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Executive summary | sommaire

Canadians feel it – higher taxes, longer wait times, and public services that don't serve us well.

Yet behind these frustrations lies a deeper problem: Canada's government sector has grown in size while becoming less and less productive.

Over the past two decades, government spending has increased, but the return on our tax dollars has declined. From 2007 to 2023, the government sector's share of the economy rose from 25.7 to 27.3 per cent of GDP, even as productivity fell. Today, government workers produce 7 per cent less output than their counterparts in the private sector.

Once more productive than private industry, the government sector is stuck in a multi-decade productivity malaise, averaging just 0.2 per cent annual growth, well below the business sector's 1.1 per cent annual labour productivity growth.

The growing government footprint means the public sector commands a larger share of Canada's economic resources and exerts greater influence on the economy. This expansion raises two fundamental questions: What are our tax dollars delivering – and how efficiently are they being spent?

This second report in a three-part series introduces two new composite indicators that together provide a more comprehensive picture of government performance.

- The Size of Government Index (SGI) captures the scale of government activity
 in the economy by integrating six key measures: employment, hours worked,
 compensation, value added, revenue, and expenditure.
- The Government Productivity Index (GPI) measures how productive the government sector is relative to the business sector.

Of course, Canada's government sector isn't a single entity. It's a collection of distinct activities – from hospitals and schools to administrative agencies – each with different cost structures, workforce dynamics, and service mandates. The data reveal serious underperformance across many of these areas:

- Health care: In the largest government sector, productivity performance was weak (0.3 per cent annually from 2007 to 2023) despite surging employment and spending.
- Education: Productivity declined in primary and secondary schools in line with
 falling student achievement scores. That weak performance contrasts with the
 much stronger measured productivity for universities (1.1 per cent growth) and
 colleges (0.6 per cent).
- **Public administration:** Productivity gains were modest (0.3 per cent annual growth) except in national defence, where productivity rose strongly (1.4 per cent annually) even as employment levels remained largely stable over decades.

The results from both the SGI and GPI indicators are sobering. They reveal that the government's footprint in Canada's economy has grown steadily, that the compensation premium for government workers remains substantial, and that productivity is lagging behind the business sector. The result is a widening disconnect between the growing scale of government activities and the efficiency with which they are carried out.

Yet, there is a path forward. To restore value for taxpayers and strengthen Canada's long-term economic resilience, governments can implement meaningful reforms. Specifically, they can:

- Accelerate the digital transformation across all levels of government by redesigning workflows to improve service delivery.
- Modernize management systems by focusing on outcomes, not inputs, and embedding more productivity metrics into public reporting and budgeting.
- Link compensation to measurable performance wherever possible.
- Pursue targeted, sector-specific reforms in the largest service areas such as health and education – where even modest productivity gains could yield major national benefits.

With an aging population, slowing economic growth, and mounting fiscal pressures, improving government productivity is mission-critical. Urgent reforms are required to ensure Canadians receive greater returns for their tax dollars. MLI

La population ressent pleinement le poids des impôts élevés, des longs délais d'attente et des services publics jugés déficients.

Or, la frustration dissimule un problème plus profond : le secteur public canadien gagne en taille, mais devient de moins en moins productif.

Depuis 20 ans, les dépenses publiques augmentent, mais le rendement de chacun de nos dollars d'impôt baisse. De 2007 à 2023, la part du secteur public dans l'économie est passée de 25,7 % à 27,3 % du PIB, alors même que la productivité a diminué.

Actuellement, le produit des personnes employées par l'État est 7 % inférieur à celui de leurs homologues du secteur privé.

Autrefois plus productif que le secteur privé, le secteur public connaît depuis des décennies une crise de productivité, laquelle augmente de seulement 0,2 % annuellement, bien en deçà du taux de 1,1 % du secteur privé.

Le gouvernement contrôle de plus en plus les ressources économiques et influence de plus en plus l'économie. Cette expansion pose deux questions essentielles : que rapportent nos impôts — et dans quelle mesure sont-ils dépensés efficacement?

Ce deuxième rapport d'une série de trois introduit deux nouveaux indicateurs composites qui, ensemble, donnent une image plus complète du rendement d'un gouvernement.

- L'Indice Taille du gouvernement (Size of Government Index ou SGI) mesure l'échelle de l'activité gouvernementale dans l'économie via six variables clés : emploi, heures travaillées, rémunération, valeur ajoutée, recettes et dépenses.
- L'Indice Productivité du gouvernement (Government Productivity Index ou GPI) mesure la productivité du secteur public par rapport au secteur privé.

Bien sûr, le secteur public canadien n'est pas une entité simple. Il est constitué d'un large ensemble d'activités distinctes – qui vont des hôpitaux aux écoles en passant par les organismes administratifs – avec des coûts, une main-d'œuvre et un mandat spécifiques. Or, les données montrent de graves lacunes dans plusieurs des domaines suivants :

- Santé: Dans ce secteur le plus important, la productivité a été faible (gain annuel de 0,3 % entre 2007 et 2023) malgré la forte progression de l'emploi et des dépenses.
- Éducation: La productivité a diminué de pair avec les résultats des élèves dans les écoles primaires et secondaires. La faiblesse de ces résultats contraste avec la productivité mesurée nettement plus élevée dans les universités et les collèges (gains respectifs de 1,1 % et de 0,6 %).
- Administration publique: Les gains de productivité ont été peu élevés (gain annuel de 0,3 %), sauf pour la défense nationale, qui affiche un gain annuel de 1,4 %, et cela, malgré la stabilité de ses niveaux d'emploi depuis des décennies.

