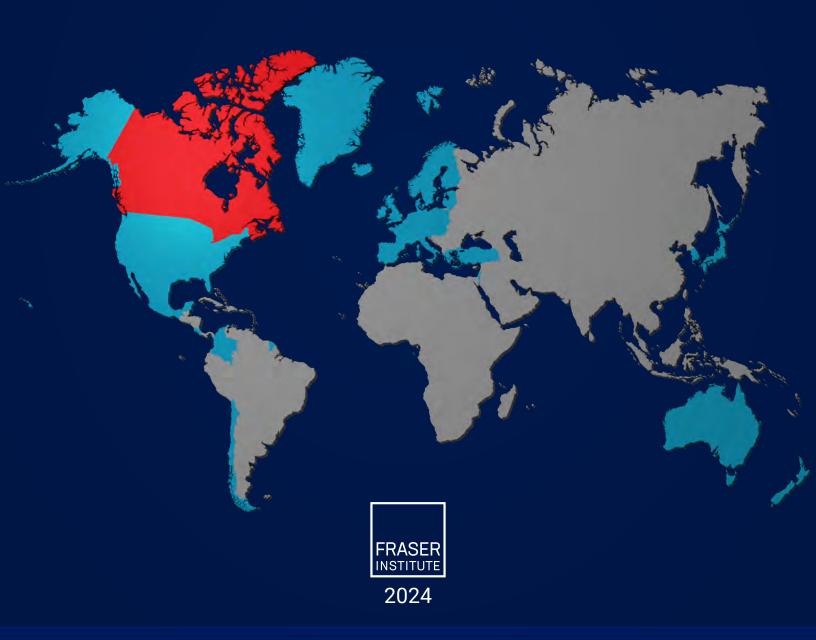
A Comparative Analysis of the Economic Performance of Canada and Its OECD Competitors, 2007–2019

Francisca Dussaillant



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Executive Summary

- This essay examines Canada's economic performance compared to a group of industrialized countries in the OECD from 2007 to 2019, the last full business cycle. The study assesses GDP, investment, and labour market performance.
- Starting with income measures, Canada's GDP saw a 22.5% growth over the period, positioning it 14th among 32 OECD countries.
- However, when adjusted for per-person GDP, growth was modest at 7.2%, ranking Canada 19th out of 31 countries. This per-person performance indicates a decline relative to the OECD average, highlighting challenges in maintaining relative economic growth.
- Initially exceeding the OECD average in 2007, Canada's investment, as measured by the ratio of total Gross Fixed Capital Formation (GFCF) to GDP, began declining in 2013 and fell below the OECD average by 2016.
- A particularly stark indicator of this trend is the 11.1% reduction, from 2007 to 2019, in business investment, as represented by private non-residential GFCF. This decline points to a substantial contraction in investment within key segments of the economy. Canada's Government investment as a proportion of GDP also decreased 9.2% in the period.
- Labour market analysis reveals mixed results. Canada's labour force participation rate and employment rate showed relative stability. However, public sector employment grew faster (17.3%) than private sector employment (13.3%).
- Labour productivity, measured as GDP per hour worked, increased by 10.3%, but this growth lagged behind the OECD average of 11.2%. Additionally, GDP per worker grew by 6.8%, further underscoring Canada's position as one of the slower-growing economies among its OECD peers.

1. Introduction

This report explores Canada's economic performance relative to its OECD peers over the 2007-to-2019 business cycle. It analyzes a broad spectrum of economic indicators, including GDP and GDP per capita, gross fixed capital formation with a focus on its private non-residential component, and labour market dynamics encompassing labour force participation, employment rates, and labour productivity. The study encompasses a comparative analysis with 33 OECD nations, offering insights into Canada's position and trends within this international context.

¹ The list of OECD countries included in this analysis comprises most members by 2019, excluding countries with a per-capita GDP, as of 2019, below US\$25,000 (Chile and Mexico) and Luxembourg due to its small size. Not all analyses cover the 33 selected OECD countries; where a smaller set is used, this limitation is because data are not available.

2. Income Measures (GDP and GDP per Person)

Section 1 examines Canada's Gross Domestic Product (GDP) from 2007 to 2019, detailing its growth and Canada's international ranking among the OECD countries. It also explores per-person GDP to offer a comprehensive view of economic progress, adjusting for population changes and comparing Canada's performance to global counterparts.

Gross Domestic Product (GDP)

Measured in 2015 US dollars, Canada's GDP, in 2007, stood at US\$1.42 trillion, ranking it ninth amongst 32 OECD countries,² ahead of Türkiye and Australia but below the United States, Japan, Korea, and several European countries (figure 1). In 2019, Canada's total GDP amounted to US\$1.74 trillion (2015 USD and constant Purchasing Power Parity³). Canada fell one position to 10th in 2019 as Türkiye moved up to seventh (figure 2). The Canadian economy grew 22.5% from 2007 to 2019, ranking it 14th amongst 32 select OECD countries for growth in aggregate GDP. Canada ranked behind such peer countries as the United States (23.4%), Australia (34.8%) and fast growers Ireland (60.5%) and Türkiye (68.9%) (figure 3).

However, solely relying on total GDP for cross-economy comparisons has its limitations since it is influenced by population size and growth. With varying population sizes across countries, it is natural to anticipate a considerably higher GDP from a country with a population of 330.5 million, like the United States, compared to 37.6 million in Canada or 25.3 million in Australia (all figures from 2019). Additionally, GDP and population growth rates differ as a result of migration patterns, and Canada experienced a significant influx of international migrants in the years from 2007 to 2019, resulting in a population growth rate of 14.3%. This growth rate is notably distinct from the 9.6% growth in the United States, the 16.7% growth in Australia, and the 3% decrease in population in Greece during the same period (OECD, 2023)

² Latvia is not included in the list because comparable data is not available.

