

Low Interest Rates and the Cost of Government Debt

Philip Cross



DO BUDGET DEFICITS MATTER?

Essays on the Implications of Government
Deficits and Debt

CHAPTER 3

Low Interest Rates and the Cost of Government Debt

By Philip Cross

Introduction

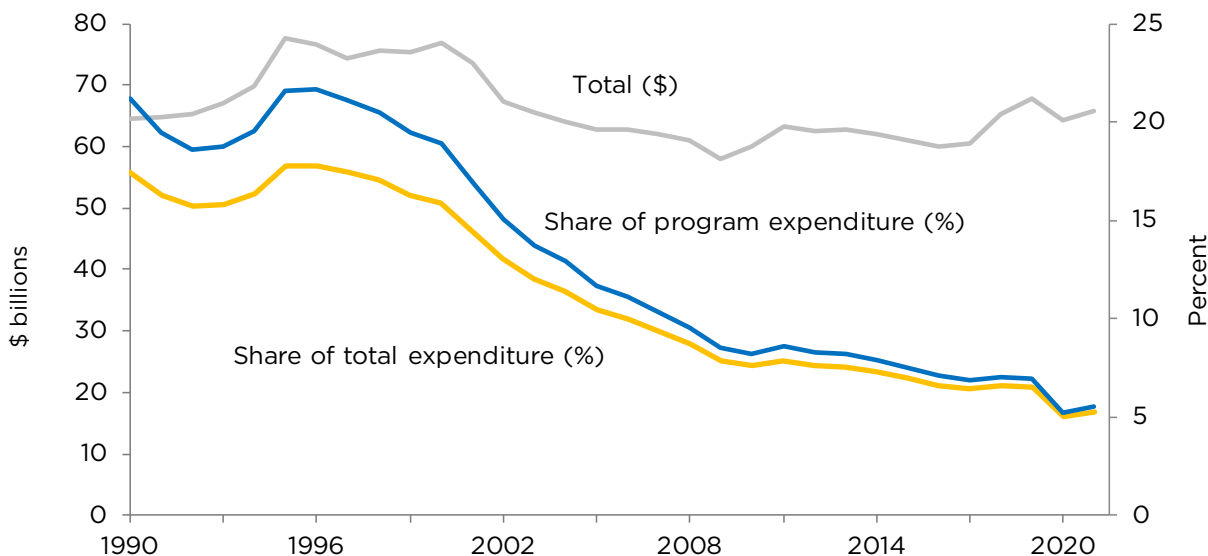
Interest rates plumbed record lows during the pandemic, encouraging governments to be complacent about taking on additional debt by lightening the burden of interest payments. However, interest rates in Canada have already started to return to more normal levels, with the yield on 10-year government bonds rising from below 1.0 percent to near 3.0 percent in only a few months as markets increasingly factor in the reality of higher current and prospective inflation. Rising interest rates on the sharply higher level of debt issued during the pandemic means the burden of servicing government debt could rise rapidly.

This chapter provides a short overview of the importance of interest payments to government spending and deficits. It reviews the magnitude of interest payments in recent decades, their role in determining the state of government finances, and how rising interest rates could soon damage government finances after the recent record issuance of new debt. The analysis covers all levels of government in Canada, but pays particular attention to federal finances.

Interest rates and government debt

Low interest rates represent a risk to future economic growth, not just (or mainly) an opportunity to borrow funds cheaply, as some finance ministers have claimed. Canada's 2021 federal budget justified numerous new spending programs by stating that "In today's low interest rate environment,

Figure 1: Total Interest Payments by All Governments in Canada



Source: Statistics Canada (2022a).

not only can we afford these investments in Canada’s future, it would be short-sighted of us not to make them” (Canada, 2021: 24). US Treasury Secretary Janet Yellen expressed a similar sentiment, arguing “Right now, with interest rates at historic lows, the smartest thing we can do is act big” (Timiraos, 2022: 276). This perspective ignores the inconvenient truth that low interest rates mean that an economic downturn in the near-term results in little room to cut interest rates to stimulate the economy, leaving fiscal stimulus as the only tool governments could wield. Governments therefore need to restore their fiscal health quickly so they are in a position to weather the next downturn, rather than running large deficits year after year simply because interest rates are low.