Les résultats des indicateurs SGI et GPI interpellent. Ils révèlent que le gouvernement est de plus en plus présent dans l'économie canadienne, que la prime de rémunération de ses salariés reste importante et que sa productivité est toujours inférieure à celle du secteur privé. Il s'ensuit un fossé croissant entre l'expansion des activités gouvernementales et leur efficacité.

Une voie de rétablissement est pourtant possible. Pour restaurer la valeur revenant aux contribuables et renforcer la résilience économique à long terme du Canada, les gouvernements peuvent mettre en place des réformes réelles. Plus précisément, ils peuvent :

- Accélérer la transformation numérique dans tous les paliers de gouvernement en repensant les flux de travail pour améliorer les services.
- Moderniser les systèmes de gestion en mettant l'accent sur les résultats plutôt que sur les intrants, et en intégrant de nombreux indicateurs de productivité dans les rapports publics et les budgets.
- Lier la rémunération aux performances mesurables, là où c'est possible.
- Réaliser des réformes sectorielles ciblées dans les domaines des services clés (santé et éducation), là où des gains de productivité même modestes pourraient générer des retombées nationales majeures.

Avec le vieillissement de la population, le ralentissement économique et les pressions budgétaires croissantes, il est crucial d'améliorer la productivité du secteur public. Il faut des réformes urgentes pour accroître le rendement de nos impôts. MLI

Introduction

Governments play a major role in Canada's economy and in the lives of its citizens. Governments employ more than one in five workers, collectively spend more than 40 per cent of GDP, and shape the conditions for economic growth and social well-being. Public debates often focus on how much governments spend or on the size of their deficits and debt, but less attention is paid to the more fundamental issue of what tax dollars deliver, and how efficiently they are used. Understanding the size and productivity of the government sector isn't merely a technical exercise; it's central to improving service delivery, ensuring fiscal sustainability, and enhancing Canadians' living standards.

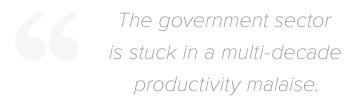
This report is the second in a three-part series that addresses these important issues. The first report, *The Growing Government Gap: Rising costs, shrinking returns, and the productivity crisis in the public sector,* laid the foundation for thinking about the size and productivity of Canada's government sector. It described how governments translate resources into activities, services, and outcomes, why political incentives and cost dynamics tend to drive government expansion, and why, in the absence of market prices, government productivity is so hard to measure. It also presented evidence showing that the size of Canada's government sector has expanded over the past decade even as its measured productivity has declined.

This report turns from concepts and context to measurement over a longer period. We introduce two composite measures that incorporate a variety of relevant metrics:

• The **Size of Government Index (SGI)**, which is designed to capture the scale of government activity in the economy; and

 The Government Productivity Index (GPI), which attempts to measure how productive the government sector is relative to the business sector.

These indices aim to move beyond discussions of isolated statistics to provide a more comprehensive assessment that will help policymakers, taxpayers, the public, and the media evaluate government performance. This report focuses on national trends, tracking how the size of government has changed in recent decades, how these patterns vary across different activities (such as health, education, and public administration), and how productivity in government compares with that in the business sector.



These findings provide more robust evidence that the government's footprint in the economy has grown, that the compensation premium for government workers has remained significant, and that measured productivity in the government has fallen behind that in the business sector. This work sets the stage for the third and final report in the series, which will focus on provincial governments, identifying which jurisdictions are leading and lagging behind, and drawing lessons for improving government performance across the country.

By systematically measuring the size and productivity of the government, this series aims to better assess whether Canadian taxpayers are getting value for money, identify where improvements are needed, and chart a path toward a more efficient and effective public sector. With living standards stagnating, fiscal pressures rising, and new technologies transforming what is possible for workers and the economy to achieve, the time is ripe to dig into these critical issues.

The Size of Government Index (SGI)

Measuring the size of government is central to understanding the proportion of the country's economic resources that are under direct public control and how that share is evolving. Governments shape the economy through employment, taxes, spending, regulation, and by producing goods and services. Yet discussions about the public sector often focus narrowly on one or two metrics, such as program spending or public debt, that capture only part of the picture.

In this report we introduce the **Size of Government Index (SGI)**. It is designed to provide a more comprehensive measure of the size of the public sector. The six SGI components – employment, hours worked, total compensation, real value added, government revenue, and government expenditure – were selected to capture both the economic and fiscal dimensions of government activity. Together, they represent the main channels through which the government sector participates in the economy: by employing labour, generating output, paying compensation, collecting revenue, and allocating expenditures. Each series is expressed as a share of GDP and given equal weight to provide a balanced composite indicator of government scale. On this index, a higher SGI score indicates a larger government presence in the economy.

