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The Cost of Government Debt in Canada, 2016

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SUMMARY

- Budget deficits and increasing debt are key fiscal issues as the federal and provincial governments prepare to release their budgets this year. Combined federal and provincial net debt has increased from \$834 billion in 2007/08 to a projected \$1.3 trillion in 2015/16. This combined debt equals 64.8% of the economy or \$35,827 for every man, woman, and child living in Canada.
- Debt accumulation has costs. One major consequence is that governments must make interest payments on their debt similar to households that pay interest on borrowing related to mortgages, vehicles, or credit card spending. Spending on interest payments con-

- sumes government revenues and leaves less money available for other important priorities such as spending on health care and education or tax relief.
- Canadian governments (including local governments) collectively spent an estimated \$60.8 billion on interest payments in 2014/15. That works out to 8.1% of their total revenue that year. To further put the amount spent on interest payments in perspective, it is more than what is spent on pension benefits through the Canada and Quebec Pension Plans (\$50.9 billion), and approximately equal to Canada's total public spending on primary and secondary education (\$62.2 billion, as of 2012/13, the last year for which we have finalized data).

Introduction

Almost seven years after the 2008/09 recession, budget deficits and increased government debt remain ongoing fiscal issues in Canada. Currently the federal government and eight out of 10 provinces are projecting deficits for the 2015/16 fiscal year. Debt levels for all governments are projected to grow in 2015/16 and rising debt levels in some provinces, including Ontario, have attracted negative attention from international credit agencies. 1 With governments set to release their budgets in the coming months, deficits and debt warrant close attention. The ongoing trend of deficit spending and growing government debt for many Canadian governments carries short-and longterm consequences for the country and its citizens.

This research bulletin examines the growth of government debt in Canada since the 2008/09 recession and the immediate consequences of that debt-specifically, government spending on interest payments to service previously accumulated debt.2

Trend reversal: Growing government debt

The growth in government debt over the past eight years reversed a positive trend from the mid-1990s to late-2000s when Canada's federal and provincial governments made considerable progress in reducing their debt burdens (Palacios et al., 2014). After a period of debt reduction, combined federal and provincial debt reached a low of \$833.8 billion in 2007/08.

However, the economic recession in 2008/09, combined with the significant increases in government spending that took place in 2009/10, meant that every government fell into deficit in either 2008/09 or 2009/10. This started Canada's governments down their current path of persistent deficits and growing debt. The trend has largely persisted since then and will likely continue in 2015/16 through the upcoming round of federal and provincial budgets.3 Figure 1 illustrates total combined federal and provincial debt (excluding local governments) from 2007/08 to 2015/16. Total debt in 2015/16 is estimated to be just shy of \$1.3 trillion.

This growth in combined federal and provincial debt has not been limited to just a few jurisdictions. The federal and every provincial government increased their debt levels between 2007/08 and 2015/16. Table 1 shows the percentage change in debt for the federal and provincial governments over this period,

¹ In this research bulletin, debt is defined as net direct debt. Net debt is the amount of total (gross) debt (including pension liabilities) minus financial assets. "Direct debt" refers to debt that government has borrowed directly. In contrast, "indirect debt" is other liabilities that represent a future claim on government resources and could become direct debt. For more discussion on the measures of debt, see Palacios et al., 2014. The authors use "debt" throughout the rest of the paper to mean "net direct debt."

² Canadian governments use different descriptors for interest payments on past debt. "Debt service costs," "public debt charges," and "interest on debt" can be found in different budgets or other financial reporting documents. This bulletin uses these different terms interchangeably.

³ While recessions and other economic factors that are largely out of the control of governments can affect the growth in government debt, research by Professor Ron Kneebone of the University of Calgary suggests that government policy decisions often have a larger impact on debt accumulation than the ups and downs of the economy, particularly in the case of Ontario (Kneebone and Wilkins, 2014; Kneebone, 2015a; Kneebone, 2015b).



Figure 1: Combined federal and provincial net debt, 2007/08 to 2015/16 (in \$ billions)

Notes:

(i) Debt levels for 2015/16 are based on the latest government projections available at the time of writing. The federal government's November fiscal update did not include an updated estimate for 2015/16 federal net debt and the figure used here comes from the 2015 federal budget. Given that the 2015 federal budget projected a budget surplus while the November fiscal update projected a budget deficit, the level of net debt for 2015/16 is likely understated.

