

Size of Government

There are two sides to fiscal policy: government spending and government revenues. Too often, we discuss spending as if it were a function of tax revenues when the reality is that spending drives taxation. This study, like previous studies of provincial prosperity undertaken by The Fraser Institute, *Returning British Columbia to Prosperity* (Clemens and Emes 2001c) and *Saskatchewan Prosperity: Taking the Next Step* (Clemens, Emes, and Esmail 2002), focuses primarily on the size of government based on government spending.

In this section, we give an overview of the research into the *optimal* size of government, its accordant economic effects, and the benefits to Ontario of having government of optimal size. We also present empirical evidence for a number of measures of the size of government in Ontario and compare the performance of the province to the Canadian national average and the performance of other Canadian provinces and American states.

Size of government and economic growth

Studies of single countries

Philip Grossman (1988) investigated the size of the American government and its effect on economic growth using data for 1929 to 1982. He hypothesized that government spending would initially contribute positively to overall economic growth but that the decision-making processes of government would lead to incremental expenditures that result in an inefficient quantity of public goods. Grossman's analysis confirmed his hypothesis that there was indeed a negative relationship between growth in government and the rate of economic growth (Grossman 1988).

Richard Vedder and Lowell Gallaway investigated the size of the US government and its effects on economic growth for the Joint Economic Committee of the US Congress. Among their many findings were that large transfer payments had negative consequences

for economic growth, that the moderate downsizing of the federal government between 1991 and 1997 had resulted in increased rates of economic growth, that the marginal effect of government activities is negative, and that further downsizing of government would be growth-enhancing (Vedder and Gallaway 1998). In fact, Vedder and Gallaway recommended reducing the size of the US government to 17.45% of GDP in order to gain sizable and permanent increases in GDP (Vedder and Gallaway 1998).

Edgar Peden and Michael Bradley attempted a comprehensive examination by measuring the effect of the size of government on economic output and productivity using US data between 1949 and 1985. They concluded that the "level of government activity in the economy has a negative effect on both the economic base [GDP] and the economic growth rate [GDP growth]" (Peden and Bradley 1989: 239). They further concluded that increases in the size of government relative to the overall size of the economy had long-lasting negative effects on GDP growth. Finally, they found that "permanent increases in the share of output devoted to the government result in a significant erosion in productivity" (241). Peden and Bradley concluded that the size of government, "beyond the optimal point" (243) resulted in lower GDP, lower rates of GDP growth, and significant deterioration in productivity. In a supplemental study, Peden attempted to quantify the optimal size of government in the United States using data from 1929 to 1986. He found that the size of government that most facilitated growth of productivity over this period was approximately 17% of GDP (Peden 1991).

Gerald Scully of the University of Texas (Dallas) investigated the aggregate tax burden that maximized the rate of economic growth in the United States. Using data for the years 1949 to 1989, Scully concluded that the overall tax burden that maximized growth for the United States was between 21.5% and 22.9% (Scully 1995).²¹

The Fraser Institute's Senior Fellow, Herbert Grubel, and co-author Johnny C.P. Chao investigated the size of government in Canada that maximized rates of economic growth between 1929 and 1996. They concluded that, between these years, government that consumed approximately 34% of GDP maximized GDP growth (Chao and Grubel 1998).

William Mackness examined government spending in Canada and concluded that the optimal level of government spending was in the area of 20% to 30% of GDP, substantially below the levels currently maintained by government (Mackness 1999).

Cross-sectional studies using data from several countries

Harvard economist Robert Barro investigated a wide variety of variables in an attempt to determine their affect on economic growth. He found that government consumption—that is, expenditures by government not deemed to be public investment such as education and defence—“had no direct effect on private productivity ... but lowered saving and growth through the distorting effects from taxation or government-expenditure programs” (Barro 1991: 430). He further found a “significantly negative association” between government consumption relative to the economy (government as a percent of GDP) and GDP growth (430).

Gerald Scully explored the relationship between tax rates, tax revenues, and economic growth for 103 countries. He found, in general, that economic rates of growth were maximized when governments took no more than 19.3% of GDP (Scully 1991). His conclusion was that “increases in the size of the government share of the economy adversely affect economic growth and the allocation of resources ... [and] that the rise in the size of the government has had a substantial depressing effect on economic growth (Scully 1989: 161).

Kevin Grier and Gordon Tullock examined economic growth among OECD countries between the years 1951 and 1980. They concluded that “government growth is negative and significant” in its effect on economic growth (Grier and Tullock 1989: 274).

