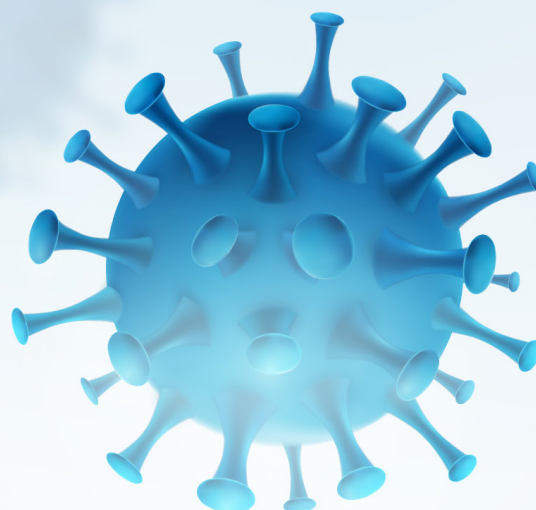


# **STORM WITHOUT END**

## **The Economic and Fiscal Impact of COVID in Canada**

### **CHAPTER 2**

## **The Fiscal Impact of COVID-19 on Canada and the Provinces**



**Livio Di Matteo**



# **STORM WITHOUT END**

## **The Economic and Fiscal Impact of COVID in Canada**

### **Chapter 2: The Fiscal Impact of COVID-19 on Canada and the Provinces**

by Livio Di Matteo

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## Executive Summary

The COVID-19 pandemic created enormous economic and fiscal disruption in both Canada and around the world. As revenues dropped and pandemic-related spending soared, governments incurred large deficits. Globally, the IMF has estimated that in 2020 world governments ran a negative general government fiscal balance of 10.2%. This was forecast to decline to 7.9% in 2021 and 5.2% in 2022. Canada did not escape this fiscal impact of the pandemic. According to the IMF, Canada saw a negative fiscal balance of 10.9% in 2020 with a forecast 7.5% in 2021 and 2.2% in 2022. However, the pandemic affected the public finances of the federal and provincial governments differently.

Whereas the federal government saw total revenues fall by 5.3% in 2020/21, the provinces saw total revenues grow by 2.9%. It is estimated that, in the subsequent year, both tiers saw total revenues rise with the federal government experiencing revenue growth of 17% and the provinces collectively 10%. Federal government spending rose 73% to \$644.2 billion in 2020/21 before declining 21% to an estimated \$508 billion in 2021/22. Total spending by provincial governments rose 9.2% in 2020/21 to \$504.4 billion and an estimated further 5.6% to \$532.9 billion in 2021/22.

Between 2019/20 and 2020/21, the federal deficit-to-GDP ratio went from -1.8% to -13.2% while the collective deficit-to-GDP ratio of the provinces went from -0.8% to -1.9%. At the provincial level, deficits appear somewhat correlated with the intensity of the pandemic impact. Federally, over half the deficit incurred during the pandemic was related to COVID-19—either health transfers or income support to people and business—while the remainder was spending independent of the pandemic that represents a permanent long-term ramping up of federal expenditure.

Along with substantial amounts of income support to individuals and business with emergency response benefits, the federal government during the pandemic engineered a substantial permanent increase in its own spending levels that deserves particular attention. The spending forecast in the federal 2022 spring budget shows that, compared to the pre-pandemic fiscal year 2019/20, total spending in 2022/23 will be about 27% higher, an average annual increase of 9% per year. This means a bigger federal government expenditure footprint.

As well, health spending deserves some mention. Total health spending was estimated to have increased by nearly 13% between 2019 and 2020 to deal with the pandemic, a rate of increase not seen in more than 30 years and triple the steady 4% growth rate from

2015 to 2019. While total health spending is up, closing of outpatient departments and postponing of medical visits and procedures during the height of the pandemic meant a reduction in some aspects of health services and spending. When provincial-territorial governments are examined, their real per-capita total health spending in 2020 rose 8.1%. However, once the COVID-19 response is factored out, their spending declined by about one percent in 2020, though it is expected to rebound in 2021. The biggest declines in real per-capita health spending by provincial governments net of COVID-19 response funding in 2020 were in New Brunswick, Quebec, and Alberta.

Summarizing the fiscal effects of the pandemic in Canada, both tiers of government saw revenues decline early on in the pandemic and then recover, with the provinces recovering faster in part because of transfers provided by the federal government. Both tiers also saw expenditures rise with an associated rise in both deficits and debt. However, collectively, the effects on Canada's provinces were more modest, producing smaller ratios of deficit and debt to GDP than was the case for the federal government.

# Introduction

The last two years both in Canada and abroad have been dominated by the seemingly endless turmoil of the COVID-19 pandemic and its effects on health, mortality, public finances, and the economy.<sup>1</sup> As of mid-March 2022, the number of COVID-19 cases around the world were estimated at 475 million with 6.1 million deaths (Worldometer, 2022). In Canada, by the same date there had been 3.4 million cases and just over 37,000 deaths. Indeed, these may be underestimates given that the World Health Organization (WHO) recently announced it believes that the true toll when one examines excess death estimates is closer to 15 million deaths (WHO, 2022).

The economic and fiscal disruption from the pandemic has been enormous. According to the World Bank's *Global Economic Prospects 2022* global real GDP growth in 2020 fell 3.4% with the advanced economies shrinking 4.6% and the emerging and developing economies down 1.7% (World Bank, 2022). Economies did rebound and world real GDP economic growth for 2021 is estimated at 5.5% and 4.1% for 2022. At the same time, the rebound has been more pronounced in the advanced economies while there has been more of a lag in the developing world. This rebound has been accompanied by continued disruptions of the supply chain, inflation, and large public-sector deficits designed to provide economic support as well as deal with the health effects of COVID-19.

As government revenues dropped and pandemic-related spending soared, large deficits were incurred. The COVID-19 pandemic resulted in a ramping up of government spending the world over as countries introduced substantial fiscal packages encompassing assorted direct support for household income, loans, guarantees, tax deferrals, and other supports along with increased public-health spending to combat the pandemic (OECD, 2020). With the initial fall in economic activity and tax revenues, the spending was financed by an expansion of government borrowing and, ultimately, public debt. However, even as economies recovered, deficits persisted.

Globally, the IMF has estimated that in 2020 world governments around the world ran a negative general government fiscal balance of 10.2%. That was forecast to decline to 7.9% in 2021 and in 2022 to 5.2%. This is up dramatically from negative fiscal balances of 3.0% and 3.6% in 2018 and 2019. Relative to the emerging market economies as well

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1. For an overview, see Di Matteo, 2021.

as the world overall, the advanced economies saw larger deficits of 10.8% and 8.8% for 2020 and 2021. The global gross debt-to-GDP ratio rose from 83.6% in 2019 to 98.5% in 2020; the advanced economies moved from 103.8% to 122.7% (IMF, 2021).

Canada and its provinces were not immune to the economic and fiscal impact of the pandemic. According to the IMF, Canada in 2020 saw its estimated real GDP shrink 5.2% with projected growth of 4.7% in 2021 and 3.6% in 2022 (IMF, 2021). The first wave of the pandemic had the most severe impact on Canada's GDP as uncertainty about the pandemic and its spread and assorted measures to contain the spread in the absence of either vaccines or immunity shut down the economy. The economy subsequently went on to recover as it adapted to the new realities of pandemic life and subsequent waves of the pandemic did not disrupt GDP as seriously as those of the first wave. Nevertheless, the last two years have seen the economic recovery proceed in fits and starts with late 2021 and early 2022 finally seeing evidence of the economy returning to full employment.

As well, according to the IMF, Canada saw a negative fiscal balance of 10.9% in 2020 with a forecast for 7.5% in 2021 and 2.2% in 2022 (IMF, 2021). This study of the fiscal impact of the pandemic on Canada's federal and provincial governments begins by providing a brief overview of the pandemic's impact and progress and how governments responded. It then examines the pandemic's effect on federal and provincial fiscal performance by examining provincial governments' health expenditures as well as focusing on basic indicators such as the growth of revenue and expenditure, deficits, and debt, with an emphasis on health spending.

The fiscal data compiled for this study comes from data available as of early summer 2022 and includes assorted government Public Accounts, Fiscal Reference Tables, Quarterly Reports, Budgets, and Economic Statements of provincial governments. With the release of public accounts in fall of 2022, numbers particularly for the 2021/22 fiscal year will be subject to revision. While revisions will affect many provinces, Ontario is a case in point given that the large initial projected deficits for 2021/22 have changed into a surplus of approximately \$2 billion as a result of larger than anticipated revenues (Ontario, 2022). One can expect further revisions to provincial fiscal data as 2022 comes to a close.



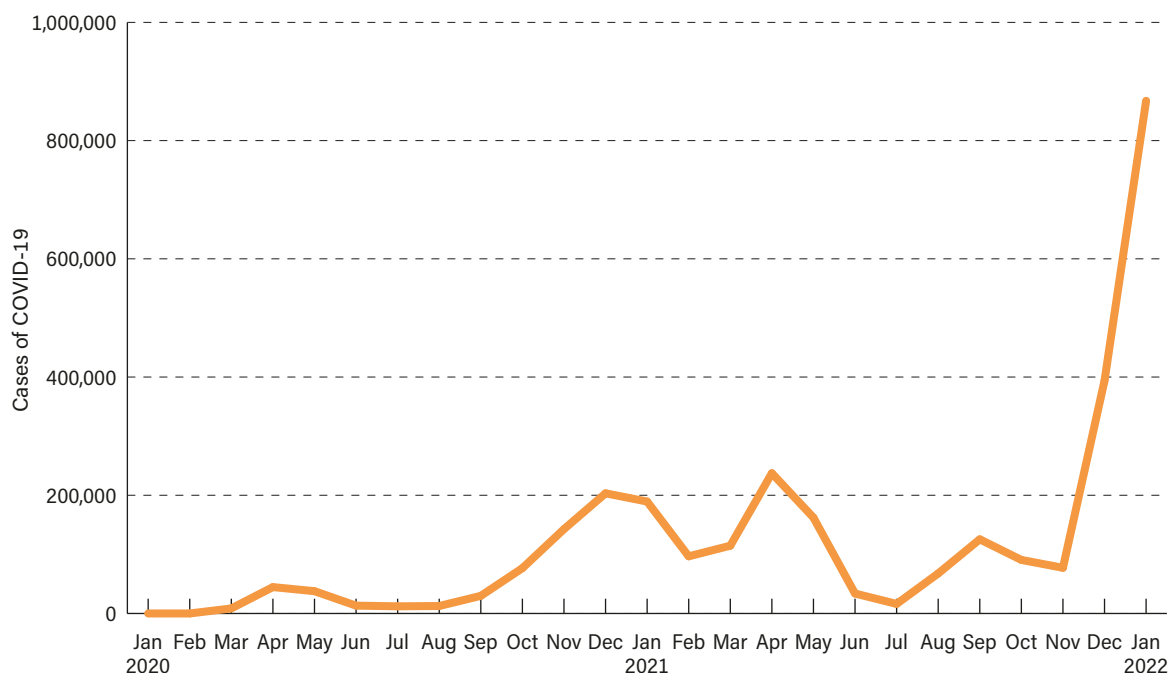
## The Pandemic in Canada

The pandemic began with reports of undiagnosed pneumonia in Wuhan, China just before the 2020 New Year celebrations and was followed by confirmation of human-to-human transmission in late January 2020. The World Health Organization (WHO) declared a global health emergency on January 30. By mid-February, the virus began spreading around the world, with March seeing the world essentially shut down as the pandemic surged and hospitals were overwhelmed in many countries. As part of the Canadian response, both the federal and provincial governments instituted emergency measures consisting of lockdowns and assorted restrictions as well as programs of financial assistance to cope with the health and economic impacts; these were ultimately followed by immunization programs as vaccines became available (McCarthy Tetrault, 2022).

### Cases of COVID-19 in Canada

The course and distribution of pandemic cases in both Canada and the provinces is illustrated in figures 1A to 1C. The pandemic in Canada proceeded in five waves based on the virus variant dominating the wave as illustrated in Figure 1A: Alpha peaked in April of 2020, Beta peaked in December of 2020, Gamma peaked in April of 2021, Delta peaked in September of 2021, and Omicron, which may have peaked in early winter of 2022, but which is still

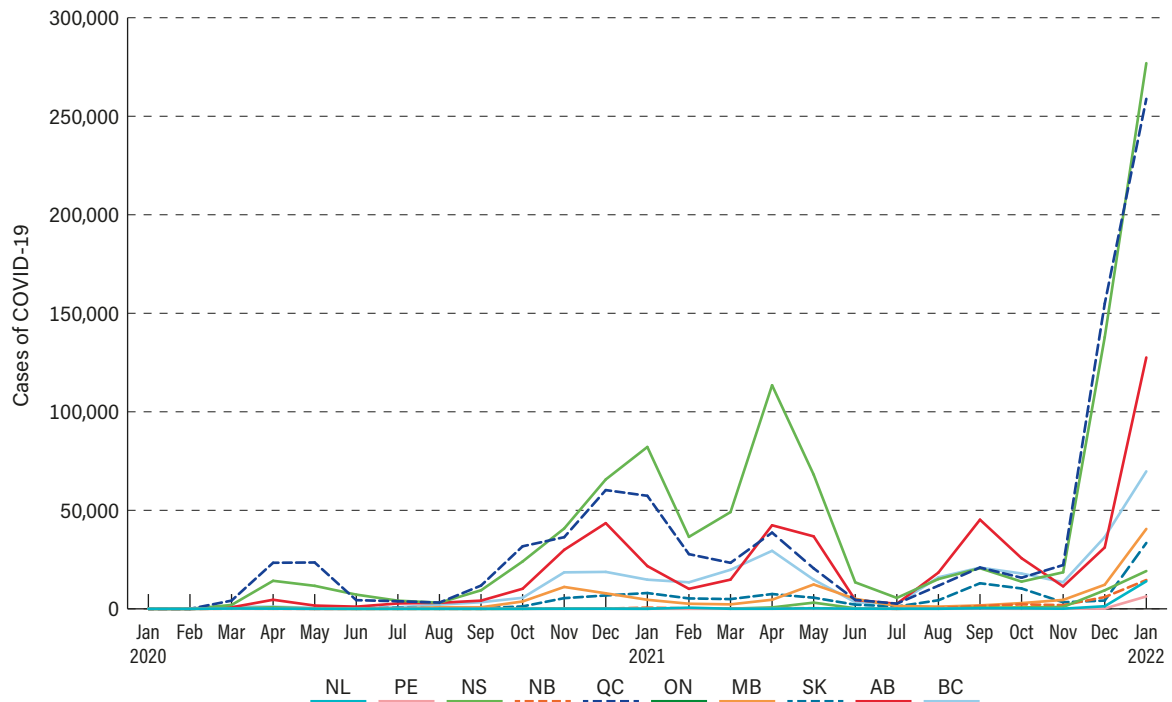
Figure 1A: Monthly COVID-19 cases in Canada, January 2020–January 2022



Source: COVID-19 Tracker, 2022.

ongoing as part of a sixth and perhaps seventh wave. As of the end of January 2022, Canada had officially seen 3,053,637 COVID-19 cases. Figure 1B shows monthly cases for each province during the pandemic and the wave pattern resembles the national totals. Ontario saw the most cases in total by January 2022 at 1,033,294 cases, followed by Quebec at 861,891, and Alberta at 493,973.

