the period from 2015/16 to 2019/20. Less than six months later, in its first full budget (2016), the federal government markedly increased budgeted program spending by an additional $65.9 billion over the same five-year period. The increases in program spending meant the government purposefully moved from expected small surpluses to large deficits. The original 2015 plan presented by the Harper government was for a cumulative budgeted surplus for the 2015/16–2019/20 period of $13.1 billion.

The Liberal government's first budget, introduced in early 2016, called for deficits between 2015/16 and 2019/20 totaling $104.3 billion, more than four times higher than originally proposed in their campaign platform. Again, these deficits were planned without an expectation of a recession or economic slowdown during the planning period. This paper estimates the potential annual and four-year cumulative deficits for the federal government if an economic slowdown or recession occurred. It does so by applying the experiences of three previous recessions (1982/83, 1991/92, 2008/09) and an economic slowdown (2000/01) to the current financial plans of the federal government.

Recessions automatically—without any policy changes—cause government revenues to decline and program spending to increase. For instance, the best known of these types of programs is Employment Insurance. During times of recession the revenues collected for EI will decline as people's income declines or they are laid off. In addition, spending by the EI program automatically increases as more people collect EI benefits. In the most recent 2008/09 recession, spending on employment insurance increased from $14.1 billion in 2006/07 to $21.6 billion in 2009/10, an increase of 53.3%.

Often governments will also enact discretionary measures that further reduce revenues and/or increase program spending in response to recessions. The Harper government, for instance, introduced a large package of stimulus spending in the

2009 budget in response to the 2008/09 recession. The result of both the automatic revenue declines and spending increases coupled with possible discretionary policy changes is larger deficits.

If the 1991/92 recession, which had mild fiscal effects, was to repeat, the 2019/20 deficit is forecast to increase from its current budgeted level of $14.4 billion to $42.7 billion. The four-year accumulated deficit for the period from 2019/20 to 2022/23 would increase from $48.5 billion to $124.2 billion.

The economic slowdown of 2000/01 had more serious fiscal effects than the 1991/92 recession. If such an experience were repeated, the deficit for 2019/20 is estimated to reach $48.7 billion and the cumulative four-year deficit increases to $287.4 billion (current estimate is $48.5 billion).

Finally, if the conditions of the most recent and fairly serious recession of 2008/09 were repeated, the annual deficit for 2020/21 is expected to reach $120.5 billion. The four-year cumulative deficit is estimated to increase from $48.5 billion to $335.1 billion.

As many commentators, including the authors of this essay have noted, running deficits in times of economic growth, even periods of slow economic growth, risks much larger deficits when the inevitable recession occurs. This essay applies the experiences of three past recessions and an economic slowdown to the federal government's current finances in order to estimate the possible fiscal effects of the next recession. The resulting decline in revenues and increase in program spending from recessions means much larger deficits and thus an accumulation of debt. The risks to federal finances from even a mild recession, let alone a more severe recession, given the current level of deficits are substantial and should be taken into consideration in future budgets.

Introduction

A number of analysts and pundits have commented on the riskiness of the federal government's current approach to finances, [1] which is to purposefully run sizeable deficits in times of positive, albeit modest, economic growth. Many of the criticisms revolve around the potential for a significant deterioration of federal finances, namely much larger and longer lasting deficits if a recession were to occur. This publication quantifies those risks by measuring the possible fiscal effects of a recession on federal finances.

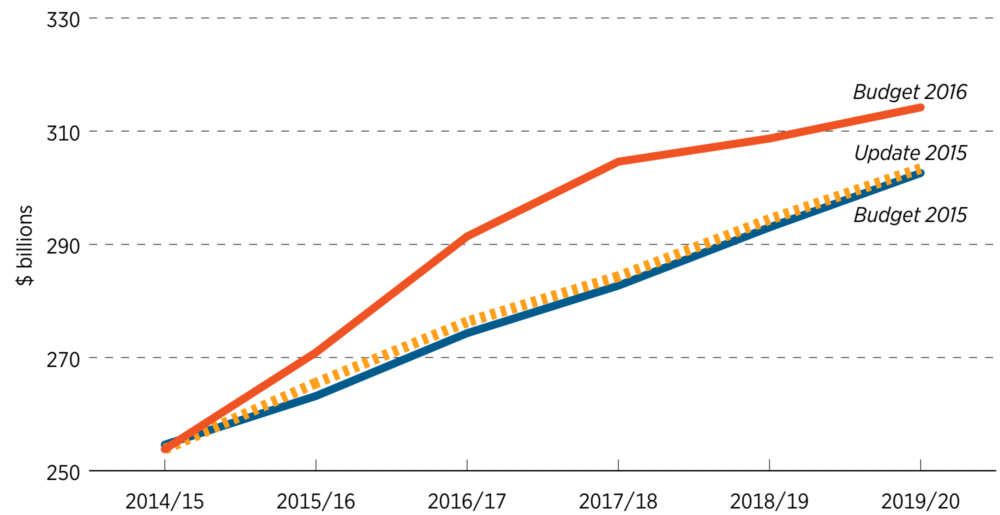
The first part reviews changes in general fiscal policies under the new federal government beginning in 2015. The second part summarizes the fiscal implications of a recession for the federal government based on previous recessions. The next section presents estimates of what could happen to federal finances if recessions similar to those experienced in the past were repeated in 2019/20. The paper ends with a brief summary and conclusion.

Background on Federal Finances

Figure 1 illustrates the budgeted federal program spending (excludes interest costs) based on 2015 Budget of the Harper government and both the Fall 2015 Economic and Fiscal Update and the spring 2016 Budget of the Trudeau government. The Liberal government under Prime Minister Justin Trudeau took office in late 2015 and immediately increased budgeted federal program spending by $8.1 billion over the period from 2015/16 to 2019/20 [2] compared to the Harper government's previous budget plan. [3] Specifically, total budgeted federal program spending over this five-year period was increased from $1,415.8 billion to $1,423.9 billion. Less than six months later, in its first full budget (2016), [4] the Trudeau government markedly increased budgeted federal program spending by an additional $65.9 billion over the same five-year period (2015/16–2019/20). Budgeted federal program spending over this period was expected to total $1,489.8 billion (figure 1).

Another way of understanding the pronounced increase in federal program spending is to compare it with past governments. On a per-person basis, adjusting for the effects of inflation, the Trudeau government raised spending in 2017 to its second highest level

Figure 1: Budgeted federal program spending ($ billions), 2014/15–2019/20



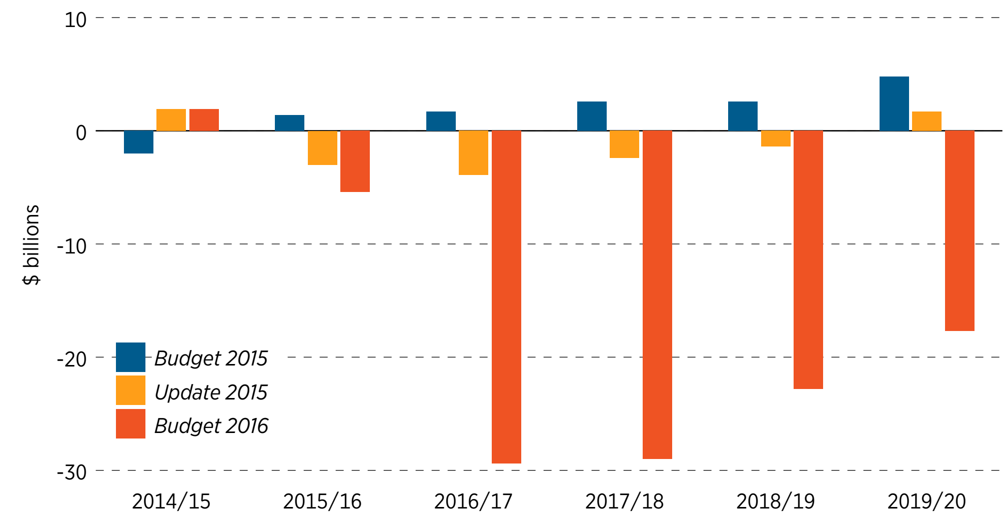
Note: Program spending in 2014/15 based on the Economic and Fiscal Update 2015 and Budget 2016 are actuals rather than budgeted amounts..
Sources: Canada, Dep't of Finance (2015), *Strong Leadership* [Budget 2015]; (2015) *Update of Economic and Fiscal Projections 2015*; (2016) *Growing the Middle Class* [Budget 2016].

in the history of the country. [5] For reference, the highest level of per-person spending (inflation adjusted) was reached under the previous Harper government in the depths of the 2008/09 recession. What is particularly important to recognize is that the increase in government spending by the current government is not occurring during a recession or a large-scale military deployment such as a war.

