

The Changing Size of Government in Canada, 2007–2018

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Executive Summary

The size of government in Canada is an important matter of public policy. It directly influences the allocation of society's resources, with consequences for long-term economic growth and prosperity. While this study is primarily focused on the size of government in Canada between 2007 and 2018, it provides important context for developments in the size of government in 2020.

The study uses three measures to examine the size of government over the past decade in Canada and the provinces. First, we examine the size of government as a share of the national and provincial economies. Second, we look at the patterns of government expenditure, that is, the items on which governments are spending their money. Finally, we look at public employment levels as a key driver of the size of government.

Economists have studied the question of whether there is an optimal size of government for decades. While there have been a variety of approaches to the question, with varying results, one comprehensive analysis of OECD countries between 1960 and 2011 found that the growth-maximizing government expenditure share was about 26% of GDP. This provides context for discussing Canada's current size of government.

In this study, we measure the size of government in Canada as a share of GDP, that is, government expenditure in relation to the size of the economy, so as to be able to compare levels of expenditure over time in a consistent manner. Between 2007 and 2018, the share of government in Canada has been growing. In fact, our data reveal that it grew for Canada as a whole, as well as in eight of ten provinces during this period.

The share of the economy that government occupies varies widely across the country. For Canada as a whole (including the federal government and the provincial governments), the share of government was 40.3% in 2018, up from 37.4% in 2007. Among the provinces, in 2018 Alberta had the smallest government, 29.3% of its economy, and Nova Scotia, the largest at 61.6%.

Governments across the country have increased the share of spending in three of the four categories measured. Spending on goods and services increased from 60.5% of total government spending to 61.5% between 2007 and 2018. Transfer payments increased from 25.9% to 27.4%. Capital transfers and subsidies increased from 3.1% to 3.8%. These increases are mirrored by the reduction in debt-servicing costs as a share of total spending, from 10.5% to 7.2%. While reduced debt servicing costs make it cheaper to increase

spending in other categories, there is reason for concern going forward as debt levels rise. Furthermore, low real interest rates that have reduced the cost of financing government borrowings may not persist.

Government employment as a share of total employment in Canada has been increasing as well. While this measure peaked in the 1990–1994 period, it has been steadily increasing for the country as a whole over the past 20 years, from 19.0% in 2000–2004 to 20.2% in 2015–2019. The province where government workers made up the largest share of total employment in the most recent time period was Newfoundland & Labrador, at 27.5%, while Ontario had the smallest share at 18.7%.

The COVID-19 outbreak and ensuing recession is contributing to a dramatic expansion in the size of government in Canada in 2020. Prior to the COVID-19 outbreak and recession, the relative size of government increased at both the federal level and in most provinces between 2007 and 2019. Governments are spending more in all categories except debt servicing costs. This growth in the relative size of government is reason for concern given estimates indicating that the pre-COVID size of government in Canada was already well above the percentage associated with maximum economic growth.

Introduction

The size of government is an important matter of public policy. It directly influences the allocation of society's resources through the level of taxation and spending, as well as the choices of how to tax and where to spend. Incentive effects can emerge from different taxing and spending patterns, which in turn affect the private-sector economy. Overall, the size of government can have important long-term consequences for the economic growth and overall prosperity of society.

This study will focus on two main questions. First, has the relative size of government in Canada, at both the national and provincial levels changed over the past decade? Second, have patterns of government expenditure, both nationally and provincially, changed over the past decade? The relative size of government is measured in two ways: government expenditures as a share of gross domestic product (GDP) and public-sector employment as a share of total employment. For expenditure, the main variable we will examine is total consolidated government spending, which looks at all spending from all levels of government in a given jurisdiction within the period. For employment, we will look at total public-sector employment from all levels of government.

The study proceeds as follows. In the next section, we examine government spending in Canada as a share of GDP, both for the country as a whole and for individual provinces (this study does not examine territories) between 2007 and 2018, the most recent year of data available. We also briefly discuss how government spending in Canada has changed so far in 2020 in light of recent developments arising from COVID-19. Finally, we look at levels of public-sector employment relative to total employment as an alternative measure of government size. The third section of the study focuses on the composition of government spending in Canada, to examine the changes in the relative amount of spending on goods and services, transfer payments, interest on debt, as well as capital spending and subsidies. The final section summarizes our observations from the data presented.

Some context on the size of government

Before proceeding to discuss data on recent changes in the size of government in Canada at the national and provincial government levels, some context on the study of this topic would be useful. In the public-finance literature, substantial attention has been paid to the issue of whether there is an “optimal” size of government, where optimal is evaluated based upon how government size is related to economic growth (Barro, 1991; Tanzi and Schuknecht, 1998; Di Matteo, 2013). To be sure, economic growth might not be the

only criterion against which Canadians evaluate whether a larger or smaller government presence in the economy is desirable and economic growth is a function of variables other than government size; however, it is certainly an important criterion.