Tracking the SGI over time helps answer fundamental questions. Among them: Has the government sector expanded or contracted as a share of the overall economy, and which activities are driving that change? As Figure 1 shows, Canada's SGI has increased over time, rising by 1.6 percentage points from 25.7 per cent of GDP in 2007 to 27.3 per cent in 2023. This upward trend indicates that governments now command a larger share of economic resources than they did two decades ago.

The following analysis examines each SGI component in turn, drawing on Statistics Canada's labour market and output data from 1997 to 2024 and fiscal indicators from 2007 to 2023. Together, these metrics show that government's economic footprint has expanded significantly over the past two decades, a trend driven by growth in government employment, hours worked, and total compensation, in concert with an expanding fiscal footprint.

30.0% 29.5% 29.0% 28.5% 28.0% 27.5% 26.5% 26.0% 25.5%

FIGURE 1: Size of Government Index, 2007–2023 (as a per cent of GDP)

Note: Figure 1 is a composite index. On this index, a higher percentage means that the government sector is larger. Source: Calculations using Statistics Canada tables 36-10-0480-01 (employment, compensation, hours, value-added); 36-10-0450-01 (general government revenue and expenditure); and 36-10-0222-01 (gross domestic product).

2015

2017

2019

2021

2023

Employment and hours worked: Government is a growing share of the workforce

2013

2007

2009

2011

Employment is among the most visible and politically salient measures of government size. It is also a key channel through which governments deliver essential services such as education, health care, and public administration.

Government employment has grown notably faster and more steadily over the past quarter century than private sector employment. Between 1997 and 2024, government sector employment increased by a total of 67 per cent (1.9 per cent per year, on average), compared with 45 per cent (1.4 per cent annually) in the business sector (Figure 2).

The public-private employment divergence was most pronounced during past economic downturns, namely, the global financial crisis in 2008–09 and the pandemic in 2020–21 when government jobs proved much more resilient than those in the private sector. These growth differentials have accumulated over time and have shifted the composition of Canada's workforce. Today, more than one in five Canadian workers is employed in the government sector, a share that is more than 2 percentage points higher than in the late 1990s.

Government 70.0% 67% 60.0% 50.0% 40.0% 30.0% 45% **Business** 20.0% 10.0% 0.0% 1997 2000 2003 2006 2009 2012 2015 2018 2021 2024

FIGURE 2: Employment growth, 1997–2024 (cumulative per cent change since 1997)

Source: Calculations using Statistics Canada table 36-10-0480-01.

All industries

Employment growth varied across government activities.

Goverment sector

• The health services sector expanded the fastest (83 per cent cumulative growth or 2.3 per cent annual job growth, on average), reflecting rising health care spending, population growth, and population aging.

· · · · Business sector

- Also growing rapidly was employment in Indigenous government services (88 per cent total or an annual growth of 2.4 per cent) and federal public administration, excluding defence (74 per cent total growth and a 2.1 per cent annual growth).
- By contrast, employment in defence was essentially stable over the entire period (4 per cent total growth, or only 0.1 per cent annually).

Total hours worked show a similar pattern, driven largely by the growth in employment. Hours worked in the government sector rose by 1.8 per cent annually since 1997, compared with only 1.2 per cent in the business sector. As with employment, the gap widened after the mid-2000s, reflecting policy decisions to expand services – particularly in health care and government administration – and from demographic pressures brought on by the aging population.

Compensation: A persistent government sector premium

Worker compensation is another critical component of government size. It reflects the number of government employees and how much they are paid, including associated benefits. Because labour costs account for a large share of government operating expenses, compensation trends have important implications for fiscal sustainability and service delivery costs.

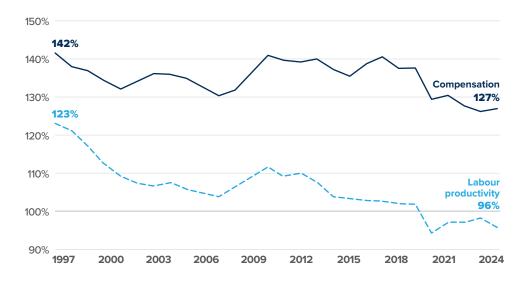
Compensation is also a key differentiator between the government and business sectors. Government workers consistently receive higher compensation per hour worked, on average, than their counterparts in the private sector. In 2024, total compensation per hour worked in the government sector was 27 per cent higher than in the business sector. On a per-worker basis, annual compensation in the government sector was only 18 per cent higher, because government employees work fewer hours.

These comparisons are an average over large populations and do not adjust for differences in worker characteristics. Government workers tend to have more formal education, are more likely to be unionized, and often enjoy better pensions and greater job security. Other factors, such as institutional and bargaining dynamics, likely also play important roles in the differences in compensation.

However, it is notable that a sizable government sector compensation premium has persisted over time, despite weaker productivity performance (Figure 3 and explored more in the section that follows). The figure shows that in 1997 the government sector paid a 42 per cent premium over the business sector, which has since dropped to a 27 per cent premium, but that productivity has dropped more – from a 23 per cent premium over the business sector to a 4 per cent deficit. This underscores a critical policy point: without corresponding improvements in efficiency, higher compensation costs increase program costs and add fiscal pressure. Aligning compensation more closely with results – through improved performance measurement, workforce planning, and pay structures – is an important way to improve value for money. Over the long term, productivity gains in both the public and private sectors are the most sustainable source of higher pay.