The marked increase in program spending enacted both in the Fall 2015 economic update as well as the spring 2016 budget adversely affected the fiscal balance of the federal government. **Figure 2** presents the fiscal balance (surplus or deficit) for the federal government based on the three budget documents presented in figure 1: Budget 2015, Economic and Fiscal Update 2015, and Budget 2016. The original 2015 plan presented by the Harper government before the 2015 election was for the federal government to run a small deficit in 2014/15 of $2.0 billion and then return to a surplus position starting in 2015/16. [6] This is illustrated in figure 2 by the first bar in the series, which shows a small deficit in 2014-15 followed by small surpluses. The cumulative budgeted surplus contained in Budget 2015 for the period from 2015/16 to 2019/20 was $13.1 billion.

The budget plan upon which the Liberal Party campaigned for election was to purposefully incur deficits totaling $25.1 billion between 2016/17 and 2018/19, with the federal budget returning to a balanced position in 2019/20. [7] The economic update introduced by the Liberal government in the Fall of 2015 introduced a number of new

Figure 2: Federal fiscal balance ($ billions), 2014/15–2019/20



Sources: Canada, Dep't of Finance (2015), *Strong Leadership* [Budget 2015]; (2015) *Update of Economic and Fiscal Projections 2015*; (2016) *Growing the Middle Class* [Budget 2016].

spending measures that resulted in modest deficits from 2015/16 through to 2018/19, with a small surplus expected in 2019/20 (figure 2). The revised plan by the new government is reflected by the second set of bars in figure 2. These budgeted deficits, which totaled $10.7 billion, were lower than those of the Liberal's campaign platform.

The Liberal government's first budget, introduced in early 2016 contained much larger spending increases as detailed above that resulted in much larger deficits than originally proposed. Specifically, the Liberal government's 2016 budget called for deficits between 2015/16 and 2019/20 totaling $104.3 billion, more than four times higher than originally proposed in their campaign platform (figure 2). In addition, the revised financial plan no longer identified a year by which the federal government would return to a balanced budget. The deficits proposed in Budget 2016 are illustrated in figure 2 by the last bar in the series. Again, these deficits were planned without any expectation of a recession during the planning period. The government's Fall 2017 economic update reiterated their approach to federal finances, which is largely based on spending increases financed by deficits (that is, borrowing). [8] Specifically, the Fall 2017 economic update indicated budgeted deficits of $100.3 billion [9] between 2016/17 and 2022/23, with no balanced budget identified within the planning period.

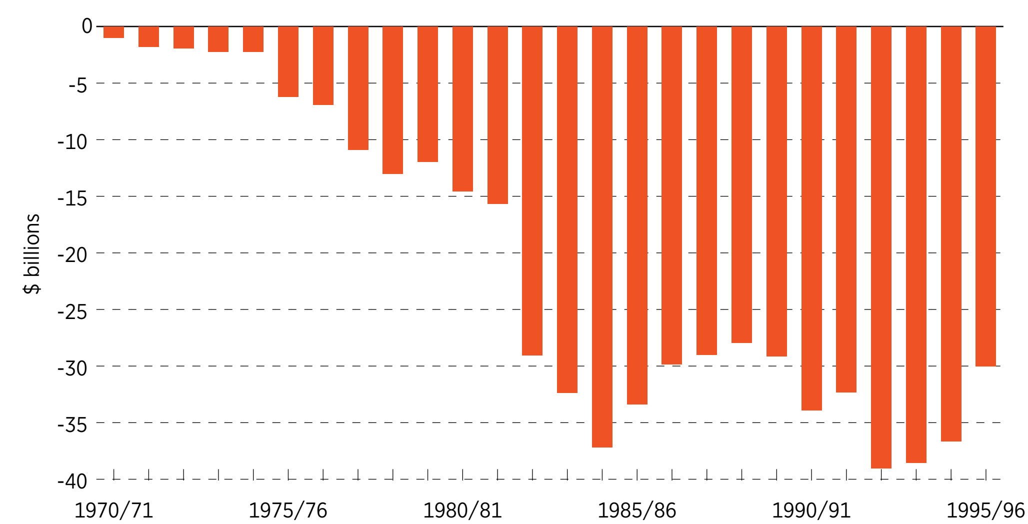
It is important to clarify one of the main risks of purposefully operating in deficit during periods of economic growth, even if it is slow economic growth. As will be explained in more detail below, recessions cause government revenues to decline and program

spending to increase, which results in larger deficits (or reduced surpluses). The risk of running sizeable deficits during periods of economic growth is that it creates a situation in which the government cannot balance its budget regardless of economic conditions. In other words, the risk is that government is permanently spending more than it is able—or perhaps willing—to raise from taxes and other revenues. This was certainly the case for the federal government during the 1970s, 1980s, and early 1990s before the Chrétien Liberal government finally balanced the budget through decisive reforms. [10]

Figure 3 shows the fiscal balances of the federal government from 1970/71 to 1995/96. Whatever the state of the economy—whether it was in a recession or robust expansion—the government never balanced the budget during this 25-year period. Indeed, and quite critically, the size of the deficits were increasing after each business cycle. For instance, the deficit almost doubled from $15.7 billion in 1981/82 to $29.0 billion in 1982/83. And it never returned to the level of $15.7 billion, regardless of economic conditions.

As illustrated in figure 3, there is a risk that Canada has now created a similar environment for federal finances. [11] More specifically, the risk is that a recession would place Canada's federal government in a rather severe deficit position that could not be balanced regardless of economic recovery. The risk of an ever-ratcheting-up deficit as depicted in figure 3 is therefore a real risk for current federal finances.

Figure 3: Federal fiscal balance ($ billions), 1970/71–1995/96



Note: Because there was a break in the series following the introduction of full accrual accounting, data from 1983/84 onward are not directly comparable with earlier years.
Source: Canada, Dep't of Finance (2017), *Fiscal Reference Tables* (September), <https://www.fin.gc.ca/frt-trf/2017/frt-trf-17-eng.asp>.

Past Recessions and Their Effects on Federal Finances

Since 1980, there have been four periods of recession or economic slowdown in Canada: 1982/83, 1991/92, 2000/01, and 2008/09. This section explains the effects of these four periods on federal finances. Recessions have two direct effects on federal finances. First, the decline in income that is central to a recession results in less revenue collected by the government. For instance, in the most recent recession of 2008/09, in which the economy contracted by 2.9%, revenues declined a total of 9.5% over two years: 3.4% in 2008/09 and 6.4% in 2009/10.

Second, a number of programs, referred to as "automatic stabilizers", increase government spending without any change in policies. The most direct example of an automatic stabilizer is Canada's Employment Insurance (EI) program. As the economy slows and unemployment increases, this program automatically provides income to affected workers. For instance, in the most recent recession, spending on employment insurance increased from $14.1 billion in 2006/07 to $21.6 billion in 2009/10, an increase of 53.3%. [12] Again, this pronounced increase in spending on the EI program occurred without any action or policy change on the part of government.

Revenues are often overlooked when assessing automatic stabilizers. The nature of Canada's personal income taxes, for instance, has a component of automatic stabilizer because of its progressive nature. As one's income increases, Canada's personal income-tax system extracts more income in taxes. In times of recession, as taxpayers' incomes decline, their income taxes decrease more than proportionately relative to the decrease in their income.

