

# Comparing the Investment Performances of Canada and the United States over the Past Five Decades

Steven Globerman



2024

July 2024 • Fraser Institute

---

# Comparing the Investment Performances of Canada and the United States over the Past Five Decades

---

Steven Globerman



## Contents

Executive Summary	1
1. Introduction	2
2. Gross Fixed Capital Investment as a Share of Gross Domestic Product	4
3. Shares of Capital Investment by Sector	6
4. Shares of Investment by Asset Categories	8
5. Growth in Labour Productivity in Canada and the United States	14
6. Conclusion	17
References	20
About the Author	22
Publishing Information	23
About the Fraser Institute	24
Editorial Advisory Board	25

## Executive Summary

- There has been a growing concern about Canada's stagnant productivity performance in recent years, including the Bank of Canada's Senior Deputy Governor, Carolyn Rogers, declaring Canada's woeful productivity performance an economic emergency.
- Weak business investment, particularly post-2014, has been highlighted by academics, executives, and policy analysts as an important contributor to Canada's weak productivity performance.
- This study compares capital investment in Canada to that of the US and the OECD over the past five decades to identify how Canada's recent relative investment performance differs from its relative performance in earlier periods.
- The findings of this study support the claim that a fundamental change took place in Canada's investment environment post-2000, and particularly post-2014. Specifically, an increasing share of total capital investment went into the construction and renovation of residential dwellings, while a decreasing share went into information and telecommunications equipment and intellectual property products used by businesses. The opposite pattern characterizes investment in the US.
- The declining share of total investment in Canada accounted for by corporate investment, contrasted with an increasing share in the US, is consistent with the US outperforming Canada in the growth of both labour productivity and real per capita GDP in recent years.

# 1. Introduction

Much has been written about Canada's capital expenditure gap compared to the US and other developed countries, particularly in the case of business investment post-2014.<sup>1</sup> For example, Globerman and Emes (2021) report that as recently as the period from 2000 to 2010, overall capital investment in Canada enjoyed a substantially faster growth rate than in other developed countries, but from 2010 to 2021, Canada's investment growth rate dropped substantially below that of the US and many other developed countries. The growth rate of corporate investment was especially weak, as corporate investment as a share of total investment in Canada was the lowest among a set of developed countries over much of the past two decades. Finlayson (2022) shows the gap between Canada and the US in business investment per available worker becoming increasingly unfavourable to Canada after 2010 and especially after 2014. This is a finding confirmed by Hill and Emes (2023) who report that in 2014, Canada invested about 79 cents per worker for every dollar of non-residential business investment per worker in the US, whereas in 2021, investment in Canada was only 55 cents per worker for every dollar invested in the US.

Canada's investment gap with the US has also been linked to Canada's slower rate of growth in real per capita GDP and labour productivity compared to the US. Janzen and Xu (2023) estimate that the percentage point contribution of capital investments to growth in output per hour worked in Canada decreased from 1.20 for the period 2000-2009 to 0.4 for the period 2010 to 2019. Williams (2022) highlights the OECD's projection that Canada will be the worst performing economy out of 38 advanced countries over the next two to three decades in terms of growth in real GDP per capita. The principal reason is Canada's inability to generate meaningful gains in labour productivity (real output per hour worked) with declining investment per available worker being an important contributor to lagging labour productivity growth. More recently, the Bank of Canada senior deputy governor, Carolyn Rogers, pointed to weak business investment as an important contributing factor to Canada's weak labour productivity growth and described its woeful productivity performance as an economic emergency.<sup>2</sup>

---

1 Among other studies, see, Globerman and Press (2018), Globerman and Emes (2021), Finlayson (2022), and Hill and Emes (2023). Capital investment in this study includes all gross investment in fixed capital assets including residential construction, and government and business fixed investment. As will be shown, the long-term trends for these various categories of investment differ with implications for growth in productivity and real income.

2 Rogers specifically identified weak business investment in machinery, equipment, and intellectual property as a particular problem. See Rendell (2024).

This study compares the investment performances of Canada and the US over the past five decades with particular attention to changes in the mix of investment by asset category and by sector of the economy (i.e., household, government, and business). The main focus of the comparison is to identify whether Canada's investment performance, both absolute and relative to the US, over the past decade is similar to that of any prior period over the past five decades. A related focus is to compare growth in labour productivity in Canada and the US over the past two to three decades. Where possible, the aim is to assess the relationship between the observed differences in productivity growth and differences in the two countries' investment performances.