The growth in compensation has varied across government sectors. Federal government services, Indigenous government services, and provincial and territorial administrations have seen the greatest growth. In education

FIGURE 3: Compensation and productivity in the government sector relative to the business sector, 1997–2024 (government divided by business sector, as a per cent)



Source: Calculations using Statistics Canada table 36-10-0480-01.

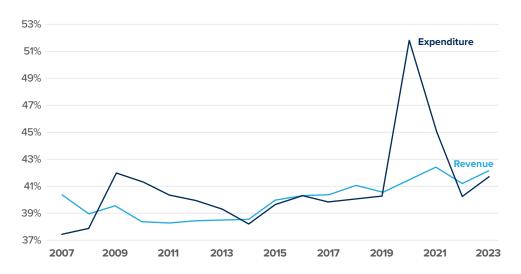
(specifically elementary and secondary schools as well as community colleges) compensation grew more slowly. Note that the government sector's relative compensation premium dropped sharply in 2020, as average compensation in the business sector jumped at the start of the pandemic when lockdowns caused a major shift in the composition of jobs. With fewer jobs in lower-paying industries, such as restaurants, travel, and accommodation, average business compensation rose. Because more government sector jobs are unionized with fixed longer-term contracts in place, compensation in that sector was slower to rise.

Spending and taxes: A larger fiscal footprint

Spending is the most widely cited indicator of government size for good reason: it reflects the scale and scope of public programs and the degree of direct fiscal intervention in the economy.

Since 2007, the earliest year for which consistent data are available in this dataset, government spending in Canada has grown significantly, both in absolute terms and relative to the overall economy. Combined federal, provincial, and local expenditures accounted for 37.4 per cent of GDP in 2007. By 2023, this had risen to 41.7 per cent (Figure 4).

FIGURE 4: Government Expenditure and Revenue, 2007–2023 (as a share of nominal GDP, in per cent)



Source: Calculations using Statistics Canada tables 36-10-0450-01 (Government revenue and expenditure) and 36-10-0222-01 (GDP).

Perhaps not surprisingly, real per capita spending also rose over this period. It increased from \$22,443 in 2007 to \$25,932 in 2023 (in chained 2017 dollars). This growth reflects demographic pressures, expanding demand for public services, and new policy initiatives in areas such as health care, child care, and climate action. Spending surged temporarily in response to the COVID-19 pandemic as governments quickly rolled out large-scale support programs and spent more to improve health care capacity. While spending *growth* has since moderated, spending *levels* are still above those prior to the pandemic, contributing to the upward trend in the Size of Government Index.

The rise in spending underscores the growing role of government in the economy, which raises questions about how sustainable the increases are and what spending governments are prioritizing. With debt levels elevated and fiscal room limited, in the future governments will need to deliver more within their existing budgets – a task that will make productivity improvements crucial.

Ultimately, government spending must be paid for one way or another. As such, changes in revenue patterns eventually reflect the size of government spending and policy choices. Indeed, revenues have also increased relative to the size of the economy since 2007, rising from 40.3 per cent of GDP to 42.2 per cent by 2023.

Real revenue per capita increased from \$24,187 to \$26,231 during this period. Part of this increase reflects economic growth and rising incomes, but decisions about tax policy also played a role. Governments at various levels expanded revenue through new or higher taxes, carbon pricing, and other measures.

Output: Government's share of economic production

Governments are not only regulators and income redistributors, they also produce goods and services. Public sector output, measured as real value-added, represents the direct economic contribution of government to GDP.

Government sector output has grown more slowly than in the business sector over recent decades. From 1997 to 2024, government real value-added increased by 2.0 per cent per year on average, compared with 2.3 per cent in the business sector. As a result, the share of GDP that can be attributed to the government sector's output fell from 20.5 per cent in 1997 to 19.3 per cent in 2024 (Figure 5). From 1997 to 2005, government's share of output fell sharply during a period of concerted fiscal consolidation (which eventually produced recurring surpluses). The trend did not last; over the past two decades the government share of output has risen.

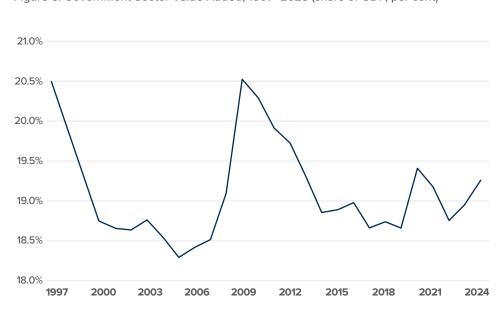


Figure 5: Government Sector Value Added, 1997–2023 (share of GDP, per cent)

Source: Calculations using Statistics Canada tables 36-10-0480-01 (value added) and 36-10-0222-01 (GDP).

The fastest growth in government sector output occurred in universities and in nursing and residential care, reflecting rising demand for higher education and health services. Defence grew much more slowly, highlighting how policy choices and program priorities have shaped government output over time.