Figure 1B: Monthly COVID-19 cases in the Canadian provinces, January 2020–January 2022



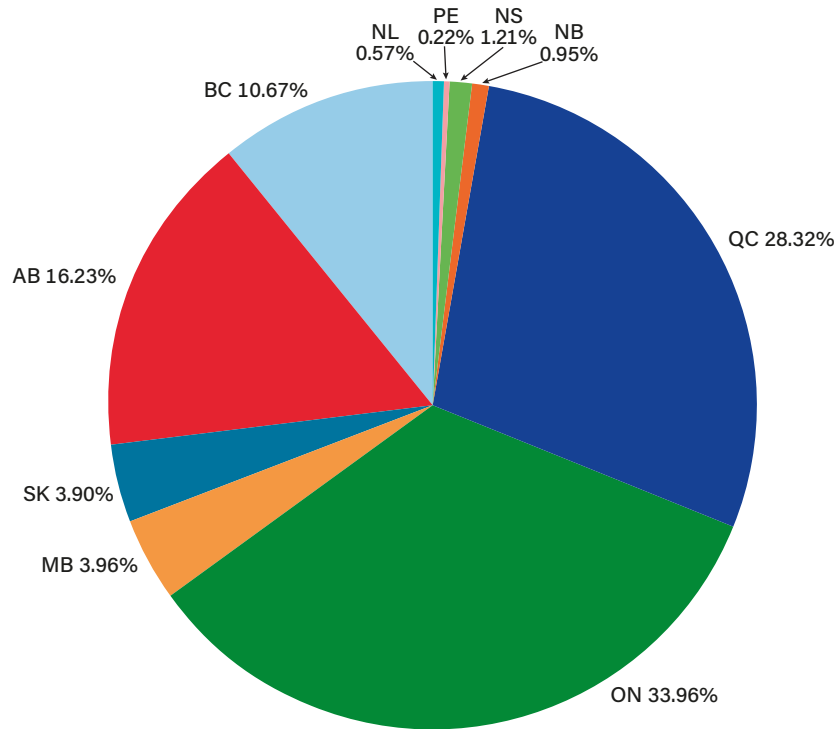
Source: COVID-19 Tracker, 2022.

Figure 1C shows the distribution of total cases by province: the largest proportion is in Ontario, which accounted for 34%, followed by Quebec at 28% and then Alberta at 16% of cases, British Columbia at 11%, and then Saskatchewan and Manitoba at approximately 4% each. The four Atlantic provinces accounted for 3% of all cases. Based on Canada’s population distribution, Quebec, Alberta, and Saskatchewan, with population shares of 23%, 11%, and 3%, were affected proportionately more than other provinces, while Ontario (share of 39%) and Atlantic Canada (6%) were affected less.

### Deaths from COVID-19 in Canada

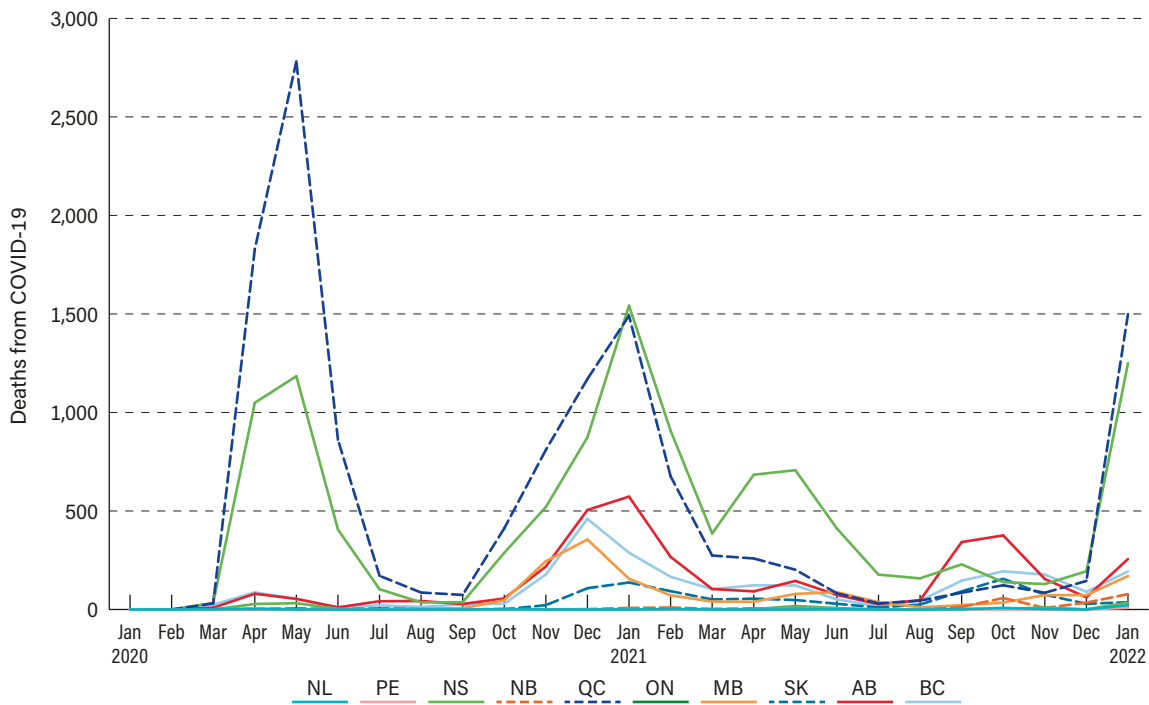
Figures 1D to 1F chronicle pandemic mortality. From January 2020 to January 2022, Canada recorded 33,872 deaths from COVID-19 with Quebec seeing the most deaths at 13,223 followed by Ontario at 11,444 and then Alberta at 3,566 and British Columbia at 2,616. Figure 1D shows that deaths were highest during the first wave: subsequent waves have seen fewer deaths largely because of the dissemination of vaccines as well

Figure 1C: Distribution of total COVID-19 cases by province, January 2020-January 2022



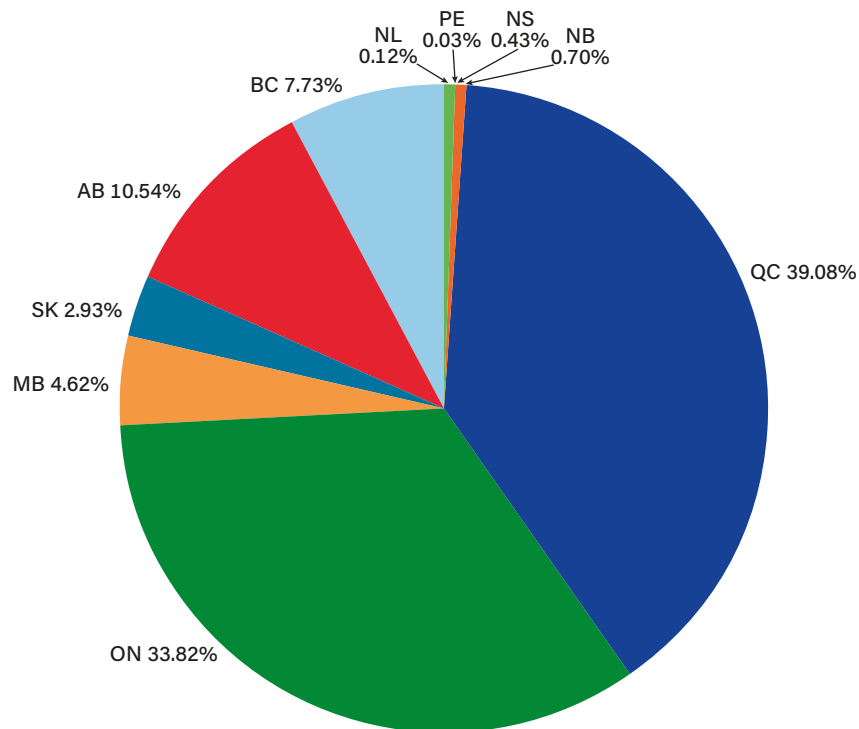
Source: COVID-19 Tracker, 2022.

Figure 1D: Monthly COVID-19 deaths in the Canadian provinces, January 2020-January 2022



Source: COVID-19 Tracker, 2022.

Figure 1E: Distribution of total COVID-19 deaths by province, January 2020–January 2022

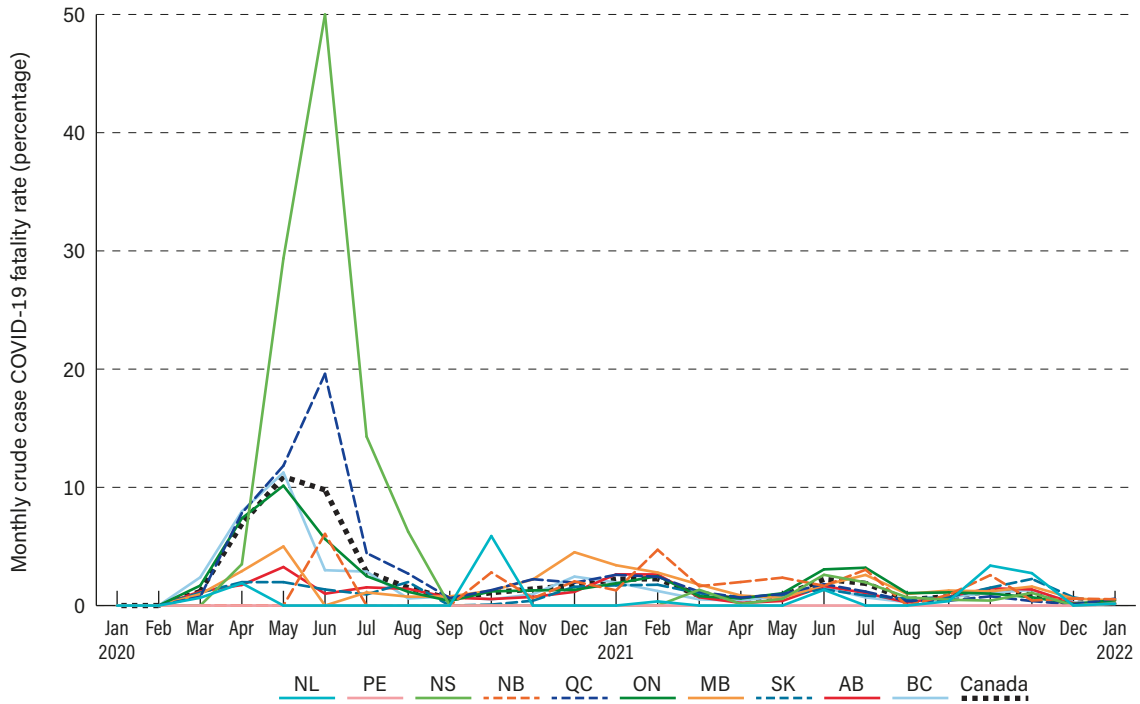


Source: COVID-19 Tracker, 2022.

as improvements in treatment protocols. Except for Quebec and Ontario (figure 1E), most provinces saw the number of deaths reflect their population shares. With 34% of Canada's COVID-19 deaths, Ontario saw its proportion of deaths below its population share while Quebec was an outlier with 39% of Canada's deaths but only 23% of the population. It should be noted that total deaths spiked up during the fifth, Omicron, wave largely because of the high transmissibility of the variant and the large surge in cases. However, when deaths are considered relative to the total cases—the crude case fatality rate (figure 1F)—mortality from COVID-19 dropped dramatically after the first wave.