Conversely, if interest rates normalize to levels that restore the effectiveness of monetary policy, then interest payments on public sector debt will automatically increase and constrain fiscal policy unless budget surpluses are restored. Rising interest rates also threaten government finances by slowing economic growth. The late Harvard economist Alberto Alesina, a renowned expert on government debt, and his colleagues once cautioned that “With higher interest rates, more and more taxes will be needed to service the debt, reducing growth and generating a potential vicious cycle: high taxes, low growth, debt over GDP ratio not decreasing,

and so forth” (Alesina, Favero, and Giavazzi, 2019: 200). The key to this vicious cycle is that interest payments on government debt require taxes to pay for it, and taxes always hamper economic growth.³

Interest payments

Altogether, governments in Canada spent \$65.7 billion on debt-servicing payments in fiscal 2021 (figure 1), mostly at the provincial (\$39.2 billion) and federal (\$23.4 billion) levels.⁴ While interest rates have fallen dramatically since the mid-1990s (when the 10-year federal bond yield was over 8.0 percent), government interest payments fell only 15.4 percent in absolute terms from \$77.7 billion to \$65.7 billion because the stock of government debt doubled to \$1.5 trillion over the period.

The current cost of debt service is high for both federal and provincial governments even at recent low interest rates. Before the pandemic, federal debt servicing requirements were equivalent to what Ottawa spent on equalization or what it collected via EI premiums (Fuss and Lafleur, 2021: 1). The provincial total for debt-servicing payments is even more worrisome, remaining just below their peak of \$30.1 billion in 2018 despite low interest rates.

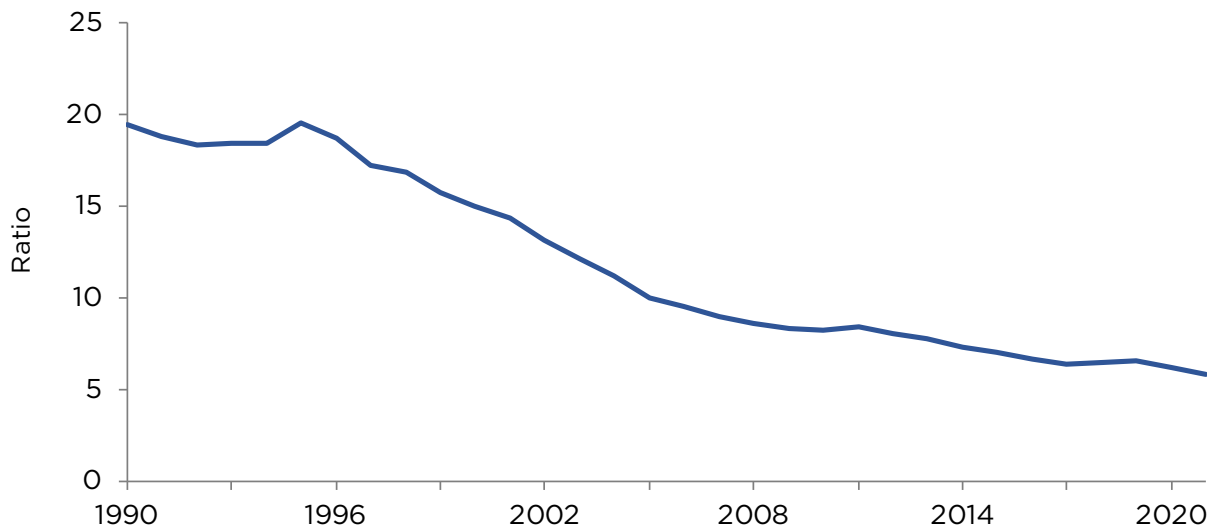
The federal government devotes a larger share of its budgetary expenditures to debt service than do provincial governments, which is one reason this study focuses more on the federal government. At its peak in 1996, federal outlays for interest payments were equivalent to 42.5 percent of total program spending, compared with a peak of 15.7 percent in 1998 for the provinces (program spending is total government spending excluding interest payments). Federal interest payments in 1996 stood at \$49.4 billion versus \$21.4 billion for the provinces in that year. However, over time the federal government was able to sharply reduce interest payments to \$20.4 billion, equivalent to 7.0 percent of program spending right before the pandemic. This was close to the provincial level of 6.7 percent despite the federal government starting from a much higher level. This convergence of federal and provincial debt payments as a share of program spending reflects both lower federal debt-servicing payments and an increase in provincial payments in absolute terms to \$29.5 billion in 2020.

The burden of government interest payments can be calculated in different ways. Some analysts compare interest payments relative to

³ See Veldhuis and Clemens (2006) for a summary of how taxes hamper investment and economic growth.

