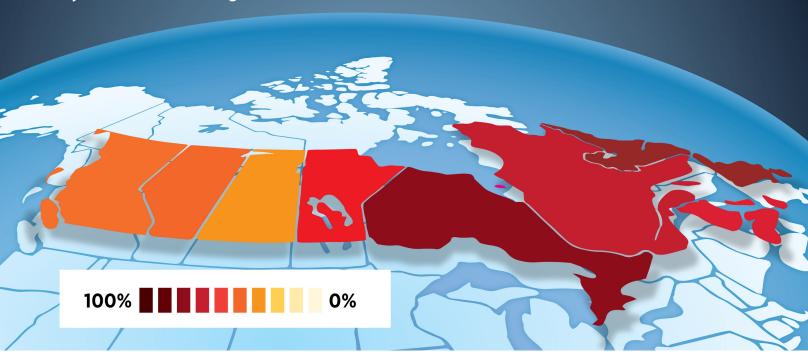
# FRASER BULLETIN



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# The Growing Debt Burden for Canadians

by Jake Fuss and Milagros Palacios



#### Summary

- Budget deficits and increasing debt have become serious fiscal challenges facing the federal and many provincial governments today. Since 2007/08, combined federal and provincial nominal net debt has grown from \$837.0 billion to a projected \$1.5 trillion in 2019/20.
- In 2019/20, combined federal and provincial net debt is expected to equal 64.3% of the Canadian economy or \$39,483 for every Canadian.
- Among the provinces, Ontario has the highest combined federal-provincial debt-to-GDP ratio (75.4%), while Saskatchewan has the lowest (44.3%). Newfoundland & Labrador has the

- highest combined debt per person (\$48,478), closely followed by Ontario (\$45,891). In contrast, Prince Edward Island has the lowest debt per person in the country with \$28,394.
- Interest payments are a major consequence of debt accumulation. Governments must make interest payments on their debt similar to households that must pay interest on borrowing related to mortgages, vehicles, or credit card spending. Revenues directed towards interest payments mean that there is less money available for tax cuts or government programs such as health care, education, and social services.

#### Introduction

Budget deficits and the growth of government debt have re-emerged as key fiscal challenges facing Canadian governments today. More than a decade has passed since the 2008/09 recession, but debt levels continue to rise for both the federal and many provincial governments. Provinces such as Alberta, Manitoba, and Ontario have not balanced their books in vears, while Ottawa has chosen to consistently run deficits since the beginning of the economic downturn. Overall nominal net debt<sup>1</sup> for the federal and seven provincial governments is projected to grow further in 2019/20,<sup>2</sup> which will pose significant problems for Canada's taxpayers and public finances in the future.

This research bulletin examines the growth of government debt in Canada since the 2008/09 recession, illustrates the differences among the provinces, and identifies the burden of government debt currently held by Canadian citizens.

#### Accumulation of government debt

Over the past 12 years, government debt across Canada has been growing quickly. This accumulation of debt has reversed a positive devel-

<sup>1</sup> Throughout this bulletin, the authors refer to debt as net debt, which is defined as financial assets minus total liabilities.

opment that occurred from the mid-1990s to the late-2000s, wherein the federal and many provincial governments managed to reduce their debt burdens. At the conclusion of that period, in 2007/08, combined federal and provincial net debt totaled \$837.0 billion.

However, the 2008/09 recession put an end to debt reduction efforts. Government spending increased dramatically in 2009/10 and every Canadian government ran deficits in either 2008/09 or 2009/10. In subsequent years, growing debt and persistent deficits again became the norm for the federal and provincial governments.

Over 10 years later, the trend of governments running deficits and accumulating debt continues-and it is unlikely to change any time soon. Figure 1 demonstrates how combined federal and provincial net debt has evolved since 2007/08. Notably, it is estimated that total net debt will reach nearly \$1.5 trillion in 2019/20.

The growth in nominal government debt is not limited to only a few provinces or one level of government. Nominal debt levels have risen federally and in every province between 2007/08 and 2019/20. Table 1 displays the change in nominal net debt for the federal and provincial governments during these years. In just over a decade, combined federal and provincial nominal debt has grown by \$647.2 billion, or 77.3%.

Over these 12 years, nominal federal net debt has increased by \$277.4 billion, or 53.7%. This stands in stark contrast to the period between 1996/97 and 2007/08 when the federal government reduced its nominal debt by \$92.7 billion. Put differently, in the past 12 years the federal government has accumulated nearly triple the amount of debt that it repaid in the mid-1990s to late-2000s.