Zsolt Besci of the Federal Reserve Bank of Atlanta investigated the effects of regional differences in taxa-

tion in the United States. He concluded that the relative marginal tax rates had a statistically significant negative relationship with relative state growth (Besci 1996).²²

Richard Vedder investigated the effect of state and local government spending on rates of economic growth in the American states. Vedder concluded that increased government spending, particularly when this included increased spending on income assistance, had a significantly negative effect on the growth rate of a state's GDP (Vedder 1993).

Recently, Stefan Folster and Magnus Henrekson (2001) examined the growth effects of government spending and taxation in “rich” countries. Folster and Henrekson limit their study to rich countries due to differences in the composition of government spending between rich and poor countries.²³ Covering the period from 1970 to 1995, Folster and Henrekson find a robust negative relationship between government expenditure and economic growth. In addition, they conclude that a 10% increase in government expenditure as a percent of GDP is associated with a decrease in the economic growth rate by 0.7 to 0.8 percentage points (Folster and Henrekson 2001).

Similarly, Dar and AmirKhalkhali (2002) concluded that total factor productivity growth and the productivity of capital are weaker in countries where the size of government is larger. They specifically looked at 19 OECD countries between 1971 and 1999 and found that those countries with smaller governments enjoyed efficiencies resulting from fewer policy-induced distortions (e.g. burden of taxation), greater market discipline, which fosters more efficient use of resources, and the absence of crowding-out effects that weaken incentives for capital investment.²⁴

Bruce Benson and Ronald Johnson looked at the impact of taxes on future capital formation across different countries using time-series data. They concluded that movement upwards in the relative tax rates resulted in downward movement in the relative amount of investment. In other words, higher tax rates resulted in lower capital formation in the future. Based on this negative relationship, Benson and Johnson concluded that “taxes negatively affect economic activity” (Benson and Johnson 1986: 400).

Most recently Alesina et al. (2002) investigated the effects of large changes in government fiscal policy on business investment. Among their findings, they concluded that increases in public spending (an increase in the size of government) resulted in increased private-sector labour costs that reduced business profits and investment. Specifically, a 1-percentage point increase in government spending relative to GDP resulted in a decrease in the investment-to-GDP ratio of 0.15 percentage points and a cumulative fall of 0.74 percentage points after 5 years.²⁵ In addition, they found that increases in taxes reduced profits and investment but that the magnitude of the effects was smaller than resulting from the increase in expenditures. Finally, and perhaps most convincing of the powerful relationship between the size of government and economic growth, is their conclusion that fiscal stabilizations that led to economic growth consisted mainly of spending cuts while those associated with downturns were characterized by tax increases.

There is strong and mounting evidence that there is a relationship between the size of government and a country's, a province's, or a state's economic performance. Intuitively, this makes a great deal of sense as we all acknowledge that there are critical services that must be provided, financed, or regulated by government. The question addressed in a majority of these studies is how large that role is given an objective of efficiently allocating resources and maximizing economic growth. The indication from an overwhelming majority of the studies available is that most countries, including Canada, have surpassed the optimal size of government.

***Size of government and social progress—
high cost for small results***

The spread of government into areas of social welfare and increased income subsidization that began in the 1960s was rationalized as achieving greater social progress. Advocates of bigger government argued that society could bear higher tax burdens in order to achieve more social progress. The data is overwhelming, however, that increased government does not lead to increased rates of economic growth but to quite the opposite. However, many still cling to the notion that we as a society are willing to give up some economic growth in order to

achieve greater social progress. Unfortunately, the high cost of big government, in terms of both direct taxation and the attendant reduction in economic growth has not been matched by advancements in social progress.

Vito Tanzi and Ludger Schuknecht, economists with the International Monetary Fund (IMF), carried out a series of studies of the size of government and social progress. They concluded that

countries with “small” governments generally do not show worse indicators of social and economic well-being than countries with “big” government—and often they achieve an even better standard. Countries with “small” governments can provide essential services and minimum social safety nets while avoiding the disincentive effects caused by high taxes and large-scale redistribution on growth, employment, and welfare. (Tanzi and Schuknecht 1998: 70)

They found that, in countries with governments whose expenditures exceed 50% of GDP, social progress is not materially (to a statistically significant degree) greater than it is in countries with smaller governments, those whose expenditures are less than 40% of GDP. In fact, Tanzi and Schuknecht found that social progress is no greater in countries with medium-sized governments (those with expenditures between 40% and 50% of GDP) than it is in countries with smaller government (Tanzi and Schuknecht 1995, 1997a, 1997b, 1998a, 1998b).