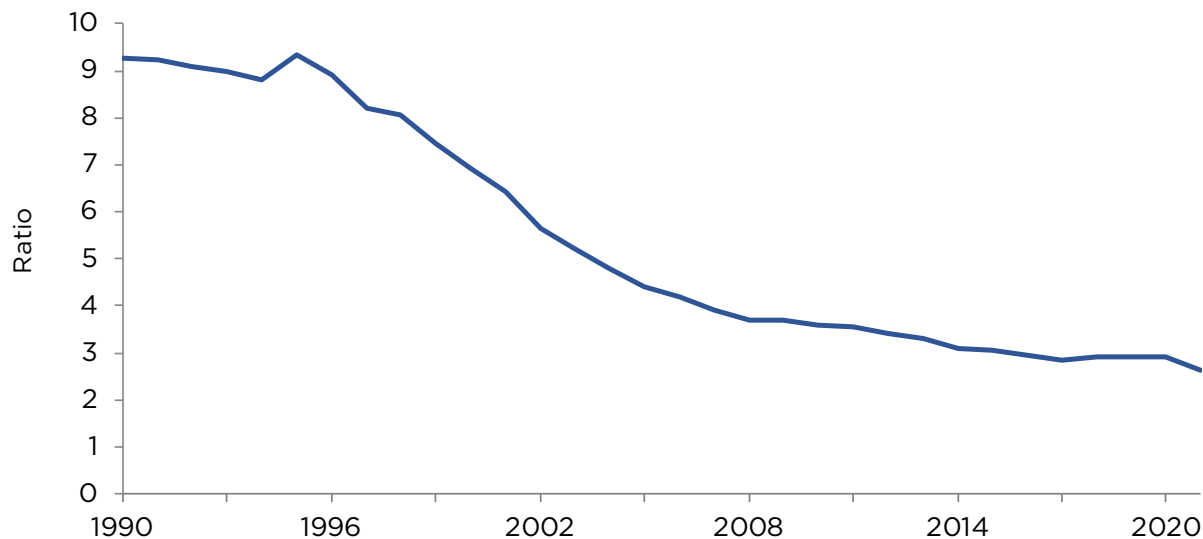
⁴ Total government interest payments include federal, provincial, and local governments, excluding the Canada and Quebec Pension Plans.

Figure 2: Ratio of Interest Payments on Debt to Government Revenues (All Levels of Governments)

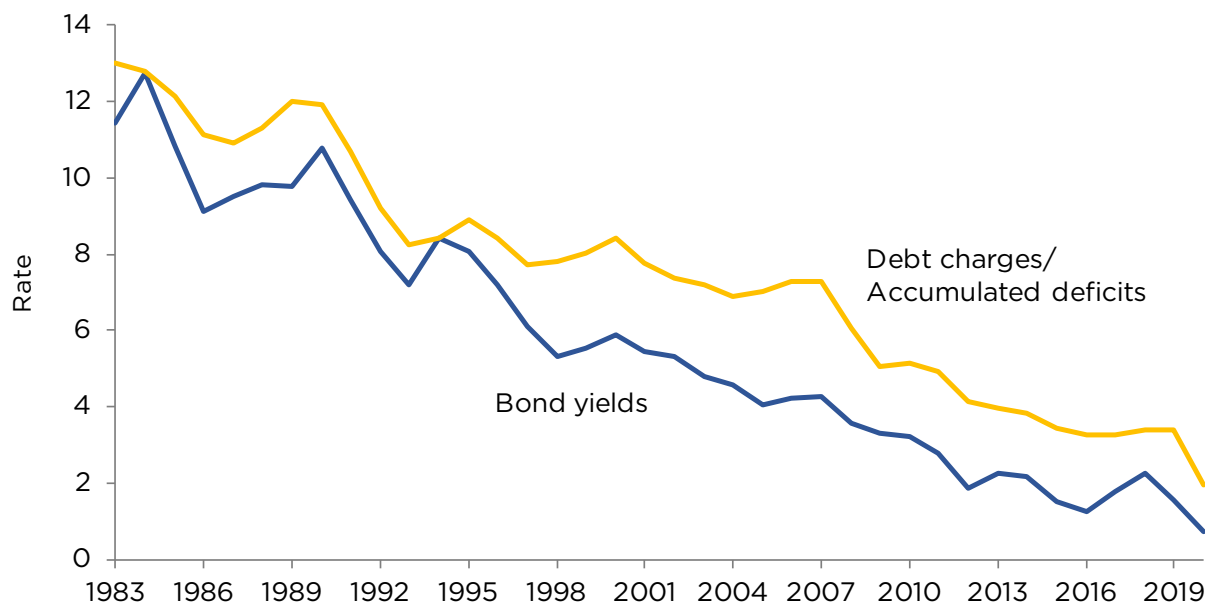


Source: Statistics Canada (2022a).

Figure 3: Ratio of Interest Payments to GDP (All Levels of Governments)



Source: Statistics Canada (2022a; 2022b).

Figure 4: 10-year Bond Yields and Interest Rate Paid on Federal Debt

Source: Canada, Department of Finance (2021).

GDP, which measures the income earned by all Canadians. Others believe the best basis of comparison is to consider debt servicing costs against the revenues raised by governments (mostly from taxes). Of course, the debt-service ratio is higher using total revenues rather than GDP as the denominator, since government revenues are considerably less (at about 40 percent of GDP) than overall domestic income.