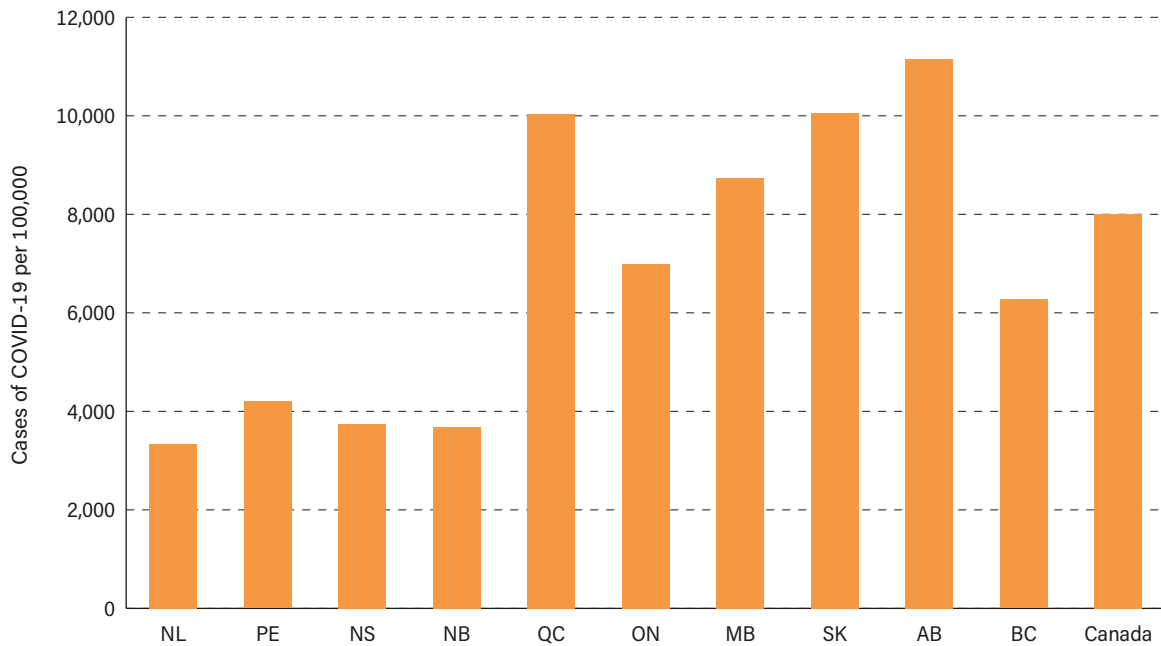
Given variations in provincial population size as well as case numbers, it is useful to standardize based on population so that interprovincial comparisons can be made more effectively, as in figures 2A to 2C. Figure 2A shows COVID-19 cases per 100,000 population for the entire period from January 2020 to January 2022. Canada as a whole saw 8,013 cases per 100,000 population. Across the provinces, the incidence ranged from a high of 11,151 cases per 100,000 in Alberta to a low of 3,331 cases per 100,000 in Newfoundland & Labrador. The four Atlantic provinces saw the lowest total incidence rates, followed by British Columbia and Ontario. Quebec and the Prairies generally saw the highest incidence rates.

Figure 1F: Monthly COVID-19 crude case fatality rate (%), Canada and the provinces, January 2020–January 2022



Source: COVID-19 Tracker, 2022.

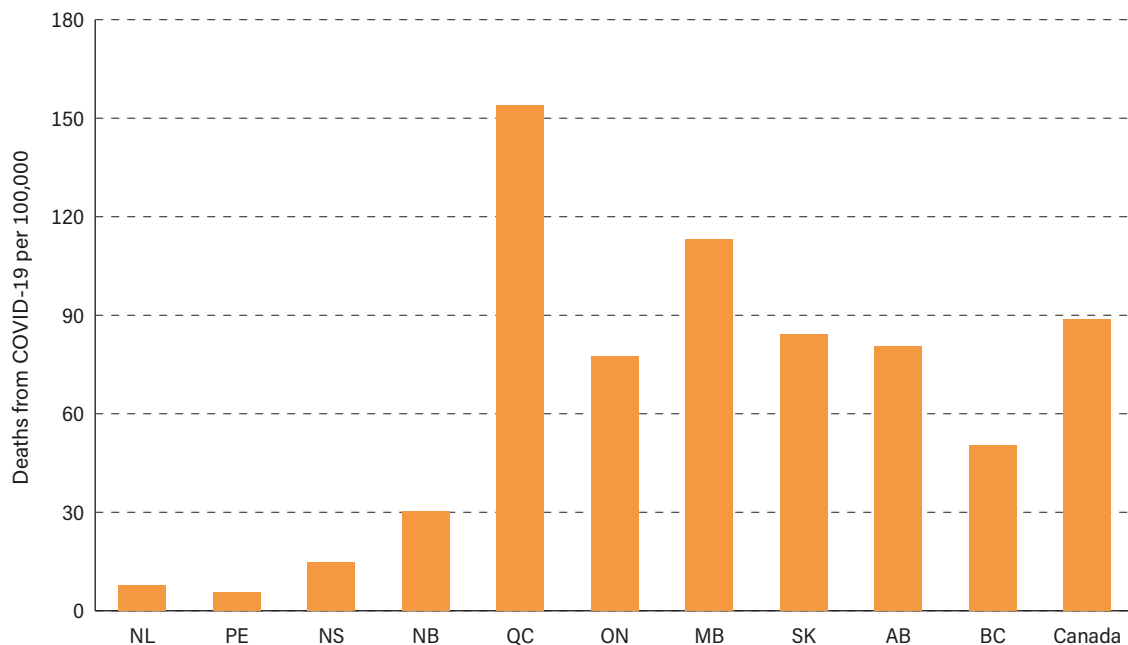
Figure 2A: COVID-19 cases per 100,000 population, Canada and the provinces, January 2020–January 2022



Source: COVID-19 Tracker, 2022; calculations by author.

The pattern for deaths per 100,000 population (figure 2B) and per 100,000 COVID-19 cases (figure 2C) were quite similar. While Quebec did not have the highest incidence in terms of cases per 100,000 population, it had the most deaths per 100,000 population and the highest case fatality rate. In general, if you got COVID-19, you were more likely to die of COVID-19 in Quebec and Manitoba and less likely in Newfoundland & Labrador, Prince Edward Island, and Nova Scotia. While New Brunswick had relatively few deaths per 100,000 population, it had overall case fatality rates like Saskatchewan, Alberta, and British Columbia, though much of that came late in the pandemic. Indeed, some provinces that fared relatively well during the first waves of the pandemic appear to have had more difficulties with the Omicron surge.

Figure 2B: COVID-19 deaths per 100,000 population, Canada and the provinces, January 2020–January 2022

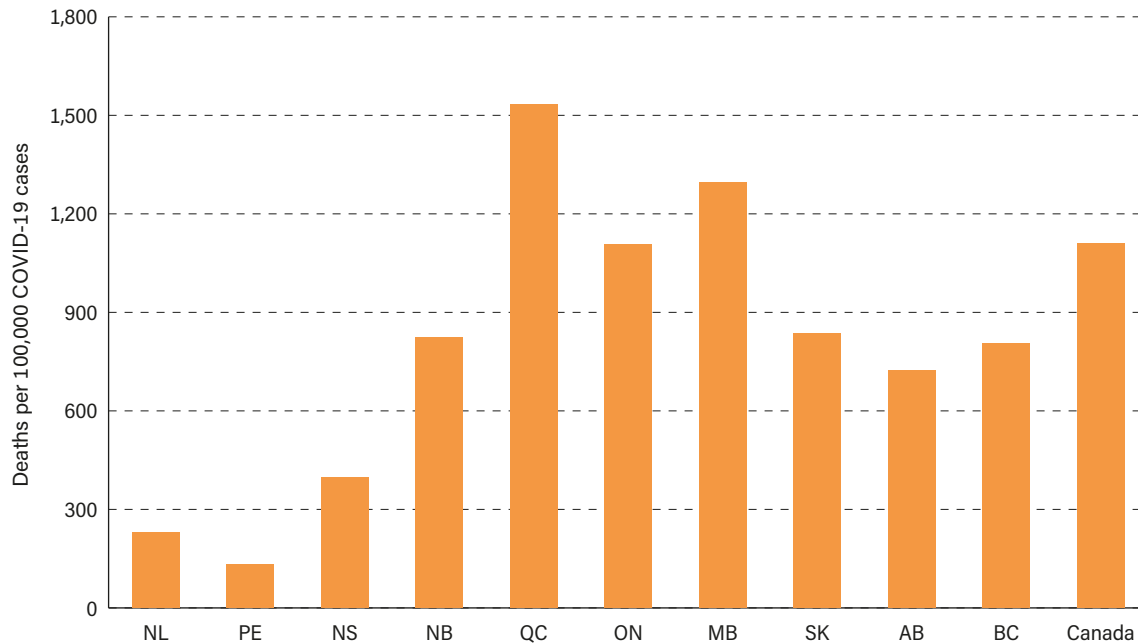


Source: COVID-19 Tracker, 2022; calculations by author.

### Fiscal Impact of the Pandemic

The general effects of the pandemic have been to disrupt health, social, governmental, and economic systems. The impact of the pandemic on these systems in Canada and its provinces should be similar but, given the regional variations in demographics and other characteristics across Canada's provinces, one might also expect differences in the effects. Indeed, other studies have noted regional variations. For example, in Spain, a country that has devolved health care onto regions, one study of the first wave of the pandemic found that 90% of the variation of the pandemic's impact was attributable to differences among regions (Gutiérrez, Inganzo, and Orbe, 2021). These differences

Figure 2C: COVID-19 fatality rate per 100,000 cases, Canada and the provinces, January 2020–January 2022



Source: COVID-19 Tracker, 2022; calculations by author.

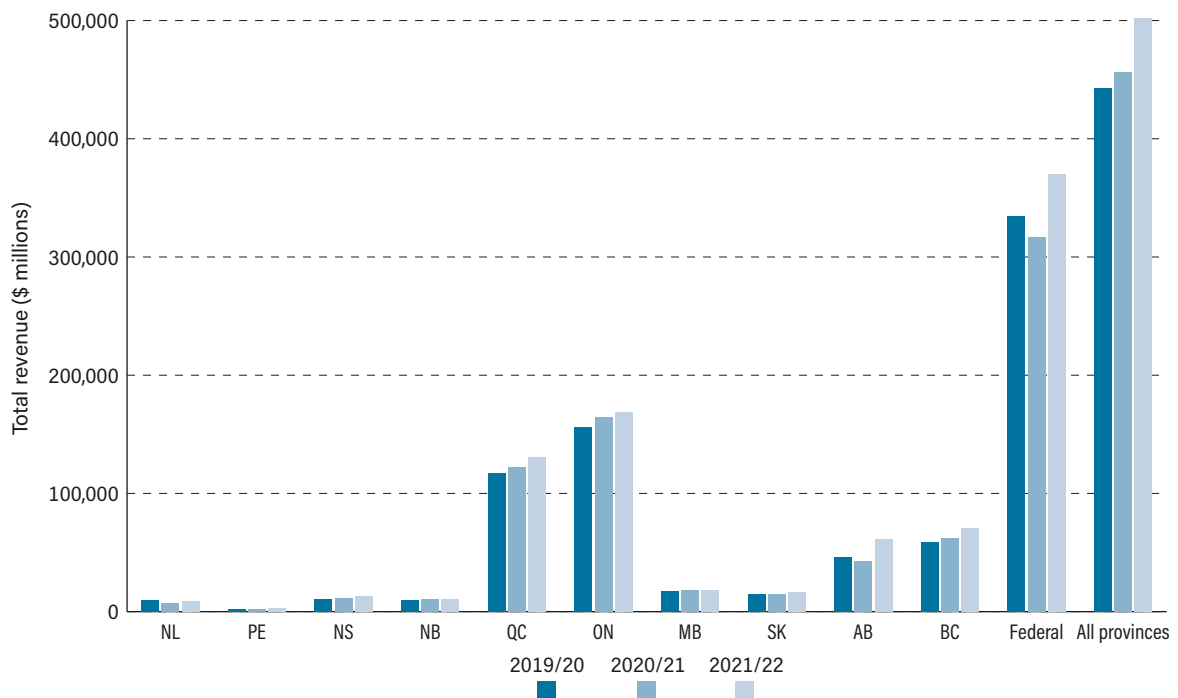
would then even spread into economic impacts as noted for the United States by a study on the employment impacts of the pandemic by economic region and sector (Foerster, Garvey, and Sarte, 2021). As a result, one might expect that fiscal impacts from the pandemic would also exhibit some regional differences.

The economic disruption of the pandemic to both employment and consumer spending generated drops in economic activity and government revenues that initially led to declines in consumption- and income-tax revenues and led to concerns of a collapse of revenue. The economic consequences were somewhat uneven with small business particularly hard hit and unemployment affecting younger workers more severely in the second and third quarters of 2020 (Greider, Khan, Ortega, and Symmers, 2021; Kunci, McWhirter, and Ueberfedt, 2021). Those fears about government revenue collapsing turned out eventually to be unfounded as not only did the economy bounce back quicker than expected but government revenues did too and in some cases with a vengeance as both consumers and business adapted to the new era.

## Impact of COVID-19 on Revenues

Figure 3A plots federal and provincial total revenues in millions of dollars during the period from 2019/20 to 2021/22; figure 3B shows annual growth rates. The pandemic had a differential effect on revenues when one compares the federal government with the provinces collectively: whereas the federal government saw total revenues fall by 5.3% in 2020/21, the provinces saw their total revenues grow by 2.9%, in large part because of the initial stabilization of their revenues by the federal government through significant transfers. The subsequent year, both tiers were expected to see total revenues rise, with the federal government seeing revenue growth up to an estimated 17% and the provinces collectively up 10%.