(ii) Net debt is presented on a consolidated basis in each province.

Sources: Canada, Receiver General for Canada (2008-2015); Canada, Department of Finance (2015a); British Columbia, Ministry of Finance (2015a and 2015b); Alberta, Ministry of Finance (2008-2015a and 2015b); Saskatchewan, Ministry of Finance (2008-2015a and 2015b); Manitoba, Ministry of Finance (2008-2015a and 2015b); Ontario, Ministry of Finance (2008-2015a and 2015b); Québec, Ministère des Finances (2008-2015a and 2015b); New Brunswick, Department of Finance (2014-2015a and 2015b); Nova Scotia, Department of Finance (2008-2015a and 2015b); Prince Edward Island, Department of Finance (2008-2015a and 2015b); Newfoundland & Labrador, Department of Finance (2008-2015).

along with the change in debt as a percentage of GDP and per person. The combined federal and provincial debt increased by \$450.6 billion, or 54.0%, in just eight years.

To put this in perspective, the federal government reduced its debt level by \$92.7 billion between 1996/97 and 2007/08. In 2008/09, the federal government began running a deficit, contributing to the \$175.7 billion in added debt from 2007/08 to 2015/16. In other words, the federal government reduced debt for 11 years, but in just eight years has accumulated nearly

double the amount of debt it cut in those 11 years. Nominal federal debt is likely to continue to grow, particularly if the new federal government follows through on its campaign promise for more deficit spending.

A common way to measure government debt is as a share of the economy (which is itself measured by Gross Domestic Product (GDP)). The ratio between debt and GDP can be used to compare government debt between different jurisdictions and to assess the sustainability of debt accumulation. Figure 2 displays the

Table 1: Federal and provincial net debt in dollars, as a percentage of GDP, and per person, 2007/08 and 2015/16

	Net debt (\$ millions)			Net debt as percentage of GDP (%)			Net debt per person (\$)		
	2007/08	2015/16	Percent change	2007/08	2015/16	Percent change	2007/08	2015/16	Percent change
BC	24,055	40,821	69.7%	12.1	16.6	37.1%	5,606	8,717	55.5%
AB	(35,046)	(3,392)	90.3%	(13.4)	(1.0)	92.6%	(9,973)	(808)	91.9%
SK	5,873	6,718	14.4%	11.2	8.5	(24.6%)	5,861	5,926	1.1%
MB	10,561	20,426	93.4%	21.2	30.7	44.7%	8,880	15,793	77.9%
ON	156,616	298,315	90.5%	26.0	39.9	53.4%	12,270	21,629	76.3%
QC	124,681	188,150	50.9%	40.7	49.2	20.7%	16,208	22,769	40.5%
NB	7,152	12,602	76.2%	25.3	38.3	51.4%	9,594	16,717	74.2%
NS	12,115	15,118	24.8%	35.7	37.8	6.0%	12,956	16,032	23.7%
PE	1,347	2,177	61.6%	29.1	35.5	21.9%	9,781	14,868	52.0%
NL	10,188	11,528	13.2%	35.1	38.1	8.7%	20,014	21,843	9.1%
FED	516,281	692,000	34.0%	32.8	34.9	6.4%	15,698	19,302	23.0%
FED + PROV	833,823	1,284,463	54.0%	53.0	64.8	22.2%	25,353	35,827	41.3%

(i) Debt levels for 2015/16 are based on the latest government projections available at the time of writing. The federal government's November fiscal update did not include an updated estimate for 2015/16 federal net debt and the figure used here comes from the 2015 federal budget. Given that the 2015 federal budget projected a budget surplus while the November fiscal update projected a budget deficit, the level of net debt for 2015/16 is likely understated.