<sup>&</sup>lt;sup>2</sup> Newfoundland & Labrador, New Brunswick, and Quebec are the exceptions. Net debt in Newfoundland & Labrador is projected to fall by 9.3% in 2019/20. However, this is primarily a result of the accrual of the guaranteed revenue stream secured by the province as part of the recently updated Atlantic Accord. The province used accrual accounting to record the entire \$2.5 billion that they will receive over a 38-year period during this fiscal year. Without the accord, Newfoundland & Labrador would be running a considerable deficit in 2019/20 and net debt would continue to grow.

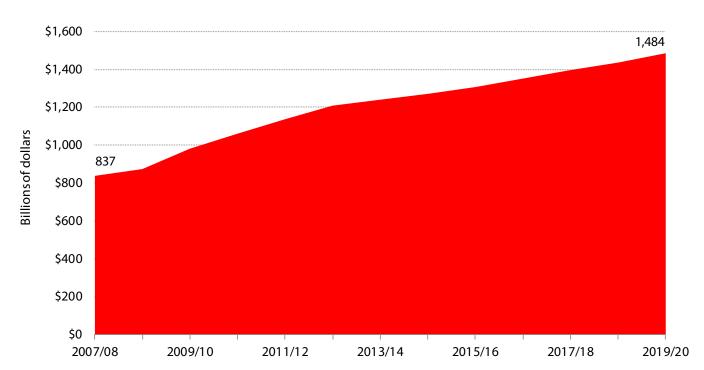


Figure 1: Combined Federal and Provincial Nominal Net Debt, 2007/08 to 2019/20

#### Notes:

- (i) Debt levels for 2019/20 are based on the latest government projections available at the time of writing.
- (ii) Net debt is presented on a consolidated basis in each province.

Sources: Canada, Department of Finance (2019a and 2019b); Alberta, Ministry of Finance (2019); British Columbia, Ministry of Finance (2019); Saskatchewan, Ministry of Finance (2019a and 2019b); Manitoba, Ministry of Finance (2019); Ontario, Ministry of Finance (2019); Québec, Ministère des Finances (2019a and 2019b); Newfoundland, Department of Finance (2019); New Brunswick, Department of Finance (2019a and 2019b); Nova Scotia, Department of Finance (2019); Prince Edward Island, Department of Finance (2019).

Among the provinces, Alberta experienced the largest percentage increase in its nominal debt level at 204.5%. For an extended period of time, Alberta has been plagued with persistent increases in program spending and an inability to balance its books regardless of the state of the economy.<sup>3</sup> In fact, Alberta has moved from

being the only province in a net financial asset position in 2007/08 to a province with the fastest growing debt burden today. Other provinces such as Saskatchewan, Manitoba, and Ontario have all increased their nominal debt levels by more than 100.0% as well.

tario, and Quebec. In 2018/19, Alberta spent \$12,622 per person, which is 18.5% higher than the \$10,647 spent in British Columbia.

<sup>&</sup>lt;sup>3</sup> Eisen et al. (2019) found that Alberta's per-person program spending was substantially higher than in comparable provinces like British Columbia, On-

**Table 1: Federal and Provincial Nominal** Net Debt in 2007/08 Compared to 2019/20 (\$ billions)

	Net Debt 2007/08	Net Debt 2019/20	Change (\$ billions)	Change (%)
ВС	23.9	44.5	20.6	86.3%
AB	(35.0)	36.6	71.7	204.5%
SK	5.9	12.0	6.1	104.2%
MB	10.6	25.8	15.2	144.3%
ON	160.0	353.7	193.7	121.0%
QC	124.7	172.5	47.8	38.4%
NB	7.1	13.8	6.8	95.6%
NS	12.1	15.3	3.2	26.1%
PEI	1.3	2.2	0.9	66.6%
NL	10.2	14.0	3.8	36.9%
FED	516.3	793.7	277.4	53.7%
FED + PROV	837.0	1,484.2	647.2	77.3%

Sources: Figure 1; calculations by authors.

This sizeable growth in nominal provincial debt is an important development for the future of Canada's public finances. While the federal government has increased its debt level, the provinces have been increasing their nominal debt levels at a much faster rate. Figure 2 shows that the portion of total net debt held by the federal and provincial governments has shifted substantially over time. For example, the provincial portion of total government debt has grown from 38.3% in 2007/08 to 46.5% in 2019/20.