³ Purchasing Power Parity (PPP) are the rates of currency conversion that compare the relative price levels of different countries by measuring the amount of local currency needed to purchase the same basket of goods and services in each country. OECD (n.d.-c) is a resource for understanding its methodological approach to calculating PPP.

United States Japan Germany France United Kingdom Italy Spain Korea Canada Türkiye Australia Netherlands Poland Belgium Switzerland Sweden Austria Greece Czech Republic Portugal Norway Denmark Ireland Hungary Finland Israel New Zealand Slovak Republic Lithuania Slovenia Estonia Iceland 0 5,000 10,000 15,000 20,000 Billions \$US 2015, constant PPP

Figure 1: Gross GDP (billions \$US 2015, constant PPP) in OECD countries, 2007

Note: Data not available for Latvia. Source: OECD, 2023.

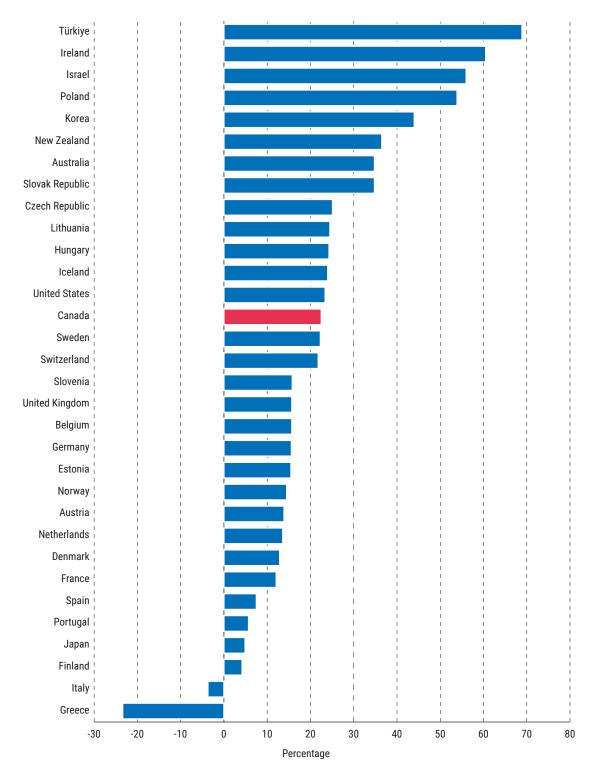
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United States Japan Germany United Kingdom France Italy Türkiye Korea Spain Canada Australia Poland Netherlands Switzerland Belgium Sweden Austria Ireland Czech Republic Israel Portugal Norway Hungary Denmark Greece Finland New Zealand Slovak Republic Lithuania Slovenia Estonia Iceland 0 5,000 10,000 15,000 20,000 25,000 Billions \$US 2015, constant PPP

Figure 2: Gross GDP (billions \$US 2015, constant PPP) in OECD countries, 2019

Note: Data not available for Latvia. Source: OECD, 2023.

Figure 3: Change (%) in gross GDP (\$US 2015, constant PPP), in OECD countries, 2007-2019



Note: Data not available for Latvia. Source: Author's estimates derived from OECD, 2023.

GDP per person

In 2007, Canada's per-person GDP was, measured in US dollars (2015), US\$43,135, ranking it 13th amongst 31 OECD countries,⁴ ahead of the OECD-Total,⁵ several European countries and Japan, but below the United States, Australia. and the Nordic Countries— Denmark, Sweden, Finland, Norway and Iceland (figure 4). In 2019, Canada's per-person GDP amounted to US\$46,224 (\$US 2015 and constant PPP). From 2007 to 2019 Canada rose one position, to 12th, moving ahead of Finland (figure 5, p. 8). In the 12 years from 2007 to 2019, Canada's per-person GDP grew 7.2%, ranking 19th amongst 31 select OECD countries (figure 6, p. 9). This is lower than the average OECD increase of 11.5%. It is also lower than Australia's (10.8%) or the United States' (12.7%) growth in per-person GDP over the period.

From 2007 to 2019, Canada experienced a relative decline in per-person GDP compared to the OECD average. This trend is illustrated in figure 7 (below), alongside a comparison with the trajectory of the United States during the same period. In 2007, Canada's per-person GDP was 11.3% higher than the OECD average. However, a noticeable decline began around 2014 and by 2019 this figure had dropped to only 7.0% above the OECD average. In contrast, the United States exhibited a different trend, with its GDP per capita relative to the OECD average increasing from 39.5% to 41.0% over the same time frame.

United States Percentage 100 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 Source: OECD, n.d.-a.

Figure 7: Real per-person GDP in Canada and the United States as a percentage of OECD-total's, 2007–2019

⁴ Slovak Republic and Switzerland are not included in the list because data for 2007 is not available.

The OECD-Total measure that OECD reports in its *Economic Outlook* corresponds to a weighted average of OECD member's statistics (OECD, 2012).

Norway Ireland **United States** Netherlands Iceland Denmark Austria Sweden Finland Belgium Germany Australia Canada United Kingdom Italy France Japan OECD - Total Spain Greece New Zealand Slovenia Czech Republic Israel Korea Portugal Estonia Hungary Lithuania Latvia Poland Türkiye 0 10,000 20,000 30,000 40,000 50,000 60,000 70,000 80,000 \$US 2015, constant PPP

