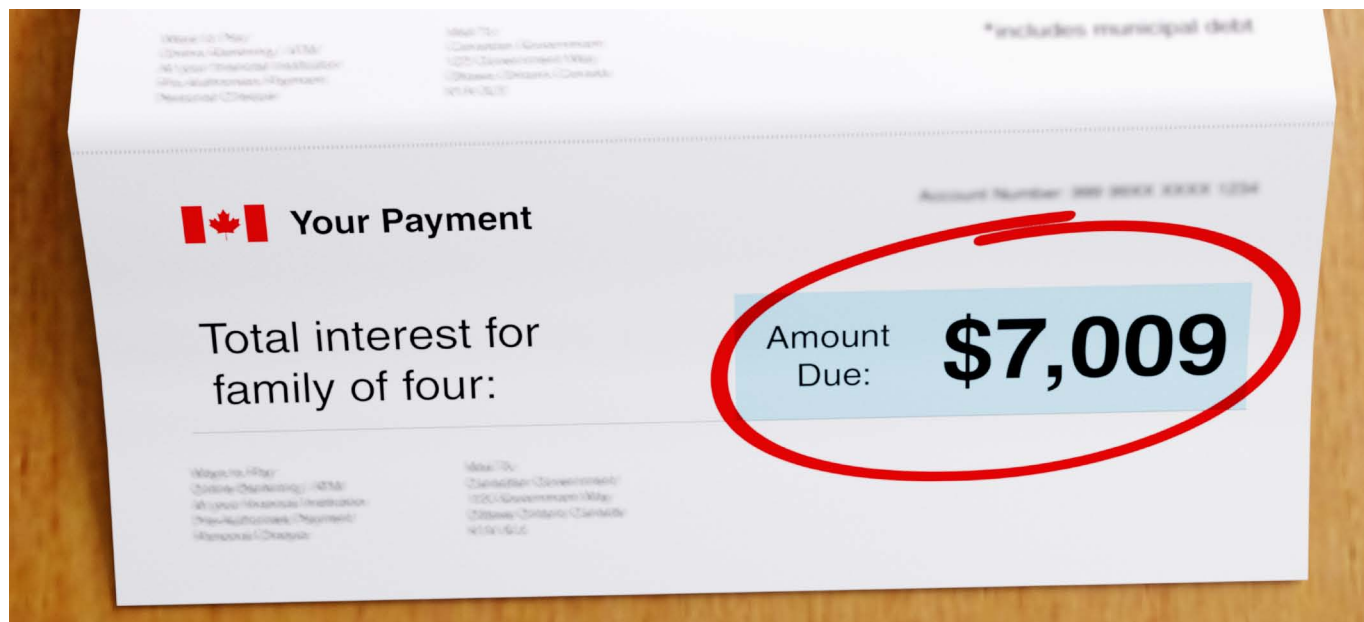


The Cost of Government Debt in Canada, 2017

by Charles Lammam, Hugh MacIntyre, Feixue Ren, and Sazid Hasan



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 \$833 billion in 2007/08 to a projected \$1.4 trillion in 2016/17. This combined debt equals 67.5% of the Canadian economy or \$37,476 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 which must pay interest on borrowing related to mortgages, vehicles, or credit card spending. Spending on interest payments

consumes 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 \$62.8 billion on interest payments in 2015/16. That works out to 8.1% of their total revenue that year and \$1,752 for each Canadian or \$7,009 for a family of four. The total amount spent on interest payments is approximately equal to Canada's total spending on public primary and secondary education (\$63.9 billion, as of 2013/14, the last year for which we have finalized data).

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Introduction

Almost eight years after the 2008/09 recession, budget deficits and increased government debt remain ongoing fiscal issues in Canada. Currently, the federal government and seven provinces are projecting deficits for the 2016/17 fiscal year. Debt levels for all governments are projected to grow in 2016/17¹ and rising debt levels in some provinces have attracted negative attention from credit rating agencies. With governments set to release their budgets in coming months, deficits and debt warrant particularly close attention. The ongoing trend by many Canadian governments of deficit spending and growing government debt carries short- and long-term 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.

