

Caution Required When Comparing Canada's Debt to that of Other Countries

by Jason Clemens
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SUMMARY

- The federal government continues to rationalize its debt-financed spending based on international comparisons showing Canada with the lowest level of debt in the G7.
- Of the two broad measures of debt, gross debt includes most forms of debt while net debt is a narrower measure that accounts for financial assets held by governments.
- By using net debt as a share of the economy (GDP), Canada ranks 11th lowest of 29 countries and lowest amongst the G7. By using gross debt as a share of the economy, Canada falls to 25th of 29 countries and 4th in the G7.
- Canada experiences by far the largest change in its indebtedness ranking—falling 14 places—when the measure shifts from net debt to gross debt. Taiwan has the second largest change, an improvement of 7 positions.
- One reason for this pronounced change in ranking is that net debt includes the assets of the Canada and Quebec Pension Plans, which have unique approaches to funding public retirement plans: unlike most other industrialized countries, the CPP and QPP invest in non-government assets including equities and corporate bonds.
- As of March 31, 2020, according to Statistics Canada data, there were net assets in the combined CPP and QPP of \$488.1 billion.
- According to IMF data, the difference between Canada's gross and net debt was approximately \$1.5 trillion as at the end of 2019, which means the assets of CPP and QPP explain roughly one-third of the difference.

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Introduction

One of the consistent refrains from the federal government regarding its COVID and post-COVID spending and borrowing is that Canada enjoys comparatively low levels of debt. Indeed, in Minister Freeland's first speech as finance minister, she laid out a number of reasons justifying the federal government's plan to spend significantly post-COVID, including the country's low "debt-to-GDP ratio," referring to the size of the country's debt relative to the size of our economy.¹

The rationalization for current debt-financed spending based on comparatively low debt levels featured prominently in the recent federal budget.² On page 52 of the 700-plus page budget a section titled "A Responsible Fiscal Plan" highlighted Canada's low debt position:

Canada entered this crisis in a strong fiscal position, allowing the government to take decisive action to put in place the support necessary for people and businesses to weather the storm and support a robust and inclusive recovery of the Canadian economy.

However, those actions, combined with lower revenues due to the recession, have increased public debt sharply. Canada's

history of prudent fiscal management means that, despite the unprecedented actions we took to fight the virus, we continue to have, by far, the lowest net debt-to-GDP balance relative to international peers (Chart 40).

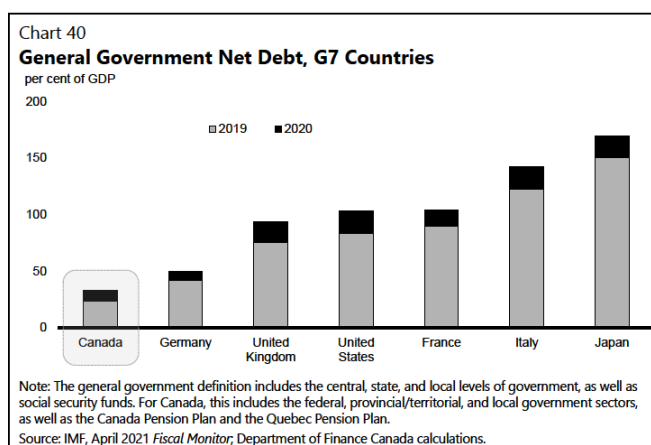
The government is committed to responsible fiscal policy. Budget 2021 deficits and the federal debt-to-GDP ratio remain below levels shown in FES 2020 that incorporated the planned \$100 billion in incremental spending and forecasted economic and fiscal impacts of the second wave.³

Deconstructing this argument is important to understand the actual state of Canada's indebtedness, some of the complexities involved in international comparisons, and the risks of continued debt-financed spending moving forward.⁴