The study proceeds as follows: Section 2 presents and discusses total fixed capital investment as a share of gross domestic product (GDP) with a primary focus on the comparative performances of Canada and the US. Sections 3 and 4 provide detailed descriptions of the distribution of investment across major sectors of the Canadian and US economies, as well as across asset categories respectively. Section 5 compares the growth in labour productivity in Canada and the US and relatedly, Canada's relative performance in labour productivity growth to its investment performance compared to the US. Concluding comments are offered in the final section.

## 2. Gross Fixed Capital Investment as a Share of Gross Domestic Product

In this section of the essay, we examine changes in the capital investment intensities of the Canadian, US, and OECD economies over the period 1972–2021.<sup>3</sup> Aggregate capital investment intensity is measured as the share of gross fixed capital formation in gross domestic product (GDP). Gross fixed capital formation (GFCF) includes investment in assets by governments, companies, and households and therefore represents the broadest measure of expenditures on capital assets.<sup>4</sup>

Table 1 reports the average annual shares of GFCF in GDP (expressed as percentages) for the full sample period (1972–2021), as well as for different sub-periods. Of particular interest is Canada’s overall relative investment intensity compared that to that of the US prior to and after 2014. Since data for comparable time periods is also available for OECD countries, we report the average GFCF to GDP percentage for OECD member countries as well.<sup>5</sup>

**Table 1: Gross Fixed Capital Formation as a Percentage of Gross Domestic Product**

Time Period	Canada	United States	OECD
1972–2021	22.1	21.6	23.4
1972–1999	21.6	22.1	24.4
2000–2021	22.6	21.0	22.1
2014–2021	23.5	20.6	21.9

Source: World Bank, calculations by author.

3 The earliest year for which US data on gross fixed capital formation (GFCF) as a percentage of gross domestic product (GDP) is 1972 and the latest year is 2021. Canadian data is available from 1971 through 2022. The underlying data is reported in World Bank, Gross fixed capital formation as a % of GDP.

4 We will discuss the distribution of GFCF expenditures over time by sector and by asset type in later sections of this essay.

5 It is important to note that the number of countries in the OECD increased over the sample period, although membership is restricted to relatively high-income countries including Canada and the US.

The data reported in table 1 shows that over the approximate five decades from 1972–2021, Canada’s capital investment intensity was actually slightly greater than that of the US, although it trailed the OECD’s capital investment intensity. From 1972–1999, US capital investment intensity exceeded that of Canada, whereas the opposite was the case for the period 2000–2021. Particularly interesting is the fact that Canada’s capital investment intensity was 2.9 percentage points (or 14 percent) greater than that of the US over the period 2014–2021 and also exceeded that of the OECD by 1.6 percentage points (or seven percent) in the same period. Hence, during the most recent period of weakness in Canada’s business investment as discussed in other studies cited above, Canada’s overall capital investment intensity was relatively strong compared to the US and the OECD as a whole. An obvious inference is that relatively strong capital investment intensity in other sectors of Canada’s economy offset the weakness in business investment. In the next section, sectoral investment intensity data are presented and discussed.



### 3. Shares of Capital Investment by Sector

Concerns about lagging capital investment in Canada compared to the US arise from relatively weak investment in Canada’s business sector. Table 2 reports corporate investment as a share of GFCF, as well as investment by governments and households as shares of GFCF for Canada and the US, all expressed as mean annual percentages. The data series for sectoral investment starts in 1981. The latest year data available for sector shares for the US is 2021. Hence, the full time series reported in table 2 covers the period 1981 to 2021.

**Table 2: Investment Shares as a Percentage of Gross Fixed Capital Formation**

Time Period	Canada			United States		
	Gov’t	Corporate	Household	Gov’t	Corporate	Household
1981–2021	16.6	49.4	34.0	18.3	50.8	31.1
1981–1999	17.0	50.6	32.6	19.3	50.0	30.7
2000–2021	16.4	48.4	35.3	17.3	51.4	31.4
2014–2021	16.0	47.1	37.1	16.0	53.4	30.8

Source: OECD, 2024b.