Figure 4: Gross GDP per person (\$US 2015, constant PPP) in OECD countries, 2007

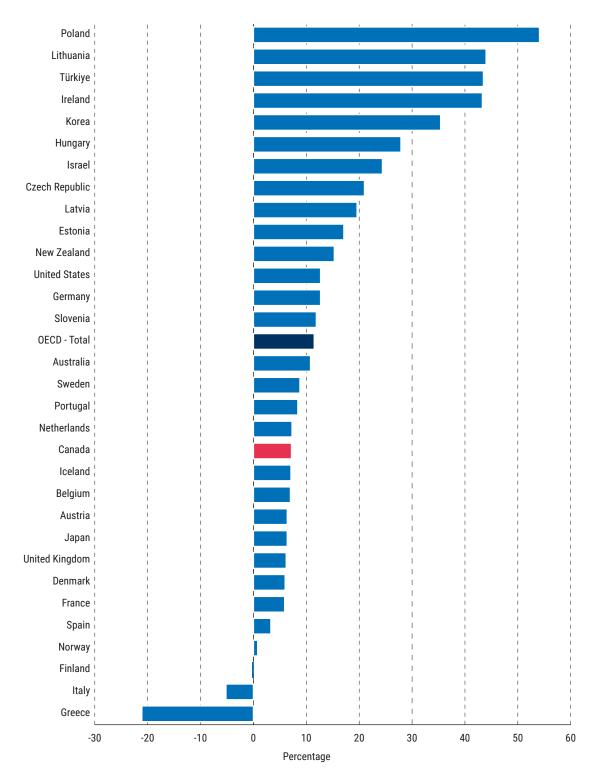
Note: Data not available for 2007 for Slovak Republic and Switzerland. Source: OECD, n.d.-a.

Ireland Norway **United States** Netherlands Iceland Denmark Austria Sweden Germany Belgium Australia Canada Finland United Kingdom OECD - Total France Japan Korea New Zealand Italy Israel Czech Republic Spain Slovenia Lithuania Estonia Portugal Hungary Poland Latvia Türkiye Greece 0 20,000 40,000 60,000 80,000 100,000 \$US 2015, constant PPP

Figure 5: Gross GDP per person (\$US 2015, constant PPP) in OECD countries, 2019

Source: OECD, n.d.-a.

Figure 6: Change (%) in GDP per person (\$US 2015, constant PPP) in OECD countries, 2007–2019



3. Investment

Investment, specifically gross fixed capital formation (GFCF), is a critical variable in economic analysis. It encompasses residential GFCF, private non-residential GFCF, and general government GFCF.⁶ GFCF from "pure" households primarily involves the purchase of dwellings. This is a key indicator of household confidence in future economic conditions and can help predict fluctuations in consumption expenditure. However, it does not provide insights into a country's productivity, competitiveness, or growth in per-capita income.

The GFCF of the general government largely includes transport infrastructure, military defence systems (including weapon systems), office buildings, schools, and hospitals. Economists, however, are particularly interested in the GFCF of the business sector, which includes non-financial and financial corporations as well as unincorporated enterprises. This sector represents the most substantial component of investment, often signaling the onset and conclusion of economic cycles and influencing the growth in apparent labour productivity. (Lequiller and Blades, 2014). This section analyzes Canada's investment trends relative to those of its OECD counterparts, with a specific emphasis on private non-residential gross fixed capital formation (GFCF) as a crucial metric. It complements this with the trends for government GFCF, since governmental investment in infrastructure and other assets also has a positive effect on productivity, competitiveness, and overall economic growth. By contrasting these trends with those of other OECD nations, the analysis aims to discern their influence on Canada's global economic position throughout the 2007-to-2019 business cycle.

Total gross fixed capital formation (GFCF)

Canada's total gross fixed capital formation (GFCF), expressed in 2012 Canadian dollars, amounted to \$212.4 billion in 2007 and rose to \$231.5 billion by 2019 (OECD, 2023). For appropiate cross-national comparisons, adjusting the investment levels of each country relative to the size of its economy, as measured by GDP, is recommended. Figure 8 depicts the longitudinal

⁶ Gross fixed capital formation (GFCF) can also be examined by asset category (that is, dwellings, buildings and structures, machinery and equipment, and intellectual property products). Globerman and Emes (2021) provide an analysis in this line. Regretfully, OECD data does not allow researchers to assign shares of capital expenditures in each of the individual asset categories to specific economic sectors (government, residential, and business non-residential).

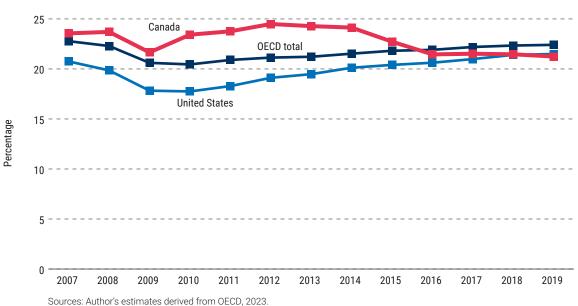


Figure 8: Total gross fixed capital formation in select countries (as % of GDP), 2007–2019

analysis of Canadian GFCF as a percentage of GDP alongside comparable series for both the OECD average and the United States. Initially, Canada's GFCF was 23.6% of GDP, a measure that exceeded both the OECD average and that of the United States. However, over the period from 2007 to 2019, Canada experienced a notable decline, falling below both benchmarks. The downturn in Canada's total GFCF as a percentage of GDP began in 2013, with the country's metrics falling below the OECD average by 2016. By 2019, Canada's GFCF percentage (21.2%) was also overtaken by that of the United States.

Nevertheless, it is essential to acknowledge that gross fixed capital formations span a diverse array of investment sources, each contributing differently to economic productivity. As mentioned previously, total GFCF, as a comprehensive measure, encapsulates investments across the public, household, and private business sectors. By 2019, 52% of Canada's total GFCF was in the private non-residential sector, 16% came from the government, and 32% from the residential sector (OECD, 2023)

Business investment (private non-residential GFCF)

Within the realm of private investment, a distinction exists between residential investments and those in productive assets, including structures, machinery, equipment, and advanced technology and intellectual property goods. For this reason, private non-residential GFCF stands out as a useful proxy for overall business investment, targeting types of investment that are crucial

for boosting productivity. Globerman and Press (2018) offered an in-depth exploration of the Canadian scenario, specifically analyzing variations within Canada's private business investment. Echoing this analytical approach, the present study seeks to contrast Canada's business investment—approximated through private non-residential GFCF—against that of 17 OECD countries, selected from the original 33 based on the availability of relevant data.