Another important study on social progress completed by Gerald Scully buttresses the findings of Tanzi and Schuknecht. Professor Scully examined data from 1995 for 16 indicators of social progress, including literacy, infant mortality, life expectancy, caloric consumption, access to health care, infrastructure, political freedom, civil liberties, and economic freedom, across 112 countries. He concluded that there was little or no difference in social outcomes among countries in which governments spent less than 40% of GDP and those that spend in excess of 50% of GDP (Scully 2000b). Another striking conclusion reached by Scully is that government spending ceases to yield any further social progress, as measured by the 16 social indicators, at 18.6% of GDP for advanced countries (Scully 2000b). There is some

variance among countries; for instance, the rate at which government spending ceases to provide any marginal benefits in Canada is 19.5% of GDP.

Conclusion

The evidence regarding the size of government and economic growth is clear: optimally sized government achieves higher rates of economic growth, higher levels of productivity, greater capital formation, and ultimately greater prosperity. Also, the notion that societies trade-off a small amount of economic growth in order to achieve greater levels of social progress is factually incorrect. In fact, increasing evidence points to the fact that small-sized governments providing the critical services required of government achieve the same or even greater levels of social progress than large or even medium-sized governments.

Size of government in Ontario

This study employs three primary sources, as well as supplementary supporting documents, to assess government spending: Statistics Canada's Financial Management System (FMS), Statistics Canada's Provincial Economic Accounts, and the Province of Ontario's 2002 Budget. Statistics Canada's Financial Management System is the best source for inter-governmental comparisons because it is standardized across jurisdictions.²⁶ The Financial Management System coupled with the Provincial Economic Accounts is the basis for our historical analysis. Information from Ontario's 2002 Budget is used to gain some insight into the government's future plans.

Provincial government spending

Spending Figure 1 illustrates real government spending in Ontario since 1980/81.²⁷ In real terms, provincial government spending in Ontario increased from \$42.0 billion in 1980/81 to over \$68.6 billion in 2001/02,²⁸ an increase of 63.3%.

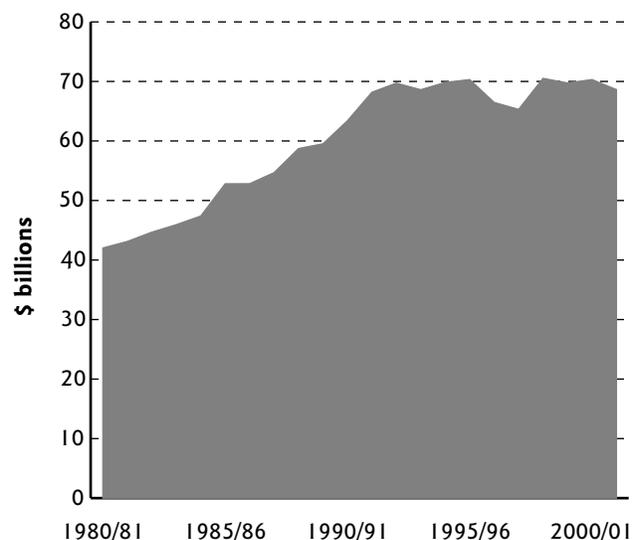
Year-over-year increases are almost stable in the initial few years presented in Spending Figure 1. Increases in spending accelerate beginning in 1985/86 and continue through to 1992/93. In fact, the rate of increase in real government spending during this period aver-

aged 5.0%, more than double the average rate for the entire period (2.4%). Increases in real spending subside substantially until they become nearly flat beginning in 1993/94. In fact, it is within this period that real spending actually declined for two consecutive years, 1996/97 and 1997/98.

Shortcomings of provincial government spending as a measure

Although provincial government spending is one of the most readily used and accessible measures of government spending, it has a number of serious shortcomings. First, it does not account for population growth. If government spending grows at a rate less than population growth, then government spending on a per-capita basis is actually declining. Second, provincial government spending fails to account for the decentralization of spending or revenue responsibilities to municipalities and regions since a provincial government may reduce its own spending while increasing municipal spending by downloading responsibilities to cities and regions. Thus, an observer who looked exclusively at provincial spending could incorrectly conclude that government spending is declining. Third, provincial government spending does

Spending Figure 1: Ontario—Real Provincial Spending (\$2001)



Sources: Statistics Canada, Provincial Economic Accounts; Statistics Canada, Public Institutions Division, Financial Management System; calculations by the authors.

not account for the size of the economy since the overall burden of government depends upon how much income the government spends relative to the total amount of income available in the economy. The following measures of the size of government in Ontario attempt to overcome these shortcomings.