Gross debt versus net debt

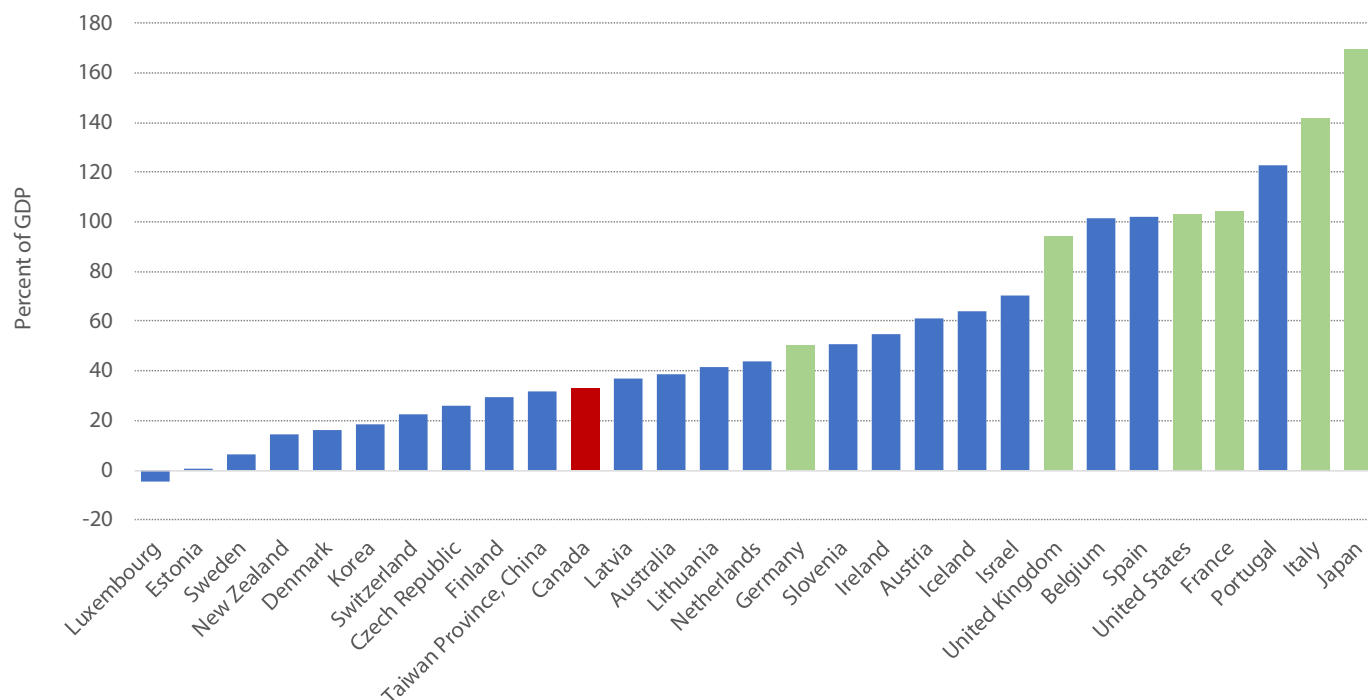
The International Monetary Fund (IMF), which is the source of the chart and statement by the federal government above, defines *gross debt* as "All liabilities that require future payment of interest and/or principal by the debtor to the creditor."⁵ In other words, gross debt is a broad measure of the liabilities and indebtedness of a country, and it tends to include almost all government liabilities. Net debt is a narrower measure of indebtedness and adjusts gross debt for financial assets. Specifically, net debt refers to the indebtedness of a jurisdiction after financial assets such as currency deposits, gold, and debt securities have been subtracted from gross debt.

The minister's speech and contents of the 2021 federal budget all refer to the IMF's measure of net debt. Figure 1 illustrates the net debt-to-GDP percentages for the advanced (i.e., de-



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Figure 1: Net Debt as a Share of GDP (2020) for Select Advanced Countries



Note: No data for Cyprus, Greece, Hong Kong, Macao, Malta, Puerto Rico, San Marino, Singapore, and Slovak Republic.

Source: International Monetary Fund (2021), *World Economic Outlook Database* (April).

veloped) countries covered by the IMF.⁶ Canada ranks 11th of 29 countries in terms of its net debt-to-GDP (33.0 percent) for 2020. This places Canada first among the G7 countries for its net debt-to-GDP ratio, and well ahead of second-placed Germany (50.0 percent). For comparative purposes, Japan ranks last with net debt representing 169.2 percent of GDP compared to Luxembourg, which ranks first, with net assets representing 4.6 percent of GDP in 2020.