Both measures of the burden of interest payments show why Canada's governments faced a debt crisis in the mid-1990s. The ratio of debt payments to government revenue (figure 2) peaked in 1995 at about 23 percent for all governments and over 33 percent for the federal government. This was politically untenable, as taxpayers saw one-third of their tax dollars going to Ottawa and then relayed to bondholders without any material benefit (in the form of government services or transfer payments) for themselves. The ratio of government interest payments to GDP was near 10 percent during this period (figure 3), confirming Lascelles's (2011, November 30) general rule that 10 percent is a "danger zone" for public finances. Canada's ratio of government interest payments to GDP was nearly twice as high as that for the United States, a reflection of how badly Canada's fiscal situation had deteriorated in the 1990s.

There is a close relationship between the rate of interest paid on new issues of federal 10-year bonds and the effective interest rate paid

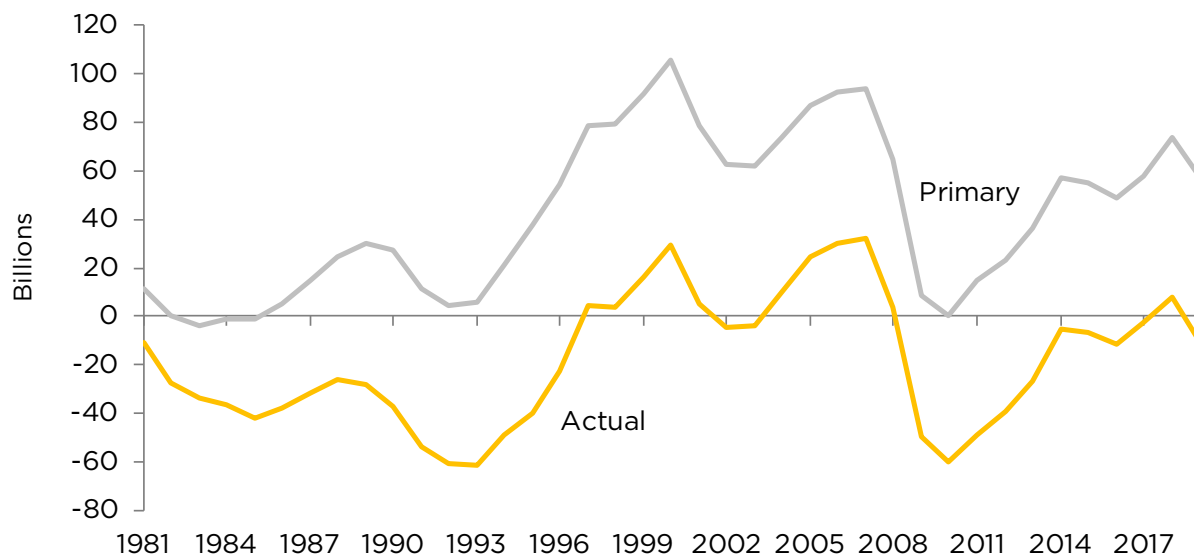
on all current federal debt (this is calculated as total interest payments divided by the stock of outstanding debt). The interest rate on new debt has a slight lead time on changes in the effective interest rate on total debt (figure 4). The high correlation between the two variables shows that the current rate of interest for new federal debt issues exercises a large influence overall on the cost of total outstanding debt because not all debt can be locked-in at the prevailing rate of interest. Even in 2020, 71 percent of federal government borrowing was through short-term Treasury Bills and bonds with a maturity of less than 10 years as it needed to raise funds quickly. The government planned to issue more long-term bonds in 2021-2022 in an attempt to lock in low rates, but even then 58 percent of planned borrowing would be short-term (Canada, 2021: Annex 2). However, the opportunity to lock in new debt at lower interest rates already has passed as the 10-year government bond rate surges. As a result, the upturn in interest rates now underway will soon raise the overall cost of servicing this portion of government debt.

Interest payments and government debt

Interest payments are one of the three determinants of changes in the ratio of overall government debt to GDP. Changes in the debt ratio can be broken down into three parts: first, the cumulative primary budget balance (the budget surplus excluding interest payments); second, the differential between the nominal interest rate and nominal GDP growth which is then applied to the existing debt-to-GDP ratio; and, finally, a residual factor that captures everything else, such as the impact of exchange rate movements on foreign debt, restructurings, selling off assets, and other exceptional financial operations.⁵ This paper examines the contributions of the first two variables—the primary budget balance and the gap between GDP growth and interest rates—to understand the role interest payments played in shaping Canada’s fiscal position in recent decades and how this will factor into the country’s fiscal situation going forward.