Figure 9 reveals that, in 2007, Canada's private non-residential GFCF accounted for 12.3% of its GDP, a measure that was comparatively low among its peers, positioning it 15th out of 17 countries. Only the United States, with a GFCF of 11.9% of GDP, and the United Kingdom, with 9.7% of GDP, recorded lower figures. By 2019, as depicted in figure 10, the situation had deteriorated for Canada, with its private non-residential GFCF decreasing to 11.0% of GDP. This reduction caused Canada to drop one place in the ranking as the United States' GFCF rose to 14.3% of GDP.

Figure 11 illustrates a downward trend in Canada's private non-residential GFCF as a share of GDP between 2007 and 2019, recording a decrease of 11.1%, which signifies an overall decline. Within the group of 17 OECD countries analyzed, nine had a reduction in GFCF as a share of GDP, with Canada experiencing the third largest decline. In contrast, the private non-residential GFCF as a share of GDP in the United States saw a significant increase of 19.7% over the period.

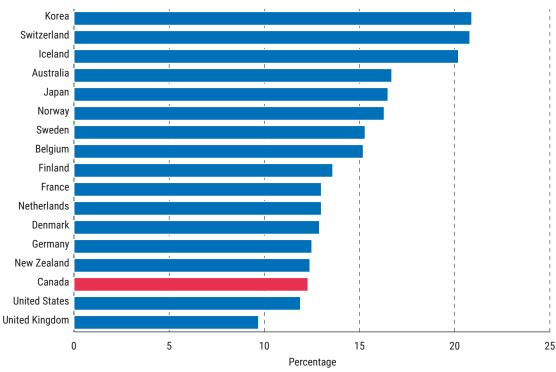


Figure 9: Private, non-residential GFCF (as % of GDP), 2007

Source: Author's.estimates derived from OECD, 2023.

Switzerland Korea Belgium Japan Norway Sweden France **United States** New Zealand Australia Netherlands Denmark Germany Finland Iceland Canada United Kingdom 0 5 10 15 20 25 Percentage

Figure 10: Private, non-residential GFCF (as % of GDP), 2019

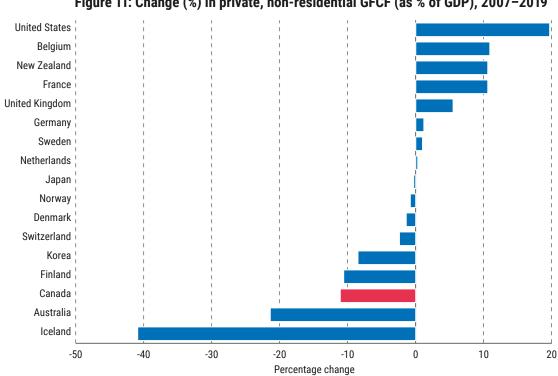


Figure 11: Change (%) in private, non-residential GFCF (as % of GDP), 2007-2019

Source: Author's.estimates derived from OECD, 2023.

Figure 12 shows the trajectory of Canada's private non-residential GFCF as a percentage of GDP. While there was a brief moment in 2009 when the United States marginally exceeded Canada, its advantage was temporary, and Canada subsequently regained the lead. From 2015, a pronounced divergence between Canada and the United States is apparent: that year marks a critical juncture when the United States definitively surpassed Canada on this investment metric. From 2015 onwards, the leading position of the United States was consistently maintained in stark contrast to most of the years from 2007 to 2014.

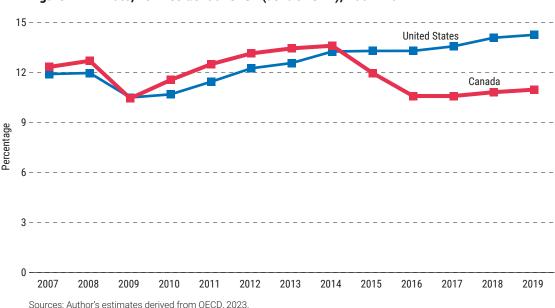


Figure 12: Private, non-residential GFCF (as % of GDP), 2007-2019

Public investment (government GFCF)

In 2007, government GFCF in Canada accounted for 16.1% of total GFCF, a figure that remained nearly unchanged at 16.2% by 2019, according to OECD, 2023. With government investment making up 3.8% of GDP in 2007, Canada ranked 10th among 17 countries (**figure 13**). By 2019, this investment had decreased to 3.4% of GDP, dropping Canada's rank to 12th, as it was overtaken by Australia and Finland during the period (**figure 14**).

Figure 15 shows the percentage change in public investment across countries during the specified period. Canada is among those with declining investments: with a 9.2% decrease, Canada ranked 12th out of the 17 countries for which information was available. During the same period, the United States also experienced a decrease in government investment of 13.1%, while countries like Australia (42.3%) and the United Kingdom (10.1%) saw increases.

New Zealand Korea Japan Iceland Norway Sweden France **United States** Netherlands Canada Finland Denmark Switzerland Australia United Kingdom Germany Belgium 0 2 3 4 5 6 1 Percentage Source: Author's estimates from OECD, 2023.