For decades, economists have studied the question whether there is an optimal size of government for economic growth, and if so, what that optimal size might be.¹ A substantial amount of research exists suggesting that the size of government in relation to economic growth follows an inverse U-shaped curve, sometimes referred to as the Scully Curve (Scully, 1994; Armeiy, 1995; Di Matteo and Summerfield, 2020). Put differently, as the size of government initially grows (as a share of the economy), the rate of economic growth increases. However, beyond some critical relative size, further growth in government is associated with a decrease in the rate of economic growth.

A possible explanation of the observed empirical relationship is provided by Miller: “Beyond that maximizing level of expenditures, the nation’s economic output will start to decline as government begins to ‘crowd out’ the private sector by assuming more and more of its resources and functions. Essentially, the relationship depicted is one of diminishing marginal returns to government in the economy” (2017: 1). This is supported by empirical research conducted by Ramey (2012), which revealed that for the most part, increases in government spending in the United States had the effect of reducing private spending.

In addition to consuming more resources, larger government can crowd out the private sector in other ways. For example, higher taxes, which have adverse incentive effects on investment and entrepreneurship in the private sector, are needed to finance a larger government. Furthermore, deficit spending and increased debt are associated with higher long-term interest rates (Laubach, 2007). This further discourages private-sector investment as businesses face higher financing costs, which reduce the expected net present value of capital investments (CRS, 2019).

The research above suggests that, beyond some relative size, government will become so large as to have negative effects on private-sector activity and aggregate economic growth. What is the relative size of government that maximizes the rate of economic growth? Empirical studies suggest that the answer depends on the location and time-period studied. One extensive analysis by Livio Di Matteo of the Fraser Institute conducted in 2013 produced interesting results. Di Matteo examined data from the World Bank and the International Monetary Fund, as well as OECD data from 34 countries between 1960

1. For a discussion of the varying views on the relationship between government spending and economic growth, see Nyasha and Odhiambo, 2019.

and 2011 to provide an analysis of the relationship between the size of government and economic growth. He conducted a regression analysis covering the first decade of the twenty-first century and found, after controlling for a number of factors, that a government expenditure level of 26% of GDP maximized economic growth at 3.1% per annum in the countries studied (Di Matteo, 2013).

Di Matteo also identified declining returns to economic growth when the size of government is increased in his regression analysis. For example, a ratio of government expenditure to GDP of 30% is associated with annual economic growth of just under three%, while an expenditure ratio of 40% is associated with an economic growth rate of 2.1%. These findings provide additional evidence supporting the existence of the Scully Curve.

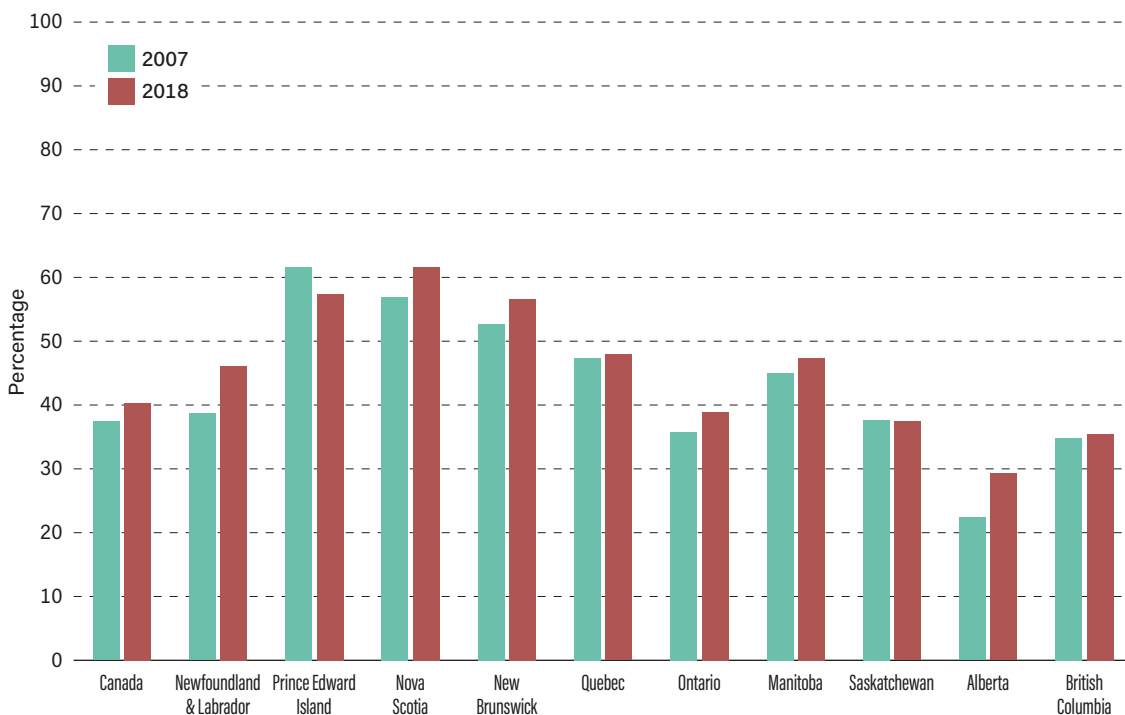
There are a couple of caveats to keep in mind when interpreting Di Matteo's findings. As he notes, the existence of diminishing returns to government spending is a finding that might vary over time and across locations. Di Matteo also notes that the 26% share of GDP spent by government is simply the share associated with maximum economic growth, and that there may be other societal outcomes that could be achieved with greater spending.