Canada's aging population and its effect on areas of provincial responsibility may contribute to a further increase in provincial debt burdens in the future. A higher proportion of Canadians over the age of 65 will entail more health care spending for the provinces, which may contribute to larger deficits and more debt in the future (Jackson et al., 2017).

#### Measures of debt

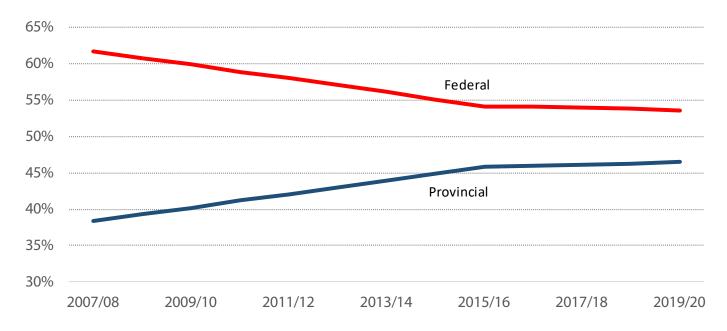
Government debt is commonly measured based on its share of the economy using gross domestic product (GDP). The debt-to-GDP ratio is a useful way to compare government debt between different jurisdictions and evaluate the sustainability of government debt accumulation. The current federal government has adopted this measure as its anchor to guide fiscal policy. Figure 3 shows federal, provincial, and combined federal-provincial net debt as a share of the economy in 2007/08 and 2019/20.

The federal net debt-to-GDP ratio has grown from 32.7% to 34.4% over this period. However, the growth in total provincial net debt as a share of GDP is far more pronounced. Provincial net debt as a share of the economy has increased by nearly 10 percentage points over the last 12 years, from 20.3% to 29.9%. Overall, the combined federal-provincial debt-to-GDP ratio is projected to climb from 53.1% in 2007/08 to 64.3% in 2019/20.

Eight provinces are expected to see an increase in their ratio of debt to GDP over this period. Table 2 exhibits the increase in provincial debt-to-GDP ratios between 2007/08 and 2019/20. Alberta is expected to have the largest percentage point increase in this ratio, which is projected to grow from -13.4% to 10.6%-an increase of 24.0 percentage points. Ontario is projected to have the second largest percentage point increase in its ratio, rising by nearly 14.0 points.

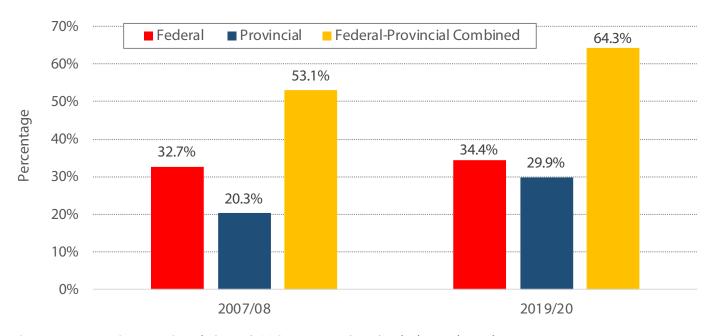
Newfoundland & Labrador has the highest debt-to-GDP ratio among the provinces at

Figure 2: Share of Total Net Debt (%) Held by Provincial vs. Federal Governments, 2007/08 to 2019/20



Sources: Figure 1; calculations by authors.

Figure 3: Federal, Provincial, and Combined Net Debt as a Share of GDP, 2007/08 vs. 2019/20



Sources: Figure 1; Statistics Canada (2019a); RBC Economics (2019); calculations by authors.

Table 2: Provincial Net Debt as a Percentage of GDP (%), 2007/08 and 2019/20

	2007/08	2019/20	Percentage point change
ВС	11.9%	14.4%	2.5
AB	-13.4%	10.6%	24.0
SK	11.2%	14.6%	3.4
MB	21.2%	34.7%	13.4
ON	26.6%	39.9%	13.9
QC	40.6%	37.8%	-2.9
NB	24.9%	36.5%	11.6
NS	35.6%	33.3%	-2.3
PEI	29.0%	30.6%	1.8
NL	35.0%	40.6%	5.6

Sources: Figure 3; calculations by authors.