Because public sector output is largely estimated using input costs rather than market prices, the official measurements do not necessarily capture productivity and/or changes in the "quality" of the goods and services it produces. This limitation underscores the importance of combining output measures with official productivity statistics and examining other more direct measures of government outcomes, such as whether increased government resources have improved student achievement scores or health care wait times. We will take up this task in the sections that follow.

Summary

More than any single indicator, the SGI paints a more complete picture of the economic footprint of the government sector. It shows that Canada's governments have expanded meaningfully over the past two decades, both in labour market presence and fiscal scale.

A larger government sector isn't necessarily good or bad in and of itself. What matters is whether the expanded use of public resources has translated into better outcomes for citizens and the economy. Having established that the government footprint has expanded, the next step is to use the Government Productivity Index (GPI) to examine whether this growth has translated into greater efficiency.

The Government Productivity Index (GPI)

The Size of Government Index (SGI) shows *how much* governments do, while the Government Productivity Index (GPI) answers the more fundamental question: *how well* do they do it? Productivity is a measure of how effectively governments convert inputs – spending on labour, capital, and transfers – into outputs and services.

The concern about productivity is not abstract or academic. Government is a major and increasing part of Canada's economy. Without productivity gains, governments must either raise taxes, cut services, or taxpayers must accept declining service quality. With higher productivity, governments can deliver more and better services with existing resources.

The GPI provides a straightforward way to track performance. It is a composite indicator that combines two key measures of labour productivity – real output per hour worked and real output per worker – each weighted equally and expressed as a ratio of the equivalent measure in the business sector. A GPI above 100, therefore, means the government sector is more productive than the business sector while a reading below 100 means that the government is less productive.

150% 115.6 115% 110% 105% 100% 95% 92.7 90% 2000 2003 2006 2009 2012 2015 2018 2021 2024

FIGURE 6: Government Productivity Index (GPI), 1997-2024 (index: >100 means the government sector is more productive than business sector)

Source: Calculations using Statistics Canada table: 36-10-0480-01.

The GPI shows that over the past three decades government productivity in Canada has steadily declined relative to the business sector (Figure 6). The GPI began at a high of 115.6 in 1997, which indicates that at that time the government sector was more productive than the private sector. However, the trend has declined since then; it fell below the 100 threshold in 2014, and reaching 92.7 per cent in 2024. This means that, on average, those working in the government sector produce about 7 per cent less than those working in the business sector (as averaged across output per hour and output per worker measures). Compared with 1997, the GPI is down a remarkable 23 percentage points.

Over the past three decades, government productivity in Canada has steadily declined relative to the business sector.

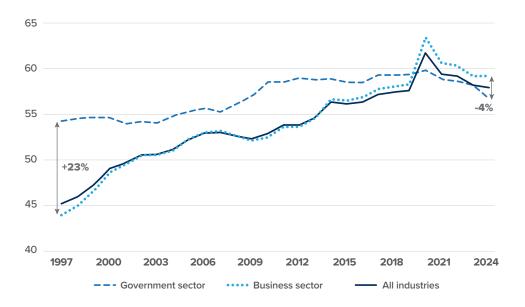
Output per hour worked

We now briefly analyze the two GPI components in turn. The most common way economists measure productivity is using output per hour worked – how much real value-added is produced from each hour of labour. This essentially captures how efficient workers are, how well work is organized, as well as how effectively the organization applies technology and skills.

The official data show a growing gap between the government and business sectors in recent decades. In 1997, government sector productivity was estimated to be 23 per cent *higher* than in the business sector. By 2024, however, it was about 4 per cent *lower*, with the government producing \$56.80 in real output per hour worked (in 2017 chained dollars) compared with \$59.20 in the business sector (Figure 7).

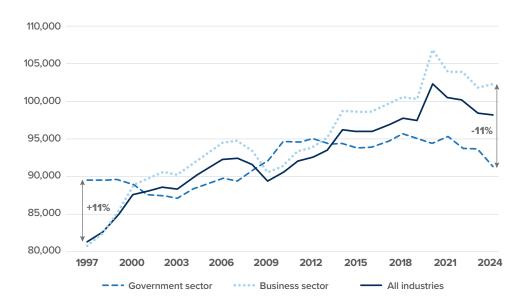
From 1997 to 2024, labour productivity growth in the government sector was just 0.2 per cent annually, well below the 1.1 per cent annual growth in the business sector. Much of the growth in government output over this period was driven by rising employment and hours worked rather than efficiency gains – a pattern that could be characterized as "working

FIGURE 7: Output per hour worked – government vs. business, 1997–2024 (real value added per hour worked, 2017 chained dollars)



Source: Calculations using Statistics Canada table 36-10-0480-01.

FIGURE 8: Output per worker – government vs. business, 1997–2024 (real value added per worker, 2017 chained dollars)



Source: Calculations using Statistics Canada table 36-10-0480-01

Note: "All industries" aggregations used in this report exclude owner-occupied dwellings. See Appendix B for more details.