It is beyond the scope of this study to pursue any original analysis of the relationship between the relative size of government and economic growth. Nor do we offer any additional discussion of the optimal size of government. We merely note that research on the relationship between the relative size of government and real economic growth provides some policy-related background to our examination of the changing size of government in Canada.

1 The Size of Government in Canada, 2007–2018

In Canada, different levels of government spend money on various activities. The broadest monetary measure of the size of government can be derived by aggregating spending for all purposes, known as total consolidated government spending (**figure 1**). This measure encompasses spending on goods and services, transfer payments, as well as interest on public debt incurred by all three levels of government. When discussing the data for Canada, we refer to the country as a whole, not merely the federal government. When discussing a specific province, we refer to the total spending in that province by all three levels of government (not simply spending by the provincial government). This data is presented as a percentage of GDP to identify the size of government relative to the economy as a whole.²

Figure 1: Total consolidated government spending in Canada as a percentage of GDP, 2007 and 2018



Sources: Statistics Canada, 2020c, table 36-10-0450-01; Statistics Canada, 2020c, table 36-10-0450-01; calculations by authors.

2. Federal government spending at the provincial government level references transfer payments from the federal government to provincial governments, for example, cost-sharing for provincial health care plans. Therefore, the transfer does not lead to “double counting” within the numbers presented here.

Looking at more detailed data in **table 1**, we see a marked increase in government spending relative to GDP at the federal level, as well as in every province save Saskatchewan from 2007 to 2009. This is unsurprising given the 2008/09 financial crisis and recession, and with it an expansion of government spending on income-support programs, as well as a shrinking private sector.

Table 1: Total consolidated government spending as a percentage of GDP, 2007–2018

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Canada	37.4	37.9	42.0	41.3	40.4	39.9	39.3	38.2	39.6	40.3	40.0	40.3
Newfoundland & Labrador	38.7	36.0	50.4	44.7	40.5	43.2	40.1	40.1	45.4	46.4	45.8	46.1
Prince Edward Island	61.6	63.8	65.7	63.8	62.8	61.6	60.5	59.1	58.5	57.3	57.4	57.4
Nova Scotia	56.9	57.5	60.4	59.2	60.8	62.6	61.6	60.9	61.0	60.6	61.2	61.6
New Brunswick	52.7	55.2	57.2	56.5	55.4	55.9	56.7	56.0	56.2	56.7	56.5	56.6
Quebec	47.4	48.1	49.5	49.0	48.9	48.9	49.0	48.7	48.4	48.5	48.4	47.9
Ontario	35.8	37.7	41.0	41.0	40.8	39.6	39.7	38.6	38.2	37.8	38.0	38.9
Manitoba	45.0	45.7	48.9	47.6	48.6	46.7	46.1	45.4	45.9	46.7	46.3	47.4
Saskatchewan	37.7	31.0	36.5	37.0	33.0	32.0	29.9	30.7	33.6	36.7	36.4	37.4
Alberta	22.4	21.9	27.8	26.6	24.8	24.7	23.3	22.0	27.0	30.3	29.3	29.3
British Columbia	34.8	36.1	39.0	38.4	37.6	37.9	37.6	36.0	36.5	36.0	35.3	35.5

Sources: Statistics Canada, 2020b, table 36-10-0222-01; Statistics Canada, 2020c, table 36-10-0450-01; calculations by authors.

Broadening our time frame, the general pattern of relative government spending in Canada from 2007 to 2018 is more complex. Immediately following the recession-related increase noted above, relative government spending at the federal and provincial levels declined from 2010 to 2014, with the exception of spending by New Brunswick.³ The pattern post-2014 shows a general increase in relative government size, although three provinces (Prince Edward Island, Quebec, and British Columbia) show a decrease in relative government size. It might be noted that both the relative share of spending by both the federal and the provincial governments exceeded 26% in recent years.