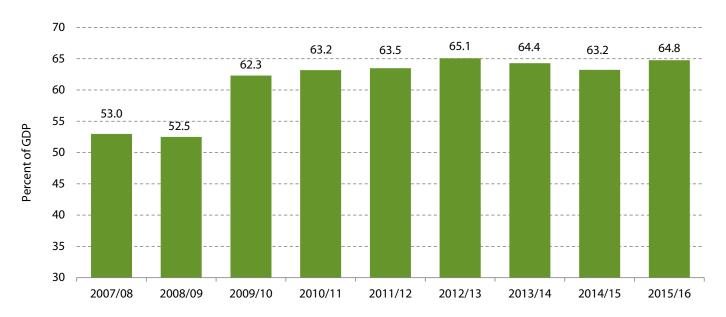
(ii) Canadian GDP figures for 2015 and provincial GDP figures for 2014 and 2015 are estimated using forecasts from TD Economics (TD Economics, 2015).

Sources: Figure 1; Statistics Canada (2015a and 2015b); TD Economics (2015); calculations by authors.

increase in combined federal and provincial debt as a share of GDP between 2007/08 and 2015/16. (Table 1 includes a breakdown by province in 2007/08 and 2015/16.) From its peak in the mid-1990s (99.6% of GDP in 1995/96), combined federal and provincial debt as a share of GDP fell to 53.0% in 2007/08. Starting in 2008/09 many Canadian governments began to run budgetary deficits and accumulate more debt, which caused the ratio to climb to 62.3% in 2009/10. In 2015/16, the ratio is projected to reach 64.8%.

Every Canadian government will likely see an increase in its debt-to-GDP ratio from 2007/08 to 2015/16, with the exception of Saskatchewan, where the ratio decreases slightly (see table 1). Alberta is expected to have the largest percentage increase in this ratio, increasing by 92.6%. Alberta is unique in that it is the only jurisdiction in Canada to be in a net financial asset position, where the value of financial assets exceeds government liabilities. However, since 2007/08, the province has been sliding towards a net debt position, where debt

Figure 2: Combined federal and provincial net debt as a percentage of GDP, 2007/08 to 2015/16



Notes: See table 1.

Sources: Figure 1; Statistics Canada (2015a); TD Economics (2015); calculations by authors.

will exceed financial assets. Ontario is expected to have the second largest increase in its debt-to-GDP ratio, which is projected to grow from 26.0% to 39.9%—a 53.4% jump. Ontario's debt growth has attracted negative attention from international credit agencies and research shows that the rate of debt accumulation is not sustainable over the longer term (Wen, 2015). While New Brunswick and Manitoba are also expected to see large increases in their ratios, Quebec and Ontario, Canada's two most populous provinces, have the two highest debt-to-GDP ratios among provinces in 2015/16 at 49.2% and 39.9%, respectively.

Table 1 also displays federal and provincial government debt on a per person basis in 2007/08 and 2015/16. This is a useful measure because ultimately debt needs to be repaid and a perperson calculation shows how much govern-

ment debt each citizen is responsible for on average. Quebec has the highest debt per person at \$22,769, Newfoundland & Labrador has the second highest at \$21,843 per person, followed closely by Ontario at \$21,629 per person. The combined federal and provincial debt is \$35,827 for every man, woman, and child living in Canada. This represents a 41.3% increase (in nominal terms) from the combined government debt per person of \$25,353 in 2007/08.

The eight-year growth in government debt in Canada is considerable but, according to the latest government budget projections, it is far from over. Debt is poised to continue growing for the foreseeable future as several governments continue to project budgetary deficits and finance capital projects with debt. Table 2 summarizes the expected year that the federal and provincial governments will eliminate their

deficits as well as the number of years of projected deficits since 2008/09.

There is uncertainty about whether some governments will actually achieve a balanced budget on schedule. For instance, the projected year of federal deficit elimination does not take into account spending promises made by the new federal government during the 2015 election. The timeline for a balanced budget in Ontario remains precarious (FAO, 2015). And several provinces have recently pushed back their planned date for deficit elimination. Newfoundland & Labrador's government had previously planned to eliminate its deficit by 2015/16 but the new target has been delayed to 2019/20.4 The governments of New Brunswick and Prince Edward Island have also delayed their deficit elimination date by another year. Notably, the new Alberta government has recently backed away from an election campaign commitment to balance the budget by 2018/19; it now plans to balance the budget by 2019/20.

