



CANADA'S UNEXPLODED DEBT BOMB CONTINUES TO TICK

HIGHLIGHTS

- Canada is the world's 6th most indebted jurisdiction, owing around 3½ times GDP, and having increased total indebtedness by more than any other jurisdiction during the COVID-19 pandemic.
- Even before the crisis, when the economy was supposedly "solid" and unemployment was low, Canada was already the world's 7th most indebted jurisdiction. The household, corporate and government sectors are *all* highly leveraged relative to other jurisdictions.
- Households and corporations (i.e. the private sector) spend about one-quarter of income servicing debt through interest and repayments of loan principal. This is a record high and well above most other countries. A high debt-servicing ratio is considered an early warning indicator of future macroeconomic and financial instability.
- Despite its heavy borrowing, Canada generated virtually no growth in real GDP per capita over the five years to 2019.
- The best way to reduce indebtedness going forward is to generate faster *per capita* economic growth through productivity improvements. Growing out of indebtedness through rising income per person is far more attractive than implementing austerity measures.
- Canadian policy discussions tend to be preoccupied with expanding the population and labour supply through stepped-up immigration levels. This city-centric and labour-intensive strategy does increase GDP – but it has negligible overall impact on GDP per capita, labour productivity, or real wages.
- In contrast, higher productivity growth has the advantage of raising people's living standards by increasing GDP *per capita* and average real incomes. Making the workforce more productive per hour worked – by reviewing the incentives facing private sector investment in productive capital, technology, skills, innovation, and scale – is also the best solution to the challenge of population aging.

*There are but two ways of paying debt
— increase of industry in raising income,
increase of thrift in laying out.*

Thomas Carlyle,
British philosopher, 1795-1881

CANADA BORROWS HEAVILY IN GOOD TIMES AND BAD TIMES

Canada accumulated an extraordinary level of debt relative to the size of its economy both before and during the COVID-19 pandemic.

Already the 7th most indebted jurisdiction globally in 2019, at a time when the economy was near full employment, Canada increased its overall indebtedness by a further 50% of GDP during the pandemic.¹ This was the largest increase in the world. As a result, by 2020Q3, Canada had become the world's 6th most indebted jurisdiction.

High debt levels and heavy debt-servicing burdens relative to our ability to generate income could make Canada more susceptible

to future financial and economic shocks. After the current crisis has passed, government policymakers need to address Canada's chronically slow pace of labour productivity growth – a situation that could make today's debt loads difficult to shoulder in the medium- to long-term. Our recent [column in the Globe and Mail newspaper](#) proposes the establishment of an institutional framework to review structural policy settings that affect national productivity performance.

¹ When discussing indebtedness (i.e. the ratio of debt to GDP), both debt and GDP are in nominal terms.

HOW DID WE GET HERE?

National indebtedness (including both private and public sector debt) peaked at around 2½ times GDP during the early-1990s recession (**Figures 1a** and **1b**). It returned to about that level in the initial aftermath of the 2008-09 recession induced by the Global Financial Crisis (GFC), and shortly thereafter began creeping higher. By 2016-2019, national indebtedness had reached three times GDP. A key difference between the two post-recession eras is that there was no effective fiscal consolidation and debt reduction in the aftermath of the GFC. In the 2010s, public indebtedness stayed high, albeit below the early-1990s recessionary peak.

Since the early 2000s, household indebtedness in Canada has soared with only a few temporary pauses. Households have been encouraged to build wealth using residentially-secured loans, especially in and around Canada’s largest metropolitan areas (i.e. the international gateway cities of Toronto, Vancouver, and Montreal). For about two decades, debt-fueled housing demand in these intrinsically geographically-constrained cities has driven spectacular house price appreciation and housing capital gains. Domestic investors, new immigrants, and foreign buyers/investors played a prominent role in the gateway city house price boom of the mid-2010s.² These patterns have led to growing household wealth inequality within and across cities, even as overall *income* inequality and poverty rates in Canada have declined (see [Williams 2020a](#)).

All three broad sectors of Canada’s economy – households, corporations, and governments – are now carrying record levels of debt relative to GDP at the same time.

In the 2010s, the non-financial corporate sector joined the debt party. But unfortunately, higher corporate borrowing did not lead to increased business investment per worker and hence higher labour productivity levels ([Robson and Wu \(2021\)](#) and [Williams \(2020b\)](#)). Corporate indebtedness is now higher than in other sectors and also sits at record levels.

All three broad sectors of Canada’s economy – households, non-financial corporations, and governments – are now carrying record levels of debt relative to GDP *at the same time*. That is unusual. Typically when one or two sectors are increasing indebtedness, another sector is reducing debt or at least staying below record levels. There is usually at least one sector of the economy that is well-placed to absorb unanticipated shocks.