40.6% and recorded a substantial increase in its debt-to-GDP ratio from 2007/08 to 2019/20. The second highest debt-to-GDP ratio belongs to Ontario (39.9%), which is followed closely by Quebec (37.8%). Quebec, however, is one of only two provinces to reduce its debt burden relative to the economy since 2007/08.4

**Table 3: Federal and Provincial Nominal** Net Debt per Person (\$), 2007/08 Compared to 2019/20

	2007/08	2019/20	Percent change
ВС	5,565	8,772	57.6%
AB	-9,973	8,379	184.0%
SK	5,861	10,210	74.2%
MB	8,879	18,839	112.2%
ON	12,538	24,285	93.7%
QC	16,207	20,331	25.4%
NB	9,482	17,794	87.7%
NS	12,957	15,726	21.4%
PEI	9,782	14,300	46.2%
NL	20,014	26,748	33.6%
FED	15,698	21,115	34.5%
FED + PROV	25,449	39,483	55.1%

Sources: Figure 1; Statistics Canada (2019b); calculations by authors.

An alternative way to evaluate government debt is to measure it per person. Debt per person is important because it demonstrates just how much government debt, on average, each Canadian citizen is responsible for repaying. Table 3 presents the estimated federal and provincial debt per person in 2007/08 and 2019/20. Newfoundland & Labrador has the highest debt per person at \$26,748. Ontario has the second highest at \$24,285 per person, while Quebec comes in third at \$20,331 per person.

Total federal net debt per person has risen 34.5% since 2007/08 and is expected to reach \$21,115 this year. The combined federal and pro-

for further information about the accounting changes.

<sup>&</sup>lt;sup>4</sup> Quebec made accounting changes in 2009/10 involving a line-by-line consolidation of the organizations in the health, social services, and education networks. Therefore, public accounts data after 2009/10 is not directly comparable to the data for previous years. However, the accounting changes increased net debt by \$7.6 billion in 2009/10. Even with this upward adjustment in net debt from the accounting changes, Quebec has reduced their debt burden relative to the economy since 2007/08. Please see the 2009-2010 Quebec Public Accounts

vincial net debt is now \$39,483 for every person living in Canada. This represents a 55.1% increase from the combined government net debt per person of \$25,449 in 2007/08.

Further, according to the federal government's 2019 budget projections, this growth in government debt is far from over. The federal government is expecting that net debt will increase 8.2% by 2023/24 and reach \$859.1 billion (DOF, 2019b). Without any policy changes, current projections from the Department of Finance suggest that the federal government will not balance its budget until 2040 (Canada, DOF, 2018). Several provinces are also poised to continue accumulating debt for the foreseeable future. This increase in net debt is projected to occur even though governments are generally expecting positive economic growth.

However, recent announcements by some provinces have signaled an intention to return to balanced budgets. In 2019, provincial governments in Alberta and Ontario announced their plans to balance the books. The Alberta government intends to balance the budget by 2022/23, while Ontario has targeted 2023/24 as its date.5

Despite these commitments, there is uncertainty about whether the governments will achieve their targets. A recession could act as a potential obstacle to budget balance since revenues stagnate or decline and spending rises (Fuss and Palacios, 2019). In such a case, both the federal and provincial governments would likely plunge deeper into debt and continue

running larger and more persistent deficits than are currently anticipated.

Although the timing of deficit elimination and the total amount of debt accumulated in the foreseeable future are uncertain, it is clear that Canadian governments have collectively increased debt since 2007/08 and reversed the positive trend of the mid-1990s through to the late-2000s. By returning to balanced budgets sooner rather than later, Canadian governments can begin restoring the long-run health of public finances and reduce the burden placed on citizens.

#### Allocating federal debt to the provinces

Canadians face different debt burdens depending on the province in which they live. The extent of provincial debt is different and the burden of federal debt is not evenly distributed among the provinces. For instance, residents in one province may collectively provide a greater share of federal revenues than residents in another province. Residents in the province that provide more revenue will collectively bear a larger share of the federal debt burden.

Table 4 shows the level of provincial government debt, the province's share of the federal debt, and the combined federal and provincial debt in each province. Federal debt is distributed based on the share of total federal personal income tax revenue from each province (5-year average), which is derived from Canada Revenue Agency data (see CRA, 2015-2019). The table also displays the combined federal-provincial debt in each province both as a share of its GDP and per-person.