Figure 13: Government GFCF (as % of GDP), 2007

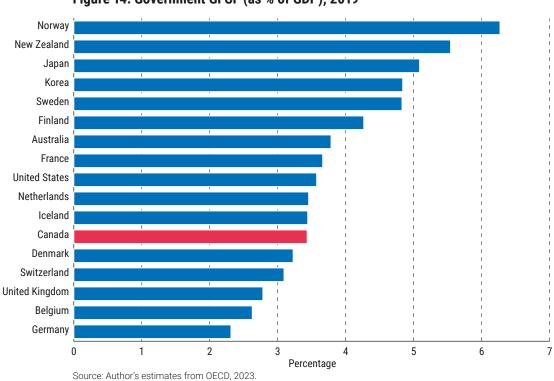


Figure 14: Government GFCF (as % of GDP), 2019

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Australia Norway Belgium Finland Germany Sweden Switzerland United Kingdom Denmark New Zealand Japan Canada Korea France Netherlands **United States** Iceland -0.4 -0.3 -0.2 -0.1 0.0 0.1 0.2 0.3 0.4 0.5 Percentage change

Figure 15: Change (%) in government GFCF (as % of GDP), 2007-2019

4. Labour Markets

Section 3 explores the dynamics of Canada's labour markets from 2007 to 2019, focusing on labour-force participation rates, employment, and demographic shifts within the working-age population. It weaves together a detailed examination of domestic labour-market trends with comparisons of employment in the private and public sectors, and of trends in labour productivity, against OECD benchmarks. This comprehensive approach highlights the distinctive features and productivity trends of Canada's labour market, positioning it among the wider advanced economies.

Employment rate, working age population, and labour force participation

Between 2007 and 2019, there was a slight decrease in Canada's labour-force participation rate from 70.9% to 70.4% of the working-age population, which, for the purposes of this analysis, is defined as individuals aged 15 to 74 years. Similarly, the employment rate—calculated as the proportion of employed individuals within the working-age population⁷—remained relatively stable (OECD, 2023).

Figure 16 and figure 17 illustrate the employment rate in Canada, which was 66.6% of the working-age population in 2007, positioning Canada 9th among the 33 select countries. By 2019, the employment rate had marginally decreased to 66.3%, and Canada's fell to 12th place as a result of improvements in the employment rate of a number of other countries. The general trend among OECD countries was an increase in employment rates over this period, leading to a decline in Canada's relative ranking. Notably, the United Kingdom, Estonia, Sweden, Germany, and Japan, which had lower employment rates than Canada in 2007, had surpassed Canada on this metric by 2019. Conversely, during this 12-year period, Canada's employment figures improved relative to those of Ireland and Denmark.

Figure 18 details the changes in employment rates from 2007 to 2019, revealing a modest reduction of 0.3% in Canada's employment rate. This change positioned Canada 24th among the 33 OECD countries studied, ahead of the United States, which saw a 2.9% decrease, but behind

⁷ In this analysis, the employment rate is calculated as the ratio of the total number of employed persons (according to labour force surveys) to the working-age population, defined herein as individuals aged 15 to 74. The OECD (2021) specifies that the count of employed persons encompasses "all persons engaged in productive activity that falls within the production boundary of the national accounts. The employed comprise all individuals who, during a specified brief period, were in either paid employment or self-employment".

Iceland Switzerland Norway New Zealand Denmark Netherlands Australia Ireland Canada Sweden Japan **United States** United Kingdom Estonia Finland Austria Korea Slovenia Latvia Portugal Israel Germany Spain Lithuania Czech Republic Belgium France Slovak Republic Greece Hungary Italy Poland Türkiye 0 10 20 30 40 50 60 70 80 Percentage

Figure 16: Total employment rate for working-age population, 2007

Japan New Zealand Switzerland Iceland Netherlands Estonia Norway Australia Sweden Germany United Kingdom Canada Lithuania Israel Korea Austria Latvia Ireland **United States** Denmark Czech Republic Slovenia Hungary Finland Portugal Slovak Republic Belgium Spain France Poland Italy Greece Türkiye 0 10 20 30 40 50 60 70 80 Percentage

Figure 17: Total employment rate for working-age population, 2019

Hungary Poland Germany Türkiye Lithuania Japan Israel Estonia Slovak Republic Czech Republic Latvia Korea Austria United Kingdom New Zealand Belgium Portugal Netherlands Sweden Australia Italy Slovenia Switzerland Canada France Finland United States Norway Ireland Iceland Spain Denmark Greece -0.10 -0.05 0.20 0.00 0.05 0.15 Percentage

Figure 18: Percentage change in employment rates, 2007-2019

Australia, Japan, Israel, and several European countries, with Hungary leading the growth at 18.9%. This relative stability of Canada's labour-force participation rate and employment rate conceals significant dynamics in the growth of population and labour-force composition that could have important consequences for the country's labour markets in the next few years. As mentioned earlier, from 2007 to 2019, Canada's population increased by 14.3%. However, this increase was not uniform across age groups (figure 19).

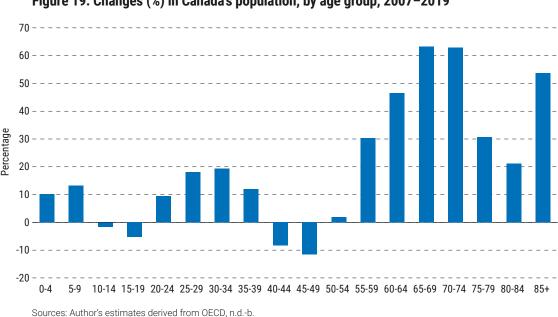


Figure 19: Changes (%) in Canada's population, by age group, 2007-2019

As a result, Canada has experienced a significant change in the age composition of the Canadian population. While in 2007 17.1% of the population was younger than 15 years old, by 2019 this group had dipped to 16.0% of the total population. Similarly, people 75 and older represented 6.3% of the Canadian population in 2007, a share that had risen to 7.4% by by 2019. Furthermore, and what is most important for our analysis, the age composition of the working-age population also changed significantly over the period (figure 20).