The relentless increase in Canadian indebtedness over the past two decades partly reflects the trend decline in interest rates. However, interest rates have also fallen in other advanced countries that have *not* leveraged as heavily as Canada, including some that have

actually deleveraged in the decade since the GFC. This suggests that Canada’s increase in private sector indebtedness over the past two decades has not been effectively countered by timeous and appropriate macroprudential policies, nor has it been offset by greater public sector restraint.

CANADA IS NOW THE 6TH MOST INDEBTED JURISDICTION

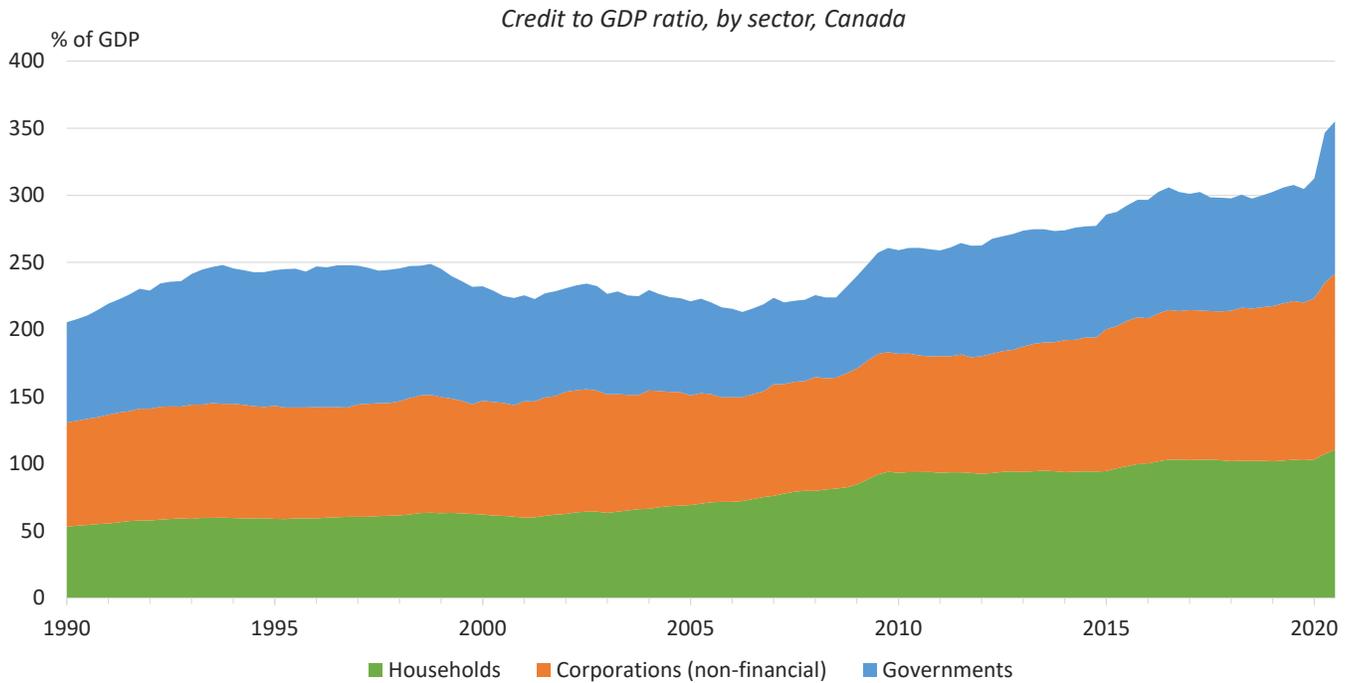
The latest data show that Canada is currently the world’s 6th most indebted jurisdiction, with a debt/GDP ratio of 355% in 2020Q3 (**Figure 2**). Ahead of Canada are Luxembourg, Hong Kong, Japan, France, and Belgium. Canada’s debt/GDP ratio significantly exceeds countries such as the United States, United Kingdom, Germany, Italy, Greece, Australia, and New Zealand.

Table 1 shows that Canada currently has the world’s 5th most indebted household sector, the 11th most indebted public sector, and the 13th most indebted non-financial corporate sector as at 2020Q3.³ Yet even before the pandemic, when the economy was operating close to full employment and the federal government was describing Canada’s economy as “[sound and growing at a solid pace](#)”, Canadians were relying heavily on leverage to sustain their living standards. This is true across all sectors. In 2019, Canada’s household, government and corporate sectors respectively had the 5th, 13th and 14th, highest debt/GDP ratios globally.

² According to Statistics Canada data from the 2016 Census, 56% of all newcomers to Canada settle in Toronto, Montreal, and Vancouver. Fully 70% of all newcomers to Canada settle in those cities plus Calgary and Edmonton. Only around 21% of newcomers settle in other cities, and around 9% settle in non-metropolitan areas.