The uncertainty around the timing of deficit elimination means that the total amount of debt that will be accumulated before Canadian governments ultimately return to surplus is still unclear. However, one thing is sure: Canadian governments have collectively increased debt since 2007/08 and eroded the progress made from the mid-1990s through to the late-2000s. The sooner governments return to balanced budgets, the sooner they can begin restoring the long-run health of Canada's public finances.

Table 2: Expected year of deficit elimination, federal and provincial governments (as of December 4, 2015)

Projected year of deficit Projected number

	elimination from latest budget	of years in deficit since 2008/09
ВС	Surplus projected for 2015/16	4
AB	2019/20	10
SK	n/a	4
MB	2018/19	9
ON	2017/18	9
QC	Surplus projected for 2015/16	6
NB	2018/19	10
NS	2016/17	6
PE	2016/17	8
NL	2019/20	8
FED	2019/20	10

Notes:

- (i) Provinces that have eliminated their deficit may still be accumulating debt due to debt-financed capital spending (Wen, 2014). For example, despite expecting a balanced operating budget, British Columbia projects that its net debt will increase by \$1.9 billion in 2015/16 compared to the previous year (British Columbia, Ministry of Finance, 2015b).
- (ii) The fiscal balance is based on consolidated government figures for each province except for Nova Scotia, which reports its 2015 budget on a General Revenue Fund basis.
- (iii) The Saskatchewan government initially projected a surplus for 2015/16 in its 2015 budget, but the most recent update shows that the government now expects a deficit for 2015/16.
- (iv) The projected year of federal deficit elimination does not take into account the new federal government's spending commitments made during the 2015 federal election.

Sources: Canada, Department of Finance (2015b); British Columbia, Ministry of Finance (2015c); Alberta, Ministry of Finance (2015b); Saskatchewan, Ministry of Finance (2015c); Manitoba, Ministry of Finance (2015c); Ontario, Ministry of Finance (2015b); Québec, Ministère des Finances (2015b); New Brunswick, Department of Finance (2015b); Nova Scotia, Department of Finance (2015c); Prince Edward Island, Department of Finance (2015b); Newfoundland & Labrador, Department of Finance (2015); calculations by authors.

⁴ The 2019/20 target for deficit elimination in Newfoundland & Labrador was set by the previous government, but the new government's election platform also established 2019/20 as the target. For further details, see http://nlliberals.ca/why-liberal/ our-five-point-plan/.

Why growing government debt is problematic

Empirical research has found that a negative relationship exists between government debt and economic growth (Reinhart and Rogoff, 2010; Cecchetti et al., 2011; Checherita and Rother, 2010; Woo and Kumar, 2014; Chudik et al., 2015; Eberhardt and Presbitero, 2015; Égert, 2015). This negative relationship can be explained in different ways but one important way relates to the effect of government debt on private investment. When government debt expands, it can cause long-term interest rates to rise, which in turn increases the cost of private sector borrowing. Higher borrowing costs can then discourage private capital investment, which is a key driver of long-term economic growth.

There are also immediate consequences from government debt in the form of interest payments, or what are called debt servicing costs. 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. Government spending on debt servicing costs results in less revenue available for important priorities such as tax relief and spending on public programs like health care, education, and social services.

Debt servicing costs are a considerable expenditure for a number of Canadian governments. Table 3 shows the amount that Canadian governments are estimated to spend on interest payments in 2015/16. It also shows these costs as a share of total government revenues for the federal and provincial governments. This provides a measure of the percentage of government resources directed to interest payments and gives a sense of the potential displacement effect on other spending priorities.

Table 3: Federal and provincial debt servicing costs, 2015/16

Debt servicing costs Debt servicing costs as (in millions of \$) percent of revenue (%)

BC	2,534	5.4
AB	778	1.8
SK	514	3.7
MB	842	5.6
ON	11,270	9.0
QC	10,277	10.3
NB	685	8.2
NS	870	8.8
PE	127	7.7
NL	888	12.7
FED	25,900	9.0

Notes:

(i) Debt servicing costs for 2015/16 are based on the latest government projections available at the time of writing.