⁵ This decomposition comes from Eichengreen et al. (2021), pages 97-98. The mix of foreign versus domestically held debt also matters for the burden of interest payments. If governments are paying interest that mostly goes to savers in their own country, they will be able to tax at least some of that interest income. However, if much of the debt is held by non-residents, governments not only will not get back tax revenues, but may be liable for the risk of currency fluctuations. Government debt held by non-residents has trended down in recent years, but a devaluation of the Canadian dollar could add to the future cost of debt service.

**Figure 5: Actual and Primary* Budget Balances
All Levels of Governments, 1981-2019**



* Excludes interest payments.

Source: Statistics Canada (2022a).

The primary budget balance (excluding interest payments)

Over the past four decades, interest payments on accumulated debt have played an important role in determining whether governments in Canada run a budget surplus or deficit. Figure 5 shows the actual deficits of all governments as well as their primary budget balance (the deficit excluding interest payments). Governments typically ran a surplus in their primary balance but interest payments pushed them into an overall deficit position in most years. Over the past 39 years, Canadian governments collectively posted a primary surplus in 34 years and a primary deficit in only 5 years. However, adding in interest payments meant that governments actually posted a deficit in 28 out of the last 39 years.

Governments have alternated between long sequences of deficits and surpluses since 1982. Governments ran deficits for 22 consecutive years from 1975 to 1996. These deficits mostly resulted from high interest payments, particularly in periods when central banks raised interest rates to lower inflation. This more than offset the surpluses governments ran on their primary balance in most years, the opposite of the pattern in

the 1970s when low interest rates masked the presence of large structural deficits by keeping annual interest payments below \$13 billion. While the Mulroney government eliminated the federal primary deficit by the mid-1980s (Ragan and Watson, 2004: 20), large overall deficits persisted because interest payments remained stubbornly high at over \$30 billion per year. The combination of a drop in the primary surplus due to the recession of the early 1990s and an upturn in interest rates as central bank policy tightened to combat inflation pushed annual interest payments on the stock of government debt above \$65 billion, driving total governments deficits past \$60 billion and triggering Canada's debt crisis of the mid-1990s.

After taking decisive action to lower government spending and eliminate deficits in the mid-1990s, governments posted budget surpluses almost every year from 1997 to 2008 (slight deficits in 2002 and 2003 originated in the provinces). These resulted from huge surpluses in governments' primary budget balance, which averaged \$74.9 billion over the period (peaking at \$105.8 billion in 2000). Economic growth also picked up, notably when soaring commodity prices from 2003 to 2007 swelled tax coffers, while interest rates edged down, especially after the turn of the century. The growing gap between economic growth (nominal GDP) rates and interest rates amplified the steady reduction in the level of government debt outstanding from \$879.8 billion in 1998 to its recent low of \$788.4 billion in 2007 (with most of this drop concentrated at the federal level).

Governments in Canada returned to budget deficits for 13 years in a row starting in 2008 (with the exception of a small surplus in 2018). Government surpluses in their primary budget balance shifted to outright annual deficits in three of these years, reflecting recessions related to the global financial crisis starting in 2008 and the pandemic in 2020 (the 2020 and 2021 deficits are not included in figure 4 because their scale overwhelms all other data points). However, even the primary budget surpluses in the other nine years were much lower due to more government spending and slower economic growth. Record low interest rates enabled governments to run deficits without substantially increasing the overall debt-to-GDP ratio until deficits exploded during the pandemic in 2020 and 2021. For example, while federal government debt rose from \$457.6 billion in 2007 to \$685.5 billion in 2019, interest payments fell outright from \$28.3 billion to \$23.3 billion as the 10-year bond rate dropped from 4.3 percent to 2.3 percent. Even the big jump in federal government debt during the pandemic from \$685.5 billion to \$1,048.7 billion was accompanied by a contemporaneous drop in interest payments from \$23.3 billion to \$20.4 billion as the 10-year government bond rate plunged from 2.3 percent to a record low of 0.7 percent.