Consolidated provincial and local government spending

Spending Figure 2 shows consolidated government spending for Ontario between 1989/90 and 2001/02.²⁹ The data presented in this figure includes provincial government spending as well as total municipal government spending in Ontario and, thus, eliminates the shortcomings associated with the shifting of responsibilities between different levels of government. Spending Figure 2 shows a pattern similar to that presented in Spending Figure 1, which depicted provincial government spending only. Real consolidated spending in Ontario was essentially flat throughout the 1990s (except for brief period between 1995/96 and 1997/98).

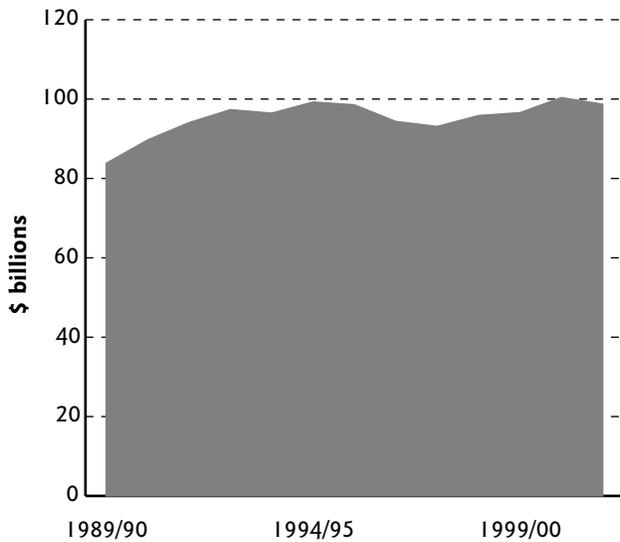
Reductions in provincial-only spending from 1996/97 to 1997/98 (Spending Figure 1) were more pronounced than reductions in consolidated provincial and

local spending over the same period because some of the reductions enacted were not actually reductions but rather decentralization that saw the provincial government reduce spending and the municipal governments increase spending. For example, the provincial government devolved responsibility for spending and program provision for welfare and related programs to the municipalities and regional governments. Spending Figure 2 presents a more realistic and comprehensive measure of total government spending in Ontario.

Spending Figure 3 depicts the average growth rates in real consolidated government spending since 1990/91. Ontario's average growth rate in real consolidated spending from 1990/91 and 1995/96 was 2.8%, above the national average of 1.7% and significantly above Alberta's average of -2.4%.³⁰ Only British Columbia had a higher average growth rate than Ontario in real consolidated spending over this time period.

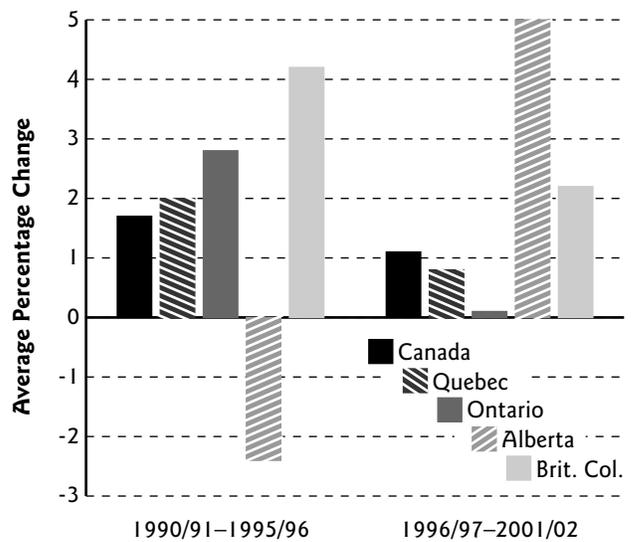
Ontario's consolidated spending made a dramatic turn in the second part of the 1990s when it had an average growth rate in real consolidated spending of 0.1%. This is below the national average of 1.1% and represents the lowest growth rate in the country for that time period.

Spending Figure 2: Ontario—Real Consolidated Spending (\$2001)



Sources: Statistics Canada, Provincial Economic Accounts; Statistics Canada, Public Institutions Division, Financial Management System; calculations by the authors.

Spending Figure 3: Canada and Selected Provinces—Average Real Change in Consolidated Government Spending, 1990/91–2001/02



Sources: Statistics Canada, Provincial Economic Accounts; Statistics Canada, Public Institutions Division, Financial Management System; calculations by the authors.