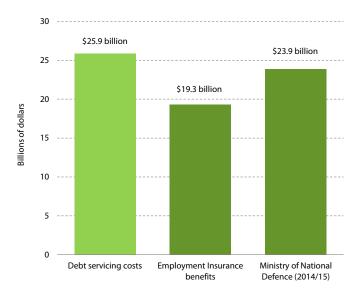
(ii) To ensure consistency between the provinces, Saskatchewan's debt servicing cost for 2015/16 was obtained by special request to Saskatchewan's Ministry of Finance (Brian Miller, on behalf of Saskatchewan Finance Communication, August 13, 2015). The debt servicing costs reported in the 2015 budget (\$305.1 million) do not account for pension costs on an accrual basis.

Sources: Figure 1; Canada, Department of Finance (2015b); Saskatchewan, Ministry of Finance (2015d); calculations by authors.

In relative terms, Newfoundland & Labrador is projected to spend by far the most on interest payments, amounting to 12.7% of total revenue. Quebec is projected to spend 10.3%. The Ontario, federal, and Nova Scotia governments estimate debt servicing costs to be approximately 9% of their total revenue. This means a number of Canadian governments are now dedicating nearly 10 cents or more of every dollar in revenue simply to service debt obligations.

It is important to note that these figures exclude debt servicing costs incurred by local governments. When local governments are

Figure 3: Federal debt servicing costs compared to other expenditures, 2015/16



Note:

(i) Ministry of National Defence spending is for 2014/15, the most recent year available.

Source: Canada, Department of Finance (2015b); Canada, Receiver General for Canada (2015).

included, total debt servicing costs in Canada for 2014/15 (the latest year of available data) totalled \$60.8 billion, or 8.1% of total government revenue⁵ (Statistics Canada, 2015d).

Debt accumulation is a significant driver of debt servicing costs. But debt levels alone do not determine the magnitude of interest payments. The interest rate, or the cost of borrowing, also has a significant impact. Governments have been able to borrow at historically low rates. If interest rates rise, borrowing costs will rise accordingly and result in even more resources being directed to debt servicing costs. Governments that maintain relatively high debt levels, such as Ontario and Quebec, are

especially vulnerable to interest rate increases (Wen, forthcoming).

Debt servicing costs compared to other spending

More spending on debt servicing costs invariably means that fewer resources are available for public priorities. To put debt servicing costs into perspective, consider the following illustrations from Canada's three largest governments.

Federal debt servicing costs

At the federal level, debt servicing costs in 2015/16 are projected to be \$25.9 billion, or 9.0% of federal revenue. This is considerably larger than the \$19.3 billion the government expects to spend on Employment Insurance benefits (see figure 3). It is also more than what the federal government spent on the Ministry of National Defence in 2014/15 (\$23.9 billion). Indeed, debt servicing costs now consume considerable resources compared to many important spending programs.

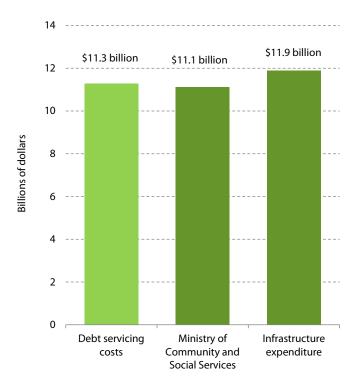
Debt servicing costs in Ontario

In Ontario, where growing government indebtedness is a well-documented problem,⁶ the province estimates debt servicing costs in 2015/16 at \$11.3 billion or 9.0% of total revenue. This means that 9 cents of every dollar in revenue that the Ontario government collects will go to paying interest on the provincial debt. As figure 4 shows, debt servicing costs in 2015/16 will exceed the amount the government plans to spend on the Ministry of Community and Social Services (\$11.1 billion). It is also close to the amount the government plans to spend on infrastructure (\$11.9 billion).

⁵ Total government revenue includes CPP and QPP contributions.

⁶ For a discussion on Ontario's growing debt problem, see Murphy et al., 2014 and Wen, 2015.

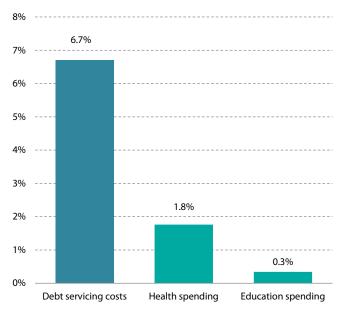
Figure 4: Ontario's debt servicing costs compared to other expenditures, 2015/16



Sources: Ontario, Ministry of Finance (2015b).