Figure 3A: Total revenue (\$ millions) of Canadian federal and provincial governments during the pandemic, 2019/20–2021/22

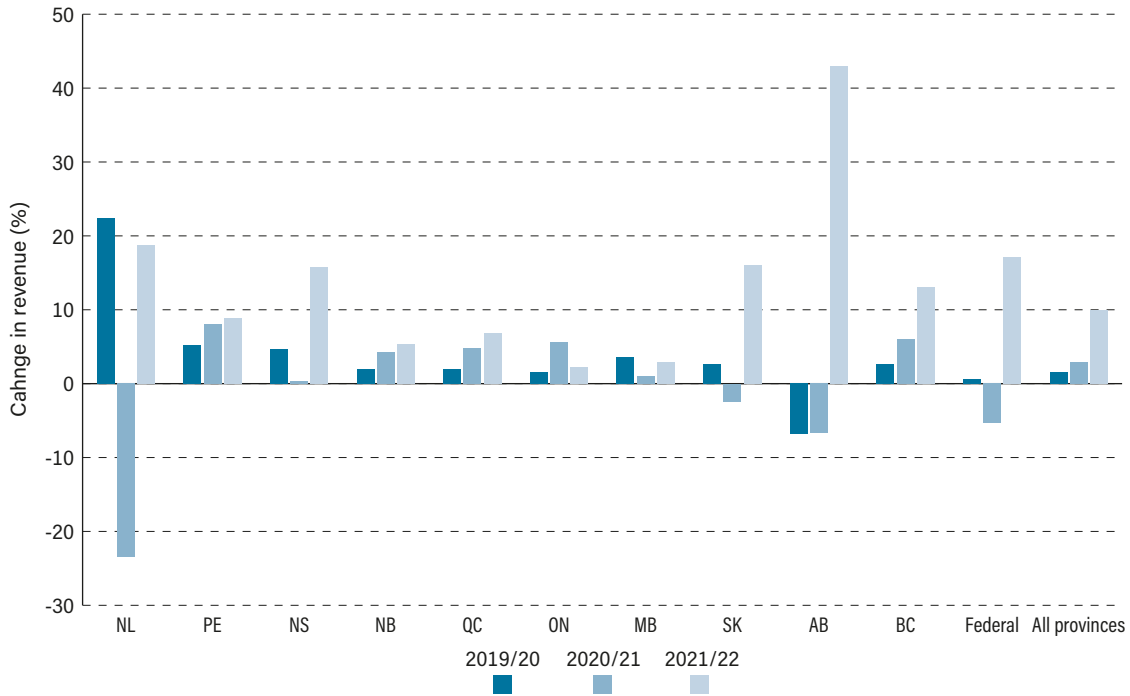


Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements.

The hardest hit in terms of revenue losses in 2020/21 were Alberta, Saskatchewan, and Newfoundland & Labrador. This was partly tied to the decline in energy prices and subsequent government royalty revenues for these provinces where the economy is energy-resource intensive. As energy prices recovered, so did resource revenues. For 2021/22, the largest projected rebounds were again in the resource-intensive provinces: Alberta saw increases of 43%, Saskatchewan of 19%, and Newfoundland & Labrador of 16%.



Figure 3B: Change (%) in the revenue of Canadian federal and provincial governments during the pandemic, 2019/20–2021/22

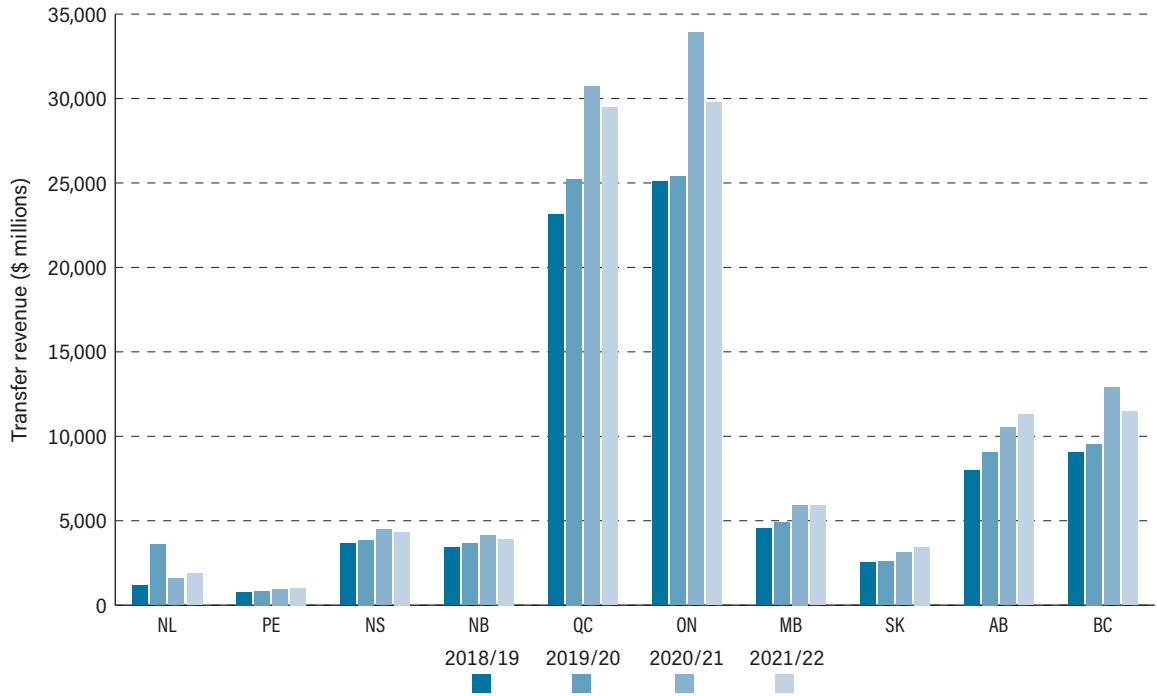


Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements.

Figures 4A to 4F drill down into the revenue data by looking at the performance of specific revenue categories during the pandemic. To start, figure 4A, figure 4B, and figure 4C separate revenues into transfer revenues from the federal government and own-source revenues. Led by COVID-19 supports for health spending in particular, the provinces saw federal transfers rise substantially during the pandemic from \$81.353 billion in 2018/19 to \$88.639 billion in 2019/20, and then surging to \$108.292 billion in 2020/21 before a projected decline in 2021/22 to \$102.538 billion. The largest percentage increases in federal transfers during the pandemic were for British Columbia (35%), Ontario (34%), and Quebec (22%). Newfoundland & Labrador saw a decline in federal transfers during the pandemic but that is after the 203% increase in 2019/20 driven by terms of the 2019 renewed Atlantic Accord.<sup>2</sup>

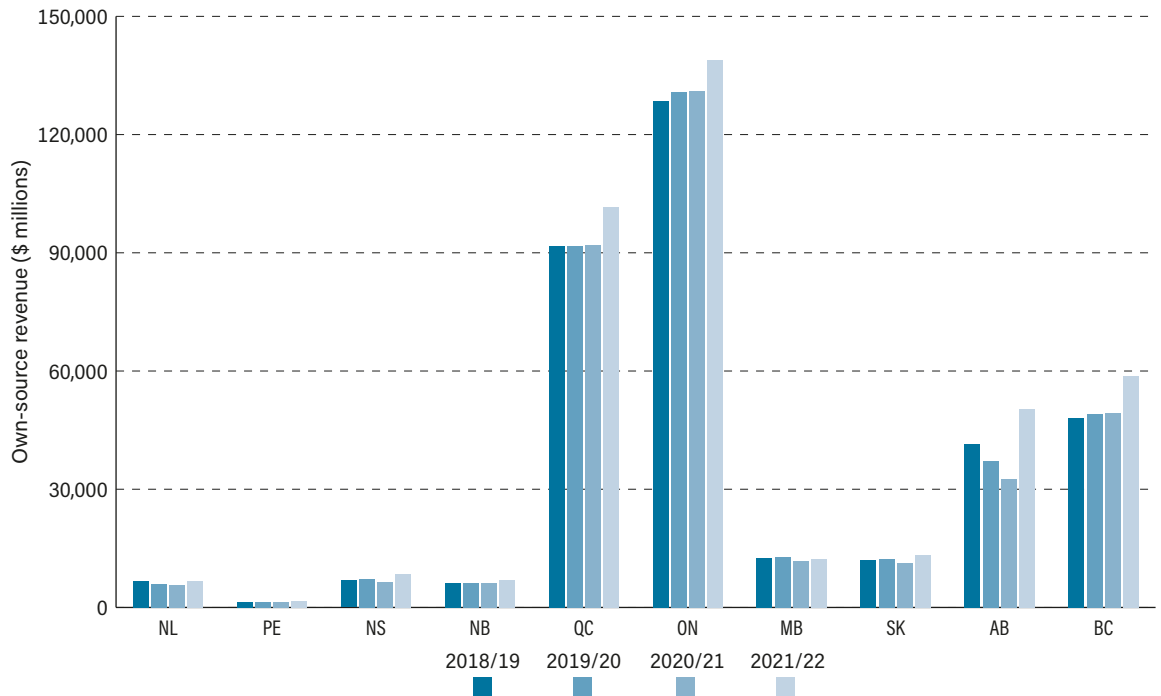
2. The Atlantic Accord was signed in 1985 between the Government of Canada and the Government of Newfoundland & Labrador to allocate revenues from offshore oil and gas resources adjacent to Newfoundland & Labrador. The agreement was renewed in 2019 and it is estimated the Government of Newfoundland & Labrador will receive \$2.5 billion from the federal government over 38 years (see Newfoundland & Labrador, 2020).

**Figure 4A: Transfer revenue (\$ millions) to Canadian provincial governments during the pandemic, 2018/19–2021/22**



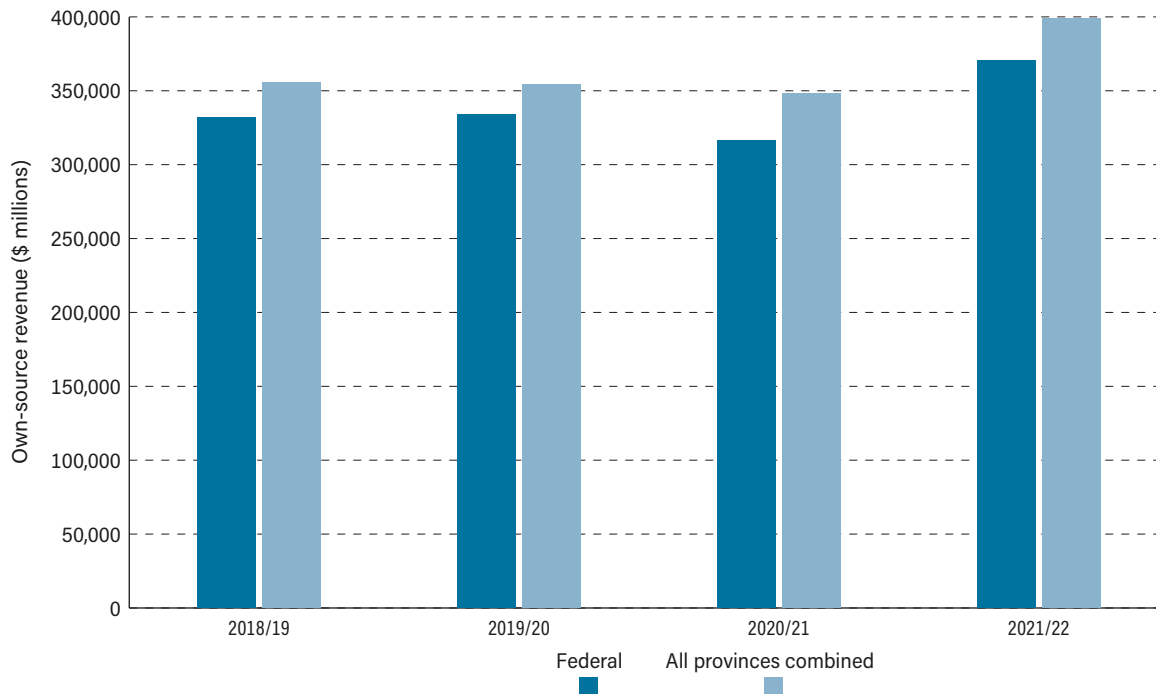
Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements.

**Figure 4B: Own-source revenue (\$ millions) of Canadian provincial governments during the pandemic, 2018/19–2021/22**



Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements.

Figure 4C: Own-source revenue (\$ millions), Canadian federal government and all provinces combined during the pandemic, 2018/19–2021/22

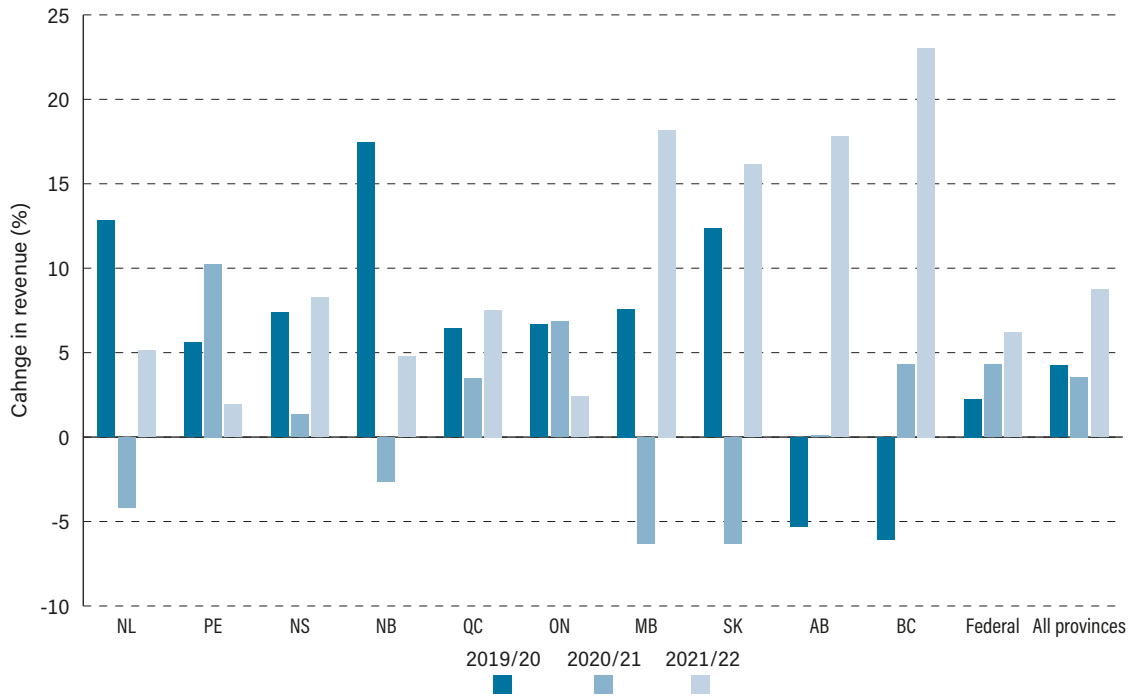


Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements.