Three provinces stand out in table 1 as having particularly interesting results, and perhaps for different reasons. Alberta has witnessed the second largest absolute increase in our measure of relative size of government over the full sample period at 6.9 percentage

3. The difference for New Brunswick in the percentages for 2010 and 2014 might well be statistically insignificant.

points.⁴ Having long-been Canada’s smallest government jurisdiction, this rapid expansion of government spending in Alberta has brought it somewhat closer to other provinces, although its ratio is still the lowest of all Canadian provinces. Newfoundland & Labrador also saw a marked expansion in the size of government over the full time period, increasing by over 7 percentage points. Prince Edward Island is the only jurisdiction to see a meaningful reduction in the relative size of government. Strong economic growth combined with spending restraint have allowed the province to shed its long-held title as Canada’s highest spending jurisdiction (although it still ranks comparatively highly).

Overall, the story of relative spending, both at the federal level and in the provinces has been one of growth across virtually all provinces in recent years. Available data limit our examination to the period from 2007 to 2018, and thus do not capture the additional relative growth in government expenditures likely occurring during the recent economic downturn and COVID-19 outbreak.

Additional costs

For the purposes of this study, and specifically in the section above, we focus on public-sector spending as the primary measure of the size of government. While this stands as a good measure, it should be noted that the effective economic influence of government is arguably larger than simply what the government spends. Examples of additional ways by which governments can influence overall economic growth include tax expenditures and regulatory costs.

Tax expenditures are provisions that provide tax deductions or tax credits to companies or individuals for carrying out specific economic activities, such as producing “Canadian-content” entertainment programming. While a tax expenditure is clearly different from direct government spending, it indirectly involves the state influencing private-sector activity and, in this respect, indirectly reflects government’s relative size in an economy. One recent study found that tax expenditures in Canada result in the “true” size of government being about 25% higher than generally reported (Sheikh, 2014).

Regulation also greatly expands the scope of government involvement in the economy. A study by economist Phillip Cross notes that measuring regulation “is important because regulation has been found to stymie innovation, depress productivity, raise prices, and lower living standards” (2014: 2) His study concluded that regulatory measures indirectly contribute to government controlling an additional 10.5% of the Canadian economy, over and above that identified by direct government spending and tax expenditures. Taken

4. Newfoundland & Labrador had the largest absolute increase.

together, this full accounting of the government's role in the economy suggests that the direct and indirect participation of the public sector in Canada accounts for almost two thirds (64%) of all economic activity in Canada (Cross, 2014).

Developments in government spending during 2020

While the data above demonstrate a general growth in the relative size of government in Canada after 2014, they do not capture recent events. The first half of 2020 has been an historic time, both in terms of an expansion in government spending, and in terms of a contraction in the private economy. The full economic consequences of the COVID-19 crisis are not yet known. However, it is useful to put the present situation in context by comparing it to the size of the government numbers reported in this study. First, we will examine new spending commitments from government. Second, we will look at current estimates of the economic contraction resulting from the COVID-19 recession. Finally, we shall contrast those numbers to the trends in the size of government described above.

Government spending has been escalating rapidly in 2020 as governments at all levels have rolled out a variety of programs in response to COVID-19 and the economic downturn. To cite one example of dramatically increased spending, calculations as of June 2020 show that the federal government's per-person program spending will reach \$13,226 this year. To put that number in context: estimated federal per-person spending in 2020 is 50.7% higher than in the 2009 recession, and 74.5% higher than during World War II (Hill, Li, Palacios, and Clemens, 2020).

The data in table one above report total consolidated government spending. Unfortunately, this data is not yet available for 2020, and so a direct comparison between our 2018 data and present spending is not feasible at this time. However, we can describe the various increases in government spending. At the federal level, the most recent estimates from the Economic and Fiscal Snapshot released in July of 2020 show new spending measures resulting in an estimated federal deficit of \$343 billion (Canada, Dep't of Finance, 2020). Looking back at prior spending figures, one sees that the federal government spent \$347 billion in 2019, and was projecting expenditure of \$356 billion in 2020 (Canada, Dep't of Finance, 2019). The government now projects total federal spending for the year to be approximately \$612 billion.

Turning our focus toward the economy as a whole, the latest scenario from the Department of Finance projects a contraction of 6.8% this year. This would reduce nominal GDP to \$2.158 trillion (PBO, 2020). Applying the \$612-billion spending estimate described above, federal government spending alone could account for 28.3% of the country's GDP this year. The impact of recent developments can be put into context

by comparing pre- and post-COVID estimates of federal government spending for 2020. As noted above, the pre-COVID federal spending estimate for 2020 was \$356 billion. The last pre-COVID estimate from the Parliamentary Budget Office projected GDP in 2020 to be \$2.3 trillion (PBO, 2020). This yields an estimate of federal spending as a share of GDP of 15.4%, compared to the 28.3%—nearly double—mentioned above.

It is important to stress that this increase is an estimate based on where things stand currently, and there is significant uncertainty surrounding how the remainder of the year will unfold. This projection is therefore only meant to provide an insight into how much the relative size of government (measured by direct spending) has changed compared to the pattern seen from 2007 to 2018.