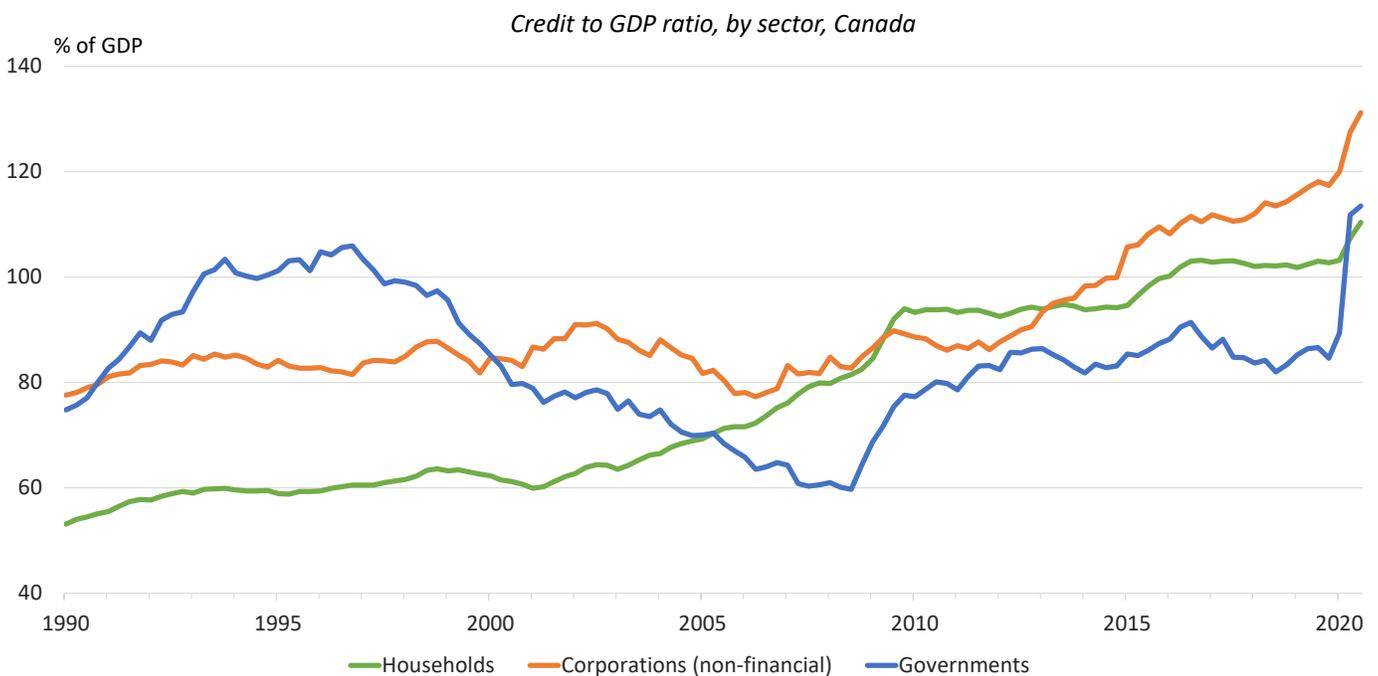
³ For most countries where market prices are available, government sector debt is quoted at market values relative to GDP. This is the best metric because it is consistent with national accounting principles. For several countries, nominal (face) values for debt relative to GDP are available only. The rankings shown in Figures 3 and 4 and Table 1 use the best available figures for all countries.

FIGURE 1a: NATIONAL INDEBTEDNESS HAS MARCHED HIGHER SINCE THE MID-2000s



Source: BIS Statistics.

FIGURE 1b: ALL SECTORS OF THE ECONOMY OWE RECORD LEVELS OF DEBT



Source: BIS Statistics.