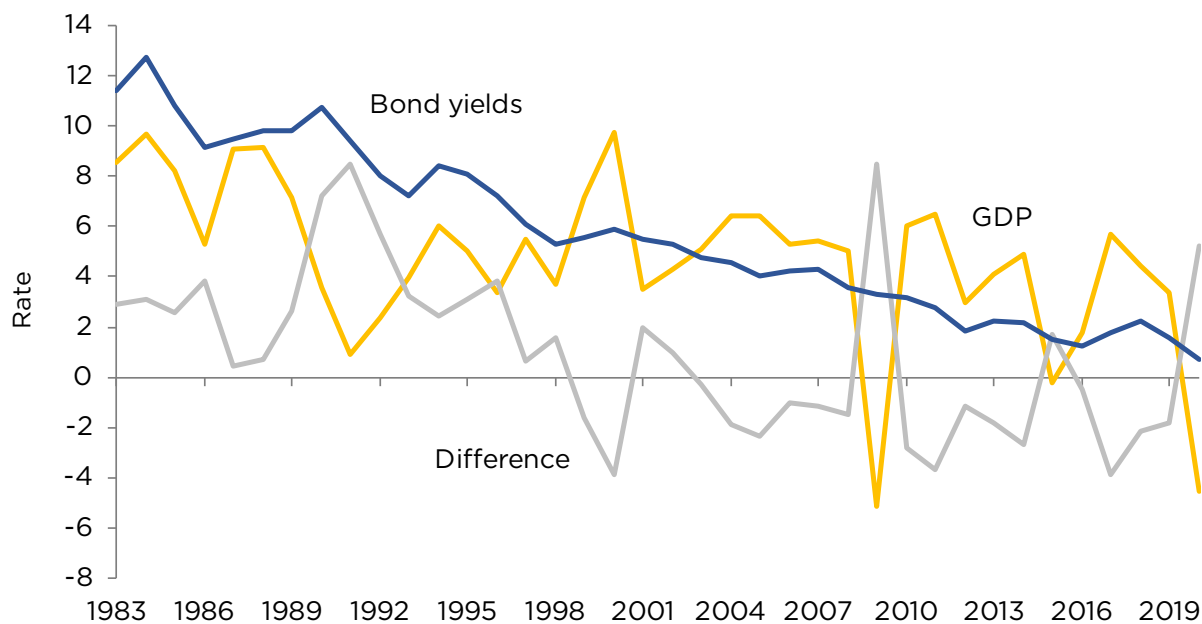
The decline in interest payments despite record government deficits attests to the critical importance of interest rates. Very low interest rates served government finances well during the pandemic when the Bank of Canada was actively purchasing government bonds to keep borrowing costs low (Poloz, 2022: 135). However, the recent experience is also a reminder of how quickly the burden of servicing past debts can increase when interest rates climb and exceed the rate of economic growth.

The above analysis shows why governments would be wise to return to a primary budget surplus as quickly as possible. While Eichengreen and his co-authors sympathize with the need for large deficits during the acute phase of the pandemic, they also warn that “The danger is that moderate inflation can turn into rapid inflation if not accompanied by primary budget surpluses” (Eichengreen et al., 2021: 210). These authors also highlight the problem of “fiscal dominance, of a central bank being pressured to subordinate monetary policy to debt-management considerations” (134). This is exactly what happened immediately after the Second World War, when central banks in Europe and North America kept interest rates below the inflation rate to help governments lower their debt burden. A willingness to countenance fiscal dominance may help explain why central banks were slow to raise interest rates even as economies rebounded and inflation sharply accelerated in 2021.

Interest rates and GDP growth

The differential between the nominal GDP growth rate and interest rates has a profound impact on the burden of government debt. Greg Ip, a columnist for the *Wall Street Journal*, explains that “A tipping point occurs when interest rates climb above a country’s nominal growth rate. At that point, the debt-to-GDP ratio will automatically rise unless the country runs a budget surplus, excluding interest. For example, if a country’s nominal GDP grows 4 percent and it pays 6 percent interest on its debt, it needs an annual surplus, excluding interest, of 2 percent of GDP to keep the debt steady as a share of GDP” (Ip, 2010: 199). After the huge increase in government debt issued during the Second World War, the debt-to-GDP ratio fell rapidly in the 1950s partly because interest rates were kept low as a matter of policy choice (reflecting financial repression by central banks) while economic growth was turbocharged. Similarly, the marked reduction in the ratio of government debt-to-GDP in Canada and the US in the second half of the 1990s partly resulted from the combination of high rates of economic growth and low interest rates. Conversely, govern-

Figure 6: Government of Canada 10-year Bond Yields and Nominal GDP Growth, 1983-2020



Source: Statistics Canada (2022b; 2022c).

ment efforts to grapple with high debt levels in the 1980s were frustrated by high interest rates and subdued economic growth.

Thus, it is important to examine interest rates relative to economic growth and not only in isolation. Figure 6 does this by comparing the 10-year government bond rate for Canadian federal debt with nominal GDP growth. For most of the 1980s and 1990s, interest rates exceeded GDP growth in an environment where inflation was relatively high, forcing governments to run large primary surpluses in order to control their debt. Since 2003, interest rates have usually been below GDP growth (except when the economy slumped in 2008, 2015, and 2020), which encouraged governments to relax their fiscal stance. The belief that interest rates would remain below the growth of nominal GDP encouraged some analysts to assert “public debt may have no fiscal cost” (Blanchard, 2019: 1197). However, this benign forecast was based on the naïve assumption that inflation would remain low even if large government deficits boosted aggregate demand while stifling the supply of business investment, a combination that inevitably generates higher prices.