Without going into detailed projections for each province, it is also worth mentioning new spending commitments at the provincial level. Provincial commitments to date in 2020 total about \$40 billion. Canada's largest provinces have committed significant shares of GDP to new spending programs. Estimates range from between 1.5% in Quebec to 2.5% in Alberta, with estimates for Ontario and British Columbia falling somewhere in between (Burelton and Sondhi, 2020).

The combination of increased spending by the federal and provincial governments combined with a contracting GDP suggests that relative government spending in 2020 and perhaps beyond will be substantially greater than the values reported in table 1. To be sure, there is substantial uncertainty surrounding our projections given the unknown course of the COVID crisis and any subsequent economic recovery. Nevertheless, a possible doubling of the size of the federal government alone as a share of the economy represents a dramatic change in Canada's economy.

Developments in public-sector employment

We now turn our attention to a different measure of the size of government: government employment as a share of total employment. In every jurisdiction in Canada (and indeed throughout the developed world), government spending represents a relatively large share of the economy as a whole. Within that envelope, the single biggest driver of spending is typically public-sector employment.

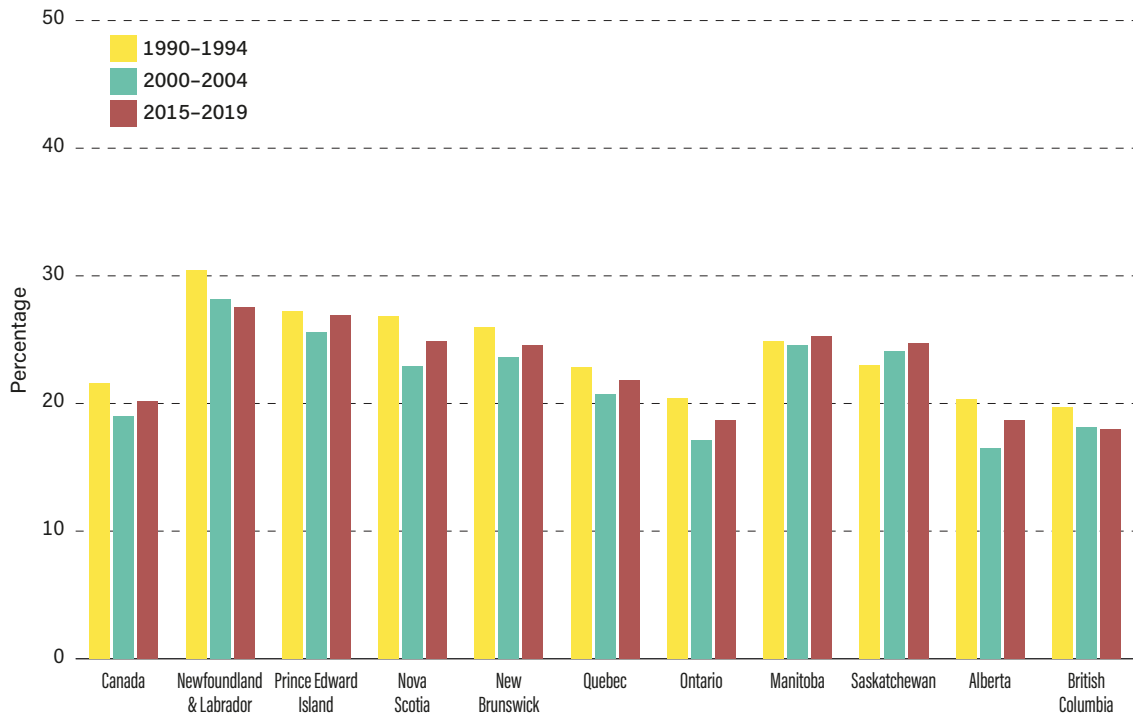
Table 2 and **figure 2** report the average ratio of public-sector employment to total employment for six sub-periods from 1990 to 2019. Comparing the average of the first sub-period (1990-1994) to that of the last (2015–2019), we see that relative public-sector employment declined in most jurisdictions, with the notable exceptions of Manitoba and Saskatchewan. However, the ratio increased for most provinces between sub-periods

Table 2: Public-sector employment as a percentage of total employment, five-year averages, 1990–2019

	1990–1994	1995–1999	2000–2004	2005–2009	2010–2014	2015–2019
Canada	21.6	19.6	19.0	19.6	20.1	20.2
Newfoundland & Labrador	30.4	29.4	28.2	27.4	28.8	27.5
Prince Edward Island	27.2	26.3	25.6	26.6	28.3	26.9
Nova Scotia	26.8	24.8	22.9	24.0	24.3	24.9
New Brunswick	26.0	23.8	23.6	24.3	24.1	24.6
Quebec	22.8	20.9	20.7	20.8	21.2	21.8
Ontario	20.4	18.1	17.1	18.5	19.2	18.7
Manitoba	24.9	24.0	24.6	25.6	25.8	25.3
Saskatchewan	23.0	22.5	24.1	24.7	24.4	24.7
Alberta	20.3	17.3	16.5	17.2	16.9	18.7
British Columbia	19.7	18.2	18.1	17.8	18.5	18.0

Sources: Statistics Canada, 2020a, table 14-10-0027-01; calculations by authors.