It is notable that, even though the working-age share of the Canadian population remained the same (76.6%), by 2019 the internal composition of this group was significantly different, with increased representation of older working-age cohorts and decreased representation of the younger working-age cohorts. In 2007, 17.8% of the working-age population were aged 15 to 24, 57.7% were in middle-aged category (25 to 54), and 24.5% were older and/or approaching retirement (55 to 74). These shares had changed significantly to 15.9%, 52.6%, and 31.5% by 2019.

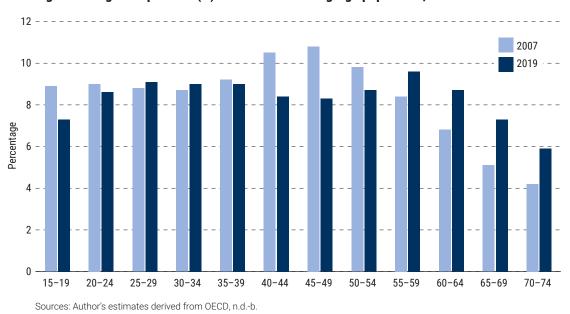


Figure 20: Age composition (%) of Canada's working-age population, 2007 and 2019

The employment rates are influenced by the relative shares of the youngest and oldest individuals within the working-age population, with the latter typically exhibiting the lowest probabilities of employment, compared to middle-aged cohorts where the probability of employment is maximized. Consequently, an increase in the proportion of older working-age individuals is offset by a decrease in the younger working-age segment, leading to overall stability in the employment figures. However, this apparent stability masks significant changes in the composition and quality of the labour force, implying that the characteristics and future prospects of

Employment in the public and private sectors

those employed in 2019 differ markedly from those in 2007.

Figure 21 summarizes the trajectory of public- and private-sector employment in Canada from 2007 to 2019. In 2007, the total number of individuals employed in Canada was 16.8 million. By 2019, this figure had risen to 19.1 million, marking a 14.0% increase. This growth corresponds to an approximate annualized growth rate of 1.1% over the period. Figure 21 also shows these employment levels by broad sector—public and private. In 2007, 19.1% of Canada's employed

⁸ For the purposes of this analysis, "public employment" corresponds to what the OECD categorizes as "general government employment" whereas "private employment" denotes the difference between "total employment" (labour force survey base) and "general government employment". According to the OECD (2021): "General government employment encompasses positions at all governmental levels (central, state, local, and social security

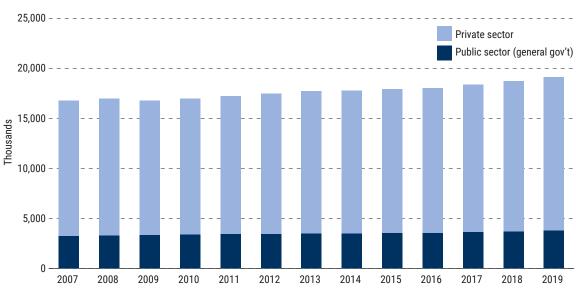


Figure 21: Canada's total employment in private and public sectors, 2007–2019

population, or approximately 3.2 million individuals, were engaged in public-sector work. By 2019, public-sector employment had grown to 3.8 million, or 19.7% of the total employed population, indicating that, out of the 2.4 million increase in employment from 2007 to 2019, 556,300, or 23.6%, were in the public sector. This shift suggests an asymmetry in sectoral employment growth during this period, with a discernible preference for the public sector. As a result, there was an observable rise in public-sector employment as a percentage of the total working-age population.

Figure 22 and figure 23 offer a perspective on Canada's public employment rate compared to the employment rates of OECD countries for which information was available. These figures define the public employment rate as the proportion of individuals employed in the public sector relative to the working-age population, which, for the purposes of this analysis, is defined as individuals aged 15 to 74 years. Figure 22 illustrates that in 2007, the public employment rate in Canada stood at 12.7% of working-age population, ranking Canada 8th among 21 countries, positioned below the Northern European countries but above the United States, with Japan having the lowest rate at 5.5%. By 2019, Canada's public employment rate had increased to 13.1%, though its rank remained unchanged (figure 23).

funds), incorporating core ministries, agencies, departments, and non-profit institutions under public authority control. Total employment includes all individuals engaged in productive activities within the national accounts' production boundary". Health-care providers, teachers, and emergency workers who are directly employed by the government or public organizations are considered as employed in this measure.

⁹ Among the initial group of 33 countries considered for this analysis, only 21 had available data on public employment.

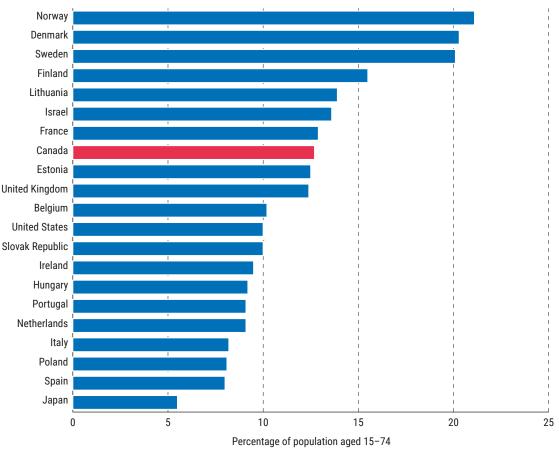


Figure 22: Public employment (%) for working age population, 2007

The comparative analysis of the evolution of private and public employment within Canada, relative to its OECD counterparts, is an important area for investigation. Figure 24 illustrates the growth or decline in employment within both the public and private sectors across countries, ranking them according to the rate of growth in public employment from 2007 to 2019. This rate is determined by measuring the change in the number of individuals employed in each sector. Over this period, Canada saw a 17.3% increase in its public-sector employment, placing it fourth out of 21 countries, with only Norway, Israel, and Ireland reporting higher growth rates. Conversely, several nations witnessed a contraction in public-sector employment—a trend not equally reflected in their private sectors. Lithuania, Italy, the United Kingdom, Japan, and Portugal stand out as notable examples where public employment diminished.