The trend to ever lower interest rates was exhausted in 2020 as rates approached their lower bound of zero percent⁶ and rising public debt-to-GDP put upward pressure on interest rates through the inevitable increase in inflation. Meanwhile GDP growth prospects initially seemed to be lethargic amid the raging pandemic. Nominal GDP growth has slowed from an average of 5.8 percent a year between 1982 and 1999 to 4.3 percent between 2000 and 2019.⁷ The OECD predicts that relatively slow growth will persist in Canada, which is expected to post the weakest growth of real GDP per capita among all OECD members for both the current decade and from 2030 to 2060 (Guillemette and Turner, 2021: 13). Persistently slow growth means the fiscal burden of higher interest rates will be harder—possibly much harder—for governments to bear in the coming years.

The likelihood that inflation will soon push interest rates above GDP growth will squeeze governments that issued record amounts of debt during the pandemic. By April 2022, the interest rate on the federal 10-year bond had already risen to near 3.0 percent, almost twice its 2019 average of 1.6 percent. One study estimated that a return of interest rates to their 2019 level would cost governments in Canada \$17.0 billion per year in higher debt service (Clemens et al., 2021: 1). Another study finds that every 25 basis-point increase in the effective interest rate will add 4.5 percentage points to the federal debt-to-GDP ratio by 2055 (Laurin and Drummond, 2021: 10). In the US, the Congressional Budget Office forecast a similar sensitivity as each 0.1 percentage point increase in interest rates will add \$235 billion to the American government's debt service costs by 2030 (Timiraos, 2022: 292).

With governments running record deficits during the pandemic, even seemingly small changes in interest rates relative to economic growth can have a large impact on governments' fiscal performance. For example, the Department of Finance optimistically predicts that economic growth in Canada will exceed interest rates by one percent in the future, gradually reducing the federal debt-to-GDP ratio from its current level of near 40 percent to 30 percent by 2055 (Canada, 2022). However, when Laurin and Drummond alter this assumption by nudging the interest rate up 1 percentage point (so that GDP growth and interest rates are identical), the federal debt-to-GDP ratio soars to 60 percent in their baseline scenario. They concluded that continuing slow economic growth and rising interest rates represent "a toxic cocktail for future governments" because "[o]nly very slight changes in assumptions of economic growth and interest rates

⁶ Slightly negative interest rates are possible, but the Bank of Canada has ruled them out except "as a last-resort measure" (Poloz, 2022: 142).

⁷ These periods exclude the severe recessions in 1982 and in 2020.

dramatically change the course of the debt burden” (Laurin and Drummond, 2021: 2).

The OECD reached a similar conclusion, where slightly slower output growth and a one percentage point increase in interest rates produces an increase of over 40 points in the debt-to-GDP ratio for all governments in Canada by 2040 (Guillemette and Turner, 2021: 34). High debt levels also increase the vulnerability of an economy because they reduce government’s scope for stimulus in the next downturn and because high-debt countries are often penalized with larger interest rate increases during volatile economic conditions (Laurin and Drummond, 2021: 2).

The federal budget forecasts that debt-servicing costs will remain manageable, increasing from \$26.9 billion in fiscal 2022-2023 to \$42.9 billion in 2026-2027 (Canada 2022: 263). However, while the federal government requires mortgage borrowers to pass a stress test proving they can cope with higher interest rates, it is notable the budget does not outline how federal finances would react to interest rates rising more than the rosy scenario it assumes. For example, the budget’s assumptions that the interest rate on 3-month treasury Bills would average 0.8 percent, and, on 10-year bonds 1.9 percent, in 2022 already were obsolete by mid-April (Canada, 2022: 222).

The proper time for governments to move towards a balanced budget is when the economy is growing at a solid pace, as Canada’s currently is. This is because “[t]he output cost is higher when austerity is started during a downturn. Austerity started during an expansion has no output costs; in fact it is mildly expansionary” (Alesina et al., 2019: 170). Of interest, Alesina et al. (2019) cite Canada in the mid-1990s as a prime example of so-called “expansionary austerity.”

Conclusion

This chapter shows that finance ministers across Canada were (and still are) wrong to assume interest rates would stay low as the economy rebounded strongly from the pandemic, an assumption that led Canadian governments to act in ways that added enormously to the pre-COVID stock of public debt. Instead of complacently running large deficits when interest rates were near zero, they should have moved faster to restore their fiscal capacity in advance of the next economic downturn. The current surge of inflation suggests the Canadian economy did not need further demand stimulus in 2021, especially as the economy approached full capacity faster than expected. While the burden of interest payments remains low at present, the huge amount of debt issued during the pan-

demic means debt-servicing costs for the federal government and many of the provinces are poised to rise quickly, especially if the primary balance remains in deficit and interest rates exceed output growth.

References

Alesina, Alberto, Carlo Favero, and Francesco Giavazzi (2019). *Austerity: When It Works and When It Doesn't*. Princeton University Press.