Governments sometimes also choose to introduce discretionary increases in spending during recessions in an attempt to stimulate the economy towards stronger economic growth. [13] The previous Harper government, for instance, initiated stimulus spending in 2009 in response to the recession. [14] The combination of automatic stabilizers with possible discretionary increases in program spending coupled with declines in government revenues mean either lower surpluses or, more likely, deficits. [15]

Table 1 summarizes the revenue and spending effects from the three recessions or one economic slowdown that have occurred in Canada since 1980. Please note that 1982/83, 1991/92, and 2008/09 were all technically recessions but the economic slowdown in 2000/01 was not technically a recession as overall economic growth for the year totaled positive 1.8%.

Declines in revenue in a single year range from −1.3 percent during the 1991/92 recession to −6.4 percent during the most recent recession of 2008/09. The most recent recession is generally characterized as a rather severe contraction in economic activity. Indeed, the 2008/09 recession, like the recession of 1991/92, saw revenue declines over

Table 1: Fiscal Effects of Recessions, 1982–2009, and Economic Slowdown, 2000/01

CHANGE IN GDP*				
Time Period				
1982/83	−3.2%			
1991/92	−2.1%			
2000/01	1.8%			
2008/09	−2.9%			
REVENUES**				
Starting Year	First Year	Second Year	Third Year	Fourth Year
1982/83	0.2%	−3.2%	10.3%	8.0%
1991/92	−1.3%	−0.5%	5.6%	7.2%
2000/01	−5.4%	3.6%	5.4%	6.7%
2008/09	−3.4%	−6.4%	8.4%	3.4%
PROGRAM SPENDING				
Starting Year	First Year	Second Year	Third Year	Fourth Year
1982/83	17.3%	−3.0%	9.2%	−1.0%
1991/92	6.7%	0.1%	0.8%	−1.9%
2000/01	4.3%	7.7%	6.3%	14.6%
2008/09	4.7%	17.1%	−2.0%	0.4%

Notes: *Expressed in chained 2007 dollars based on Statistic Canada's CANSIM 384-0037 series. **The revenue declines in the 1982/83, 1991/92, and 2008/09 recessions occurred over a two-year period.

Sources: Department of Finance (2017), *Fiscal Reference Tables* (September), <https://www.fin.gc.ca/frt-trf/2017/frt-trf-17-eng.asp>; Statistics Canada, CANSIM Table 384-0037, *Gross Domestic Product, Income-Based, Provincial and Territorial, Annual (in Millions)*; calculations by authors.

two successive years. Increases in program spending in a single year range from 4.3% in 2000/01 to 17.3% in the 1982/83 recession. The increase in program spending was actually larger during the most recent recession but it was introduced over the course of two years (table 1).

In each of these economic downturns, the government produced a pronounced increase in the existing deficit. For instance, the deficit increased from $32.3 billion in 1991/92 to $39.0 billion in 1992/93, an increase of 20.7%. [16] In comparison, the deficit during the more severe recent recession of 2008/09 went from a surplus of $9.6 billion in 2007/08 to a deficit of $55.6 billion in 2009/10. [17] The clear immediate effect on federal finances from recessions and economic slowdowns is deficits based on less revenues and more program spending.

Estimating the Likely Deficits from Recessions

Prior to presenting the estimates of the potential deficits from a recession, it is important to review the assumptions and methodology used to calculate the estimates. There are countless ways in which to estimate potential future deficits. As outlined previously, the approach of this essay is to apply the experiences of previous recessions and calculate from the way revenues and program spending changed to the current fiscal position of the federal government.

The four periods of recession or economic slowdown presented in table 1 are classified as mild, moderate, and severe based on their fiscal effects. In other words, the classification is not based on how severe or mild the contraction in economic activity was during the period but rather the degree to which government revenues declined and program spending increased. Based on that classification, the experiences of the 1991/92 recession (mild), the 2000/01 recession (moderate), and the 2008/09 recession (severe) were used to estimate the potential fiscal effects in 2019/20 if similar recessions occurred. The 1982/83 recession was excluded from this analysis because of a break in the Public Accounts data between 1982/83 and 1983/84, which makes data from 1983/84 onward difficult to compare with data from earlier years.

The baseline for each of these estimates is the recent 2017 economic update. In other words, the government's projections for revenues and spending contained in the economic update released in the autumn of 2017 [18] are the basis for the analysis. Specifically, the changes in revenues and program spending given in table 1 are applied to the baseline revenues and program spending contained in the 2017 economic update starting in 2019/20 in order to calculate the potential size of deficits from recessions.

The time period of analysis is 2019/20 to 2022/23, which is the time period covered by the Fall 2017 economic update. In each of the three estimates presented, revenues and program spending are assumed to change—both decline and expand—based on the exact experiences of the 1991/92, 2000/01, and 2008/09 recessions. In other words, the estimates assume that the exact set of economic conditions and government responses from these previous recessions are replicated from 2019/20 to 2022/23.

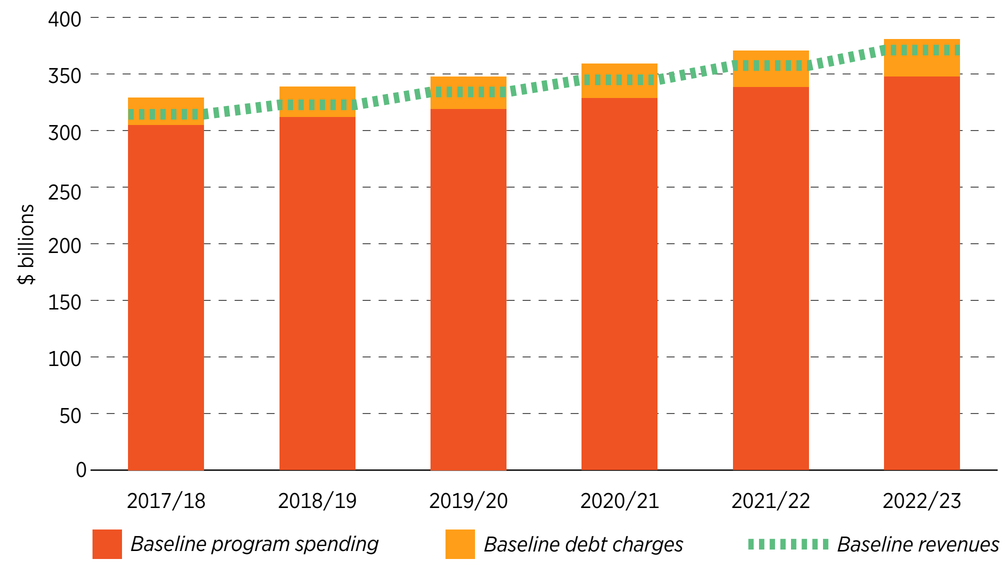
In all cases, the most conservative assumptions [19] were used to ensure that the estimates of potential deficits erred on the side of caution. To further ensure conservative estimates, debt charges are assumed to be the same as presented in the 2017 economic update: even though the estimates indicate an accumulation of debt over the period of analysis, no change in interest costs is included in the deficit estimates relative to the 2017 economic update.

Finally, the analysis assumes no policy changes by the current federal government relating to either revenues or program spending. Again, the estimates simply apply what happened to federal revenues and program spending during these past recessions to 2019/20 and beyond in order to provide some idea of the deficits that could be incurred should Canada experience a recession.

Starting Point: 2017 Economic Update [20]

As stated previously, the starting point or baseline for the deficit analysis is the 2017 economic update (**figure 4**). Total revenues over the period from 2019/20 to 2022/23 are $1,409.5 billion. Program spending over the same period is expected to total $1,334.4 billion. Debt charges are budgeted for $123.6 billion. The net result are deficits that total $48.5 billion over from 2019/20 to 2022/23. [21] The annual deficit in 2019/20 is budgeted to reach $14.4 billion, excluding the $3.0 risk adjustment (see footnote 21). It is expected to decline to $9.4 billion by 2022/23.