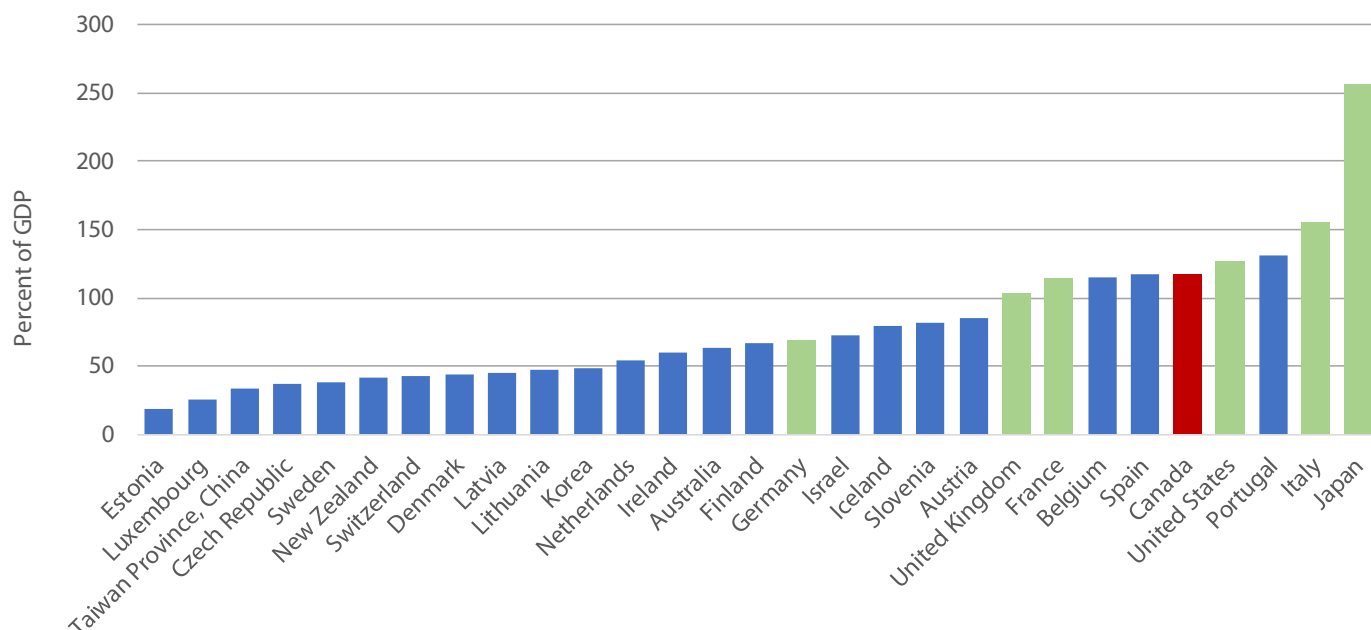
A very different assessment of Canada's comparative indebtedness occurs if gross debt statistics are used. Figure 2 illustrates the gross debt-to-GDP percentages for the same group of countries presented in figure 1. Japan is still the most indebted (256.2 percent) and Luxem-

bourg (25.5 percent) is the second least indebted. Canada, however, falls from 11th place when net debt is measured to 25th when gross debt is used. Moreover, Canada falls from having the lowest net debt-to-GDP ratio in the G7 to ranking fourth for gross debt-to-GDP, outperforming Japan, Italy, and the United States.

Figure 3 illustrates the change in the rankings for the 29 countries included in figures 1 and 2. Specifically it depicts the change in the rank moving from net debt to gross debt. Canada's rank falls 14 positions, by far the largest change of any country. The next largest change is Taiwan, which improves by 7 positions. The country with the next largest decline in its ranking is