Growing government debt

The growth in government debt over the past nine years reversed a positive trend that began in the mid-1990s and extended to the late-2000s when Canada's federal and provincial governments made considerable progress in reducing their debt burdens. By the end of this period, combined federal and provincial debt reached a low of \$833.2 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 Cana-

dian governments down their current path of persistent deficits and growing debt. The trend has largely persisted since then and will likely continue in 2016/17 through the upcoming round of federal and provincial budgets. Figure 1 illustrates the total combined federal and provincial debt (excluding local governments) from 2007/08 to 2016/17. Total net debt in 2016/17 is estimated to be \$1.4 trillion.

This growth in combined federal and provincial debt has not been limited to just a few jurisdictions. The federal government and every province have increased their debt levels between 2007/08 and 2016/17. Table 1 shows the percentage change in debt for the federal and provincial governments over this period, along with the change in debt as a percentage of GDP and per person. The combined federal and provincial debt increased by \$526.6 billion, or 63.2%, in just nine years.

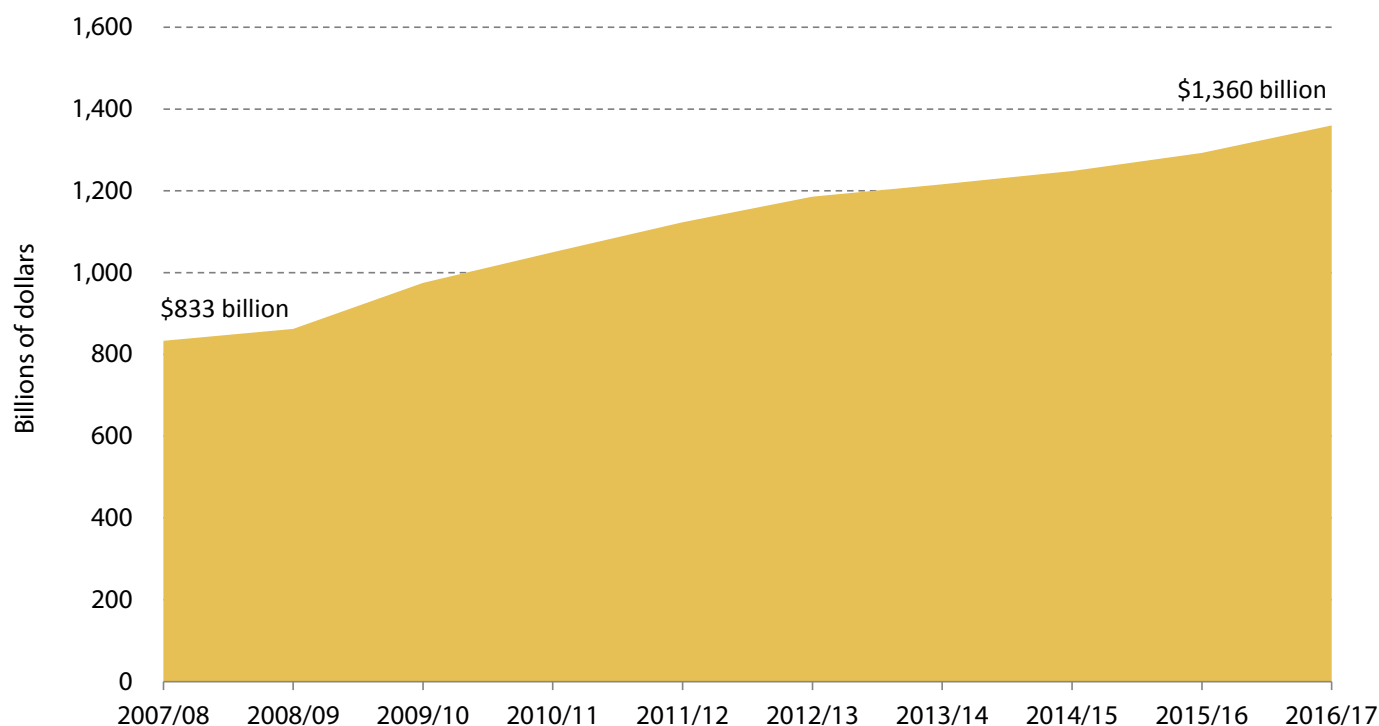
Notably, the federal government was able to reduce its debt level by \$92.7 billion between 1996/97 and 2007/08. But in 2008/09, the federal government began running budget deficits, contributing to the \$211.2 billion in added debt from 2007/08 to 2016/17. In other words, the federal government reduced debt for 11 years, but in just nine years has accumulated more than double the amount of debt it cut in those 11 years.