Blanchard, Olivier (2019). Public Debt and Low Interest Rates. *American Economic Review* 109, 4: 1197-1229.

Canada (2021). *Budget 2021: A Recovery Plan for Jobs, Growth, and Resilience*. Government of Canada, Department of Finance. <<https://www.budget.gc.ca/2021/report-rapport/toc-tdm-en.html>>, as of May 9, 2022.

Canada (2022). *Budget 2022: A Plan to Grow Our Economy and Make Life More Affordable*. Government of Canada, Department of Finance. <<https://budget.gc.ca/2022/report-rapport/toc-tdm-en.html>>, as of May 9, 2022.

Canada, Department of Finance (2021). *Fiscal Reference Tables December 2021*. Government of Canada. <<https://www.canada.ca/content/dam/fin/publications/frt-trf/2021/frt-trf-21-eng.pdf>>, as of May 9, 2022.

Clemens, Jason, Milagros Palacios, and Jake Fuss (2021). *Interest Cost Risks to Government Budgets*. Fraser Research Bulletin. Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/interest-cost-risks-to-government-budgets.pdf>>, as of May 9, 2022.

Eichengreen, Barry, Asmaa El-Ganainy, Rui Esteves, and Kris James Mitchener (2021). *In Defense of Public Debt*. Oxford University Press.

Fuss, Jake, and Steve Lafleur (2021). *Federal and Provincial Debt-Interest Costs for Canadians*. Fraser Research Bulletin. Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/federal-and-provincial-debt-interest-costs-for-canadians.pdf>>, as of May 9, 2022.

Guillemette, Yvan, and David Turner (2021). *The Long Game: Fiscal Outlooks to 2060 Underline Need for Structural Reform*. OECD Economic Policy Paper Number 29 (October). OECD. <<https://www.oecd-ilibrary.org>>

[org/docserver/a112307e-en.pdf?expires=1652141231&id=id&accname=guest&checksum=652DD9F237A1D14CE4FFDCDDAF541EC3](https://docserver/a112307e-en.pdf?expires=1652141231&id=id&accname=guest&checksum=652DD9F237A1D14CE4FFDCDDAF541EC3)>, as of May 9, 2022.

Ip, Greg (2010). *The Little Book of Economics: How the Economy Works in the Real World*. Wiley.

Lascelles, Eric (2011, November 30). The Italian diagnosis: Ailing, But Not Yet Failing. *Globe and Mail*. <<https://www.theglobeandmail.com/report-on-business/international-business/european-business/the-italian-diagnosis-ailing-but-not-yet-failing/article4179778/>>, as of May 9, 2022.

Laurin, Alexandre, and Don Drummond (2021). *Rolling the Dice on Canada's Fiscal Future*. E-Brief. CD Howe Institute. <<https://www.cdhowe.org/public-policy-research/rolling-dice-canadas-fiscal-future>>, as of May 9, 2022.

Poloz, Stephen (2022). *The Next Age of Uncertainty: How the World Can Adapt to a Riskier Future*. Allen Lane.

Ragan, Christopher, and William Watson (2004). Introduction and Summary. In Christopher Ragan and William Watson (eds.), *Is the Debt War Over? Dispatches from Canada's Fiscal Frontline*. (McGill University Press).

Statistics Canada (2022a). *Table 36-10-0477-01: Revenue, Expenditure, and Budgetary Balance – General Governments (x 1,000,000)*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610047701>>, as of May 9, 2022.

Statistics Canada (2022b). *Table 36-10-0103-01: Gross Domestic Product, Income Based, Quarterly (x 1,000,000)*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610010301>>, as of May 9, 2022.

Statistics Canada (2022c). *Table 10-10-0122-01: Financial Market Statistics, Last Wednesday Unless Otherwise Stated, Bank of Canada*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1010012201>>, as of May 9, 2022.

Timiraos, Nick (2022). *Trillion Dollar Triage: How Jay Powell and the Fed Battled a President and a Pandemic—and Prevented Economic Disaster*. Little, Brown & Co.

Veldhuis, Niels, and Jason Clemens (2006). *Productivity, Prosperity, and Business Taxes*. Studies in Economic Prosperity Number 3 (January). Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/ProductivityProsperityBusinessTaxes.pdf>>, as of May 9, 2022.

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Prof. J.C. Herbert Emery	Prof. Lawrence B. Smith
Prof. Jack L. Granatstein	Dr. Vito Tanzi

Past members

Prof. Armen Alchian*	Prof. F.G. Pennance*
Prof. Michael Bliss*	Prof. George Stigler*†
Prof. James M. Buchanan*†	Sir Alan Walters*
Prof. Friedrich A. Hayek*†	Prof. Edwin G. West*
Prof. H.G. Johnson*	

* deceased; † Nobel Laureate