BOX 1

Interpreting the Government Productivity Index: Absolute and relative productivity and opportunity costs

It is important to distinguish between absolute productivity (i.e., how productive the government is) and relative productivity (i.e., how productive the government is compared with the business sector). At 0.2 per cent per year, measured productivity of this opportunity cost, if government growth in government has been positive but very modest over the past three decades. Because business productivity has grown much faster, at around 1.1 per cent per year, the government's relative productivity has declined. The GPI is a relative measure.

Large productivity gaps matter from a macroeconomic perspective because they reflect the opportunity cost of allocating labour to government activities rather than the business sector. To get a rough idea sector productivity growth had matched the business sector since 1997, Canada's GDP conceivably could be \$114 billion (or 5.5 per cent) higher.

harder, not smarter." By contrast, growth in the business sector was driven by roughly equal contributions from productivity improvements and increased labour input. See Box 1 for more on the absolute and relative productivity comparisons with the business sector, as well as the macroeconomic implications.

Output per worker

A second common way to measure productivity is output per worker – how much real output each employee produces each year. Once again, the government sector lags behind the business sector. In 2024, government sector output per worker was 11 per cent lower than in the business sector, despite starting out with an 11 per cent advantage decades earlier. The current larger gap in output per worker (Figure 8) compared with output per hour (Figure 7) reflects the fact that government sector employees work fewer hours.

Differences across government activities

The GPI provides a convenient aggregate look at government sector performance, but ignores important variations below the surface. Canada's government sector isn't a single entity but a collection of distinct activities, from hospitals and schools to administrative agencies and public safety institutions, each with different cost structures, workforce dynamics, and service mandates. Measuring productivity at a more granular level is essential for understanding where government performs well, where it struggles, and why.

Three broad sectors – health care, education, and government administration – dominate government employment, spending, and service delivery. Together, they account for the vast majority of activities the public sector engages in and drive the overall trends. This section explores each in turn, highlighting results using official productivity data and investigating alternative performance measures where feasible.¹

Health care: Measured productivity gains are slow; big opportunities for improvements

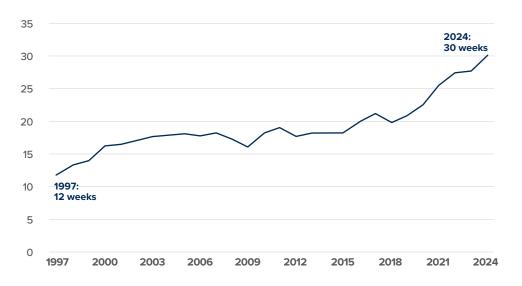
Health care is the single largest component of Canada's government sector. As noted earlier, over the past two decades, staffing in hospitals, long-term care, and public health agencies has been among the fastest-growing areas of government employment. The activity is highly labour-intensive and accounts for roughly a third of total government hours worked.

Measuring productivity in health care is difficult and improvements in service quality, patient outcomes, or experience aren't well captured in productivity statistics. Nonetheless, these data sources suggest that increases in productivity performance across the sector are weak (0.3 per cent annually); hospitals and nursing and residential care facilities all show similar results.

Demand for health care has risen steadily due to population aging and the increasing prevalence of chronic conditions. To expand service volumes, governments often hire more workers rather than invest more in capital equipment or fundamentally reorganize workflows to improve system-wide efficiency.

The slow adoption and diffusion of technology in health care may also play a role in the sector's weak productivity gains. While digital health tools,

FIGURE 9: Median wait time from physician referral to treatment, 1997–2024 (weeks waited)



Source: Moir and Barua (2024).3

AI-enabled diagnostics, and telemedicine have started to transform care delivery, their adoption remains uneven and often lags the private sector. Fragmented service delivery and complex governance structures and funding arrangements can slow innovation and reduce incentives for improved efficiency.

Of course, health outcomes depend not only on how the health care system performs, but also on a wide variety of other factors including lifestyle choices (such as diet and exercise), the availability and affordability of drug treatments, and the like.

A more direct alternative measure of the performance of the health care system comes from the Fraser Institute's estimates of the median wait time between a doctor's referral and the patient receiving treatment. These data show a significant increase in waits over time, up from 12 weeks in 1997 to 30 weeks in 2024, which suggests the system is having a harder time processing patients despite sizable increases in federal health transfers to the provinces (Figure 9).

Because health care accounts for the largest share of government activities, even modest productivity gains in this sector would yield substantial improvements in overall government performance.

Education: Varied performance

Education is another cornerstone of government service delivery, representing 29 per cent of overall government hours worked in 2024. This sector encompasses a diverse set of activities from early childhood education to primary and secondary schooling to college and university instruction.

Productivity measures for education reveal a more mixed picture than in health care. In aggregate, the growth in labour productivity in education was the same as for the overall government sector (0.2 per cent annually), but with notable variations across activities.

Elementary and secondary schools

Productivity measures show the lowest numbers for elementary and secondary schools (a drop of 0.5 per cent annually) where structural factors such as staff-to-student ratio requirements, collective bargaining frameworks, and curriculum mandates may limit a school's flexibility to reorganize work or experiment with more efficient technology.