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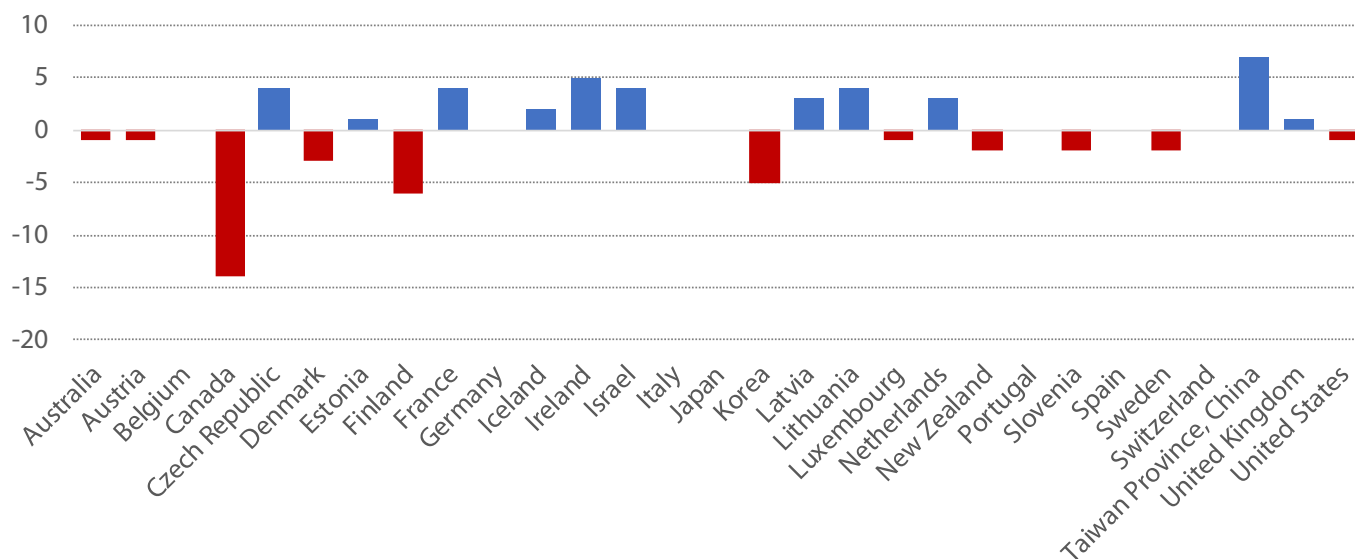
Figure 2: Gross Debt as a Share of GDP (2020) for Select Advanced Countries



Note: No data for Cyprus, Greece, Hong Kong, Macao, Malta, Puerto Rico, San Marino, Singapore, and Slovak Republic.

Source: International Monetary Fund (2021), *World Economic Outlook Database* (April).

Figure 3: Change in Rank from Net Debt to Gross Debt (2020)



Note: No data for Cyprus, Greece, Hong Kong, Macao, Malta, Puerto Rico, San Marino, Singapore, and Slovak Republic.

Source: International Monetary Fund (2021), *World Economic Outlook Database* (April).

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Finland, which falls 6 places, less than half the change experienced by Canada.

A key explanation for this marked difference between the two measures of indebtedness relates to the definition of net debt. Budget 2021 includes the following:

Note: The general government definition includes the central, state, and local levels of government, as well as social security funds. For Canada, this includes the federal, provincial/territorial, and local government sectors, as well as the Canada Pension Plan and the Quebec Pension Plan.⁷

The last phrase in the note above is key—the financial assets used to adjust gross debt to calculate net debt includes the Canada Pension Plan and the Quebec Pension Plan. The unique approaches of both government plans to fund public retiree benefits is critical in understanding the differences between the two measures of debt, and more importantly why caution should be used in relying solely on net debt to assess Canada's comparative indebtedness.

Understanding accounting for public pensions and indebtedness

Under the leadership of then Prime Minister Jean Chretien and Finance Minister Paul Martin, the nine participating provinces and the federal government agreed to historic changes to the Canada Pension Plan (CPP)⁸ in 1996, which took effect in 1997, and which effectively ensured the solvency of the CPP for the long term through the pressures of the retiring baby boomers.⁹ Amongst a number of reforms, the increase in the contribution rate to the CPP was accelerated to 9.9 percent by 2003¹⁰, the exemption value was frozen,¹¹ a host of small changes were made to certain benefits,¹² and most importantly for the purposes of this essay,

the surplus funds of the CPP were transitioned to an active investment strategy. Specifically, the Canada Pension Plan Investment Board (CPPIB)¹³ was created to actively invest the surplus funds from the CPP in a broad portfolio of market instruments including bonds, equities, private placements, and other investments. As of March 31, 2020, the CPPIB portfolio of investments was valued at \$535.5 billion and the CPPIB's net assets were \$409.6 billion.¹⁴