Further examination is warranted to understand the disparity between the rates of growth in public- and private-sector employment within each country, as depicted in figure 24. The case of Canada, with a growth of public employment of 17.3% and a growth of private employment

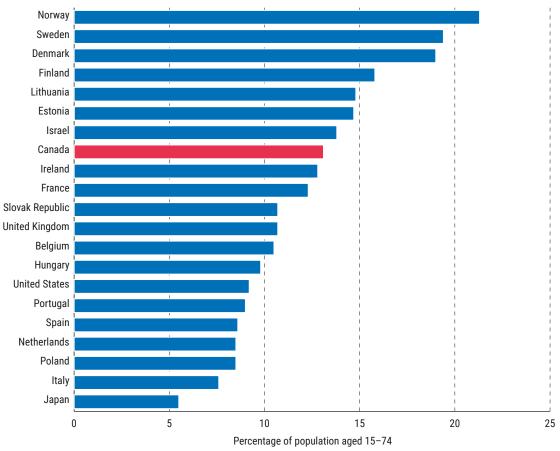


Figure 23: Public employment (%) for working age population, 2019

of 13.3%, points to a gap of 4.1 percentage points.¹⁰ Figure 25 maps these disparities and orders countries by the magnitude of the gap. This ranking is arranged in descending order of the gap size, with a large positive value indicating a country where public-sector employment has grown disproportionately more than private-sector employment, and a negative value indicating the reverse trend.

Canada ranks sixth among the 21 countries, exhibiting a positive gap between growth in public and private employment over the period studied, and indicating a greater expansion in the public sector. This trend aligns Canada with Finland, Norway, Estonia, Spain, and Ireland, which also experienced similar growth in public-sector employment. In contrast, the 15 remaining countries, including the United States and Japan, along with several European nations, exhibited a negative disparity, signifying a more vibrant expansion in the private sector's employment figures.

¹⁰ Discrepancy in the reported difference is due to the rounding of figures.

Figure 24: Growth (%) in private- and public-sector employment in Canada, 2007-2019 Growth in public-sector employment Growth in private-sector employment Growth (percentage) 10 -10 Lithuania

Sources: Author's estimates derived from OECD, 2023.

Figure 25: Gap between growth rates of public and private employment, 2007-2019 Ireland Spain Estonia Norway Finland Canada Denmark Belgium Slovak Republic France Portugal Lithuania **United States** Sweden Italy Netherlands Japan Poland Hungary Israel United Kingdom -30 -20 -10 10 20 30 40 50 60 Percentage points

Labour productivity

One way to measure the labour productivity of an economy is to estimate its GDP per worker or its GDP per hour worked. **Figure 26** and **figure 27** depict the latter for 28 OECD countries for which there was information available. In 2007, Canadian labour productivity amounted to US\$47.79 per hour worked (measured in 2015 US dollars), locating the country slightly above the OECD average of US\$46.85 and in rank 17th of 28. By 2019, Canada's productivity had increased to US\$52.70 per hour worked (constant USD 2015 and constant PPP) and was still slightly above the OECD average of US\$52.08, with an identical ranking.

Figure 28 ranks Canada alongside its peer countries based on the growth rate of GDP per hour worked. Canada experienced a 10.3% increase, demonstrating a slower pace of growth than the OECD average of 11.2%, ranking it 14th out of 28 countries. It is notable that the majority of countries with growth rates below Canada's during this period had both starting and ending levels that were superior to Canada's, as illustrated in figures 26 and 27. Exceptions to this pattern include Portugal, New Zealand, and Greece.

The modest growth in Canada's GDP per hour worked is paralleled by a decrease in the total annual hours worked. Specifically, the average number of hours worked by a Canadian employee decreased from 1,745 in 2007 to 1,691 in 2019, a reduction of 54 hours or 3.2% (OECD, 2023). This decline implies that Canadian employees in 2019 worked more than a full week less than they did in 2007. Given varying changes in hours worked across countries, exploring how the evolution in GDP per hour worked affects the GDP per worker measure is pertinent. This measure is crucial as it correlates with annual wages received. The OECD's data from 2007 to 2019 show that Canada's annual GDP per worker started at US\$83,419 (USD 2015, PPP), ranking it 17th out of 33 countries and marginally below the OECD average of US\$84,402 (figure 29). By 2019, Canada's GDP per worker had increased to US\$89,121, still below the OECD average of US\$91,145, maintaining its ranking (figure 30). Several countries, including the United States, Australia, and various European nations, have outpaced Canada in the growth of GDP per worker.

Figure 31 demonstrates that from 2007 to 2019, Canada experienced a growth in GDP per worker of 6.8%, which is below the OECD average of 8.0%, ranking it 21st among 33 countries. This positions Canada as one of the economies with slower productivity growth relative to its OECD counterparts, trailing significantly behind countries such as Ireland (55.4%) and Poland (42.4%), the United States (14.6%), and Australia (8.7%). Notably, when defining the group of slower-growing countries as those with growth rates in GDP per worker below the OECD average, an examination of figures 29 and 30 reveals that the majority of these countries, with the exception of Greece and Japan, started and concluded the period studied with a GDP per worker higher than Canada's.

Norway Belgium Switzerland Ireland Netherlands Sweden Denmark Austria **United States** France Germany Finland United Kingdom Iceland Italy Australia Canada OECD Spain Japan Greece Slovenia New Zealand Israel Portugal Czech Republic Estonia Lithuania Latvia 0 20 40 60 80 100 \$US 2015

Figure 26: GDP per hour worked (\$US 2015, constant PPP), 2007

Source: OECD, 2023.