Additional evidence on the performance of the primary and secondary education system comes from the Programme for International Student Assessment (PISA). PISA is a test that measures how well 15-year-old students

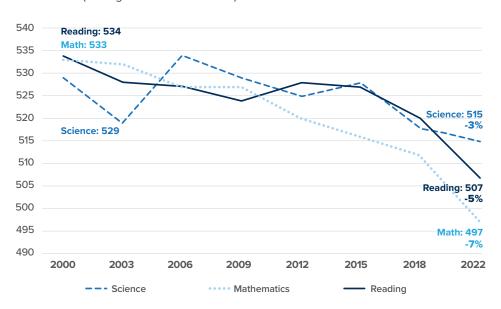


FIGURE 10: Canada's Programme for International Student Assessment (PISA) scores, 2000–2022 (average achievement score)

Source: Council of Ministers of Education, Canada (CMEC).

can apply their knowledge and skills to real-world problems in reading, math, and science, and it has a long comparable history going back to 2000.

The results for Canada show clear drops in competency in all three subject areas, with math skills falling the most (Figure 10). The 2022 results were likely adversely affected by the major disruptions in schooling during the pandemic and the associated government lockdowns, but nonetheless, the declining trends were evident well before the pandemic.

Universities and colleges

Official productivity measures for universities were significantly better than for other forms of education. In fact, they were on par with productivity increases in the overall business sector (both 1.1 per cent annually). Even community colleges and CEGEPs (0.6 per cent annually) – which did not grow their productivity as much as universities did – still performed better than most other government areas. Expanded program offerings and student enrolment have helped system outputs. Technological adoption, including institutions offering more remote course delivery over this period, likely also contributed positively to the productivity numbers.

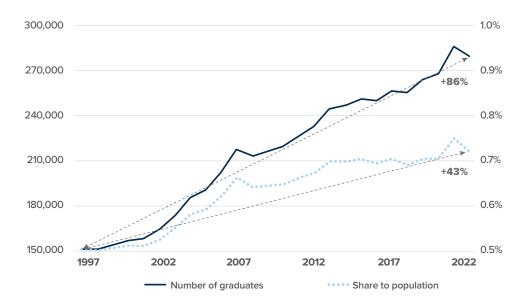
Alternative performance measures support the relatively positive view of the performance in this sector; even the relative performance rankings within the higher education system. The number of students graduating with a university degree grew by 85 per cent over this period (2.4 per cent annually, Figure 11). Expressed as a percentage of the population, the graduating number also rose significantly, by 43 per cent (1.4 per cent annually).²

The trends for college graduates are also positive, although slightly less robust (Figure 12). The number of students graduating with a college diploma grew by 64 per cent in total (1.9 per cent annually). As a share of the population, college graduates increased by 26 per cent (0.9 per cent annually).

Government public administration: Stable but stagnant

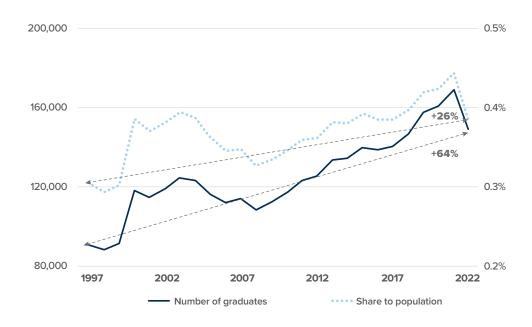
Public administration, which includes core functions such as policy development, regulatory oversight, public safety, and service delivery, is another crucial component of government. It crosses many levels of governments with a diverse range of activities. As such, some employees in public administration have highly skilled policy roles while others perform more operational functions, such as benefits administration and licensing.

FIGURE 11: Students graduating with a university degree, 1997–2022 (number of graduates (left axis) and graduates as a share of the population (right axis))



Source: Calculations using Statistics Canada tables 37-10-0012-01 (number of Canadian graduates) and 17-10-0009-01 (population).

FIGURE 12: Students graduating with a college diploma, 1997–2022 (number of graduates (left axis) and graduates as a share of the population (right axis))



Source: Calculations using Statistics Canada tables 37-10-0012-01 (number of Canadian graduates); 17-10-0009-01 (population).

Overall, government administration delivered modest productivity growth over the period (0.3 per cent annually) with only minor variances across levels of government: federal (0.3 per cent excluding defence); provincial and territorial (0.1 per cent); and local, municipal, and Indigenous government (0.0 per cent annual productivity growth). The only strong performer was federal defence, which despite – or perhaps because – employment was held stable, recorded a strong productivity performance (1.4 per cent).

Demands for better immigration processing, social benefits, and environmental regulation, among others, have led to steady increases in federal staffing. Most of this growth has been met through additional hiring or external contracting rather than through productivity improvements.

There has been relatively limited structural change in public administration. While digital government initiatives have advanced in recent years, their impact on measured productivity has been modest so far. Many administrative processes remain labour-intensive and relatively inefficient, limiting gains from technology. Without structural reforms, particularly around digital transformation, process redesign, and workforce deployment, technology's contribution to improving the overall GPI is likely to remain limited.

Conclusions

This second report in the series set out to measure the size and productivity of Canada's government sector from 1997 to 2024. Building on the conceptual framework developed in the first report, we introduced two composite indicators, the Size of Government Index (SGI) and the Government Productivity Index (GPI), to provide a more comprehensive picture of how government performance has evolved over nearly three decades.