Figure 4: Baseline federal revenues and spending ($ billions), 2017/18–2022/23



Source: Canada, Dep't of Finance (2017), *Progress for the Middle Class: Fall Economic Statement 2017*, <https://www.budget.gc.ca/fes-eea/2017/docs/statement-enonce/fes-eea-2017-eng.pdf>.

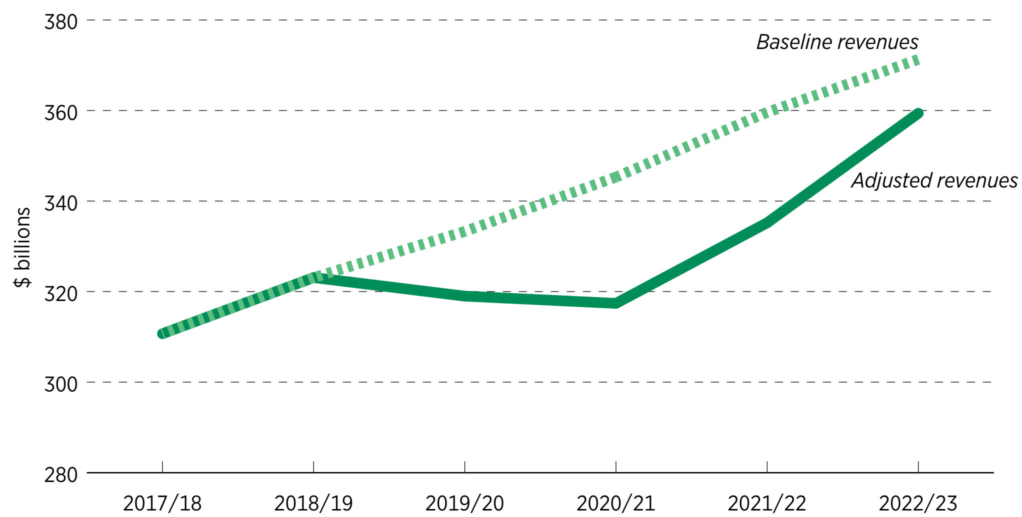
Mild Fiscal Effects from Recession (1991/92)

The recession of 1991/92 is used as the basis for estimating the deficits that might result from a recession with mild fiscal effects. Please recall from table 1 that mild effects from a recession entail revenues dropping by 1.8% (over two years) and program spending increasing by 6.7% during the period of recession (2019/20). **Figure 5a** depicts the drop in the revenues based on the experience of the 1991/92 recession while **figure 5b** illustrates the increase in program spending. In both cases, the dashed line represents the current planned revenues and program spending (referred to as baseline) based on the economic update of Fall 2017 while the solid line represents the estimate of revenues and program spending given a recession.

Revenues in 2019/20 decline from the budgeted level of $333.3 billion to $319.0 billion. They decline again in 2020/21 to $317.4 billion before starting to recover in 2021/22. Over the four-year period, revenues are cumulatively lower than currently budgeted by $78.5 billion (figure 5a). Program spending in 2019/20 increases from $319.0 billion to $333.0 billion. However, unlike the current budget plan (dashed line), program spending stays essentially flat in 2020/21 and 2021/22, growing a mere 0.1% and 0.8%, respectively. It then declines in 2022/23 by 1.9%. Interestingly, if the period of analysis were extended by one year to include the equivalent of 1996/97, federal program spending would decline by an additional 7.9%. The period of spending

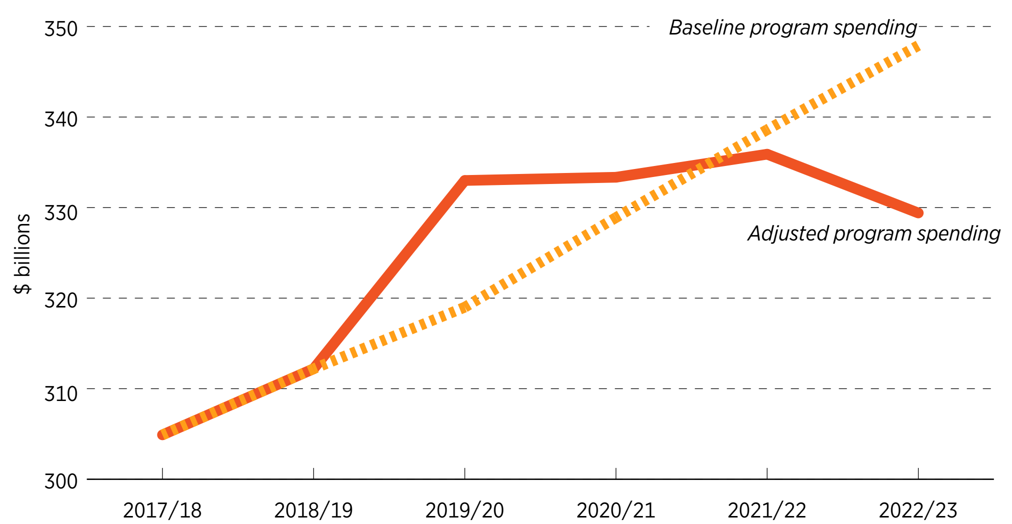
captured in this analysis is the front end of the Chrétien reform era whereby program spending was reduced by nearly 10% over two years to create a path to a balanced budget by 1996/97. [22]

Figure 5a: Federal revenues ($ billions), mild recession, 2017/18–2022/23



Sources: Canada, Dep't of Finance (2017), *Progress for the Middle Class: Fall Economic Statement 2017*, <https://www.budget.gc.ca/fes-eea/2017/docs/statement-enonce/fes-eea-2017-eng.pdf>; (2017), *Fiscal Reference Tables* (September), <https://www.fin.gc.ca/frt-trf/2017/frt-trf-17-eng.asp>; calculations by the authors.

Figure 5b: Federal program spending ($ billions), mild recession, 2017/18–2022/23



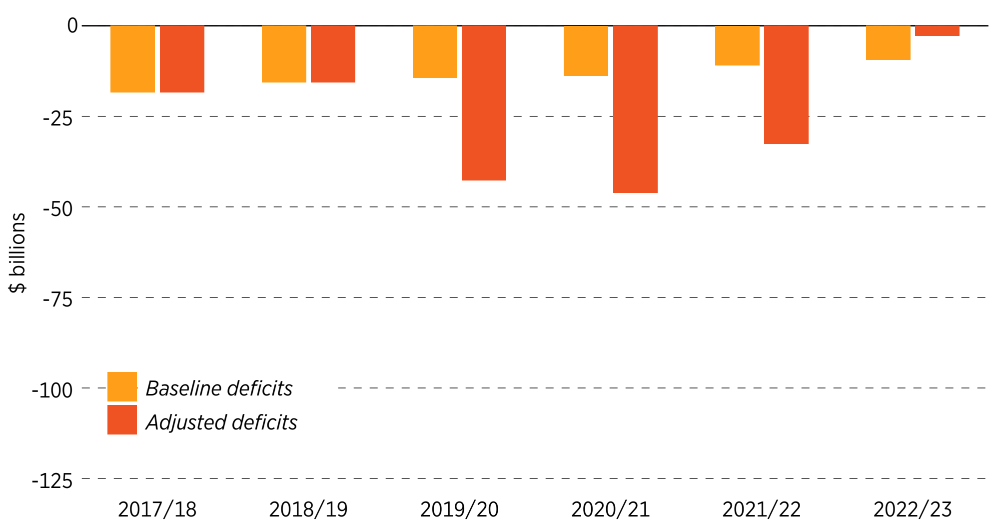
Sources: Canada, Dep't of Finance (2017), *Progress for the Middle Class: Fall Economic Statement 2017*, <https://www.budget.gc.ca/fes-eea/2017/docs/statement-enonce/fes-eea-2017-eng.pdf>; (2017), *Fiscal Reference Tables* (September), <https://www.fin.gc.ca/frt-trf/2017/frt-trf-17-eng.asp>; calculations by the authors.