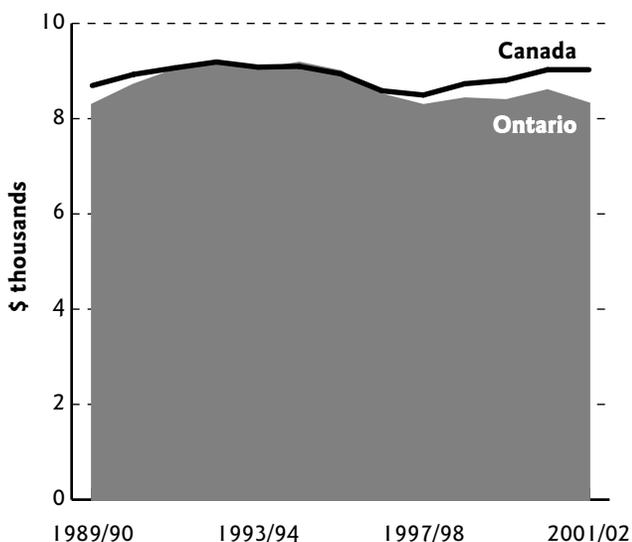
Spending per capita

Including municipal spending does not, however, overcome the shortcoming of ignoring population growth or accounting for the overall size of the economy. Spending Figure 4 incorporates the effect of population growth by presenting the real consolidated spending per capita in Ontario since 1989/90 compared with the national average.

Ontario begins the period (1989/90) spending \$404 less than the national average in terms of real consolidated per-capita expenditures. In 1994/95, it exceeds the national average by \$70 but returns to a lower level of real consolidated per-capita spending relative to the national average in 1996/97. It ends the period with real consolidated per-capita spending \$714 below the national average.

Over the 13-year period, Ontario experienced near flat growth in real consolidated per-capita spending, increasing at 0.1% on average. Ontario's average year-over-year growth in spending is lower than the national average of 0.3% and only three provinces (Nova Scotia, Saskatchewan, and Alberta) recorded smaller average growth rates over the same period.

Spending Figure 4: Ontario—Real Per-Capita Consolidated Spending (\$2001)



Sources: Statistics Canada, Provincial Economic Accounts; Statistics Canada, Public Institutions Division, Financial Management System; calculations by the authors.

Government spending as a percent of GDP

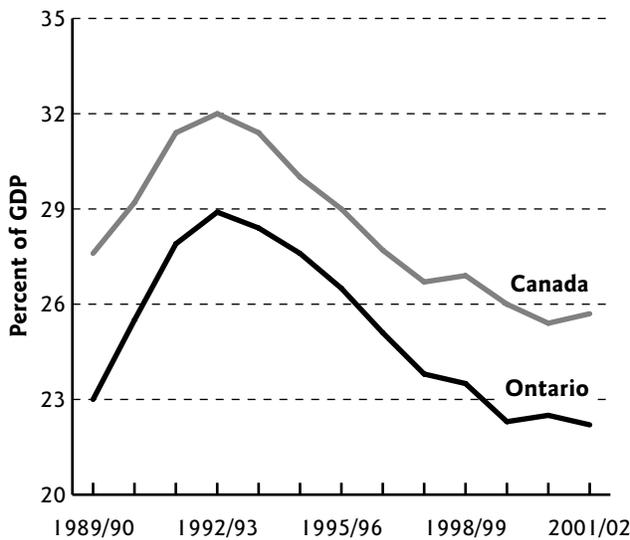
Using per-capita figures is clearly an improvement on the use of aggregate numbers but it still does not account for the burden government spending places on the economy as a whole. The best measure available of the size of government is consolidated government spending as a percent of the economy. High levels of per-capita spending are not necessarily indicative of a high level of government intrusion in the economy. For example, it is possible for two jurisdictions to spend the same amount per capita but consume measurably different amounts of the economy due to differences in per-capita income. If one jurisdiction is significantly wealthier than another, it has the ability to spend the same amount of money on a per-capita basis while not consuming nearly the same proportion of the total economy due to the larger size of its economy.³¹ Indeed, much of the research pertaining to the size of government discussed in the early part of this section measures the size of government according to the share of the economy consumed by government spending.

Spending Figure 5 illustrates the percent of GDP consumed by government spending in Ontario between 1989/90 and 2001/02, as well as the national average. Ontario consistently consumed less of its economy in government spending (provincial and municipal) than the national average. Specifically, Ontario began the period with consolidated government spending 4.5 percentage points below the national average, which stood at 23.0% of GDP. The gap between Ontario government spending as a percent of GDP and the national average was reduced to 2.4 percentage points in 1994/95 but began to increase in the latter part of the 1990s. In 2001/02, Ontario's consolidated government spending stood at 22.2% of GDP, 3.4 percentage points below the national average.