Own-source revenues for all provinces saw a decline from \$354.5 billion to \$347.5 billion from 2019/20 to 2020/21 before rebounding in 2021/22 by a projected 15% to reach \$399.2 billion. While all provinces saw a rebound of own-source revenue in 2021/22, some of the largest estimated revenue increases were those of Alberta (54.5%) and Nova Scotia (28.8%) while the smallest were those of Manitoba (4.5%) and Ontario (6.0%). The rebound in energy prices appear to have particularly boosted the own-source revenues of Alberta, Saskatchewan, and Newfoundland & Labrador.

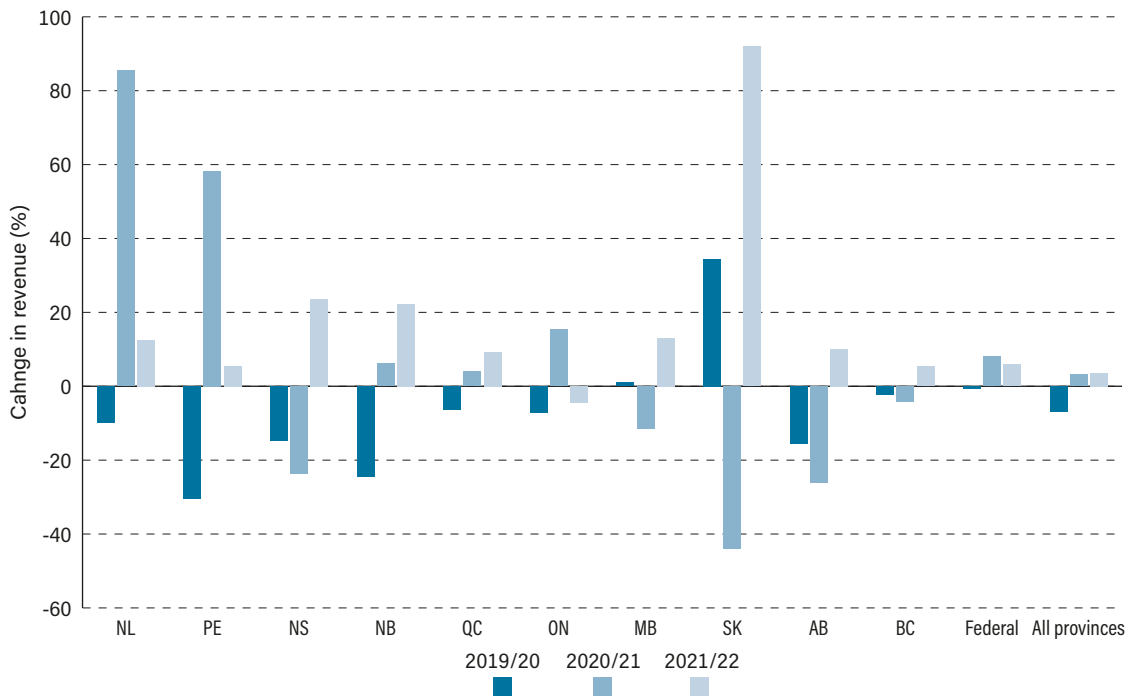
When specific categories of own-source revenue are examined, it appears that income tax revenues—both personal (figure 4D) and corporate (figure 4E)—continued to increase for both the federal as well as provincial governments as the pandemic progressed. However, both the federal and provincial revenue was initially affected by a decline in revenue from consumption taxes, with the federal government particularly hard hit. Sales taxes also fell for both levels of government (figure 4F), with federal general sales-tax revenues down 13% in 2020/21 compared to 3% for the provinces. Much of the provincial decline was driven by Ontario’s 7% drop in total general sales-tax revenues. Sales tax revenues rebounded an estimated 30% at the federal level in 2021/22 and 14% at the combined provincial level. Clearly, the impact of pandemic restrictions that allowed many to work at home did not affect personal income-tax revenues as much as it did those revenues that were derived from in-person consumer spending.

Figure 4D: Change (%) in revenue from provincial and federal personal income tax during the pandemic, 2019/20-2021/22



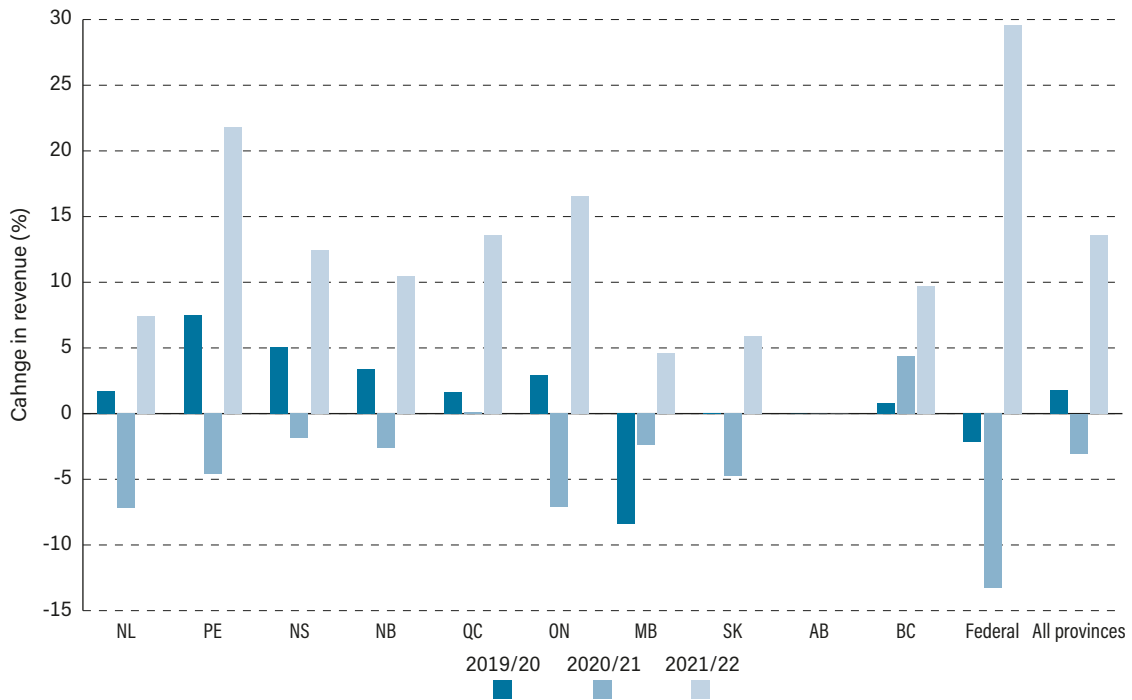
Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements.

Figure 4E: Change (%) in revenue from provincial and federal corporate income tax during the pandemic, 2019/20-2021/22



Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements.

Figure 4F: Change (%) in revenue from provincial and federal consumption taxes during the pandemic, 2019/20–2021/22



Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements.

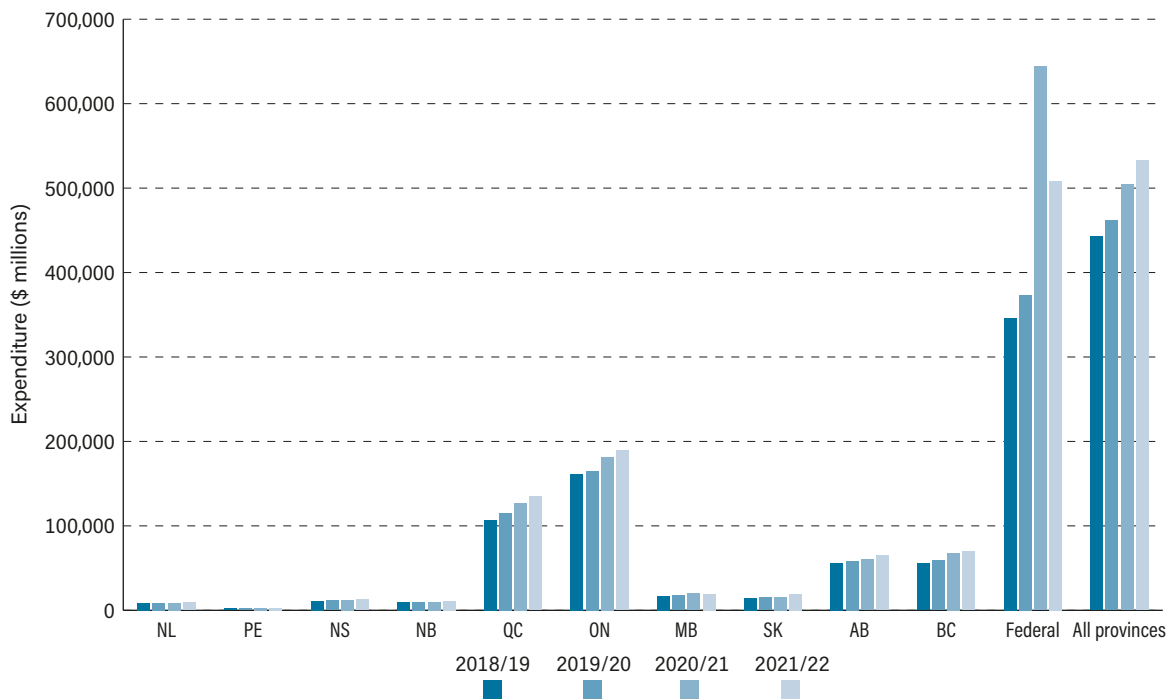
The performance of Ontario's sales-tax revenue clearly stands out given the length and intensity of its restrictions during the pandemic. It had the second largest drop in sales-tax revenues, 7.1%, just behind Newfoundland & Labrador's 7.2%. Ontario had some of the highest stringency index values at certain points of the pandemic, namely, April of 2020, January of 2021, and especially in May of 2021.<sup>3</sup> Stringency then declined, bottoming out in December of 2020 before starting to rise again, peaking in early 2021, and then falling again starting in February when the series ends. Given that higher levels of stringency have been associated with worse economic performance across countries as measured by real GDP growth during the pandemic, it is likely to have been a factor in affecting those provincial government revenues derived from spending on goods and services (Di Matteo, 2021).

3. The strictness of COVID-19 restrictions is measured by what are known as stringency indices, the most famous of which was the Oxford Stringency Index (see Blavatnik School of Government, University of Oxford, 2021). There is also the COVID-19 Stringency Index constructed by the IRPP Centre for Excellence on the Canadian Federation, which models its stringency index on the Oxford one. The index takes on a value from 0 to 100 with larger numbers being associated with larger amounts of stringency. The index is similar in principle and construction to the Oxford Stringency Index. There are a total of 17 indicators (see IRPP, 2021).

## Impact of COVID-19 on Expenditures

Expenditure rose during the pandemic at both the federal and provincial level, fueled by assorted economic supports to individuals and business as well as health spending to deal with the pandemic. Figure 5A and figure 5B summarize total expenditures and their growth at both fiscal tiers. Federal government spending in 2018/19 was \$346.2 billion and it rose 7.9% in 2019/20 to \$373.5 billion and soared 73% to \$644.2 billion in 2020/21 before declining 21% to an estimated \$508.2 billion in 2021/22.

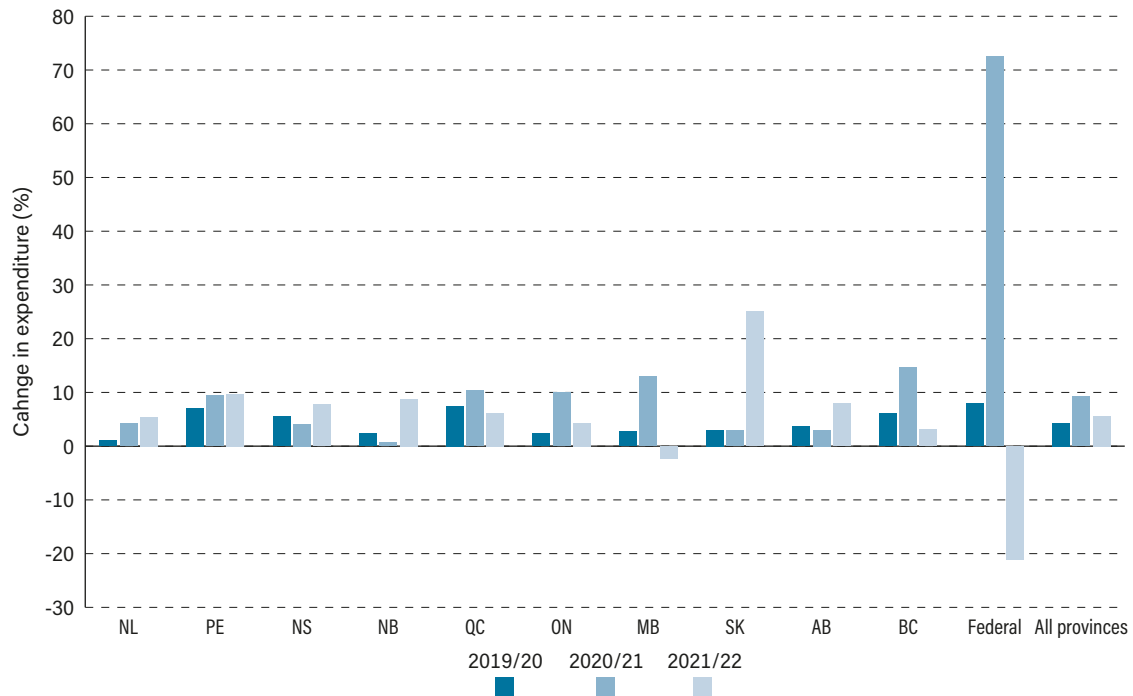
Figure 5A: Total expenditure (\$ millions) by Canadian federal and provincial governments during the pandemic, 2018/19–2021/22



Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements.