The result of the decrease in revenues and increase in program spending is illustrated in **figure 5c**, which shows the expected deficits from 2017/18 to 2022/23. Note that there is no difference in 2018/19 since the recession is assumed to occur in the 2019/20 fiscal year. The deficit in 2019/20, which is when the analysis assumes the recession occurs, increases from the currently planned level of $14.4 billion to $42.7 billion (figure 5c), an increase of 196.5% in the deficit.

In total, the federal government's four-year deficit for 2019/20 to 2022/23 increases from $48.5 billion to $124.2 billion, an increase of 156.2% in the level of deficits over this four-year period. Put differently, the four-year cumulative deficit, assuming an experience like the recession of 1991/92 occurred, would be $75.7 billion higher than currently planned.

It is important to note, however, that the reduced growth in program spending in 2020/21 and 2021/22 coupled with the actual decline in program spending in 2022/23 means that the deficit estimated for 2022/23 ($2.8 billion) is substantially lower than the government's current budget plan: $9.4 billion. Indeed, under this scenario, like the actual experience of the mid-1990s, the budget would likely be balanced in 2023/24.

Figure 5c: Federal deficits ($ billions), mild recession, 2017/18–2022/23

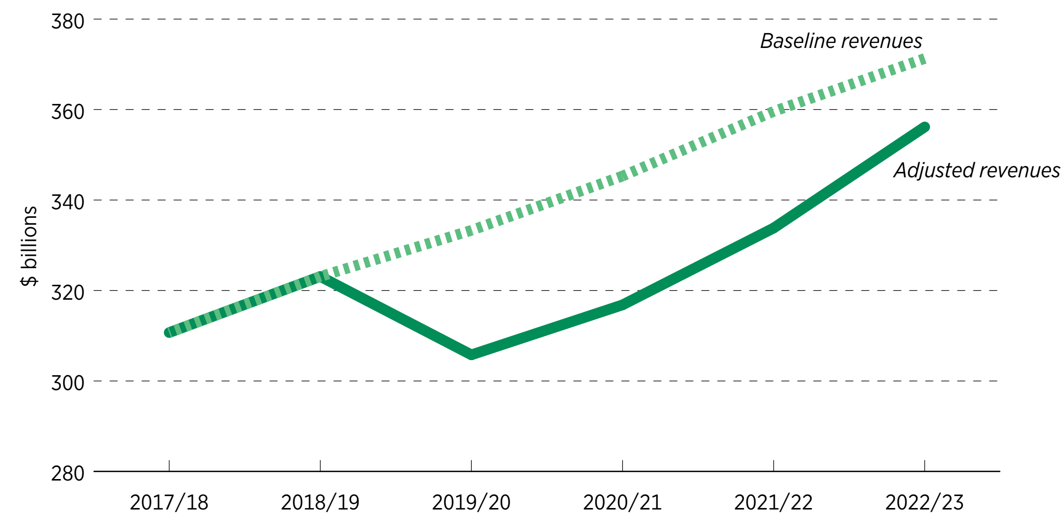


Sources: Canada, Dep't of Finance (2017), *Progress for the Middle Class: Fall Economic Statement 2017*, <https://www.budget.gc.ca/fes-eea/2017/docs/statement-enonce/fes-eea-2017-eng.pdf>; (2017), *Fiscal Reference Tables* (September), <https://www.fin.gc.ca/frt-trf/2017/frt-trf-17-eng.asp>; calculations by the authors.

Moderate Fiscal Effects from Recession (2000/01)

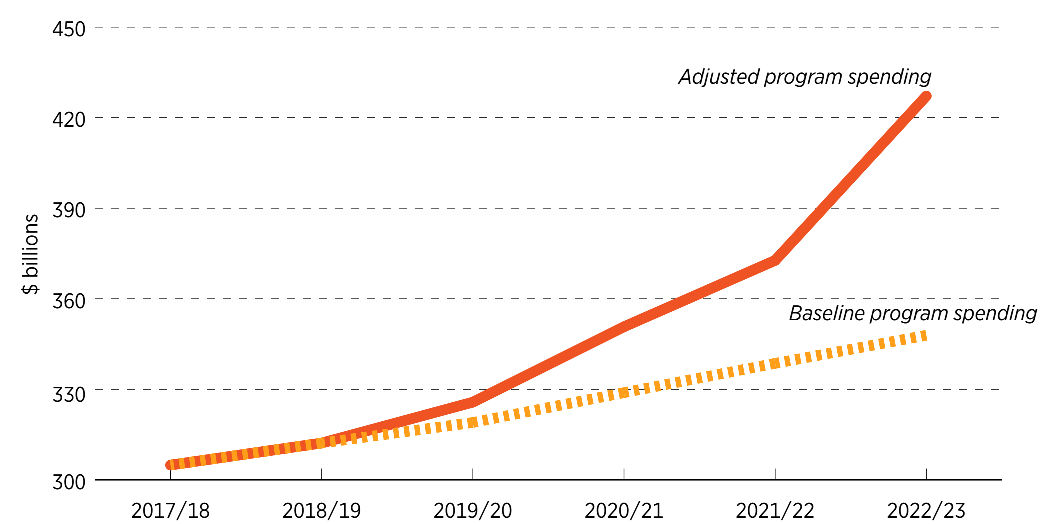
The moderate fiscal effects from a recession are based on the experience of 2000/01. Revenues declined 5.4% while program spending increased by 4.3% during the 2000/01 recession (table 1). **Figure 6a** shows the drop in the revenues and **figure 6b** illustrates the increase in program spending associated with the recession.

Figure 6a: Federal revenues ($ billions), moderate recession, 2017/18–2022/23



Sources: Canada, Dep't of Finance (2017), *Progress for the Middle Class: Fall Economic Statement 2017*, <https://www.budget.gc.ca/fes-eea/2017/docs/statement-enonce/fes-eea-2017-eng.pdf>; (2017), *Fiscal Reference Tables* (September), <https://www.fin.gc.ca/frt-trf/2017/frt-trf-17-eng.asp>; calculations by the authors.

Figure 6b: Federal program spending ($ billions), moderate recession, 2017/18–2022/23

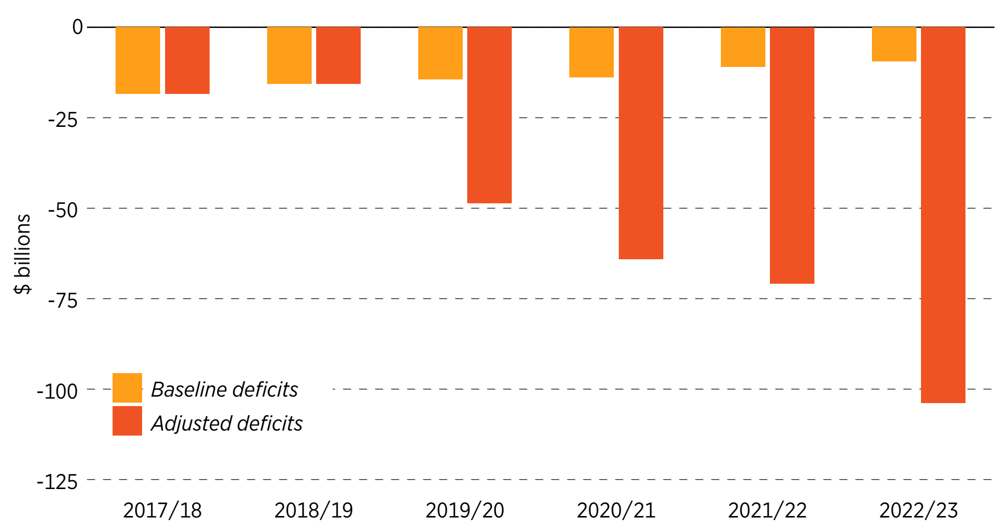


Sources: Canada, Dep't of Finance (2017), *Progress for the Middle Class: Fall Economic Statement 2017*, <https://www.budget.gc.ca/fes-eea/2017/docs/statement-enonce/fes-eea-2017-eng.pdf>; (2017), *Fiscal Reference Tables* (September), <https://www.fin.gc.ca/frt-trf/2017/frt-trf-17-eng.asp>; calculations by the authors.