Optimal government and the size of government in Ontario

Spending Figure 6 presents the provincial rankings for consolidated (provincial and local) government spending as a percent of GDP for 2001/02. As was the case for real per-capita consolidated government spending,

Spending Figure 5: Ontario and Canada—Consolidated Government Spending as a Percent of GDP, 1989/90–2001/02

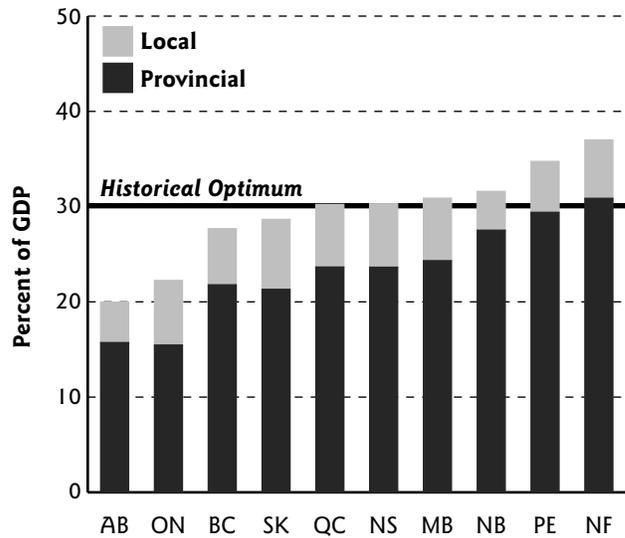


Sources: Statistics Canada, Provincial Economic Accounts; Statistics Canada, Public Institutions Division, Financial Management System; calculations by the authors.

Ontario ranks second, behind Alberta, which has the smallest government sector. Shockingly, the government in Newfoundland, which has the largest consolidated government sector of any province, consumes 37.0% of GDP, nearly double the proportion (20.0%) consumed by government spending in Alberta, which has the smallest government sector.

Estimates of the optimal size of government for Canada range between roughly 20.0% and 34.0% of GDP, depending on the study and the time frame analyzed.³² Incorporating for analytical purposes a 30.0% threshold for the size of government (illustrated by the horizontal line in Spending Figure 6), results in some interesting observations. First, only four provinces (Alberta, Ontario, Saskatchewan, and British Columbia) maintain consolidated provincial and local government sectors that consume less than 30.0% of provincial GDP. Second, four provinces (Quebec, New Brunswick, Nova Scotia, and Manitoba) are relatively close to the optimal threshold of 30.0% of GDP. The remaining provinces (Prince Edward Island and Newfoundland) are well above the 30.0% optimal threshold for the size of government.

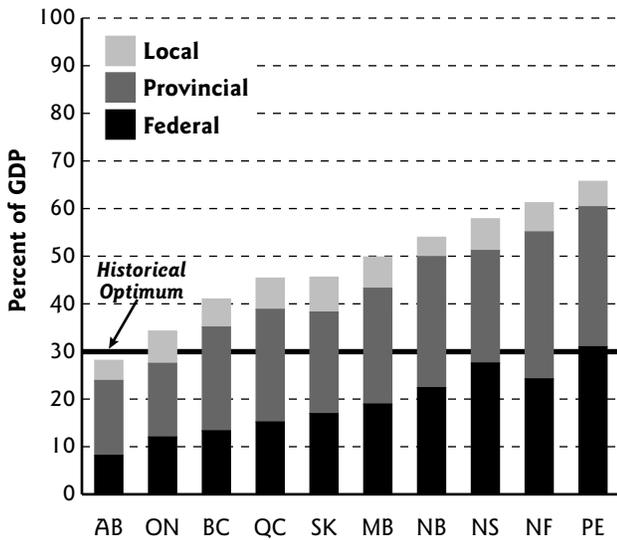
Spending Figure 6: Canadian Provinces—Rank by Consolidated Local and Provincial Government Spending as a Percent of GDP, 2001



Sources: Statistics Canada, Provincial Economic Accounts; Statistics Canada, Public Institutions Division, Financial Management System; calculations by the authors.