The reason this reform is so important is because it is unique amongst almost all industrialized countries.¹⁵ Prior to the reform, the CPP, like the public pension plans of most other industrialized countries, invested the surplus funds in provincial bonds. The 1996-97 reforms ended this practice and transitioned to an active investment strategy to increase the returns earned on the CPP assets.

This reform has major implications for Canada's measure of net debt. Consider the old rules, which exist for most industrialized countries. The old rules require excess funds from government mandated retirement plans like the CPP in Canada or Social Security in the US to be invested in government debt. In the case of Canada, the funds were invested in provincial bonds while the United States invested in federal treasury securities.

The result of such investment strategy has important implications for the measure of gross and net debt. Every dollar of debt issued by a government that is financed by its retirement plan (i.e., the CPP or the US Social Security) results in both an asset and liability, meaning no net change in its net indebtedness. For instance, let us assume that the CPP purchased \$1 billion in Government of Canada bonds. The federal government has a liability of \$1 billion and the CPP has an asset of \$1 billion in bonds.

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The gross debt for the federal government would have increased by \$1 billion but its *net* debt position, which includes the assets of the retirement plan (CPP) would have an offsetting \$1 billion in assets.

The reforms to the Canada Pension Plan in 1996-97 thus have a profound effect on the measurement of Canada's net debt relative to other countries. Specifically, the accumulated assets, and more importantly the net asset position of both the CPP and CPPIB post-1997 do not have a corresponding liability on the books of the federal or provincial governments. The latest annual financial statements for the CPP (which includes the CPPIB noted previously) at the time of writing were for the fiscal year ending March 31, 2019, and indicated net assets of \$396.6 billion.¹⁶ These net assets of the CPP, which are substantial, reduce the *net* debt of Canada.

The corresponding number for the Quebec Pension Plan as of December 31, 2019, the latest information available, was \$81.5 billion.¹⁷ Thankfully, Statistics Canada provides a consistent series of data for the assets and liabilities of both the Canada Pension Plan and the Quebec Pension Plan. As of March 31, 2020, according to Statistics Canada data, there were net assets in the combined CPP and QPP of \$488.1 billion.¹⁸

This is particularly important in reference to the statistics presented by the federal government in its recent budget given that the difference between gross debt and net debt, according to the IMF, was approximately \$1.5 trillion as at the end of 2019.¹⁹ In other words, roughly one-third of the difference in Canada's gross and net debt according to the IMF could be explained by the value of net assets held in the CPP and QPP.

For contrast, consider Social Security in the US. The financial statements for the Social Security Administration (SSA) for 2020 (fiscal year end-

ing September 30th) show investment assets of \$2.9 trillion, all of which was invested in federal government debt.²⁰ As explained previously, this means the \$2.9 trillion in debt is included in the US gross debt statistic but has no effect on its net debt since there is both an asset from the SSA and a liability held by the federal government. Recall that the assets from the CPP (and QPP) reduce Canada's net debt because there is no corresponding liability held by government to the degree the assets are invested in non-government financial instruments.

To be clear, the earnings of the CPPIB (and the equivalent in Quebec) are not available to the federal or provincial governments and are specifically retained within the CPP. The assets of the CPP are similarly not available to the federal or provincial governments for use outside of funding the retirement and related benefits provided by the CPP. Indeed, as noted in the reform-era actuarial evaluation,²¹ the introduction of the CPP's active investment strategy was one of the single largest sources of savings from the reforms. Allowing the federal and/or provincial governments to have access to either the earnings of the CPP or its assets would necessitate an increase in the required contribution rate for the CPP to be sustainable.