Revenues in 2019/20, the year in which the recession is assumed to occur, decline from the $333.3 billion in the current budget to $305.8 billion. Over the four-year period, revenues are cumulatively lower relative to the budget by $96.9 billion (figure 5a). Similarly, program spending in 2019/20 increases from $319.0 billion to $325.7 billion. The increases in program spending, which are assumed to occur in each of the four years of the time period examined based on the experience of 2000/01 are substantial: 4.3% in 2019/20, 7.7% in 2020/21, 6.3% in 2021/22, and 14.6% in 2022/23. Cumulatively over the four-year period, program spending is $142.0 billion higher than currently budgeted (figure 6b) based on the experience of 2000-01.

The result of the decrease in revenues and increase in program spending is depicted in **figure 6c**. The deficit in 2019/20 increases from the current budgeted amount of $14.4 billion to $48.7 billion (figure 4c), an increase of 238.0%. In total, the government's four-year deficit for 2019/20 to 2022/23 increases from $48.5 billion to $287.4 billion. Alternatively stated, the four-year cumulative deficit, assuming an experience like the recession of 2000/01, would be $238.9 billion higher than currently expected. As a point of reference, the total net debt—a measure of both the total debt of the government offset by financial assets—of the federal government as of 2016/17 was $714.5 billion. [23] The net debt of the country would, therefore, increase by one-third (33.4%) in just four years if a recession like 2000/01 took place with no change in current policies.

Figure 6c: Federal deficits ($ billions), moderate recession, 2017/18–2022/23



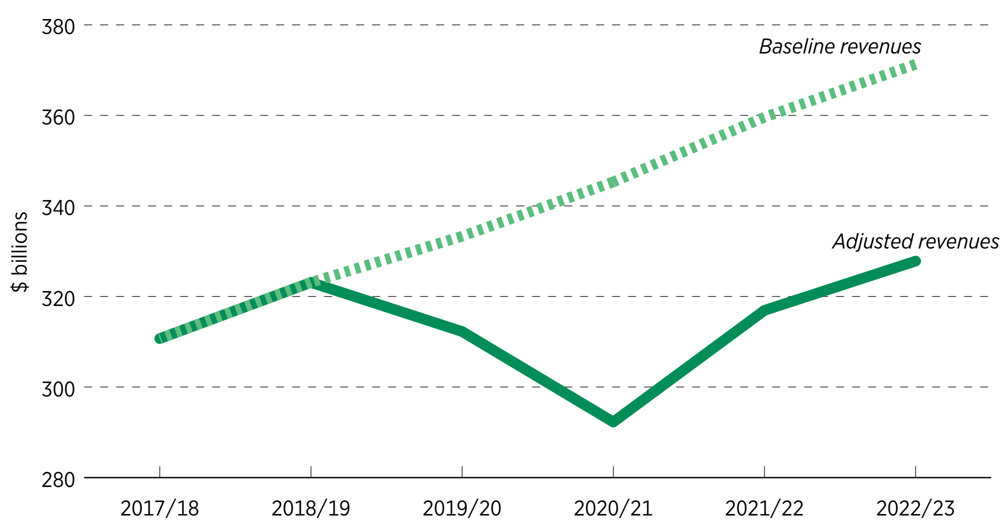
Sources: Canada, Dep't of Finance (2017), *Progress for the Middle Class: Fall Economic Statement 2017*, <https://www.budget.gc.ca/fes-eea/2017/docs/statement-enonce/fes-eea-2017-eng.pdf>; (2017), *Fiscal Reference Tables* (September), <https://www.fin.gc.ca/frt-trf/2017/frt-trf-17-eng.asp>; calculations by the authors.

Perhaps more importantly, the deficit in 2022/23 is projected to reach $103.8 billion, which is a significant deterioration in the deficit currently forecast for 2019/20 ($14.4 billion). Indeed, there is no abatement of the deficit over the period from 2019/20 to 2022/23, which reflects the strong likelihood that it would take the federal government a significant amount of time to reach a balanced budget without pronounced changes in tax and spending policies given an experience like the 2000/01 slowdown.

Severe Fiscal Effects from Recession (2008/09)

Finally, the worst-case scenario of the three estimates is based on the experience of the recent 2008/09 recession wherein revenues declined 9.5% over two years and program spending spiked by 17.1%, though this spike occurred in the second year of analysis (table 1). **Figure 7a** and **figure 7b** illustrate the deviation of revenues and program spending, respectively, relative to current plans based on a recession like 2008/09 occurring in 2019/20.

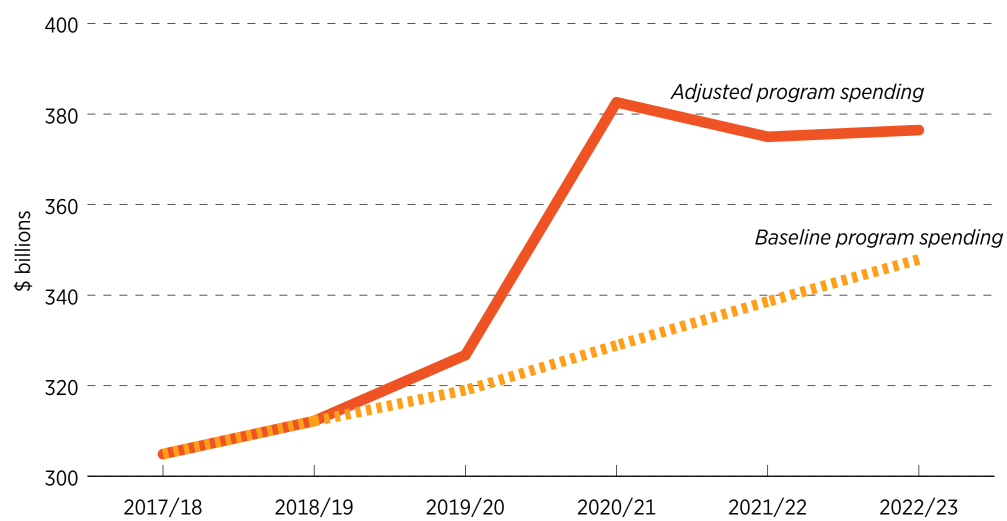
Figure 7a: Federal revenues ($ billions), severe recession, 2017/18–2022/23



Sources: Canada, Dep't of Finance (2017), *Progress for the Middle Class: Fall Economic Statement 2017*, <https://www.budget.gc.ca/fes-eea/2017/docs/statement-enonce/fes-eea-2017-eng.pdf>; (2017), *Fiscal Reference Tables* (September), <https://www.fin.gc.ca/frt-trf/2017/frt-trf-17-eng.asp>; calculations by the authors.