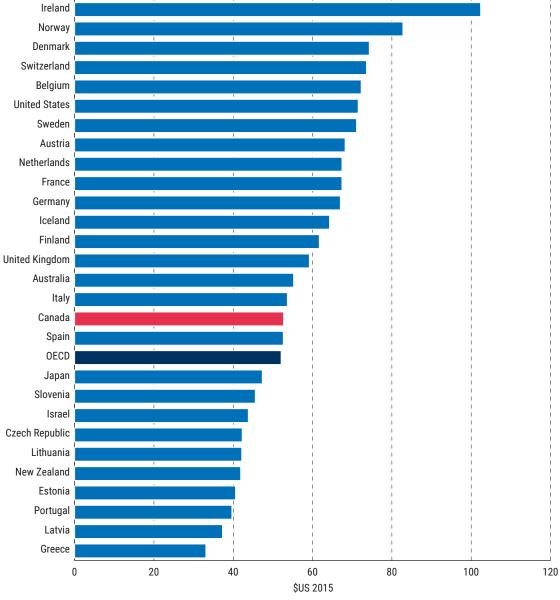


Figure 27: GDP per hour worked (\$US 2015, constant PPP), 2019

Source: OECD, 2023.

Ireland Latvia Lithuania Estonia Israel Czech Republic Australia Iceland Denmark Spain **United States** Slovenia OECD Japan Canada Switzerland Germany Portugal Sweden New Zealand France Austria Belgium United Kingdom Finland Netherlands Norway Italy Greece -20 0 10 -10 20 30 40 50 60 Percentage

Figure 28: Percentage change in GDP per hour worked, 2007-2019

Norway Ireland **United States** Switzerland Belgium Austria France Finland Italy Sweden Netherlands Denmark Germany United Kingdom Iceland Australia OECD total Canada Greece Spain Japan Israel New Zealand Türkiye Slovenia Czech Republic Portugal Korea Slovak Republic Estonia Hungary Lithuania Poland Latvia 0 20,000 40,000 60,000 80,000 100,000 120,000 \$US 2015

Figure 29: GDP per worker (\$US 2015, constant PPP), 2007

Source: OECD, 2023.

Ireland **United States** Norway Switzerland Belgium Sweden Austria France Denmark Netherlands Iceland Finland Australia Germany Italy OECD total United Kingdom Canada Spain Türkiye Israel Korea Japan Czech Republic New Zealand Slovak Republic Poland Slovenia Lithuania Portugal Estonia Hungary Greece Latvia 0 50,000 200,000 100,000 150,000 \$US 2015

Figure 30: GDP per worker (\$US 2015, constant PPP), 2019

Source: OECD, 2023.

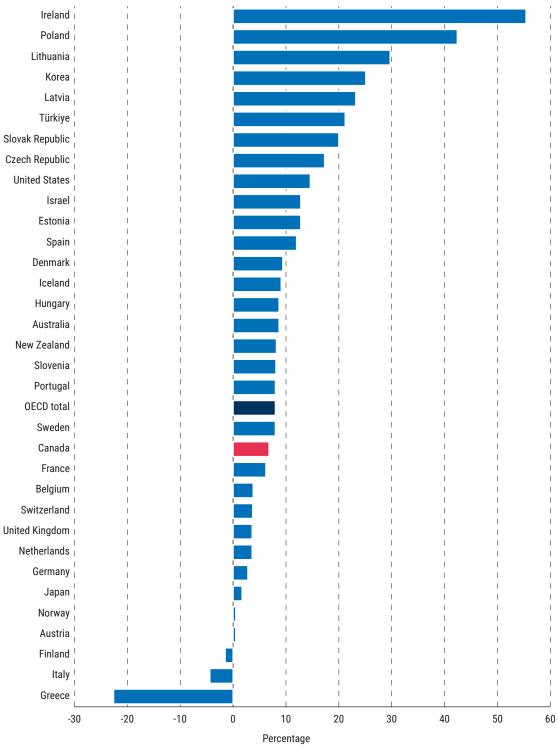


Figure 31: Percentage change in GDP per worker, 2007-2019

5. Concluding Remarks

Between 2007 and 2019, Canada's economic story is one of mixed results when compared with other advanced economy countries in the OECD. Although Canada's economy grew, it did so at a slower pace than many of its peers and the growth of GDP per person was modest. A key concern highlighted above is the weakness of Canadian business investment, which is crucial for long-term increases in prosperity and real incomes. Its poor investment performance suggests Canada might be facing challenges in keeping its economy vibrant over the long term.

The labour market in Canada remained quite stable, but there was a noticeable increase in public-sector jobs compared to employment in the private sector. Also, while Canadians have been earning more per hour worked, the increases have not kept up with the average in other developed countries. Essentially, between 2007 and 2019 Canada moved forward, but not as quickly or as strongly as many peer countries around the world.

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About the Author

Francisca Dussaillant is an economist. She studied Chemical Engineering and earned a Ph.D. in Economics from the Universidad Católica de Chile, along with a Master of Arts in Education from UNC Chapel Hill as a Fulbright Scholar. In Chile, she had a long and prolific career. She was the Director of the Center for Public Policy at Universidad del Desarrollo, where she also taught economics and public policy. She served as a Councillor at the Chilean Education Council and was the Chief of Labor and Social Policy at



the Chilean Ministry of Finance. Additionally, she worked for the Centro de Estudios Públicos and Horizontal think tanks, both with a classical liberal orientation, and was an in-house consultant at the Chilean office of the United Nations Development Program. Since her recent arrival in Canada, she has worked as a consultant. Ms Dussaillant has written more than 40 indexed studies and participated in several policy reports and briefs focusing on governmental policy in areas including education, labor markets, health, social development, and economic policy. She is particularly interested in understanding the drivers of a nation's economic development.

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