The findings are illuminating and sobering. Canada's government sector has grown over time, as measured by the SGI. Unfortunately, greater size hasn't translated into greater efficiency. The government sector, once more productive than the business sector, now produces roughly 7 per cent less output per unit of labour, on average. Since 1997, productivity growth in the government sector has been weak, averaging only 0.2 per cent per year, compared with

about 1.1 per cent per year in the business sector. If government productivity had matched the business sector over this period (i.e. growing at 1.1 per cent annually rather than 0.2 per cent), Canada's GDP in 2024 would be roughly \$114 billion (5.5 per cent) higher.

While disappointing, lagging government productivity highlights opportunities for reform. Investments in digital technologies, improved data use, and organizational changes have the potential to empower governments to deliver services more efficiently. Modernizing procurement, updating workforce skills, and aligning incentives more closely with outcomes could improve productivity without necessarily increasing spending. This paper's analysis leads to several other implications:

- The findings raise questions about value for money and service quality, and demonstrate that improving public sector productivity is essential. A government that grows in size and continues to pay a significant compensation premium but lags in productivity will increasingly strain public finances. Ultimately, higher spending must be financed through higher taxes, more borrowing, or reallocating funds from other priorities. Without faster productivity growth, governments will struggle to maintain service quality without raising taxes or expanding deficits.
- Technology must be part of the solution to modernize service delivery. Governments need to accelerate the adoption of digital tools, automation, and artificial intelligence. They should not simply digitize and automate existing processes, but redesign workflows and improve service delivery. Achieving this will require investment and training. Better information and organizational capacity are essential if governments are to successfully identify productivity improvements and meet taxpayer expectations without further expanding their employment numbers or budgets.
- Better measurement is vital. Various productivity indicators should be embedded into public reporting and decision-making, helping governments target reforms where they will have the greatest impact.
- Link compensation growth to performance. Governments should align compensation increases with measurable productivity gains wherever possible.

• An analysis of individual government activities can help illuminate where the biggest challenges and opportunities lie. Our results underscore the need for nuanced policy design. Strategies that may improve productivity in regulatory agencies, for example, may not translate easily to hospitals or schools. Tailored approaches grounded in data and focused on outcomes will be crucial. Health care, education, and public administration all exert a powerful influence on overall government productivity and performance. As such, even modest improvements in these important areas could yield outsized productivity gains over time.

This report has established the national baseline for understanding government size and productivity. The forthcoming third report will extend this work to the provinces, comparing performance across jurisdictions, identifying best practices, and drawing lessons from the strongest performers to guide improvements nationwide. MLI

About the author



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Endnotes

- Given the well-documented challenges of accurately measuring government sector outputs and outcomes (for example, see Harrison and Sharpe, 2024, or UK Statistics Authority, 2025), this section introduces alternative data sources to attempt to measure government performance, such as those suggested in Sargent and Egan (2025).
- We exclude non-permanent residents in the population data given the major swings in that category in recent years.
- The time series in this figure was constructed by the author using Chart 1 from successive Fraser Institute reports on Canadian health care wait times (Moir and Barua and other authors over various years, 1997 to 2024). Each data point corresponds to the Fraser Institute's annual survey of specialist physicians. See the reference section for full report citations.

APPENDIX A Comparing government and business sector performance

(Average annual change from 1997 to 2024)

Indicator Growth	Government sector	Business sector	Difference (in percentage points)
Employment	1.9%	1.4%	+0.5
Hours worked	2.2%	1.1%	+1.1
Total compensation	4.8%	4.5%	+0.3
Real value-added	2.0%	2.3%	-0.3
Labour productivity	0.2%	1.1%	-0.9

Source: Calculations using Statistics Canada table 36-10-0480-01.

APPENDIX B Data issues and adjustments for 2013 reclassifications

We used Statistics Canada data from Table 36-10-0480-01 (for employment, hours worked, compensation, and real value-added output) and from Table 36-10-0450-01 (for general government revenues and expenditures).

With the large Statistics Canada datasets, the following government subsectors were reclassified beginning in 2013: elementary and secondary schools [GS611100], community colleges and CEGEPs [GS611200], other educational services [GS611A00], government health services [GS620], hospitals [GS622000], defence services [GS911100], provincial and territorial government services [GS912].

These classification changes affected reported estimates for employment, hours worked, and total compensation, but not the value-added series. This in turn, heavily influenced some labour productivity estimates and introduced discrete jumps in 2013 for affected series. For example, "other government health services" were reclassified from "provincial and territorial government services" to "health services."

To make all series consistent and comparable over time, we reconstructed these time series. To do so, we applied the historical long-term growth rates up to 2013 in order to forecast the relative changes in each indicator between 2012 and 2013. We then inferred the magnitude of the reclassification impacts based on the differences between the actual and predicted changes in the series.

Finally, note that the "All industries" aggregations used in this report exclude owner-occupied dwellings because there are no data on the number of hours worked by homeowners to maintain their dwellings. By subtracting this activity from GDP, the result is a better estimate of productivity for the total economy because it harmonizes the measurement of hours worked with GDP.

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