Revenues in 2019/20 fall from the budgeted level of $333.3 billion to $312.3 billion. Over the four-year period 2019/20 to 2022/23, revenues are cumulatively lower than currently budgeted by $160.2 billion (figure 7a). Program spending in 2019/20 is only $7.8 billion higher than currently budgeted: $326.8 billion rather than $319.0 billion. The reason is that the spike in program spending comes in the second year rather than

Figure 7b: Federal program spending ($ billions), severe recession, 2017/18–2022/23



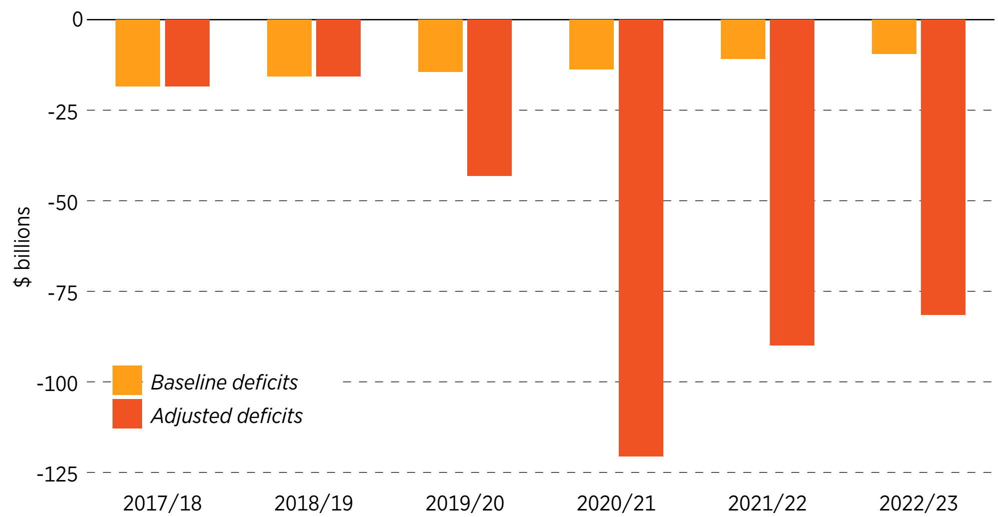
Sources: Canada, Dep't of Finance (2017), *Progress for the Middle Class: Fall Economic Statement 2017*, <https://www.budget.gc.ca/fes-eea/2017/docs/statement-enonce/fes-eea-2017-eng.pdf>; (2017), *Fiscal Reference Tables* (September), <https://www.fin.gc.ca/frt-trf/2017/frt-trf-17-eng.asp>; calculations by the authors.

the first year of the recession. In 2020/21, program spending increases to $382.6 billion compared to the currently budgeted amount of $328.9 billion, a 16.3% increase in one year. Cumulatively over the four-year period, program spending is $126.4 billion higher than currently budgeted (figure 7b).

The result of markedly lower revenues and equally as marked higher spending is illustrated in **figure 7c**, which shows the annual deficits from 2017/18 to 2022/23. The deficit in 2019/20 increases from the currently budgeted level of $14.4 billion to $43.2 billion. The deficit in the second year is considerably worse. Figure 7c shows the estimated deficit increasing from its current budgeted level of $13.8 billion in 2020/21 to an estimated $120.5 billion based on the experience of the 2008/09 recession. As illustrated in figure 7c, and quite unlike the previous scenario, the deficit improves each year after 2020/21 based on restrained program spending (see figure 7b).

The cumulative four-year deficit over the period from 2019/20 to 2022/23 is $335.1 billion compared to the currently planned four-year deficit of $48.5 billion. In other words, the four-year deficit would increase from current plans by $286.6 billion if an experience like the 2008/09 recession were replicated. Put differently, a severe recession could cause the federal government's net debt, which accounts for both total debt and financial assets, to increase by roughly 46.9% in just four years; recall that the government's net debt in 2016/17 was $714.5 billion. [24]

Figure 7c: Federal deficits ($ billions), severe recession, 2017/18–2022/23

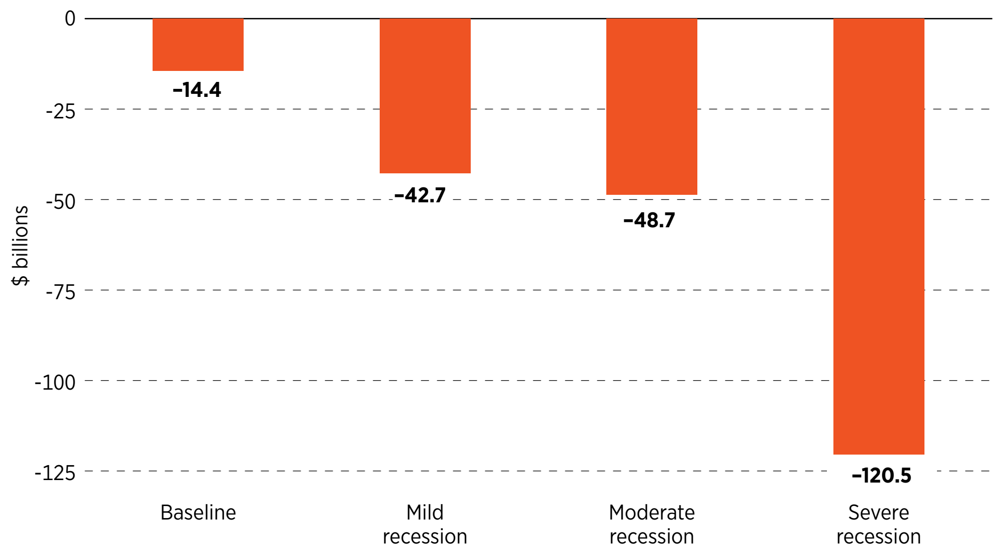


Sources: Canada, Dep't of Finance (2017), *Progress for the Middle Class: Fall Economic Statement 2017*, <https://www.budget.gc.ca/fes-eea/2017/docs/statement-enonce/fes-eea-2017-eng.pdf>; (2017), *Fiscal Reference Tables* (September), <https://www.fin.gc.ca/frt-trf/2017/frt-trf-17-eng.asp>; calculations by the authors.

Summary

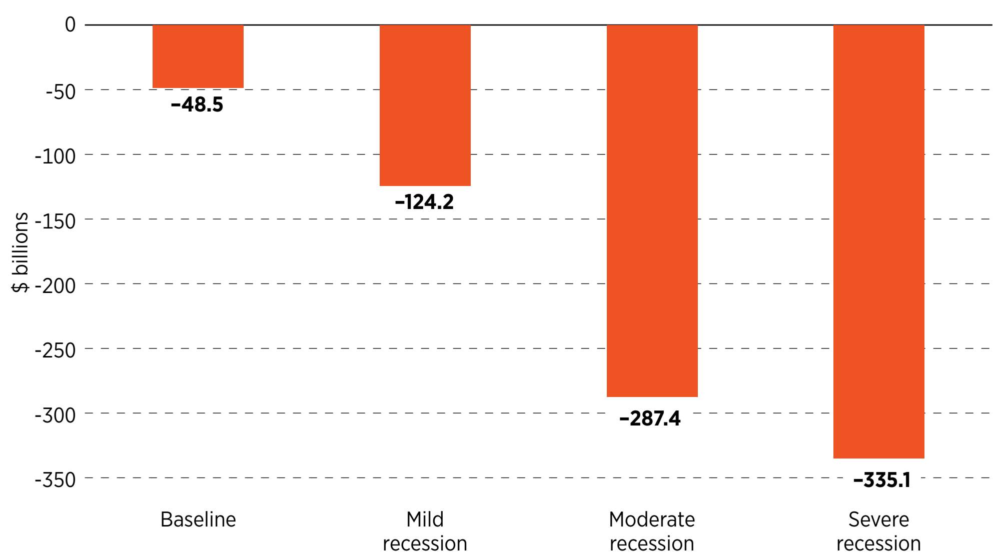
As many commentators, including the authors of this essay have noted, running deficits in times of economic growth, or even periods of slow economic growth, risks much larger deficits when the inevitable recession occurs. This essay applies the experiences of three past recessions and an economic slowdown to the federal government's current finances in order to estimate the possible fiscal effects of the next recession. The resulting decline in revenues and increase in program spending from economic downturns means much larger deficits and thus debt accumulation. Specifically, as illustrated in **figure 8a**, the 2019/20 deficit could increase from its current expected level of $14.4 billion to anywhere between $42.7 and $120.5 billion depending on the severity of the next recession and the government's response. Similarly, the four-year accumulated deficit from 2019/20 to 2022/23 could increase from its current expected level of $48.5 billion to between $124.2 and $335.1 billion (**figure 8b**). The risks to federal finances from even a mild recession let alone a more severe recession given the current level of deficits are substantial and should be taken into consideration in future budgets.