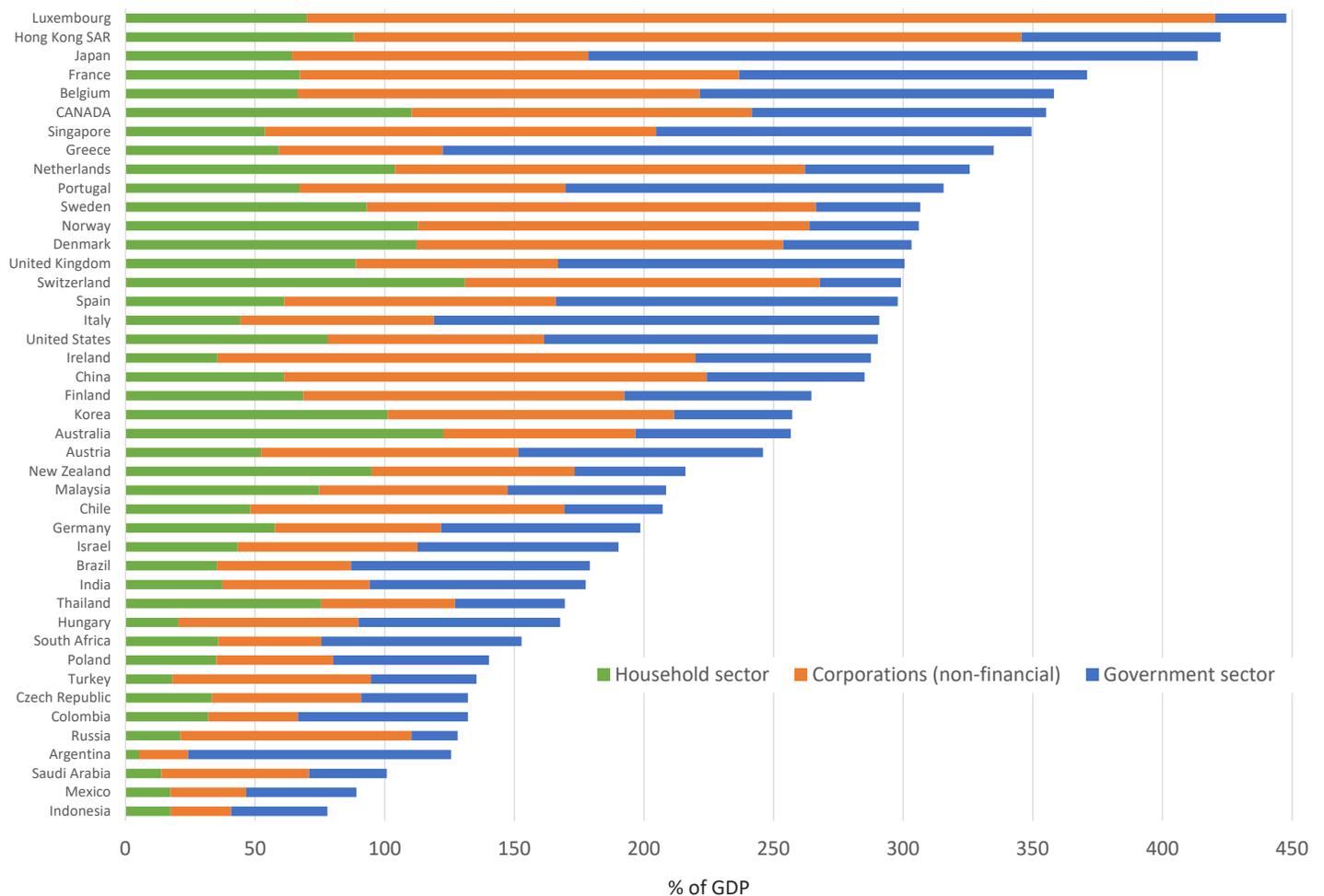
TABLE 1: **CANADA IS THE WORLD'S 6TH MOST INDEBTED JURISDICTION**

Sector	2020 Q3 Latest		2019 Q4 Pre-pandemic		Change	
	Debt/GDP (%)	World ranking (#)	Debt/GDP (%)	World ranking (#)	Debt/GDP (ppts)	World ranking (#)
Household	110.4	5	102.7	5	7.7	2
Corporate (non-financial)	131.2	13	117.4	14	13.8	4
Government	113.5	11	84.6	13	28.9	7
TOTAL	355.0	6	304.7	7	50.3	1

Source: BIS Statistics.

FIGURE 2: **CANADA IS THE WORLD'S 6TH MOST INDEBTED JURISDICTION**

Debt/GDP ratio, by sector, as at 2020Q3



Source: BIS Statistics.

CANADA INCREASED ITS INDEBTEDNESS MORE THAN ANY OTHER JURISDICTION DURING THE PANDEMIC

Since the end of 2019, there has been a tremendous world-wide increase in borrowing because of the pandemic-induced recession. Global indebtedness is at levels last seen at the end of the second world war. Even so, Canada's increase in indebtedness stands out because it was the world's largest at 50.3% of GDP during the first three quarters of 2020 (**Figure 3**).

Canada's increase was mainly driven by fast-rising public indebtedness (+28.9% of GDP), but there were also sizable increases in indebtedness by corporations (+13.8% of GDP) and households (+7.7% of GDP). Overall, Canada's government debt/GDP increase was the largest in the world, the household sector's increase was the second largest, and corporate sector increase was the fourth largest.

It is important to recognize that Canada has one of the most decentralized systems of government in the world. It also operates with a significant vertical fiscal imbalance: revenue streams do not match expenditure responsibilities for the different levels of government. It is inappropriate and misleading to look at Canada's federal debt – in isolation – compared to other national governments. Canada's federal government has relatively few spending responsibilities compared to other national governments. The provincial governments bear most of the responsibilities for health, education, and other social service expenses, some of which are certain to increase as the population ages. An apples-to-apples comparison of

aggregate taxpayer indebtedness requires looking at the government sector as a whole, including both federal and provincial debt, compared to other countries. This is the approach we have taken here.