Moreover, including the assets of the CPP and QPP without considering the future obligations (i.e., liabilities) associated with the assets further complicates the assessment of Canadian indebtedness. Consider, for instance, in the latest actuarial report for the Canada Pension Plan that future obligations as of December 31, 2018 were estimated at \$2.67 trillion versus expected contributions and assets of \$2.69 trillion.²² In other words, the accumulated assets in the CPP have long-term liabilities associated with them that are roughly in line with the value of the assets and expected future contributions.

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Including the assets of the CPP (and QPP) in the country's net debt statistics overestimates the value of available financial assets to Canadian governments and in doing so provides an underestimate of the indebtedness of Canada, particularly when compared to other industrialized countries.

Conclusion

Any comparison between countries is always difficult due to the differences in programs, financing, relationships between national and sub-national governments, and relations with arms-length entities such as the CPP in Canada. Given the importance of debt statistics to the current public finance debate based on the level of debt-financed spending being undertaken by both the federal and provincial governments, it is important to recognize the role the net assets of the CPP and QPP play in reducing Canada's overall net debt position. It is, therefore, important to take a broader view of Canada's indebtedness by assessing both our gross and net debt positions relative to other industrialized countries.

Endnotes

- 1 Aaron Wherry (2020), Keep calm and borrow on: Chrystia Freeland and the new logic of deficits in a pandemic, CBC News. <<https://www.cbc.ca/news/politics/freeland-deficit-pandemic-covid-otoole-poilievre-1.5780809>>, as of May 10, 2021.
- 2 Department of Finance (2021), *Federal Budget 2021*. Government of Canada. <<https://www.budget.gc.ca/2021/home-accueil-en.html>>, as of May 10, 2021.
- 3 Department of Finance (2021), *Federal Budget 2021*, p. 52.
- 4 According to Budget 2021, the federal government plans to borrow \$331.9 billion over the next five years (2021-22 to 2025-26) to finance additional spending. (See Department of Finance (2021), *Federal Budget 2021*, Table A1.4, p. 328.)
- 5 International Monetary Fund (2021), *Fiscal Monitor*, April 2016, Glossary. See also the IMF's e-learning video on gross and net debt at <https://www.youtube.com/watch?v=LAD1oCHCibi&list=PLmYAE4wV1YQzimXjDWMQ-4GwConTsP7-a>.
- 6 The analysis includes 29 advanced countries for which comparable data are available from the IMF. Cyprus, Greece, Hong Kong, Malta, Puerto Rico, San Marino, Singapore, and the Slovak Republic were excluded for a lack of data for both gross and net debt. Norway was also excluded since its net debt statistic, which is largely based on the treatment of its oil reserves and Sovereign Wealth Fund, results in a net debt position of -121.2% of GDP—an outlier within the IMF data.
- 7 Department of Finance (2021), *Federal Budget 2021*, p. 52.
- 8 For a summary and analysis of the CPP reforms see Chief Actuary, Office of the Superintendent of Financial Institutions [OSFI] (1997), *CPP Sixteenth Statutory Actuarial Report*, OSFI. <<https://www.osfi-bsif.gc.ca/Eng/Docs/cpp16.pdf>>, as of May 10, 2021.
- 9 For simplicity this essay focuses on the reforms to the Canada Pension Plan, but reforms were also introduced to the Quebec Pension Plan, a summary of which is available in National Assembly (1997), *Bill 149 (1997, chapter 73): An Act to Reform the Quebec Pension Plan and to Amend Various Legislative Provisions*, Quebec Official Publisher. <<http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=5&file=1997C73A.PDF>>, as of May 10, 2021.
- 10 The actuarial evaluation of the CPP prior to the reforms estimated that the contribution rate would have to increase to 10.1% by 2016, ultimately reaching 14.2% by 2030. The reforms meant that the rate increases were accelerated such that the contribution rate reached 9.9% by 2003 but was thereafter capped. For a succinct summary of the reforms, see Section II: The Canada Pension Plan: Provisions and Issues, in Charles Kramer and Yutong Li (1997), *Reform of the Canada Pension Plan: Analytical Considerations*, International Monetary Fund. <<https://>