One critical piece of information about the size of government that is missing from the rankings presented in Spending Figure 6 is spending by the federal government, which collects roughly 45.0% of all revenues and is, therefore, involved in the spending or transferring of roughly 45.0% of all government resources. It is, therefore, critically important to include a measure of federal government spending by province in the calculation of the size of government. Spending Figure 7 augments the rankings presented in the previous figure by including federal government spending by province.³³ The addition of federal government spending pushes all of the provinces except Alberta above the optimal threshold of 30.0%. Alberta still maintains the smallest total government sector at 28.1% of GDP. Prince Edward Island, on the other hand, has a total government sector of 65.7% of GDP. Four provinces are above 50.0% of GDP in total government spending, with another three provinces within 5-percentage points of 50.0% of GDP in government spending. Ontario continues to maintain the second smallest total government sector at 34.3% of GDP, although it is still above the optimal threshold of

Spending Figure 7: Canadian Provinces—Rank by Local, Provincial, and Federal Consolidated Government Spending as a Percent of GDP, 2001



Sources: Statistics Canada, Provincial Economic Accounts; Statistics Canada, Public Institutions Division, Financial Management System; calculations by the authors.

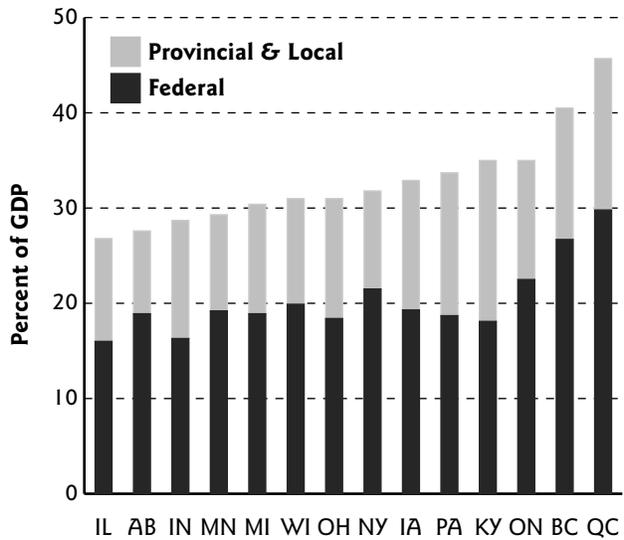
30.0% of GDP. In addition, the gap between Ontario and Alberta is significant, amounting to 6.2 percentage points of GDP.

The implication of the rankings and data contained in Spending Figures 6 and 7 are that all of the provinces, including Alberta, have to remain vigilant and focused on controlling spending since all save Alberta are above the optimal threshold for the government sector as a portion of the economy. It is helpful to remember that the 30.0% threshold incorporated in this analysis is by most accounts a generous estimate of the size of government.

Comparison with the size of government in the United States

Spending Figure 8 presents the consolidated spending as a percentage of GDP for a select group of US states and Canadian provinces in 2000, the latest year for which US data is available. Once US states bordering Ontario are included in the analysis, Ontario’s performance drops significantly, from a second place to twelfth out of 14 jurisdictions. Ontario tied with Kentucky with total consolidated spending at 35.0% of GDP and its size of

Spending Figure 8: Selected Canadian Provinces and US States—Rank by Provincial/Local and Federal Consolidated Government Spending as a Percent of GDP, 2000