Figure 2: Public-sector employment as a percentage of total employment, five-year averages, 1990–2019



Sources: Statistics Canada, 2020a, table 14-10-0027-01; calculations by authors.

2000–2004 and 2015–2019. Further, comparing the averages for the 2010–2014 sub-period to those of 2015–2019, half of the provinces, as well as Canada as a whole, saw increasing shares of public employment. Perhaps most notable is Alberta, which saw the share of public-sector employment increase from 16.9% to 18.7% over that time frame. This is consistent with the earlier reported data on spending, which documented Alberta's increased relative spending by government.

Interestingly, the share of public employment to total employment does not appear to spike during the 2007–2009 recession and financial crisis. We know that government spending did increase around this time, so the data suggests that increased government spending was funnelled primarily into spending unrelated to employment.

Overall, the results from tables 1 and 2 broadly identify an increase in relative government spending in recent years consistent with increased government employment as a share of total employment.

2 Distribution of Government Spending in Canada, 2007–2018

Spending on goods and services⁵ make up a large share of the spending commitments at the federal and provincial government levels in Canada. Indeed, when government spending is broken down between goods and services, transfer payments, and debt servicing, spending on goods and services represents the single largest category of government spending as shown in **table 3**. Expenditures on goods and services excludes capital expenses (Statistics Canada, 2018). Generally speaking, this category funds the standard line departments of government.

Table 3: Total consolidated government spending on goods and services as a percentage of total government spending, 2007–2018

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Canada	60.5	61.1	61.4	61.0	61.5	62.0	62.1	62.6	62.3	61.9	61.6	61.5
Newfoundland & Labrador	61.1	60.2	60.8	62.2	62.5	61.2	62.1	62.6	62.6	61.6	61.3	62.0
Prince Edward Island	60.9	61.7	60.7	61.8	61.3	61.4	61.9	62.5	61.8	60.9	60.5	60.3
Nova Scotia	63.7	64.6	64.1	64.4	64.6	64.5	65.0	65.5	65.1	64.9	64.8	64.9
New Brunswick	61.4	62.2	62.2	62.4	62.1	62.4	62.1	62.4	61.6	61.7	61.6	62.0
Quebec	54.6	54.1	55.0	55.0	55.2	55.2	55.6	56.0	55.7	55.6	55.5	55.8
Ontario	62.4	63.4	62.9	61.9	62.3	63.3	63.0	63.6	63.4	63.1	62.6	62.3
Manitoba	63.0	64.6	65.0	64.6	64.5	66.1	66.5	66.7	65.9	65.0	64.9	64.7
Saskatchewan	60.8	61.6	62.7	61.4	62.2	62.6	64.2	64.5	64.9	63.5	63.2	63.4
Alberta	66.4	67.2	68.3	67.9	70.1	70.7	70.5	71.0	70.0	68.9	67.5	68.0
British Columbia	62.0	62.7	63.1	63.0	63.0	63.2	63.8	64.0	63.5	62.9	63.2	63.1

Sources: Statistics Canada, 2020c, table 36-10-0450-01; calculations by authors.

The data in table 3 reports spending on goods and services as a percentage of total government spending. In general, we see that this category of spending accounts for a modestly

5. Spending on goods and services is also known as general government final consumption expenditure. This is government spending to fund the standard line departments of government, such as health care, education, and so on, and the wages, salaries, and raw materials therein. It includes only spending for the current year, not spending on capital account items or spending captured by the other categories discussed below.

increasing share of government expenditure over the full time period (2007–2018).⁶ However, over the past five years, this expenditure category has decreased as a share of total expenses in all provinces except Quebec, as well as for Canada as a whole.

The second largest general category of government expenditure is transfer payments. For our purposes, transfer payments include current transfers to households, non-profit institutions serving households, and transfers to non-residents. The majority of spending in this category is for transfers to households. For example, at the federal level, this would include the GST credit, child-tax benefit, OAS, and other categories, as well other similar transfers at the provincial level.

As reported in **table 4**, transfer payments as a share of total government spending increased in every province between 2007 and 2018. This increase is especially notable after 2014. The Atlantic Provinces lead the way for transfers as a percentage of total spending, with New Brunswick (30.3%), Newfoundland & Labrador (30.0%), and

Table 4: Total consolidated government spending on transfer payments as a percentage of total government spending, 2007–2018