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 based on the income generated in the jurisdiction. Table 1 displays the increase in combined federal and provincial debt as a share of GDP between 2007/08 and 2016/17. (Table 1 includes a breakdown by prov-

¹ The only exception is British Columbia where net debt is projected to drop slightly—by 0.4%—in 2016/17.

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Figure 1: Combined federal and provincial net debt, 2007/08 to 2016/17 (in \$ billions)



Notes:

- (i) Debt levels for 2016/17 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, Receiver General for Canada (2008-2016); Canada, Department of Finance (2016a); British Columbia, Ministry of Finance (2016a, 2016b, and 2016c); Alberta, Ministry of Finance (2008-2016a and 2016b); Saskatchewan, Ministry of Finance (2008-2016a, 2016b, and 2016c); Manitoba, Ministry of Finance (2008-2016a and 2016b); Ontario, Ministry of Finance (2008-2016a and 2016b); Québec, Ministère des Finances (2008-2016a and 2016b); New Brunswick, Department of Finance (2014-2016a and 2016b); Nova Scotia, Department of Finance (2008-2016a, 2016b, and 2016c); Prince Edward Island, Department of Finance (2008-2015 and 2016); Newfoundland & Labrador, Department of Finance (2008-2016a and 2016b).

ince in 2007/08 and 2016/17.) 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, causing the ratio to climb to a projected 67.5% in 2016/17.

Every Canadian government is expected to see an increase in its debt-to-GDP ratio

from 2007/08 to 2016/17 (see table 1). Alberta is expected to have the largest percentage increase in this ratio, rising by 124.7%. Alberta is unique in that in 2007/08 it was the only jurisdiction in Canada to be in a net financial asset position, where the value of its financial assets exceeded government liabilities. However, as of 2016/17, the province has slid into a net debt position, where its debt will exceed its financial assets. New Brunswick is expected to have the second largest increase in its debt-

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Table 1: Federal and provincial net debt in dollars, as a percentage of GDP, and per person, 2007/08 and 2016/17

	Net debt (\$ billions)			Net debt as percentage of GDP (%)			Net debt per person (\$)		
	2007/08	2016/17	Percent change	2007/08	2016/17	Percent change	2007/08	2016/17	Percent change
BC	23.9	39.5	65.0%	12.1	15.1	25.2%	5,574	8,306	49.0%
AB	-35.0	10.3	129.3%	-13.4	3.3	124.7%	-9,973	2,411	124.2%
SK	5.9	9.1	55.5%	11.2	11.5	2.9%	5,861	7,938	35.4%
MB	10.6	23.1	119.2%	21.2	34.1	60.7%	8,880	17,562	97.8%
ON	156.6	317.9	103.0%	26.0	40.2	54.5%	12,270	22,738	85.3%
QC	124.3	186.3	49.9%	40.6	48.1	18.4%	16,160	22,380	38.5%
NB	7.1	14.1	99.6%	25.0	42.4	69.8%	9,483	18,639	96.6%
NS	12.1	15.2	25.4%	35.7	36.9	3.4%	12,957	15,997	23.5%
PE	1.3	2.2	63.5%	29.1	34.7	19.1%	9,781	14,815	51.5%
NL	10.2	14.6	43.3%	35.1	49.5	41.3%	20,014	27,541	37.6%
FED	516.3	727.5	40.9%	32.8	36.1	10.1%	15,698	20,049	27.7%
FED + PROV	833.2	1,359.9	63.2%	53.0	67.5	27.5%	25,336	37,476	47.9%

Notes:

(i) Debt levels for 2016/17 are based on the latest government projections available at the time of writing.