Total provincial government spending rose from \$442.7 billion in 2018/19 to \$461.8 billion in 2019/20, an increase of 4.3%. The next year saw spending rise 9.2% to \$504.4 billion and an estimated 5.6% to \$532.9 billion in 2021/22. It should be noted that, in the absence of federal transfers, provincial government spending still rose 3.3% in 2019/20 and 6.2% in 2020/21. While federal transfer spending to the provinces did increase by 22.2% in 2020/21, the subsequent year was expected to see a drop in transfers of 5.3%. The provincial response to their revenue rebound and the needs of the pandemic appears to have resulted in some self-reliance with respect to spending. Federal government spending net of total transfers to the provinces rose 88.1% in 2020/21 but then declined 23% in 2021/22.

Figure 5B: Change (%) in total government expenditure during the pandemic, 2019/20–2021/22



Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements.

Along with substantial amounts for income support to individuals and business with emergency response benefits, the federal government during the pandemic engineered a substantial permanent increase in its own spending levels and this deserves particular attention. The federal 2022 spring budget was presented as a lower spending fiscal plan that, according to Finance Minister Freeland, would “review and reduce government spending” (Canada, Department of Finance, 2022a: vi). Spending did fall from its pandemic high of \$644.2 billion in fiscal year 2020/21 with a projection to \$461.2 billion in 2022/23. Total revenues are expected to rise from \$316.4 to \$408.4 billion over the same period, an increase of 29%. The deficit as a result declined from \$327.7 billion to \$52.8 billion. However, there is still an historically large deficit and the net debt will climb from \$1.15 to \$1.32 trillion. Moreover, compared to the pre-pandemic fiscal year 2019/20, total spending in 2022/23 will be about 27% higher, an average annual increase of 9% per year. This represents a permanent long-term ramping up of federal expenditure resulting in a bigger federal government expenditure footprint.

### Spending on health

One area that should be examined in somewhat more detail on the expenditure side is health spending given that it was an important part of the pandemic response. The release by the Canadian Institute for Health Information (CIHI) of the *National Health Expenditure Trends, 2021* (CIHI, 2021b) provided a first look at what happened to Canadian health spending during the COVID-19 pandemic. Total health spending was

estimated to have increased by nearly 13% between 2019 and 2020, a rate of increase not seen in more than 30 years and triple the steady 4% growth rate experienced from 2015 to 2019. Canadian health spending was estimated at a record \$308 billion in 2021—\$8,019 per Canadian and 12.7% of Canada’s gross domestic product (GDP) in 2021, following a high of 13.7% in 2020. The moderation of spending growth in 2021 was the result of a drop in COVID-19 response support from \$30.6 billion in 2020 to \$22.8 billion in 2021, a decline of 25%.

The increases in health spending in 2020 and 2021 were a function of government funding in response to COVID-19, particularly federal transfers to the provinces, which are responsible for about two thirds of Canadian health spending. The COVID-19 response funding included money for treatment costs, testing and contact tracing, vaccination, medical goods, and other related expenses and is a separate category from the standard ones used. While total health spending is up, it remains that the closing of outpatient departments and postponing of medical visits and procedures during the height of the pandemic meant a reduction in some aspects of health services and spending. Indeed, according to CIHI’s own analysis of COVID-19’s effect on hospital care, from March to December 2020 overall surgery numbers fell 22% compared with the same period in 2019, a drop of 413,000 surgeries (CIHI, 2021a).

Figure 6A presents annual growth rates for the years 2019, 2020, and 2021 (the latter two being forecasts) for real per-capita provincial-territorial health spending by category using the CIHI data. It should be noted that in 2019, real per-capita total health spending in Canada grew about 1% and soared by 7.2% in 2020, but is expected to rise barely one tenth of one percent in 2021. However, when the COVID-19 response spending is removed, it turns out that real per-capita health spending in 2020 declined by 3.6% but was expected to rebound by 3.1% in 2021.

The real per-capita total health spending of the provincial-territorial governments in 2020 rose 8.1%. However, once the COVID-19 response is factored out, their spending declined by about one percent though it is also expected to rebound in 2021. Hardest hit in 2020 in terms of percentage declines in real per-capita spending were physicians (–5.8%), other professionals (–6.1%), drugs (–2.3%), and hospitals (–0.5%). These results are not surprising given the decline in surgeries and physician visits brought about by the pandemic. Meanwhile, public-health spending grew 4.1%, other institutions (including long-term care) increased 1.2%, while capital spending expanded 10%.

Growth in real per-capita provincial government health spending net of the COVID response funding was also variable across provinces (figure 6B). In 2020, Newfoundland & Labrador, Prince Edward Island, New Brunswick, Quebec, Manitoba, Saskatchewan,



Figure 6A: Change (%) in real per-capita provincial-territorial health expenditure (\$1997) during the pandemic, 2019–2021

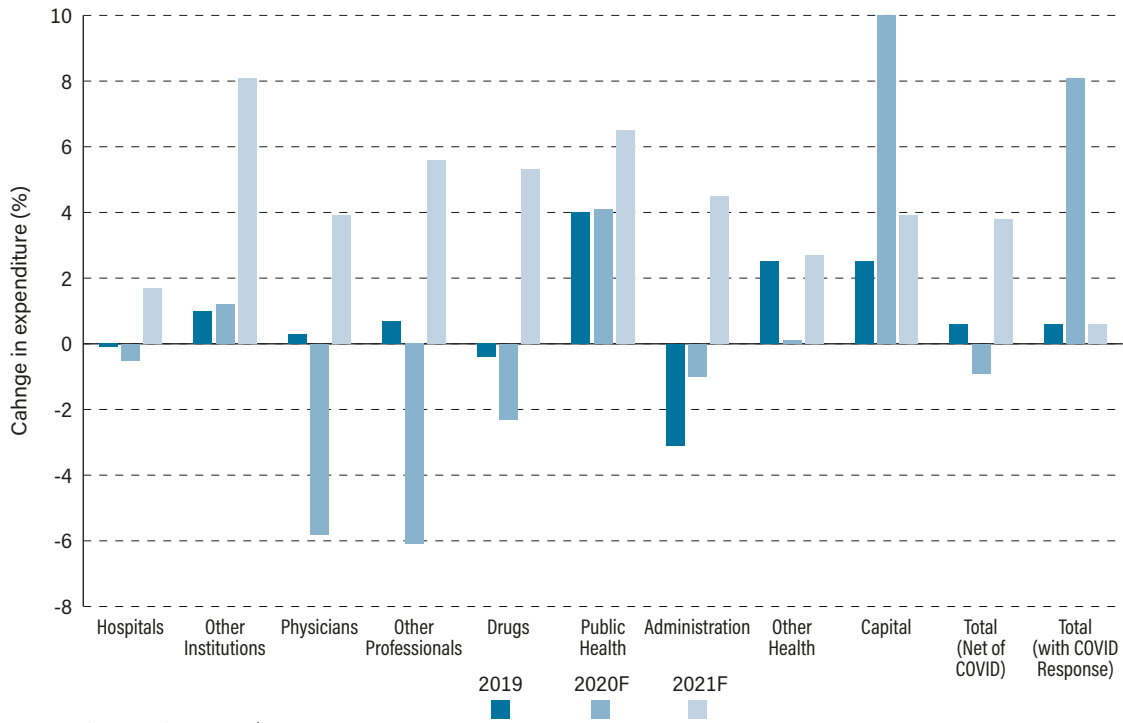
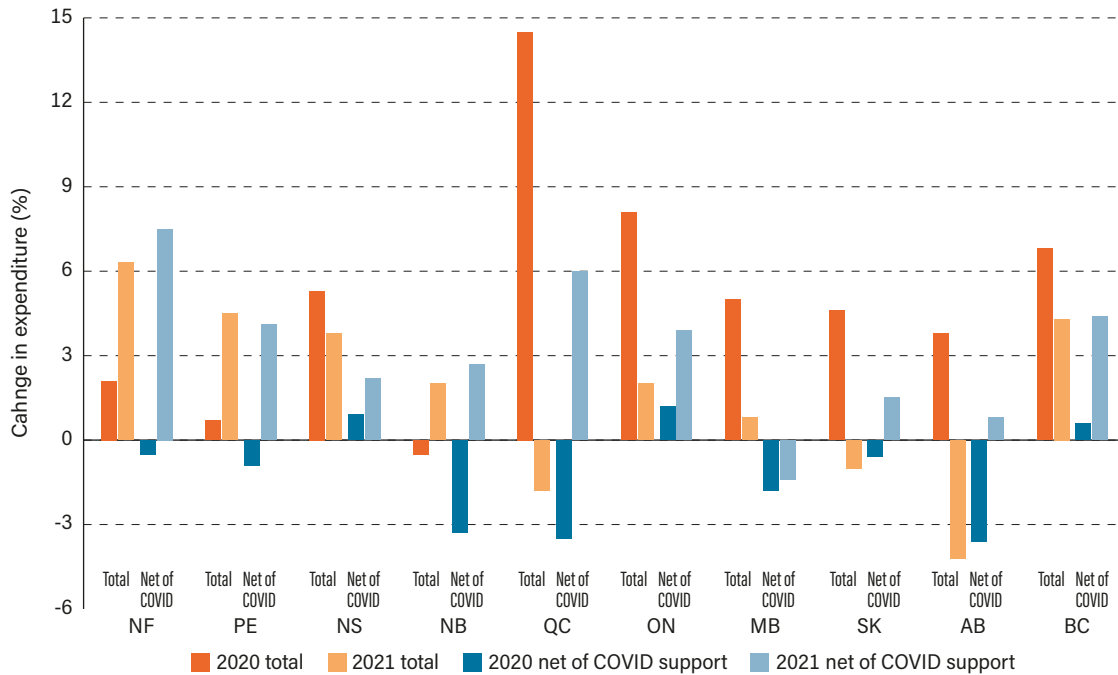


Figure 6B: Change (%) in real per-capita provincial health expenditure, total and net of COVID-19 supports, during the pandemic, 2020 and 2021



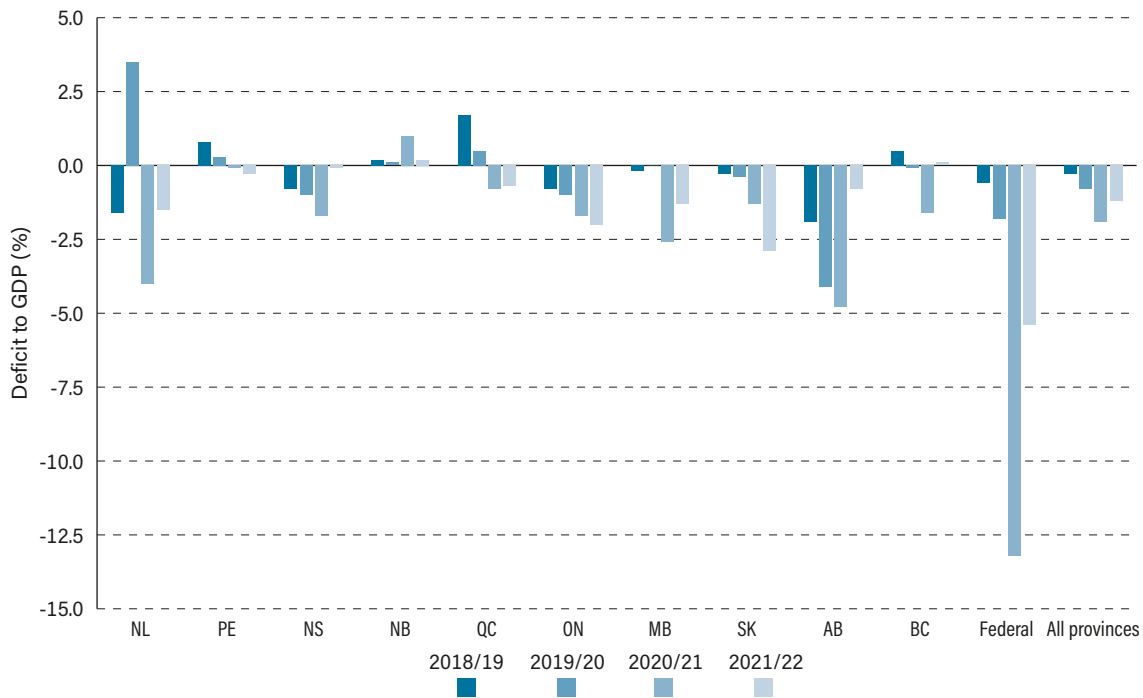
and Alberta saw a decline in real per-capita spending net of COVID-19 response funding, while Ontario, British Columbia, and Nova Scotia saw small increases, with Ontario the largest at 1.2%. New Brunswick (-3.3%), Quebec (-3.5%), and Alberta (-3.6%) saw the biggest declines in real per-capita health spending. This demonstrates that, during the pandemic's disruption of the health system, the decline in service provision at least as measured by real per-capita spending, was greater in some provinces than others. This suggests that the shutdown of services was greater in some of the provinces that were harder hit by the pandemic, namely, Alberta and Quebec.

## Impact of COVID-19 on Deficits

The difference between revenues and expenditures in a given fiscal year is the surplus (+) or deficit (-). Going into the pandemic, most provinces, along with the federal government, were already in deficit. In 2018/19, the ten provinces collectively had deficits of \$5.9 billion while the federal government had a deficit of \$14 billion. In 2018/19, 6 out of 10 provinces had deficits while four had surpluses, ranging from a surplus of \$7.9 billion for Quebec to a deficit of \$7.4 billion for Ontario. In fiscal year 2020/21, all the provinces collectively ran a combined deficit of \$48.3 billion while the federal government was at \$327.7 billion. In 2020/21, 9 out of 10 provinces had a deficit; the exception was New Brunswick, which ran a surplus of \$408 million. The largest deficits that same fiscal year were for Alberta at \$17 billion and Ontario at \$16.4 billion.