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Canada	25.9	26.1	26.6	26.7	26.0	25.9	26.3	26.2	26.9	27.5	27.8	27.4
Newfoundland & Labrador	25.9	26.9	26.5	25.6	25.6	26.5	26.4	26.7	27.5	29.2	30.5	30.0
Prince Edward Island	26.1	25.6	26.4	26.4	26.5	27.1	27.3	27.7	28.5	29.5	30.0	29.8
Nova Scotia	24.5	24.5	25.6	25.5	25.3	25.8	25.9	25.7	26.5	27.1	27.4	27.3
New Brunswick	26.5	26.5	27.1	27.0	27.0	27.5	28.2	28.5	29.7	30.4	30.8	30.3
Quebec	27.4	28.8	29.1	28.9	28.3	28.7	28.8	29.0	29.8	30.0	29.8	29.0
Ontario	25.2	25.0	26.3	26.8	25.7	25.0	25.5	25.3	25.8	26.2	26.9	26.6
Manitoba	22.2	22.1	22.4	22.5	21.9	22.1	22.3	22.7	23.8	24.7	24.9	24.7
Saskatchewan	25.4	26.5	25.7	24.2	24.3	25.1	26.2	25.7	26.3	26.8	26.9	26.7
Alberta	22.6	22.1	21.9	22.0	21.2	20.6	21.4	21.3	22.4	24.0	24.3	24.2
British Columbia	25.4	25.4	25.8	26.0	25.9	26.2	26.1	26.3	27.0	27.9	28.0	27.8

Sources: Statistics Canada, 2020c, table 36-10-0450-01; calculations by authors.

6. Data for categories of government expenditure are unavailable prior to 2007 as a result of the transition to the Financial Management System estimates that replaced the Consolidated Government Finance system in 2009.

Prince Edward Island (29.8%) having the three highest shares in the country in 2018. Alberta (24.2%) and Manitoba (24.7%) are the provinces with the lowest percentage of transfer payments as a share of total spending.

The discussion above detailing government spending in the areas of goods and services, as well as transfer payments, generally revealed an increase in these spending categories as a percentage of total government spending. In order for the share of spending in those two large categories to have increased, relative spending had to have decreased in some other spending category. In fact, that category is payments on debt interest. Every province, as well as the federal government, issues bonds as a means of raising money. Like any business or household, governments must pay interest on those bonds, and thus interest on debt. When expressed as a percentage of total government spending, interest payments have declined consistently at the national and provincial government levels over the entire sample period (**table 5**).

Table 5: Total government expenditures on debt interest as a percentage of total government spending, 2007–2018

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Canada	10.5	9.7	8.8	8.7	8.8	8.6	8.4	8.1	7.7	7.4	7.1	7.2
Newfoundland & Labrador	11.5	11.2	10.7	10.0	9.4	9.9	9.5	8.6	8.0	7.3	6.3	6.2
Prince Edward Island	9.2	8.5	8.1	7.5	7.7	7.3	7.3	7.1	6.7	6.2	5.9	6.1
Nova Scotia	10.0	9.3	8.5	8.1	7.9	7.6	7.4	6.9	6.5	6.1	5.8	5.9
New Brunswick	10.6	9.8	9.2	9.1	9.2	8.6	8.4	8.0	7.5	7.0	6.6	6.6
Quebec	13.1	12.3	11.2	11.5	11.7	11.3	11.2	10.9	10.6	10.2	9.9	10.0
Ontario	10.4	9.6	8.6	8.6	8.7	8.6	8.5	8.2	7.7	7.4	7.1	7.0
Manitoba	11.7	10.8	9.6	9.4	9.2	8.9	8.6	8.2	7.9	8.1	8.0	8.3
Saskatchewan	8.9	8.3	7.5	6.7	6.6	6.4	6.1	5.8	5.3	5.0	5.1	5.4
Alberta	7.1	6.4	5.5	5.6	5.7	5.3	5.2	5.1	4.9	4.4	4.5	5.1
British Columbia	9.7	8.9	8.1	8.0	8.1	7.5	7.4	7.0	6.7	6.3	6.0	6.1

Sources: Statistics Canada, 2020c, table 36-10-0450-01; calculations by authors.

Many provinces experienced significant declines in this spending category. For example, six of ten provinces were paying 10% or more of their total spending share⁷ on interest

7. This is not necessarily the share of the provincial budget directed toward payments on interest. It is important to remember these figures represent all government spending in the province for the period examined. Therefore, we are referring to a given province's share of the payments.

payments in 2007, while just one province, Quebec, was doing so in 2018. For Canada as a whole, interest payments as a share of government spending declined from 10.5% to 7.2% from 2007 to 2018.

While governments have been spending a declining share of their budgets on interest payments, two important observations might be made. First, the decline has occurred during a period of historically low interest rates (Trading Economics, 2020). Second, other research has shown that total government debt has been increasing in Canada over the past ten years (Fuss and Palacios, 2020). The implication is that future interest payments on government debt might increase substantially, both absolutely and relative to total government spending, if interest rates increase in the future.

The final categories of government spending that we will examine are capital transfers and subsidies. These are two separate but similar categories of spending that have been combined here for purposes of convenience. Capital transfers are payments by government toward the capital account of the recipient, often related to assets and capital formation, that is, items with a life longer than one year. Subsidies are payments to enterprises that affect their current accounts, such that they affect the enterprise's operating account in the opposite manner of taxes (Statistics Canada, 2020).