The discussion thus far has revolved around the current level of government debt servicing costs. But examining the future growth of debt servicing costs can be informative, particularly for highly indebtedness jurisdictions like Ontario. As delineated in Ontario budget, debt servicing costs are expected to increase rapidly, growing at an annual average of 6.7% from 2015/16 to 2017/18 (years of available data). This annual growth far outpaces the projected annual growth in total program spending (0.6%) and is the fastest growing line item in the Ontario budget. Critically, annual debt servicing costs are expected to grow faster than health spending (1.8%) and education spending (0.3%), two key public services for any provincial government (see figure 5).

Figure 5: Ontario's projected annual growth rate of debt servicing costs compared to other spending, 2015/16 to 2017/18



Note: Education spending includes spending of K-12 education and post-secondary and training.

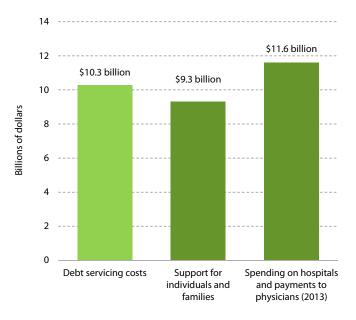
Sources: Ontario, Ministry of Finance (2015b and 2015c); calculations by authors.

Debt servicing costs in Quebec

Quebec is Canada's second most populous province and the one most indebted relative to the size of its economy.7 Quebec's interest costs are projected to consume 10.3% of total revenue in 2015/16. The \$10.3 billion in interest payments is more than the Quebec government plans to spend on support for individuals and families (\$9.3 billion). It is also close to the \$11.6 billion that the province spent on hospitals and payments to physicians in 2013 (latest year of available data).

⁷ For a discussion on the state of Quebec's debt, see Speer, 2014 and Lammam et al., 2015.

Figure 6: Quebec's debt servicing costs compared to other expenditures, 2015/16



Notes:

(i) The spending estimate of the support for individuals and families comes from the 2015 budget. It includes spending by ministries such as Ministère de l'Emploi et de la Solidarité sociale. For more details, see Volume 1 of the Quebec Public Accounts. (ii) Spending on hospitals and payments to physicians is for 2013, the most recent year available.

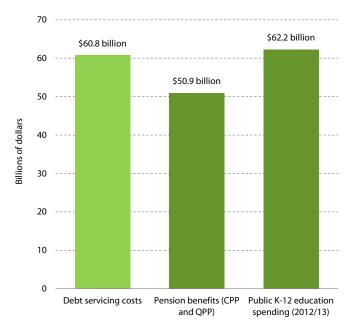
Sources: CIHI (2015); Québec, Ministère des of Finances (2015b and 2015c).

Overall debt servicing costs

In aggregate terms, all levels of government in Canada spent \$60.8 billion on debt servicing costs in 2014/15 (the latest year of available data). This is well above the \$50.9 billion spent on pension benefits through both the Canada and Quebec Pension Plans (CPP and QPP). It is also close to the country's public spending on primary and secondary education (\$62.2 billion in 2012/13, the latest year of available data).

Taken together, these comparisons provide a sense of the magnitude of the interest payments for which Canadian governments are

Figure 7: Consolidated government debt servicing costs compared to other expenditures, 2014/15



Notes:

(i) Public Elementary and Secondary School Education Expenditures is for 2012/2013, the most recent year available.
(ii) Pension benefits for the CPP and QPP are the social benefits as defined by Government Finance Statistics, which are payments to protect people against certain social risks. For more information, see: http://www23.statcan.gc.ca/imdb-bmdi/document/5174
D4 T9 V1-eng.pdf.

Sources: Canada, Department of Finance (2015c); Statistics Canada (2015c and 2015d).

responsible and the extent to which growing government debt can displace resources for important priorities.

Conclusion

Deficit spending and growing government debt have significant costs. Rising government debt can lead to more resources being directed toward interest payments and away from public priorities that help families or improve Canada's

economic competitiveness. This year's round of federal and provincial government budgets is an opportunity for governments to take meaningful action to address the growing debt problem in Canada.

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