(ii) Canadian GDP figures for 2016 and provincial GDP figures for 2016 are estimated using forecasts from the TD Economics provincial economic forecasts (TD Economics, 2016).

Sources: Figure 1; Statistics Canada (2016a, 2016b, and 2016c); TD Economics (2016); calculations by authors.

to-GDP ratio, which is projected to grow from 25.0% to 42.4%—a 69.8% jump. Ontario, Canada’s most populous province, recorded a 54.5% increase in its debt-to-GDP ratio, from 26.0% in 2007/08 to 40.2% in 2016/17.² Quebec, the second most populous province, has the second

highest debt-to-GDP ratio among provinces in 2016/17 (48.1%), surpassed only by Newfoundland & Labrador (49.5%).

Table 1 also displays federal and provincial government debt per person in 2007/08 and 2016/17. This is an important measure because ultimately debt needs to be repaid and a per-person calculation shows just how much government debt each citizen is responsible for on average. Newfoundland & Labrador has the highest debt per person at \$27,541. Ontario has the second highest at \$22,738 per person, fol-

² Wen (2015) finds that Ontario’s increased debt since the recession is primarily attributable to operating deficits (driven by current spending on government operations), rather than capital spending for the future.

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lowed closely by Quebec at \$22,380 per person. The combined federal and provincial debt is \$37,476 for every man, woman, and child living in Canada. This represents a 47.9% increase (in nominal terms) from the combined government debt per person of \$25,336 in 2007/08.

The nine-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. The plan for persistent deficits and debt accumulation is despite the fact that governments are generally expecting steady economic growth. Indeed, governments are moving away from the unwritten rule of avoiding budget deficits during periods of economic growth.

In fact, several Canadian governments lack a plan for returning to a balanced budget. A notable example is the federal government, which has not established a target date for deficit elimination. In its latest projections (for the period 2016/17 to 2021/22), the federal government has planned cumulative deficits totalling \$129.5 billion.³ Similarly, governments in Alberta, Manitoba, and Newfoundland & Labrador have no plans to eliminate their deficits.⁴

Even among provincial governments that have committed to a year in which their budget deficit is expected to be eliminated, there is uncer-

tainty about whether some governments will actually deliver. For instance, there is doubt that the Ontario government will be able to achieve a lasting budget balance by 2017/18, which is its stated timeline (FAO, 2016). Other provincial governments, including New Brunswick and Prince Edward Island, have at some point in recent years pushed back their planned date for deficit elimination.

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 tarnished 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.

Allocating federal debt to the provinces

Canadians in the various provinces face different debt burdens partly because the extent of provincial debt is different and partly because the burden of federal debt is not evenly distributed among Canadians in different provinces. Residents in one province may collectively provide a larger share of federal revenues than residents in another province, meaning that residents of the former will collectively bare a larger share of the federal debt burden.

For each province, table 2 displays the level of provincial government debt, the province's share of the federal debt, and the combined federal and provincial debt for 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, 2012-2016). Table 2 also presents the com-

³ As Veldhuis et al. (2016) show, these projections are likely understated and could add up to \$200 billion over the government's five-year fiscal plan.

⁴ The governments of Alberta and Manitoba have both stated to the media that they wish to balance their budgets by 2024, but neither has provided a plan to achieve this goal (Ibrahim, 2016, April 14; Dangerfield, 2016, May 31).