As reported in **table 6**, the share of government spending dedicated to capital transfers and subsidies in Canada over the past ten years shows mixed results. For Canada as a whole, this category has increased from 3.1% of total spending in 2007 to 3.8% in 2018. However, that figure is largely influenced by the fact that the two largest provinces, Quebec and Ontario, have both increased their share of spending in this category. Ontario has had the largest increase in the country in this category, with the percentage of spending on capital transfers and subsidies more than doubling, from 2.0% in 2007 to 4.2% in 2018. However, the share of spending in this category either remained constant or declined in six of ten provinces.

As shown in table 6, the total share of spending in this category is small relative to the other categories of spending described above. During the time period examined, only one province in one year spent more than 5% of its government spending on this category—Quebec in 2018 at 5.2%.

Table 7 provides a picture of the distribution of government expenses for the country as a whole between 2007 and 2018. When taking into account all provinces as well as the federal government, we see overall increases in the share of spending dedicated to goods and services, transfer payments, as well as capital transfers and subsidies. As explained above, this is made possible by a declining share of spending going toward interest on government debt.

Table 6: Total government expenditures on capital transfers and subsidies as a percentage of total government spending, 2007–2018

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Canada	3.1	3.1	3.2	3.5	3.7	3.5	3.2	3.1	3.1	3.2	3.6	3.8
Newfoundland & Labrador	1.5	1.8	1.9	2.2	2.5	2.4	2.1	2.1	1.9	1.9	1.8	1.8
Prince Edward Island	3.9	4.3	4.9	4.3	4.5	4.2	3.4	2.7	2.9	3.3	3.7	3.8
Nova Scotia	1.8	1.6	1.8	2.0	2.2	2.1	1.8	1.9	1.8	1.9	2.0	1.9
New Brunswick	1.5	1.4	1.5	1.5	1.8	1.5	1.3	1.1	1.1	0.9	1.0	1.1
Quebec	4.9	4.7	4.6	4.7	4.8	4.7	4.4	4.2	4.0	4.3	4.8	5.2
Ontario	2.0	1.9	2.2	2.7	3.4	3.1	3.0	2.9	3.0	3.2	3.4	4.2
Manitoba	3.2	2.5	3.0	3.5	4.4	2.9	2.6	2.5	2.3	2.2	2.2	2.3
Saskatchewan	4.8	3.6	4.2	7.6	6.9	5.9	3.5	4.0	3.5	4.7	4.8	4.5
Alberta	3.9	4.3	4.3	4.5	3.0	3.4	2.8	2.7	2.8	2.7	3.7	2.7
British Columbia	3.0	3.0	3.1	3.0	3.0	3.1	2.7	2.7	2.7	2.9	2.8	3.0

Sources: Statistics Canada, 2020c, table 36-10-0450-01; calculations by authors.

Table 7: Distribution of total government expenditures, Canada, 2007–2018

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Final goods & services	60.5	61.1	61.4	61.0	61.5	62.0	62.1	62.6	62.3	61.9	61.6	61.5
Transfer payments	25.9	26.1	26.6	26.7	26.0	25.9	26.3	26.2	26.9	27.5	27.8	27.4
Capital transfers & subsidies	3.1	3.1	3.2	3.5	3.7	3.5	3.2	3.1	3.1	3.2	3.6	3.8
Interest on debt	10.5	9.7	8.8	8.7	8.8	8.6	8.4	8.1	7.7	7.4	7.1	7.2

Sources: Statistics Canada, 2020c, table 36-10-0450-01; calculations by authors.

In fact, the share of spending on government debt declined 3.3 percentage points, which represents the largest change in any single category between 2007 and 2018. This decline accompanied an increase of transfer payments by 1.5 percentage points, in goods and services by 1 percentage point, and in capital transfers and subsidies by 0.7 of a percentage point.

Conclusion

Government spending as a share of GDP has increased in Canada, both at the federal and provincial government levels, particularly in the post-2014 period. The COVID-19 crisis—with an accompanying decline in overall economic activity—raises prospects for even larger increases in the share going forward. This development is of concern given that relative government spending pre-COVID already exceeded estimates of relative government spending consistent with maximizing the rate of economic growth.

Governments in Canada are dedicating an increasing share of their total spending to goods and services, transfer payments, and capital transfers and subsidies. This is accompanied by a declining share of spending on interest payments, which may not be sustainable given the concurrent trend of debt accumulation and the potential for future increases in interest rates.

There is some variance at different times and across different provinces within the total picture of government spending. Measured as a share of the provincial economy, the Atlantic Provinces as well as Quebec and Manitoba have the largest government spending footprint in the country. While Alberta continues to have the lowest ratio of government spending to provincial GDP, it has also experienced the largest increase in that ratio in recent years.

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