It has been two years since Canada's national government delivered a federal budget – i.e. no budget has been tabled during the life of the current parliament. The last federal budget was in March 2019. The lack of fiscal transparency is both extraordinary and concerning. Other national governments continued to table annual budgets in 2020, during the pandemic, as parliaments in those countries continued to sit and scrutinize public expenditure and tax plans in detail. Across a range of metrics, Canada has performed relatively poorly compared to other countries during the pandemic. It ranks 50th out of 152 jurisdictions in [fatalities per capita](#). It ranks 11th out of 15 countries in the Macdonald-Laurier Institute's [COVID Misery Index](#) which is a composite index of metrics about health impacts, management response and economic impacts ([Audas, 2021](#)).

Credit ratings agencies and investors in sovereign bonds will be carefully watching the upcoming 2021-22 federal and provincial budget season to evaluate whether Canada's high government sector borrowing is sustainable, including whether there exists a credible fiscal anchor and a post-crisis path to overall public sector fiscal consolidation. It is important to note that a downgrade to the credit ratings of federal or provincial government bonds, or diminished investor sentiment, would raise public borrowing costs going forward *irrespective* of movements in global interest rates.

Credit ratings agencies will be carefully watching the upcoming 2021-22 federal and provincial budget season to evaluate whether Canada's high government sector borrowing is sustainable.

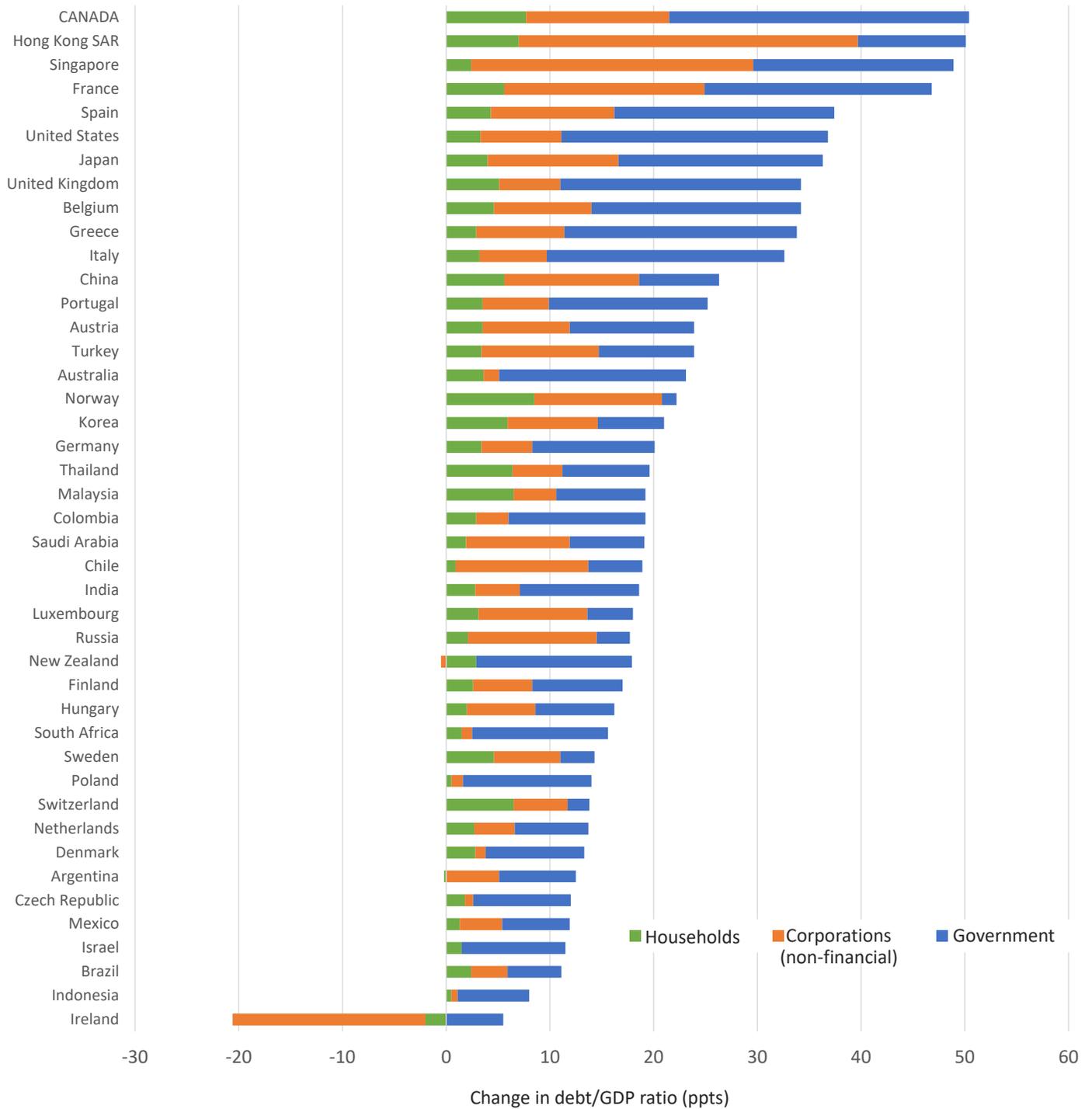
CANADA'S PRIVATE SECTOR DEBT-SERVICING RATIO IS ALSO HIGH