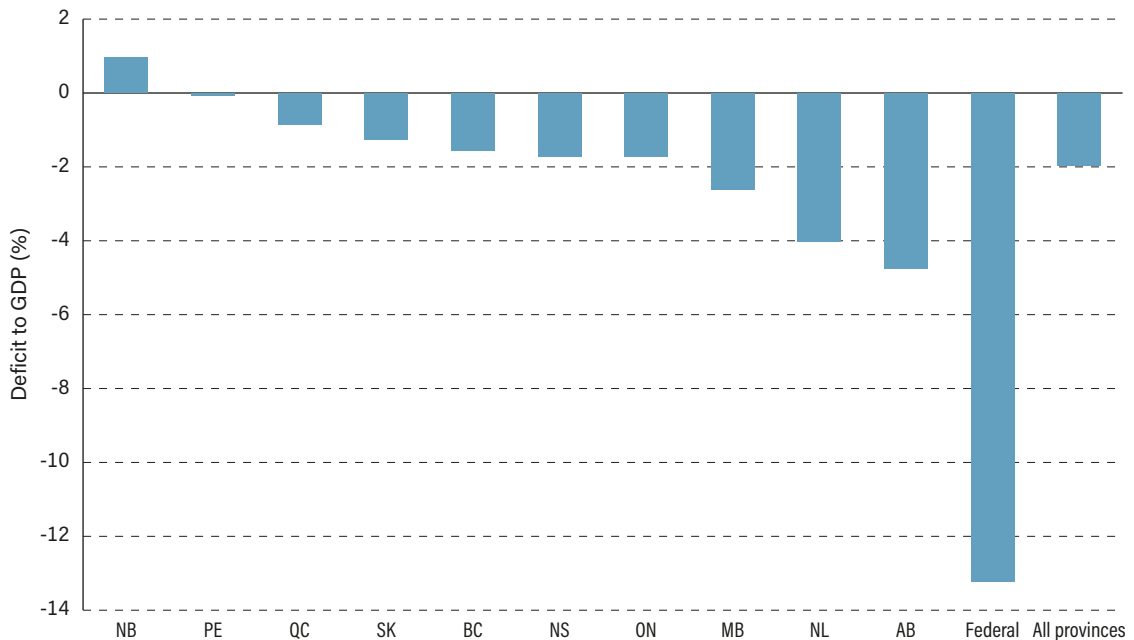
Deficits and surpluses are sometimes better portrayed relative to the size of the economy. Figure 7A does this for each year of the pandemic for the provinces and the federal government. Meanwhile, figure 7B ranks the provinces alongside the Federal government by deficit-to-GDP ratio for the first full fiscal year of the pandemic, 2020/21. The ratio

Figure 7A: Ratio (%) of Canadian federal and provincial government deficits to GDP during the pandemic, 2018/19–2021/22



Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements; Caranci, Burleton, Abdelrahman, and Sondhi, 2021; calculations by author.

Figure 7B: Ratio (%) of Canadian federal and provincial government deficits to GDP, 2020/21



Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements; Caranci, Burleton, Abdelrahman, and Sondhi, 2021; calculations by author.

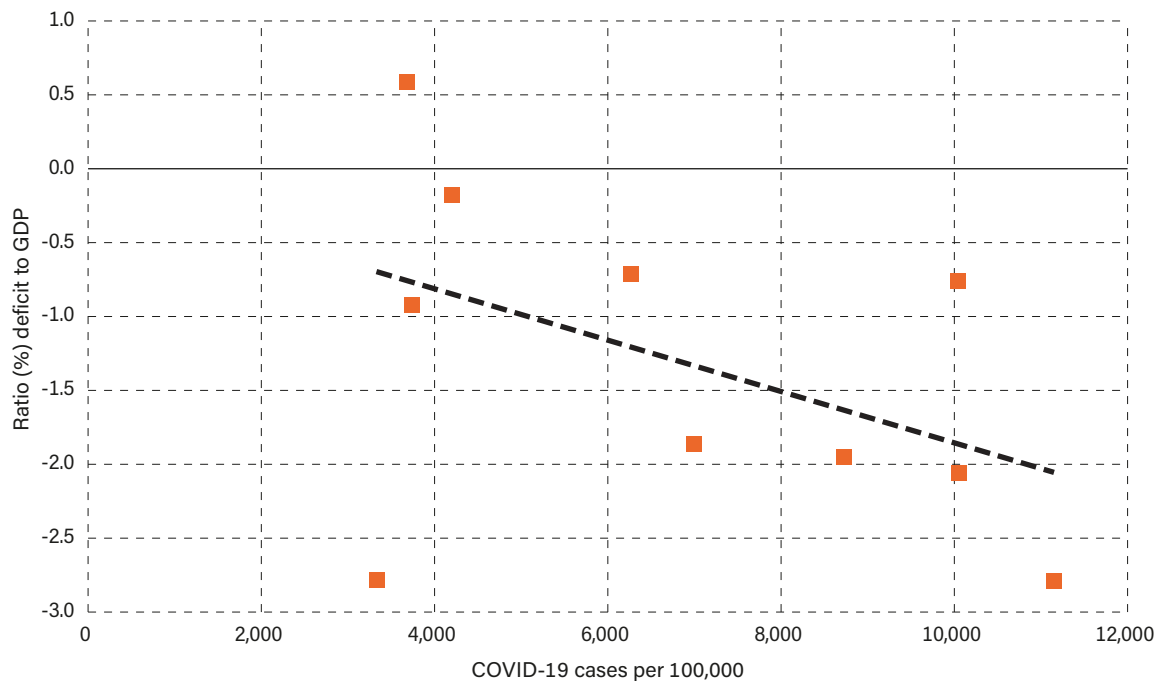
of deficit to GDP noticeably worsened between 2019/20 to 2020/21 as revenues slowed and expenditures rose to deal with the effects of the pandemic. Between 2019/20 and 2020/21, the federal deficit-to-GDP ratio rose from 1.8% to 13.2% while the collective deficit-to-GDP ratio of the provinces rose from 0.8% to 1.9%.

While the provinces did see a deterioration in their fiscal balances during the pandemic, it was much less severe than that faced by the federal government. Amongst the provinces, 2020/21 saw a range from a 1.0% surplus for New Brunswick to a 4.8% deficit for Alberta. When the deficit-to-GDP ratios for 2020/21 are ranked, one can see the lowest deficit-to-GDP ratios were for New Brunswick, Prince Edward Island, Quebec, Saskatchewan, and British Columbia. Meanwhile the worst performers were Alberta, Newfoundland & Labrador, Manitoba, Ontario, and Nova Scotia. Compared to the federal government, however, the provinces appear to have had relatively modest deficits, all things considered. Moreover, moving into 2021/22, many provincial deficits are coming in lower than initial budget projections. For example, Ontario for 2021/22 now has a small surplus rather than a deficit, due mainly to larger than anticipated revenues.

One point worth considering at the provincial level is if the size of the deficit was somehow related to the intensity of the pandemic. The answer relies, of course, on a relatively small set of data points with many variables that could affect the fiscal situation. A simple

scatterplot with trend suggests that provinces where there were more COVID-19 cases per capita appear to have had somewhat larger deficit-to-GDP ratios. Figure 7C plots the average estimated deficit-to-GDP ratio for 2020/21 and 2021/22 against COVID-19 cases per 100,000 population for the period from January 2020 to January 2022. It shows a correlation between the severity of the pandemic in terms of cases per 100,000 and the deficit. This suggests that those provinces that managed to combat the spread of the pandemic more successfully do appear to have suffered less fiscal disruption. This reflects less economic disruption and therefore a smaller impact on revenues as well as fewer expenditures to provide economic assistance and combat the medical effects, all other things given.

Figure 7C: Average ratio (%) of deficit to GDP compared to COVID-19 cases per 100,000, Canadian provinces, January 2020 to January 2022



Sources: Canada, Department of Finance, 2021; Caranci, Burleton, Abdelrahman, and Sondhi, 2021; COVID-19 Tracker, 2022; various government budgets, quarterly reports, and fall economic statements; calculations by author.

The federal fiscal situation bears further comment and analysis. Even before the COVID-19 pandemic, a structural gap had opened between the federal government's revenues and spending after revenues grew at 4% and expenditures at 5% annually over the 2015-to-2019 period. As a result, the deficit rose from \$2.9 billion in 2015/16 to \$28.8 billion in 2019/20. According to the 2022 federal budget, for the 2020/21 fiscal year, the deficit then rose to \$327.8 billion and is expected to come in at \$113.8 billion in 2021/22 and \$52.8 billion in 2022/23 (Canada, Department of Finance, 2022a).

One would expect the federal government to run deficits during the emergency of the pandemic given increased health transfers to the provinces and territories for emergency COVID-19 health responses and public health measures combined with the initial decline in revenues as the economy slowed. However, federal revenue declined from \$334.1 billion to \$316.4 billion between 2019/20 and 2020/21. Meanwhile, expenditures rose from \$362.9 billion to \$628.9 billion, an increase of \$266 billion. The Canadian Institute for Health Information (CIHI) estimates the total COVID-19 response health spending in Canada for 2020 and 2021 at \$30.6 billion and \$22.8 billion (CIHI, 2021b). The federal government maintains that it provided 80% of the public money spent to fight COVID-19 (Canada, Department of Finance, 2022b). This means that the bulk of the federal deficit was nevertheless the result of factors other than the increase in emergency health spending or the revenue decline from the disruption of the pandemic.

Chief of these were federal income supports for business and individuals, namely, the Canada Emergency Response benefit (CERB) and the Canada Emergency Commercial Rent Assistance (CECRA). The CERB was later replaced with three programs: the Canada Recovery Benefit (CRB), the Canada Recovery Sickness Benefit (CRSB) and the Canada Recovery Caregiving Benefit (CRCB). Replacing the CECRA is the Canada Emergency Rent Subsidy (CERS). There was also the Canada Emergency Wage Subsidy (CEWS) for business.

For example, in 2020, the CEWS totalled \$67.1 billion and in the first two quarters of 2021 it totalled another \$17.7 billion. In terms of transfers to households, the CERB-EI stream totalled \$29.2 billion in the last three quarters of 2020. The CERB-CRA stream totalled another \$45.3 billion over the same time while its replacement, the CRB in the fourth quarter of 2020 and the first two quarters of 2021 added another \$19.9 billion (Statistics Canada, 2021). If one adds only these numbers up, one obtains a total of \$179.2 billion over two years, which, when compared to combined deficits of \$380.6 billion (fiscal years 2020/21 and 2021/22), suggests that nearly 50% of the federal deficit during these two years was from those income-support programs alone. If one adds the COVID-19 health spending supports, about 60% of the deficits incurred those two fiscal years could be ascribed to COVID-19. At the same time, the argument has been made that the income supports provided during COVID-19 were overly generous and benefited high-income earners more than low-income earners thereby raising criticisms of waste (Clemens, Palacios, Li, and Veldhuis, 2020; Hertzberg, 2021).

The spring 2022 Federal Budget projects that, from fiscal year 2020/21 to 2022/23, total revenues are expected to rise from \$316.4 to \$408.4 billion, an increase of 29%, while total expenses will fall from \$644.2 to \$461.2, a decline of 28% (Canada, Department of Finance, 2022). The deficit as a result will go from \$327.7 billion to \$52.8 billion.

However, there will still be a deficit and the net debt will climb from \$1.15 to \$1.32 trillion. Moreover, compared to the pre-pandemic fiscal year 2019/20, total spending in 2022/23 is expected to be about 27% higher, an average annual increase of 9% per year. This represents a permanent long-term ramping up of federal expenditure that will result in the federal government having a bigger expenditure footprint independent of the pandemic.

Of course, one could counter with the argument that in the end the rapid recovery from the pandemic and the relatively better fiscal performance of the provinces were the result of generous federal income and transfer support, particularly that of the spring 2021 budget. However, Tombe (2021) notes that the spring 2021 federal budget was supposed to be a “bridge” to get Canadians through the pandemic rather than explicit stimulus. Indeed, along with the income supports and wage subsidies, an additional \$100 billion in spending measures were labeled in that budget as explicit stimulus despite growing evidence that Canada’s economy was recovering briskly such that output and employment would soon return to pre-COVID levels.<sup>4</sup>

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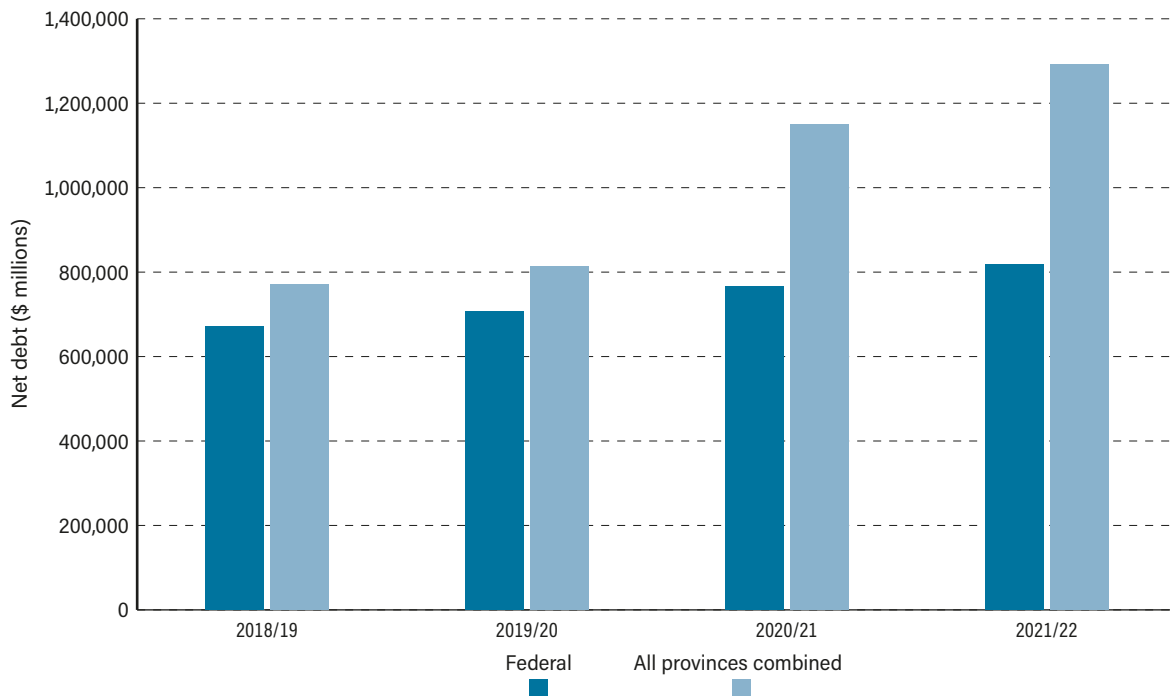
4. These additional measures included: affordable housing and homelessness supports (\$3.1 billion over five years), increased R&D support (\$6.1 billion), additional public transit funding (\$5.9 billion), increasing certain elderly benefits (\$10.7 billion), boosting funding for Indigenous communities (\$15.2 billion; mainly health and infrastructure measures), enlarging the Canada Workers Benefit (\$8.9 billion), and establishing national childcare and early-learning (\$29.8 billion) (Tombe, 2021).