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Table 2: Combined federal and provincial net debt, 2016/17

	Provincial net debt (\$ billions)	Federal portion of net debt (\$ billions)	Combined net debt (\$ billions)	Net debt as a percentage of GDP (%)	Net debt per person
BC	39.5	89.5	129.0	49.3	27,146
AB	10.3	125.4	135.6	44.0	31,896
SK	9.1	22.4	31.5	39.8	27,396
MB	23.1	20.6	43.7	64.5	33,177
ON	317.9	287.6	605.5	76.6	43,304
QC	186.3	138.0	324.3	83.7	38,952
NB	14.1	11.3	25.4	76.5	33,628
NS	15.2	15.0	30.2	73.4	31,795
PE	2.2	2.0	4.2	65.9	28,159
NL	14.6	10.0	24.6	83.5	46,397

Sources: Figure 1; Canada Revenue Agency (CRA), 2012-2016; calculations by authors.

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 (2010-2014) of the net federal tax payable by provinces as a share of the Canada's total net federal tax payable.

bined federal-provincial debt in each province as a percentage of the provincial economy and per person.

As a percentage of the economy, the combined federal-provincial debt burden ranges from a low of 39.8% in Saskatchewan to a high of 83.7% in Quebec, the latter being more than double the former. Newfoundland & Labrador is closely behind Quebec as the province with the second highest combined debt burden as a percentage of GDP (83.5%).

Newfoundland & Labrador has the highest combined debt per person (\$46,397) and British Columbia has the lowest (\$27,146).

Why growing government debt is a problem

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 relationship can be explained in different ways, but one 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—a key driver of productivity and economic growth. In addition, increased debt can hinder economic per-

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formance when governments raise taxes to pay back the debt or cover the interest payments on outstanding debt.

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 in the same way that households 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.

While debt accumulation is a significant driver of debt servicing costs, debt levels alone do not determine the magnitude of interest payments. The interest rate, or the cost of borrowing, also has a significant impact. Recently, 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, 2016).

Despite historically low interest rates, debt servicing costs are still 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 2016/17. 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 priorities.

Table 3: Federal and provincial debt servicing costs, 2016/17

	Debt servicing costs (\$ millions)	Debt servicing costs as percent of revenue (%)
BC	2,577	5.1
AB	1,024	2.4
SK	530	3.9
MB	874	5.7
ON	11,375	8.6
QC	10,047	9.8
NB	700	8.0
NS	830	8.1
PE	127	7.4
NL	1,114	15.9
FED	24,900	8.7

Notes:

- (i) Debt servicing costs for 2016/17 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 2016/17 was obtained by special request to Saskatchewan's Ministry of Finance (Brian Miller, on behalf of Saskatchewan Finance, Communication, October 25, 2016). The debt servicing costs reported in the 2016 budget (\$297.2 million) do not account for pension costs on an accrual basis.

Sources:

Figure 1; Saskatchewan, Ministry of Finance (2016d); Canada, Department of Finance (2016b); calculations by authors.

In relative terms, Newfoundland & Labrador is projected to spend by far the most on interest payments—an amount equivalent to 15.9% of total revenue. Quebec is projected to spend 9.8% of total revenue on interest payments while Ontario and the federal government each estimate their debt servicing costs to be approximately 9% of their total revenue. This means that a number of Canadian governments are now dedicating nearly 10 cents (or more) of every dollar in revenue simply to service their debt obligations.

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Table 4: Combined federal and provincial debt servicing costs, 2016/17

	Provincial debt servicing costs (\$ millions)	Federal portion debt servicing costs (\$ millions)	Combined debt charge (\$ millions)	Combined debt charge per person
BC	2,577	3,064	5,641	1,187
AB	1,024	4,292	5,316	1,250
SK	530	766	1,296	1,127
MB	874	704	1,578	1,198
ON	11,375	9,842	21,217	1,517
QC	10,047	4,723	14,770	1,774
NB	700	388	1,088	1,438
NS	830	513	1,343	1,415
PE	127	68	195	1,309
NL	1,114	342	1,456	2,747

Note:

(a) The combined federal and provincial debt servicing costs is a total of provincial debt servicing costs and the federal portion. The federal debt servicing cost is allocated to each of the provinces based on a 5-year average (2010-2014) of the net federal tax payable by provinces as a share of the Canada's total net federal tax payable.