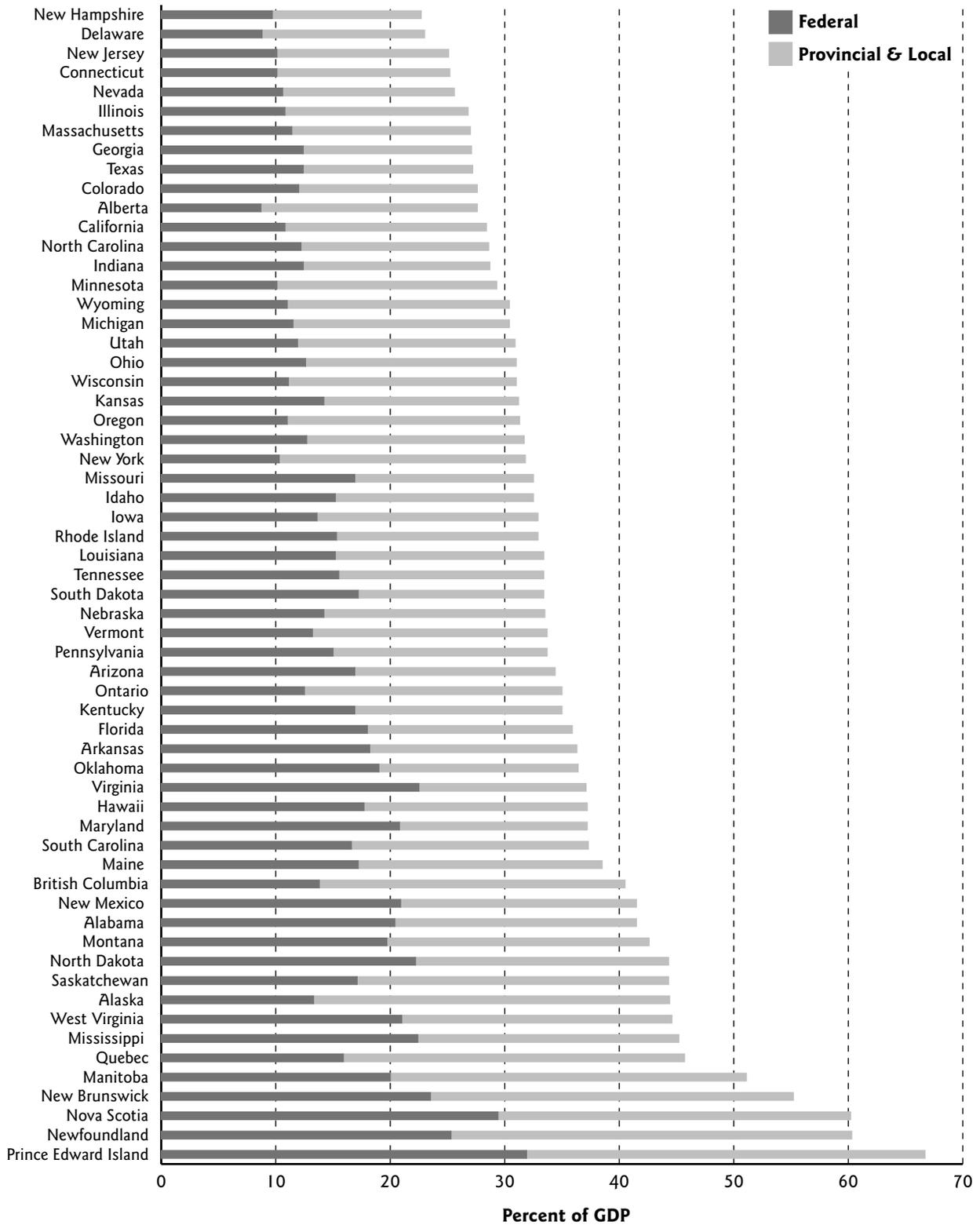
Sources: Statistics Canada, Provincial Economic Accounts; Statistics Canada, Public Institutions Division, Financial Management System; Bureau of Economic Analysis; US Census Bureau; Moody 2001; calculations by the authors.

government was not smaller than any US state included in this select comparison.

The results for Ontario do not improve when all American states are included. Spending Figure 9 presents rankings for the size of government for all Canadian provinces and all US states for 2000: Ontario ranks 36th. The only Canadian province to perform well is Alberta, which ranks 11th, while the other Canadian provinces do not fare well: seven of the ten Canadian provinces rank in the bottom 20%. In fact, the bottom six rankings are all Canadian jurisdictions.

As the literature discussed in this section suggests, those jurisdictions that move towards government of optimal size, as many US states have, will enjoy higher rates of economic growth, higher levels of capital formation, and generally more economic prosperity. One of the accordant benefits is that these governments can provide relatively high levels of per-capita spending without burdening the economy with a large government sector. The key to this win-win scenario is economic growth.

Spending Figure 9: Canadian Provinces and US States—Rank by Provincial-Local and Federal Consolidated Government Spending as a Percent of GDP, 2000



Sources: Statistics Canada, Provincial Economic Accounts; Statistics Canada, Public Institutions Division, Financial Management System; Bureau of Economic Analysis; US Census Bureau; Moody 2001; calculations by the authors.

That is, by expanding the economic pie faster than other jurisdictions, governments that enjoy economic growth are able to take a smaller slice of the overall pie but provide comparable, if not superior, goods and services because of the size of the slice. In other words, a smaller slice of a larger pie is a much better bargain than a larger slice of a much smaller pie.

Conclusion

Although Ontario performs relatively well in the Canadian context, it is clear that it lags behind its US counterparts in having larger government and, thus, a larger burden of government. Ontario must continue to rationalize its programs and services, continue to streamline its provision of remaining services, and remain focused on reducing the size of government in Ontario in order to continue and improve upon its recent economic successes.