## Impact of COVID-19 on Debt

The sum of accumulated deficits and surpluses, plus any additional borrowing for capital or infrastructure projects not part of operating budgets, becomes the public debt. The gross debt is total liabilities while the net public debt is gross debt minus financial assets. Naturally, the deficits run during the pandemic at the provincial and federal level have meant enormous increases in public debt, although there are differences between the increase in federal and provincial debts.

Figure 8A provides totals for net public debt for the federal government and the provinces combined while figure 8B provides figures for the net debt by province as well. Figure 8C shows the ratios of net debt to GDP, which provides in many respects a better gauge of the size of indebtedness relative to the size of the economy.

Figure 8A: Net debt (\$ millions) of the Canadian federal government and all provinces combined during the pandemic, 2018/19–2021/22

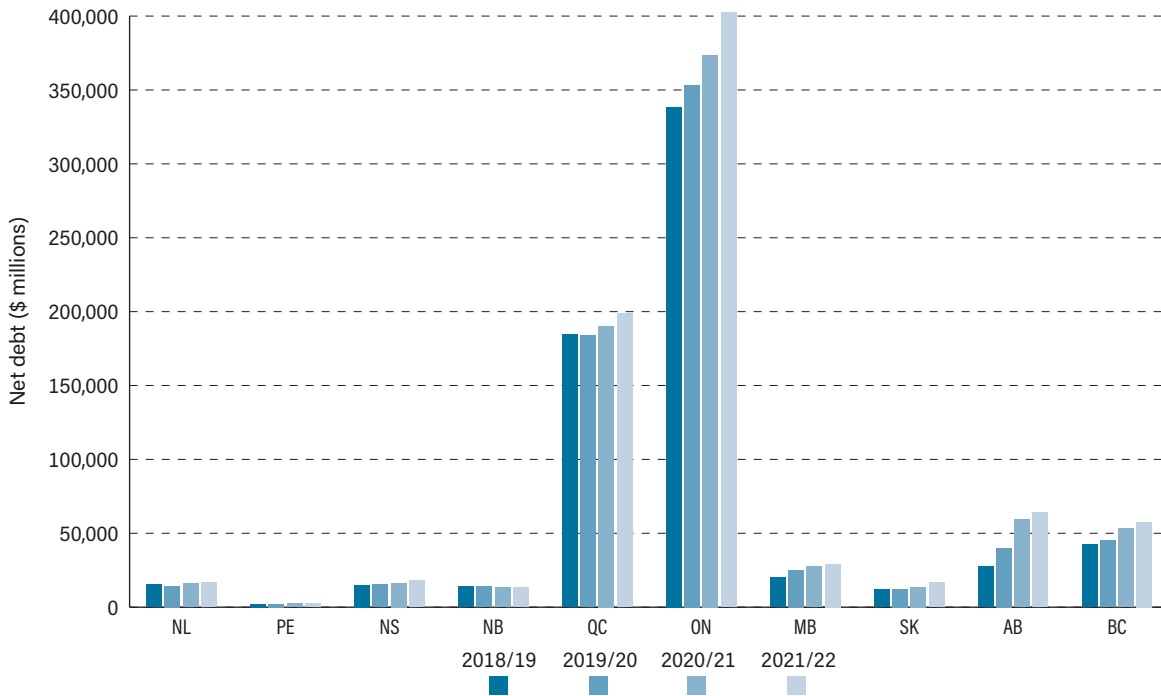


Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements, calculations by author.

Figure 8D, meanwhile, shows the estimated percentage increase in net debt for fiscal years 2020/21 and 2021/22. Going into the pandemic, both the provinces and the federal government had substantial amounts of net debt. In 2018/19 the ten provinces collectively

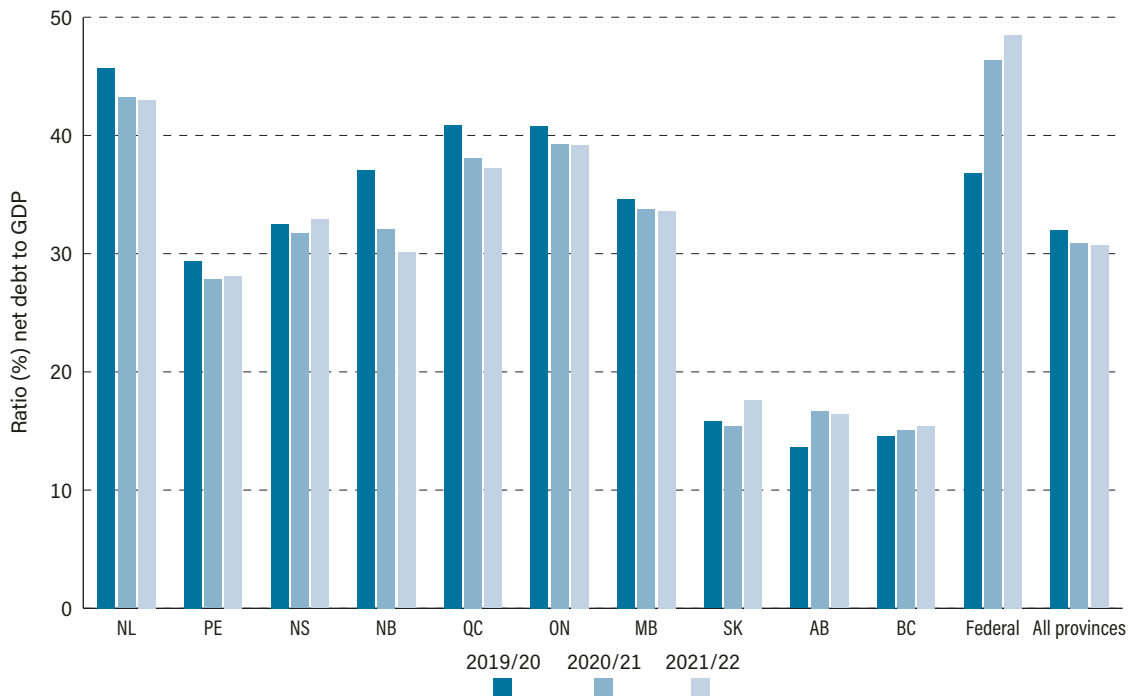


Figure 8B: Net debt (\$ millions) by Canadian province during the pandemic, 2018/19–2021/22



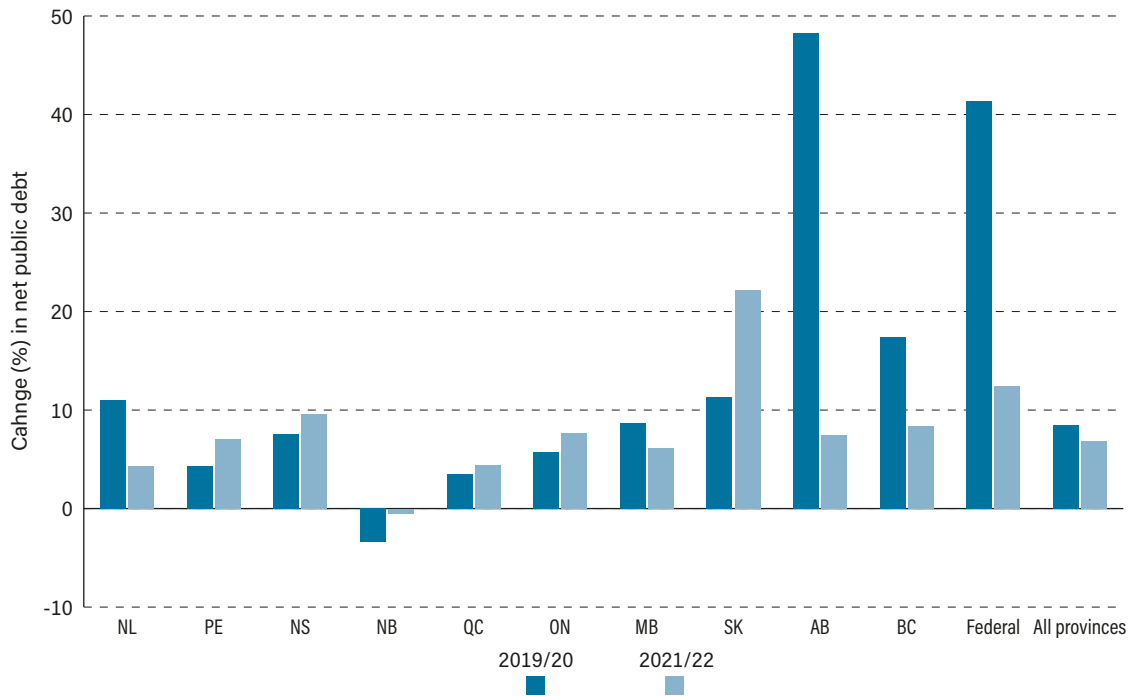
Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements; calculations by author.

Figure 8C: Ratio (%) of Canadian federal and provincial net debt to GDP during the pandemic, 2019/20–2021/22



Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements.

Figure 8D: Change (%) in net public debt of Canadian federal and provincial governments during the pandemic, 2020/21-2021/22



Sources: Canada, Department of Finance, 2021; various government budgets and fall economic statements; calculations by the author.

had a net public debt of \$671.2 billion while the federal government had approximately 15% more at \$772.1 billion. In 2019/20 provincial net debt rose 5% to reach \$705.9 billion while federal debt also climbed another 5% to reach \$812.9 billion.

The subsequent first full pandemic year of 2020/21 saw both tiers increase their debt but at vastly different rates. The provinces collectively saw their net debt rise 8.5% to \$765.8 billion while the federal government net debt grew by 41.4% to reach \$1.15 trillion. Debt acquisition was estimated to slow the subsequent year but still was estimated to rise 6.9% provincially and 12.4% federally, bringing the provincial total to \$819 billion and the federal to \$1.3 trillion. As for the individual provinces, the largest percentage increase in 2020/21 was Alberta’s at 48.3%, followed by British Columbia at 17.4%, and then Saskatchewan at 11.3% and Newfoundland & Labrador at 11.0%. The smallest increases in net debt were for New Brunswick (3.4%), Quebec (3.5%), and Prince Edward Island (4.3%).

As economies recovered, the ratios of net debt to GDP at the federal and provincial levels diverged rather dramatically. While provincial net debt rose throughout the pandemic,

the accumulation was somewhat slower than the nominal growth rate of GDP whereas federal debt grew much faster. The federal ratio of net debt to GDP rose from 33.4% in 2018/19 to an estimated 48.5% by 2021/22. Meanwhile, while the collective provincial ratio of net debt to GDP rose during 2019/20 to reach 32% from 29% in 2018/19, it then fell to 30.9% in 2020/21 and an estimated 30.7% in 2021/22. Indeed, many provinces saw slight declines in their net debt-to-GDP ratios after the initial year of the pandemic as GDP rebounded substantially.

## Conclusion

The COVID-19 pandemic had large economic and fiscal effects upon Canada and its provinces were not spared the disruption. Nevertheless, in the case of these fiscal effects—revenues, expenditures, deficits, and debt—there were some important differences between the federal government and the provinces. Both tiers of government saw revenues decline in the first six months of the pandemic and then recover, but the provinces recovered faster in part because of transfers provided by the federal government. Both tiers also saw expenditures rise with an associated rise in both deficits and debt. However, collectively, Canada’s provinces experienced more modest effects and had smaller ratios of deficit and debt to GDP.

Whereas the federal government saw total revenues fall by 5.3% in 2020/21, the provinces saw total revenues grow by 2.9%. The subsequent year, both tiers saw total revenues rise with the federal government seeing revenue growth of 17% and the provinces collectively 10%. The federal government’s spending rose 73% to \$644.2 billion in 2020/21 before declining 21% to an estimated \$508.2 billion in 2021/22. Total spending by provincial governments rose 9.2% in 2020/21 to \$504.4 billion and a further 5.6% to \$532.9 billion in 2021/22.

Relative to the federal government, the provinces collectively ran more modest deficits. Between 2019/20 and 2020/21, the federal deficit-to-GDP ratio increased from 1.8% to 13.2% while the collective deficit-to-GDP ratio of the provinces rose from 0.8% to 1.9%. At the provincial level, deficits appear somewhat correlated with the intensity of the pandemic. Federally, over half the deficit incurred during the pandemic was related to COVID-19, either health transfers or income support to people and businesses, while the remainder was stimulus and spending independent of the pandemic. This represents a permanent long-term ramping up of federal expenditure that will result in the federal government having a bigger expenditure footprint that cannot be attributed to the effects of the pandemic.

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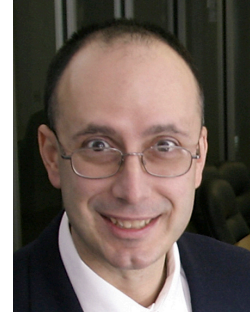
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