How manageable is Canada's private sector's debt? One indication is given by the debt-servicing ratio which is defined as the ratio of interest payments on debt, plus amortizations (i.e. regular repayments of principal outstanding), divided by adjusted gross disposable income. The DSR is considered a reliable early warning indicator of potential future macroeconomic and financial instability such as banking crises ([Drehmann and Juselius, 2012](#)). The [Bank for International Settlement \(BIS\)](#) calculates the DSR in the private sector (households and non-financial corporations). Among 32 countries, Canada's private sector carries the 6th largest debt-servicing burden at around one-quarter of adjusted gross disposable income (**Figure 4**).

Canada's private sector DSR by a wide margin exceeds other G7 countries (the G7 includes the United States, United Kingdom, France, Germany, Italy, and Japan), as well as China and Australia (**Figure 5**). Among the countries shown, only Canada, France and China show a rising private sector DSR over time. In contrast, the United States, the United Kingdom, and several other

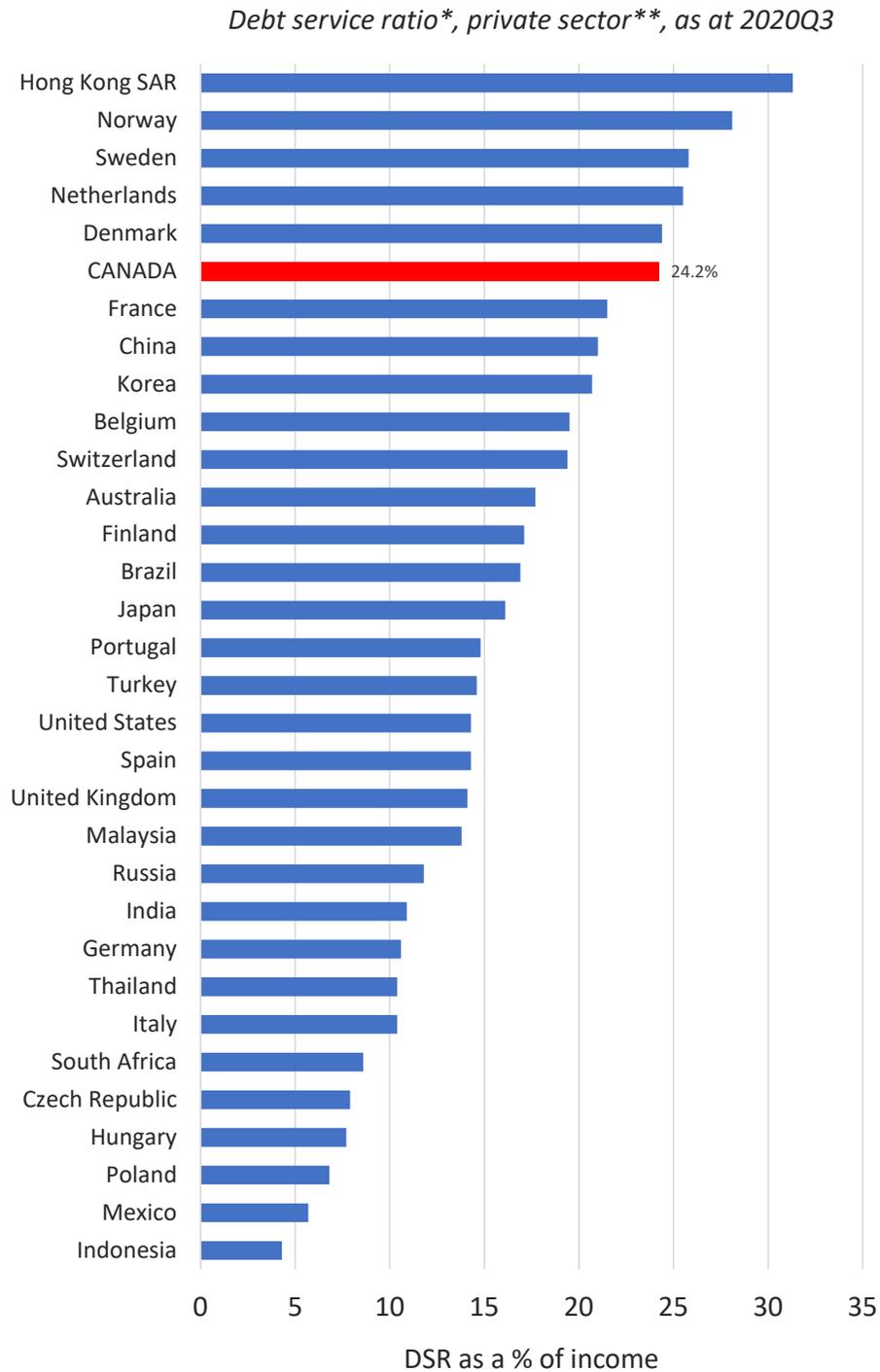
FIGURE 3: CANADA INCREASED ITS INDEBTEDNESS MORE THAN ANY OTHER JURISDICTION DURING THE PANDEMIC