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- www.imf.org/external/pubs/ft/wp/wp97141.pdf>, as of May 10, 2021. Alternatively, for a more thorough description and analysis of the reforms, see Chief Actuary, Office of the Superintendent of Financial Institutions [OSFI] (1997), *CPP Sixteenth Statutory Actuarial Report*, OSFI, and/or Office of the Chief Actuary, Office of the Superintendent of Financial Institutions [OSFI] (1997), *Canada Pension Plan, Seventeenth Actuarial Report as at December 31, 1997*, OSFI. <<http://www.osfi-bsif.gc.ca/eng/docs/cpp17.pdf>>, as of May 10, 2021.
- 11 One of the largest sources of savings in the reforms was the freezing of the exemption at \$3,500. The result is that inflation and wage growth have reduced the real value of the exemption over time and allowed for larger contributions from lower-income workers as well as increasing the value of income subject to the CPP contribution rate. (See Chief Actuary, Office of the Superintendent of Financial Institutions [OSFI] (1997), *CPP Sixteenth Statutory Actuarial Report*.)
 - 12 A number of CPP-related benefits were adjusted, which provided substantial savings as part of the overall set of reforms. For instance, more stringent work requirements were introduced for disability benefits, changes to how benefits were calculated were introduced, and the value of the death benefit (\$2,500) was reduced and frozen. (See Chief Actuary, Office of the Superintendent of Financial Institutions [OSFI] (1997), *CPP Sixteenth Statutory Actuarial Report*.)
 - 13 For a review of the creation and history of the Canada Pension Plan Investment Board (CPPIB), see <https://www.cppinvestments.com/>.
 - 14 See CPPIB (2020), *Fiscal 2020 Results*, CPPIB. <<https://www.cppinvestments.com/the-fund/our-performance/financial-results/annual-results>>, as of May 10, 2021, and CPPIB (2020), *Annual Report 2020*, CPPIB. <<https://cdn3.cppinvestments.com/wp-content/uploads/2020/05/cpp-investments-annual-report-2020-en.pdf>>, as of May 10, 2021.
 - 15 It's also worth noting that many of the other countries included in this analysis are unitary states, meaning that they do not have sub-national governments such as provinces in Canada or states in the United States. Moreover, Canadian provinces do not have legal limits imposed on the level of debt they can incur as almost all US states do in the form of constitutional balanced budget requirements.
 - 16 Employment and Social Development Canada (2019), *Annual Report of the Canada Pension Plan for Fiscal Year 2018 to 2019*, Government of Canada. <<https://www.canada.ca/en/employment-social-development/programs/pensions/reports/annual-2019.html#h2.16>>, as of May 10, 2021; see the section on consolidated financial statements, available at <https://www.tpsgc-pwgsc.gc.ca/recgen/cpc-pac/2019/vol1/s6/supp-pension-eng.html>.
 - 17 Retraite Quebec (2019), *Annual Report and Financial Statements 2019*, Government of Quebec, p. 137. <<https://www.retraitequebec.gouv.qc.ca/SiteCollectionDocuments/RetraiteQuebec/fr/publications/rq/rapports/2019/5003f-rapport-annuel-gestion-2019-partie3.pdf>>, as of May 10, 2021. For the general report, see <https://www.retraitequebec.gouv.qc.ca/en/publications/retraite-quebec/rapports-annuels-de-gestion/Pages/rapports-annuels-de-gestion.aspx>.
 - 18 Statistics Canada, National Balance Sheet Accounts (Table 36-10-0580-01 and 10-10-0015-01).
 - 19 See International Monetary Fund (2021), *World Economic Outlook Database* (April), and calculations by authors.
 - 20 Social Security Administration [SSA] (2020), *Social Security Administration's Agency Financial Report for Fiscal Year 2020*, United States, SSA. <<https://www.ssa.gov/finance/>>, as of May 10, 2021.
 - 21 Chief Actuary, Office of the Superintendent of Financial Institutions [OSFI] (1997), *CPP Sixteenth Statutory Actuarial Report*.
 - 22 Chief Actuary, Office of the Superintendent of Financial Institutions (2019), *30th Actuarial Report of the Canada Pension Plan as at December 31, 2018*, OSFI: table 103, p. 178. <<https://www.osfi-bsif.gc.ca/Eng/Docs/PPP30.pdf>>, as of May 10, 2021.



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