The combined federal-provincial debt burden as a share of the economy ranges from a low of 44.3% in Saskatchewan to a high of 75.4% in Ontario. Newfoundland & Labrador has the

<sup>&</sup>lt;sup>5</sup> These plans were laid out in the 2019 Budgets for both provinces. According to these deficit elimination plans, the net debt-to-GDP ratio is expected to reach 11.2% in Alberta and 38.6% in Ontario when their budgets return to balance.

Table 4: Combined Federal and Provincial Nominal Net Debt, 2019/20

	Provincial net debt	Federal portion of net debt (\$ billions)	Combined net debt (\$ billions)	Net debt as a percentage of GDP (%)	Net debt per person (\$)
	(\$ billions)				
BC	44.5	102.8	147.3	47.7	29,044
AB	36.6	135.0	171.7	49.5	39,270
SK	12.0	24.5	36.4	44.3	31,032
MB	25.8	22.9	48.7	65.4	35,572
ON	353.7	314.7	668.5	75.4	45,891
QC	172.5	147.2	319.7	70.0	37,681
NB	13.8	11.9	25.7	67.9	33,095
NS	15.3	16.0	31.3	68.1	32,202
PE	2.2	2.2	4.5	60.7	28,394
NL	14.0	11.3	25.3	73.6	48,478

Note: The combined federal and provincial net debt is a total of provincial net debt and the federal portion. The federal net debt is allocated to each of the provinces based on a 5-year average (2013-2017) of the net federal tax payable by provinces as a share of the Canada's total net federal tax payable.

Sources: Figure 1; Canada Revenue Agency (CRA), 2015-2019; Statistics Canada (2019a and 2019b); RBC Economics (2019); calculations by authors.

second highest debt burden relative to GDP at 73.6%.

Newfoundland & Labrador has the highest combined debt per person (\$48,478), closely followed by Ontario (\$45,891). In contrast, Prince Edward Island has the lowest debt per person in the country with \$28,394.

#### Why growing government debt is a problem

Various studies and reports have found that there is a negative relationship between government debt and economic growth (Reinhart and Rogoff, 2010; Woo and Kumar, 2014; Chudik et al., 2015; Eberhardt and Presbitero, 2015; Swamy, 2015; Egert, 2015; Congressional Budget Office, 2019). In particular, government debt has a significant effect on private investment.

Long-term interest rates can rise when government debt expands, which increases the cost of borrowing in the private sector. Higher borrowing costs can reduce the incentive for private capital investment. Declining investment levels then pose great challenges to the country's ability to enhance productivity and future economic performance. Growing debt can also cause governments to raise taxes to pay back debt or finance their interest payments, which in turn impedes economic growth.

Interest payments, or debt servicing costs, are another consequence of debt accumulation. Like households, governments are required to

pay interest on their debt. Revenues directed towards interest payments mean that there is less money available for tax cuts or government programs such as health care, education, and social services.

#### Conclusion

The debt burden for families across Canada has been growing substantially for more than a decade. As was the case in the 1970s to mid-1990s, deficit spending and debt accumulation have become the norm for the federal and many provincial governments. Since 2007/08, total net debt has risen in nominal dollars, both as a share of the economy and per person. Rising government debt has severe consequences for Canadians as more and more resources are directed toward interest payments and away from public programs that help families or improve Canada's economic competitiveness. This upcoming budget season provides an opportunity for the federal and provincial governments to meaningfully address the growing debt problem in Canada.

#### References

- Alberta, Ministry of Finance (2019). Budget 2019. Government of Alberta.
- British Columbia, Ministry of Finance (2019). Second Quarterly Report November 2019. Government of British Columbia.
- Canada, Department of Finance [DOF] (2018). Update of Long-Term Economic and Fiscal Projections 2018. Government of Canada.
- Canada, Department of Finance [DOF] (2019a). Fiscal Reference Tables 2019. Government of Canada.
- Canada, Department of Finance [DOF] (2019b). Budget Plan 2019. Government of Canada.