(b) Combined federal and provincial debt servicing costs (excluding local governments) are \$54.1 million, which translates into an average of \$1,491 for each Canadian.

Sources: Table 2; Canada Revenue Agency (CRA), 2012-2016; calculations by authors.

Canadians pay both the federal and provincial debt servicing costs through their taxes. Table 4 shows the combined federal and provincial debt servicing costs for each province, both as total dollars and per person. The method for distributing federal debt servicing costs among the provinces is the same as the method for distributing federal debt. Newfoundlanders face the highest combined federal-provincial debt servicing cost per person (\$2,747) and Saskatchewanians face the lowest (\$1,127).

It is also important to note that these figures exclude debt servicing costs incurred by local governments. When local governments are included, total debt servicing costs in Canada for 2015/16 (the latest year of available data) totaled \$62.8 billion, or 8.1% of total govern-

ment revenue. This translates into total government debt servicing costs of \$1,752 for each Canadian, or \$7,009 for a family of four (Statistics Canada, 2016c).

Debt servicing costs in perspective

More spending on debt servicing costs invariably means that fewer resources are available for public priorities. To put debt servicing costs into perspective, here we compare those costs with other government spending items, sources of government revenue, and other objects of interest. The following comparisons are for the federal government, Canada's four most populous provinces (Ontario, Quebec, British Columbia, and Alberta), and the country as a whole.

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Federal debt servicing costs

At the federal level, debt servicing costs in 2016/17 are projected to be \$24.9 billion. This represents about three-quarters of the revenue collected from GST alone (\$33.5 billion) (Canada, Department of Finance, 2016b). The amount spent on debt servicing costs is considerably larger than the \$21.0 billion the government expects to spend on Employment Insurance benefits. It is also more than what the federal government expects to spend on transfers to Canadian families in the form of Child Benefits (\$21.8 billion). Indeed, debt servicing costs now consume considerable resources compared to important spending programs. Interestingly, this year federal debt servicing costs (\$24.9 billion) will roughly equal the federal government's planned budgetary deficit (\$25.1 billion).

Debt servicing costs in Ontario

The Ontario government's debt servicing costs in 2016/17 will amount to \$11.4 billion. That is nearly what the province spends on physicians (\$13.1 billion in 2015) and translates into almost \$1 billion spent per month simply to service provincial debt (CIHI, 2015). With rising provincial debt, debt servicing costs are set to increase rapidly in coming years compared to other areas of provincial spending. As delineated in the 2016 provincial budget, Ontario's debt servicing costs are expected to grow at an average annual rate of 5.4% from 2014/15 to 2018/19 (Ontario, Ministry of Finance, 2016c). This is, in fact, the fastest growing line item in the budget, far outpacing the projected annual growth in health spending (1.8%) and education spending (1.2%).

However, as noted, Ontarians are not just responsible for the debt servicing costs of the provincial government; they are also responsible for a portion of federal debt charges. In

Ontario, the combined federal-provincial debt servicing costs will total approximately \$21.2 billion in 2016/17. That is nearly equivalent to what the provincial government collects from the Harmonized Sales Tax (\$23.8 billion) (Ontario, Ministry of Finance, 2016b) or two-thirds of the total revenue derived from provincial personal income taxes (\$33.2 billion).

Debt servicing costs in Quebec

In Quebec, provincial debt servicing costs will amount to an expected \$10.0 billion in 2016/17. That means that approximately 10 cents of every dollar collected by the provincial government will go to debt interest payments and not to programs that Quebeckers value such as health care, education, and social services. Provincial debt charges alone will exceed provincial spending on physicians (\$7.0 billion in 2015) or the support provided by the government for individual Quebeckers and their families (such as welfare and other programs) (\$9.9 billion) (CIHI, 2015; Quebec, 2016b). When we add the portion of federal debt charges that Quebeckers are responsible for (\$4.7 billion), the combined federal-provincial debt charges for Quebec total \$14.8 billion. This is more than the province spends on public K-12 education (\$12.9 billion in 2013/14) or pension benefits offered through the Quebec Pension Plan (\$12.9 billion) (Statistics Canada, 2016d; Retraite Quebec, 2016).