Change in debt/GDP ratio between 2019Q4 and 2020Q3, by sector, percentage points (ppts)



Source: BIS Statistics.

FIGURE 4: **CANADA'S PRIVATE SECTOR CARRIES THE WORLD'S 6TH LARGEST DEBT-SERVICING BURDEN**

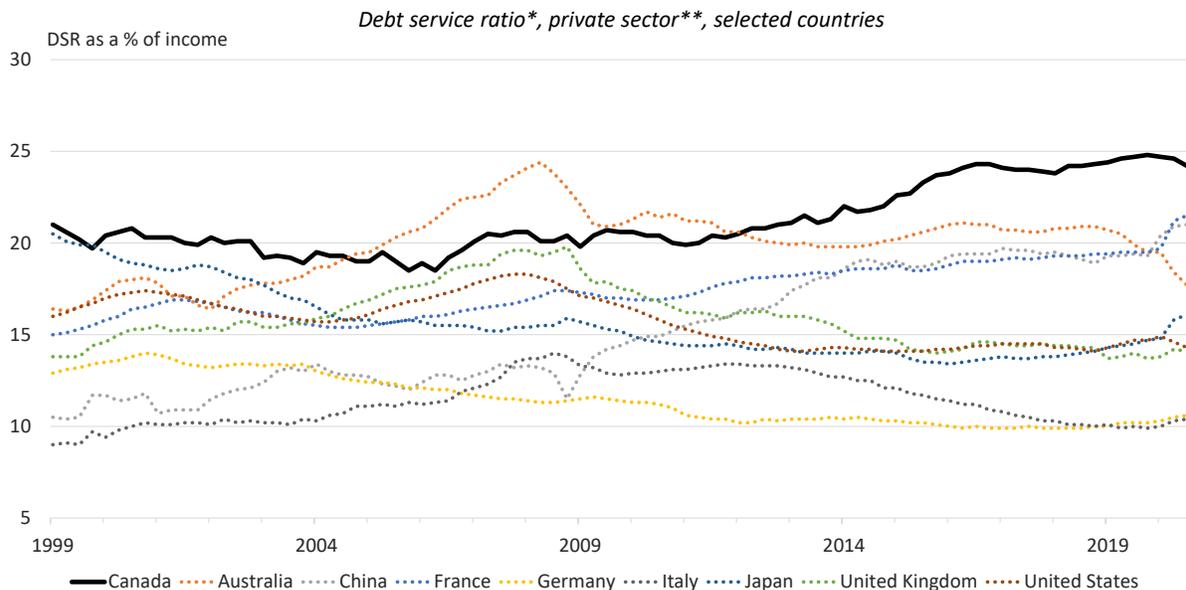


* DSR is the ratio of interest payments plus amortizations to adjusted gross disposable income

**Households and non-financial corporations

Source: BIS Statistics.

FIGURE 5: CANADA'S PRIVATE SECTOR DEVOTES MORE INCOME TO DEBT SERVICING THAN OTHER COUNTRIES



* DSR is the ratio of interest payments plus amortizations to adjusted gross disposable income
 **Households and non-financial corporations

Source: BIS Statistics.

countries outgrew or paid down debt and reduced their private sector DSRs in the aftermath of the GFC. Canada's DSR trended higher during 2006-07, 2011-16 and 2018-19, coinciding with periods of monetary policy normalization after an economic downturn. The DSR is an indicator that deserves close monitoring as interest rates begin to normalize in the post-pandemic world.

WHAT DOES THIS MEAN FOR CANADA'S LONG-TERM PROSPERITY?

Canada's long-term prosperity appears more precarious. For many years, Canadian policymakers and macroprudential regulators opted not to tighten non-price credit conditions systematically,

timeously, and dynamically across the economic cycle with a view to preventing excessive private sector indebtedness building up in the first place, although there has been some episodic tightening of credit conditions after the fact. Also, as noted above, the post-GFC era (i.e. the 2010s) was not an era of fiscal consolidation in Canada.