Figure 8a: Estimated federal deficits ($ billions) from mild, moderate, and severe recessions, 2019/20



Note: The deficit shown for "Severe fiscal effects" is for the second year rather than the first, as explained in the text.
Sources: Canada, Dep't of Finance (2017), *Progress for the Middle Class: Fall Economic Statement 2017*, <https://www.budget.gc.ca/fes-eea/2017/docs/statement-enonce/fes-eea-2017-eng.pdf>; (2017), *Fiscal Reference Tables* (September), <https://www.fin.gc.ca/frt-trf/2017/frt-trf-17-eng.asp>; calculations by the authors.

Figure 8b: Estimated accumulated four-year federal deficits ($ billions) from mild, moderate, and severe recessions, 2019/20–2022/23



Note: The deficit shown for "Severe fiscal effects" is for the second year rather than the first, as explained in the text.
Sources: Canada, Dep't of Finance (2017), *Progress for the Middle Class: Fall Economic Statement 2017*, <https://www.budget.gc.ca/fes-eea/2017/docs/statement-enonce/fes-eea-2017-eng.pdf>; (2017), *Fiscal Reference Tables* (September), <https://www.fin.gc.ca/frt-trf/2017/frt-trf-17-eng.asp>; calculations by the authors.

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1 See, for instance, Jason Clemens (2015), Deficits in Good Times Lead to Trouble in Bad Times, *Waterloo Region Record* (December 15), <https://www.therecord.com/opinion-story/6195521-deficits-in-good-times-lead-to-trouble-in-bad-times/>; Stephen Gordon (2015), The Liberals' Not-So-Modest Deficits, *National Post* (November 30, <http://nationalpost.com/opinion/stephen-gordon-the-liberals-not-so-modest-deficits>; Andrew Coyne (2015), Liberal's $30B Deficit a Debt of Choice, Not Circumstance, *National Post* (March 25) <http://nationalpost.com/opinion/andrew-coyne-liberals-30b-deficit-a-debt-of-choice-not-circumstance>; Jason Clemens and Niels Veldhuis (2017), "Just Spend More" Is Not a Sound Guiding Principle for Government, *Toronto Sun* (November 19), <https://www.fraserinstitute.org/article/just-spend-more-is-not-a-sound-guiding-principle-for-government>.

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9 Note that the actual planned deficits for this period total $116.8 billion. However, this includes an "adjustment for risk" of $1.5 billion in 2017/18 and $3.0 billion per year from 2018/19 to 2022/23. The adjustment for risk has been removed in stating the expected deficits for this period.

10 For more information on the reforms enacted by the Chretien government and other reform-minded Canadian governments, see Jason Clemens, Matthew Lau, Milagros Palacios, and Niels Veldhuis (2017), *End of the Chretien Consensus*, Fraser Institute, <https://www.fraserinstitute.org/studies/end-of-the-chretien-consensus>.

11 It is worthwhile noting that the federal Department of Finance in its most recent update of its long-term fiscal and economic projections, released in late 2016, concluded that the federal government would be in deficit until roughly 2052 given current revenue and spending expectations. See Department of Finance (2016), *Update of Long-Term Economic and Fiscal Projections*, <https://www.fin.gc.ca/pub/ltefp-peblt/report-rapport-eng.asp>.

12 Canada, Department of Finance (2017), *Fiscal Reference Tables*, Table 10: Major Transfers to Persons, <https://www.fin.gc.ca/frt-trf/2017/frt-trf-1702-eng.asp#tbl10>.

13 For a brief discussion of the failures of stimulus spending, see Niels Veldhuis and Charles Lammam (2009), The Stimulus: It Didn't Work, *Financial Post*, <https://www.fraserinstitute.org/article/stimulus-it-didnt-work>. For a more thorough analysis, see Amela Karabegović, Charles Lammam, and Niels Veldhuis (2010), *Did Government Stimulus Fuel Economic Growth in Canada? An Analysis of Statistics Canada Data*, Fraser Institute, <https://www.fraserinstitute.org/sites/default/files/did-government-stimulus-fuel-economic-growth.pdf>.

14 For information on the federal government's response to the 2008/09 recession, see Canada, Department of Finance (2009), *Budget 2009: Canada's Economic Action Plan*, <https://www.budget.gc.ca/2009/home-accueil-eng.html>; also see *CBC News* (2009), Harper Lays Out Stimulus Spending in Progress Report (June 11), <http://www.cbc.ca/news/business/harper-lays-out-stimulus-spending-in-progress-report-1.785129>, for a brief summary.

15 The federal Department of Finance calculates cyclically adjusted budgetary balances (CABB), which conceptually allow for an analysis of how much deficits are driven by policy changes (discretionary changes) compared to cyclical factors. See Canada, Department of Finance (2017), *Fiscal Reference Tables*, Table 17: Actual, Cyclically Adjusted and Cyclically Adjusted Primary Budgetary Balances: Federal

Government–Public Accounts, <https://www.fin.gc.ca/frt-trf/2017/frt-trf-1703-eng.asp#tbl17>. Unfortunately, the Department of Finance has included a number of discretionary actions such as the "temporary measures included in the stimulus phase of the Economic Action Plan" as well as a number of one-time discretionary policy changes as cyclical factors. The result is that the CABB cannot be used to isolate and assess purely discretionary policy actions compared to cyclical factors in determining the overall deficit. (Please note that this conclusion was confirmed with officials in the Department of Finance through correspondence by e-mail.)

16 Canada, Department of Finance (2017), *Federal Fiscal Tables*, Table 1: Fiscal Transactions, <https://www.fin.gc.ca/frt-trf/2017/frt-trf-1701-eng.asp#tbl1>.

17 Canada, Department of Finance (2017), *Federal Fiscal Tables*, Table 1.

18 Canada, Department of Finance (2017), *Progress for the Middle Class: Fall Economic Statement 2017*, <https://www.budget.gc.ca/fes-eea/2017/docs/statement-enonce/fes-eea-2017-eng.pdf>.

19 For example, the modeling of deficits does not include any demographic effects, namely the aging of the population that is expected to reduce labour force participation and thus economic growth at the same time as it places pressure on government spending programs such as Old Age Security and health care. For further information on these effects, see Taylor Jackson, Jason Clemens, and Milagros Palacios (2017), *Canada's Aging Population and Implications for Government Finances*, Fraser Institute, <https://www.fraserinstitute.org/sites/default/files/canadas-aging-population-and-implications-for-government-finances.pdf>; and Canada, Department of Finance (2016), *Update of Long-Term Economic and Fiscal Projections*.

20 Canada, Department of Finance (2017), *Progress for the Middle Class*.

21 Please note that the deficit numbers from the 2017 economic update do not include the risk adjustment that amounts to $1.5 billion in 2017/18 and $3.0 billion in the subsequent years (2018/19–2022/23). The expected deficits from 2019/20 to 2022/23 including the risk adjustment is $60.5 billion rather than the $48.5 billion cited in the essay. See Canada, Department of Finance (2017), *Progress for the Middle Class*, table A1.4 (p. 68), <https://www.budget.gc.ca/fes-eea/2017/docs/statement-enonce/fes-eea-2017-eng.pdf>.

22 For information on the reforms aimed at balancing budgets during the Chretien era, see Niels Veldhuis, Jason Clemens, and Milagros Palacios (2011), *Learning from the Past: How Canadian Fiscal Policies of the 1990s Can Be Applied Today*, Fraser Institute, <https://www.fraserinstitute.org/sites/default/files/learning-from-the-past.pdf>; and Jason Clemens, Matthew Lau, Milagros Palacios, and Niels Veldhuis (2017), *End of the Chretien Consensus*, Fraser Institute, <https://www.fraserinstitute.org/studies/end-of-the-chretien-consensus>.

23 Canada, Department of Finance (2017), *Federal Fiscal Tables*, table 15: Gross and Net Debt, <https://www.fin.gc.ca/frt-trf/2017/frt-trf-1703-eng.asp#tbl15>.

24 Canada, Department of Finance (2017), *Federal Fiscal Tables*, table 15.

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