Debt servicing costs in British Columbia

While the British Columbia government has a relatively low debt burden, debt servicing costs still consume a significant amount of government resources. In 2016/17, British Columbia's government expects to spend \$2.6 billion on debt servicing costs—the same amount as the tax revenue collected through MSP premiums (British Columbia, Ministry of Finance, 2016b). BC's portion of federal debt servicing

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costs (\$3.1 billion) increases the overall amount that British Columbians are responsible for in total government interest payments—\$5.6 billion in 2016/17. Total debt charges are comparable to what the provincial government collects from the Provincial Sales Tax (\$6.5 billion) (British Columbia, Ministry of Finance, 2016b).

Debt servicing costs in Alberta

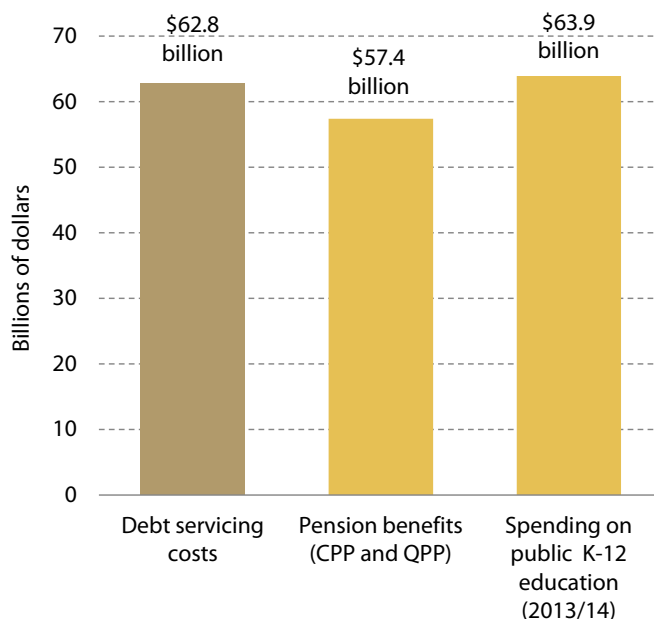
Alberta's legacy of low debt is why its provincial debt servicing costs are currently relatively low (approximately \$1 billion in 2016/17). However, the provincial government has accumulated considerable debt in recent years and is set to add more in the years ahead. After accounting for its share of federal debt servicing costs, the combined federal-provincial debt servicing costs in Alberta total \$5.3 billion. That is more than the provincial government expects to spend on social services (\$5.1 billion), which is a collection of programs generally aimed at helping lower income or vulnerable Albertans (Alberta, Ministry of Finance, 2016c). It is also more than what the Insurance Bureau of Canada estimates to be the value of the insured property damaged by the Fort McMurray wildfires in 2016 (\$3.6 billion) (IBC, 2016).

Overall debt servicing costs

In aggregate, all levels of government in Canada spent \$62.8 billion on debt servicing costs in 2015/16 (the latest year of available data). This is well above the \$57.4 billion spent on pension benefits through both the Canada and Quebec Pension Plans (CPP and QPP). It is also close to the country's spending on public primary and secondary education (\$63.9 billion in 2013/14, 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 2: Consolidated government debt servicing costs compared to other expenditures, 2015/16



Notes:

- (i) Public Elementary and Secondary School Education Expenditures is for 2013/2014, 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:

Statistics Canada (2016c and 2016d); Service Canada (2016).

responsible. They also highlight the extent to which growing government debt can displace resources that would otherwise be used for important priorities.

Conclusion

Deficit spending and growing government debt have significant costs. As government debt rises, more resources will be directed toward

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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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