- Canada Revenue Agency (2015-2019). Final Statistics (T1 Data). Canada Revenue Agency.
- Canada Revenue Agency (2019). Preliminary Statistics - 2019 Edition (2017 Tax Year). Canada Revenue Agency.
- Chudik, Alexander, Kamiar Mohaddes, M. Hashem Pesaran, and Mehdi Raissi (2015). Is there a Debt-threshold Effect on Output Growth? IMF Working Paper WP/197. International Monetary Fund.
- Congressional Budget Office (2019). The 2019 Long-Term Budget Outlook. Congress of the United States.
- Eberhardt, Markus, and Andrea F. Presbitero (2015). Public Debt and Growth: Heterogeneity and Non-linearity. Journal of International Economics 97, 1 (September): 45-58.
- Égert, Balázs (2015). The 90% Public Debt Threshold: The Rise and Fall of a Stylized Fact. Applied Economics 47, 34-35: 3756-3770.
- Eisen, Ben, Milagros Palacios, Steve Lafleur, and Jake Fuss (2019). Spending Beyond Our Means: Addressing the Root Cause of Alberta's Deficit. Fraser Institute. < https://www.fraserinstitute.org/sites/default/files/spending-beyond-our-means-root-cause-alberta-deficit. pdf>, as of November 12, 2019.
- Fuss, Jake and Milagros Palacios (2019). Fiscal Policy and Recessions: A Primer on Automatic Stabilizers. Fraser Institute. < <a href="https://www.">https://www.</a> fraserinstitute.org/studies/fiscal-policyand-recessions-primer-on-automatic-stabilizers>, as of November 12, 2019.
- Jackson, Taylor, Jason Clemens, and Milagros Palacios (2017). Canada's Aging Population and Implications for Government Finances. Fraser Institute. <a href="https://www.fraserinstitute.org/">https://www.fraserinstitute.org/</a> sites/default/files/canadas-aging-population-and-implications-for-government-finances.pdf>, as of November 12, 2019.

- Manitoba, Ministry of Finance (2019). Budget 2019. Government of Manitoba.
- Newfoundland & Labrador, Department of Finance (2019). 2019-20 Fiscal and Economic Update. Government of Newfoundland & Labrador.
- New Brunswick, Department of Finance (2019a). Fiscal and Economic Update Second Quarter 2019-2020. Government of New Brunswick.
- New Brunswick, Department of Finance (2019b). Public Accounts 2018-19. Government of New Brunswick.
- Nova Scotia, Department of Finance (2019). Budget 2019. Government of Nova Scotia.
- Ontario, Ministry of Finance (2019a). 2019 Ontario Economic Outlook and Fiscal Review. Government of Ontario.
- Ontario, Ministry of Finance (2019b). Budget 2019. Government of Ontario.
- Prince Edward Island, Department of Finance (2019). Budget 2019. Government of Prince Edward Island.
- Québec, Ministère des Finances (2010). Public Accounts 2009-2010 Volume 1. Government of Québec.
- Québec, Ministère des Finances (2019a). Budget 2019. Government of Québec.
- Québec, Ministère des Finances (2019b). Update on Québec's Economic and Financial Situation-Fall 2019. Government of Québec.
- RBC Economics (2019). Provincial Outlook December 2019. RBC Economics.
- Reinhart, Carmen, and Kenneth Rogoff (2010). Growth in a Time of Debt. American Economic Review 100, 2 (May): 573-78.
- Saskatchewan, Ministry of Finance (2019a). Public Accounts 2018-19 Volume 1. Government of Saskatchewan.

- Saskatchewan, Ministry of Finance (2019b). 2019-20 Mid-Year Report. Government of Saskatchewan.
- Statistics Canada (2019a). Table 36-10-0221-01: Gross Domestic Product, Incomebased, Provincial and Territorial, Annual (x 1,000,000). Government of Canada. <a href="https://www150.statcan.gc.ca/t1/tbl1/en/">https://www150.statcan.gc.ca/t1/tbl1/en/</a> tv.action?pid=3610022101>, as of November 12, 2019.
- Statistics Canada (2019b). Table 17-10-0005-01: Population Estimates on July 1, by Age and Sex. Government of Canada. <a href="https://">https://</a> www150.statcan.gc.ca/t1/tbl1/en/ tv.action?pid=1710000501>, as of October 16, 2019.
- Swamy, Vighneswara (2015). The Dynamics of Government Debt and Economic Growth. IEG Working Paper 359. Institute of Economic Growth.
- Woo, Jaejoon, and Manmohan S. Kumar (2014). Public Debt and Growth. Economica 82, 328 (October): 705-739.

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**Jake Fuss** is a Policy Analyst at the Fraser Institute. He holds a Bachelor of Commerce and a Master's Degree in Public Policy from the University of Calgary.



**Milagros Palacios** is the Associate Director of the Addington Centre for Measurement at the Fraser Institute. She holds a BSc in Industrial Engineering from the Pontifical Catholic University of Peru and an MSc in Economics from the University of Concepción, Chile.

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