At the same time, labour productivity growth has been chronically low for the past two decades at less than 1% per annum. This ranks Canada 25th out of 36 OECD countries (see [Williams and Finlayson, 2021](#)). And as noted earlier, prior to the pandemic, business investment per worker was low in Canada, declining both absolutely and relative to other advanced countries (see [Robson and Wu \(2021\)](#) and [Williams \(2020b\)](#)).

There may soon be a short-lived burst of productivity growth that is typical after recessions: output tends to recover faster than labour inputs (i.e. employment or hours); and high productivity companies are more likely to have survived than companies that were only marginally viable prior to the recession. However, with persistently low rates of new private sector investment across most asset types (except debt-financed housing), there is little reason to expect productivity growth will be *sustainably* higher in the medium- and long-term.

IMPLICATIONS OF HIGH INDEBTEDNESS

Canada's latest borrowing spree was partly a necessary response to the pandemic crisis and partly a

response to ultra-low interest rates. Other countries faced the same forces, however. Arguably, Canada has made a very large wager that either borrowing costs will stay ultra-low for a long time or that decades of higher productivity growth lie ahead. This seems an ambitious and improbable bet. Already the benchmark ten-year U.S. treasury rate has risen to 1.5% – a full percentage point higher than its mid-2020 nadir – signaling that financial markets expect a modest strengthening global GDP growth and inflation in 2021 and beyond.

The combination of high indebtedness across all sectors, high private sector debt-servicing burdens, and chronically sluggish growth in productivity, non-housing investment and GDP per capita (which stands in stark contrast to the high-debt post-World War II era) indicates that Canada’s economy could be more susceptible to future financial and economic shocks. Even in the absence of severe shocks, given ultra-low starting levels, a seemingly modest percentage point increase in interest rates represents a deceptively large proportional increase in the price of credit. For example, as noted above, the ten-year U.S. treasury rate has *tripled* in

less than a year. Even modestly higher interest rates could lead to a rapidly rising DSR because of the huge amount of loan principal owing. Many borrowers may find the inevitable normalization of borrowing costs difficult to absorb, and this could have a contractionary impact on the economy.

CONCLUSION

The best way to reduce indebtedness going forward is to generate faster per capita economic growth through labour productivity improvements. Growing out of indebtedness through rising income per person is far more attractive than implementing austerity measures.

Canadian policy discussions tend to be preoccupied with juicing topline GDP growth by expanding the population and boosting labour supply through stepped-up immigration levels. This mainly affects the five cities where around 70% of newcomers settle: Toronto, Montreal, Vancouver, Calgary, and Edmonton. Only 21% of newcomers settle in other cities, and only around 9% settle in non-metropolitan areas. Stepped-up immigration is a city-centric and labour-centric economic growth strategy. However, super-sized cities are not an automatic ticket to prosperity and higher living standards.

While a larger population size does increase a country’s GDP, it has negligible overall impact on real GDP per capita, labour productivity or real wages. The latter are what matter for people’s standard of living. In contrast, higher productivity growth has the advantage of raising average living standards by increasing GDP *per capita* and average real incomes. Making the current workforce more productive per hour worked – by reviewing the incentives facing private sector investment in productive capital, technology, skills, innovation, and scale – is also the best solution to the challenges posed by population aging.

As argued in our recent [Globe and Mail newspaper column](#), if Canada is to grow its way out of chronically high indebtedness and reduce its susceptibility to future economic and financial shocks, achieving higher labour productivity growth must become a dedicated objective of Canadian policy-making institutions.

AUTHORED BY

David Williams, DPhil.
Vice President of Policy

References

- Audas, R. 2021. “[COVID Misery Index: Assessing the public health and economic performances of countries in the COVID-19 crisis](#)”. MacDonald-Laurier Institute, Ottawa, March 8.
- Drehmann, M. and M. Juselius. 2012. “[Do debt service costs affect macroeconomic and financial stability?](#)” Bank of International Settlements, BIS Quarterly Review, September.
- Morneau, W. 2019. “[Government of Canada releases economic and fiscal update](#).” News release, Federal Minister of Finance, Ottawa, December 16.
- Robson, W. and M. Wu. 2021. “[From chronic to acute: Canada’s investment crisis](#).” C.D. Howe Institute e-brief, February 4.
- Williams, D. and J. Finlayson. 2021. “[What Canada can learn from Australia to boost our dismal productivity growth](#).” Globe and Mail newspaper, January 31. Also available [here](#).
- Williams, D. 2020a. “[Who is the fairest one of all? Part III](#).” *Insights and opinions*, Business Council of British Columbia, March 16.
- Williams, D. 2020b. “[Long term priorities for Canada’s post-pandemic economy](#).” *Policy Perspectives*, Business Council of British Columbia, March 19.