Over the period 1981 to 2021, corporate investment as a share of GFCF reported for the US was only modestly higher than for Canada.<sup>6</sup> Indeed, over the sub-period 1981–1999, the share of corporate investment in GFCF for each country was virtually identical. The difference in corporate investment intensity between the US and Canada was greater over the period 2000–2021 than was the case for the preceding two decades. Specifically, corporate investment as a share of GFCF in the US was three percentage points (or 6.2 percent) higher than in Canada over the 2000–2021 period, while Canada’s share slightly exceeded that of the US over the period 1981–1999. Over the period 2014–2021, however, corporate investment’s share of GFCF in the US was 6.3 percentage points (or 13.4 percent) higher than the share in Canada. This pattern is consistent with earlier cited studies that

<sup>6</sup> Other things constant, one would expect the relative share of business investment to be higher in Canada than in the US given the relatively larger role of the energy, mining, and resource-processing manufacturing sectors in Canada. The latter sectors are relatively capital intensive compared to secondary manufacturing and technology-intensive industries.

find a substantial weakening of Canadian business investment post-2014. In this case, the weakening is shown relative to corporate investment in the US.

Over the full period 1981–2021, government investment as a share of GFCF was actually higher in the US than in Canada, and this was also the case for the sub-periods 1981–1999 and 2000–2021. However, over the sub-period 2014–2021, government investment’s share of GFCF was the same in both countries. It is worth noting that the share of GFCF accounted for by government investment was virtually unchanged for Canada over the four decades from 1981–2021, whereas government investment’s share of GFCF for the US was slightly more than 10 percent lower during the period 2000–2021 compared to the period 1981–1999. Combined with the previously discussed findings for corporate investment, the data for government’s share of investment reported in table 2 suggests that government investment did not necessarily “crowd out” corporate investment in Canada in recent years, since government’s investment share of GFCF is relatively constant over the four decades for which data is reported.<sup>7</sup> On the other hand, it is possible that the declining share of government investment in the US in the 2000–2021 period compared to the 1981–1999 period freed-up some domestic savings and other investment inputs to support increased corporate investment intensity, particularly post-2014.

Finally, household investment as a share of GFCF was larger in Canada than in the US by 2.9 percentage points (or about nine percent) over the full period 1981–2021, as well as for each of the sub-periods. The Canada-US gap is especially notable post-2014 when household investment as a share of GFCF was 6.3 percentage points (or almost 21 percent) higher in Canada compared to the US. This jump in the absolute and relative (to the US) share of GFCF by Canadian households during the period 2014–2021 combined with the larger Canadian deficit in corporate investment as a share of GFCF versus the US post-2014 suggests that a sharp increase in residential real estate investing in Canada post-2014 may have competed away investment inputs from Canada’s corporate sector.<sup>8</sup> More evidence bearing on this possibility is provided in the next section which reports data for the investment shares of different asset categories.

---

7 By *crowding out*, we mean that increased investment by one sector might push up interest rates and other contributors to costs of investing for other sectors, thereby discouraging investments by participants in the latter sectors. To be sure, the fact that the share of government investment in Canada did not go up consistently over the period 1981–2021 does not mean that a lower share for government investment would not have been accompanied by increased corporate investment.

8 Residential housing is the dominant asset category for household investing.

## 4. Shares of Investment by Asset Categories

In this section, we report data on the shares of total GFCF accounted for by specific asset categories. The Organisation for Economic Co-operation and Development (OECD) reports investment as a share of GFCF for the following asset categories: 1. Dwellings; 2. Information and Communication Technology Equipment; 3. Intellectual Property Products; 4. Other Buildings and Structures; 5. Transportation Equipment.<sup>9</sup> There is obviously some overlap between the share of GFCF accounted for by any specific asset category and share of GFCF accounted for by any specific sector. For example, household investment largely consists of dwellings, while other buildings and structures (which includes roads, bridges, airfields, dams, and the like), are largely investments made by governments.<sup>10</sup> Information and communications technology equipment consists of items such as computer hardware and software, computerized databases, and telecommunications equipment. Intellectual property products include investments in research and development, original software, and original literary and artistic creations, among other activities. Investments in information and communications technology equipment and intellectual property products are likely primarily made by businesses, as are transportation equipment investments which include aircraft, ships, trains, and trucks.

Tables 3–7 report the shares of GFCF accounted for by each individual asset category in Canada and the US. The full time periods differ by asset category, as dictated by data availability. For example, data on investment in dwellings as a percentage of GFCF is available for both countries from 1972 to 2021, which is also the case for other buildings and structures and intellectual property products. However, 1976 is the earliest year for which data on investments in information communications technology equipment as a share of GFCF is available, while 1981 is the earliest year for available data on transportation equipment’s share of GFCF.

Table 3 reports the mean annual investment in dwellings as a percentage of GFCF for the full period 1972–2021, as well as for specific sub-periods. In every reported time period, dwellings are a larger percentage of GFCF for Canada than for the US. However, the difference is markedly larger in the post-2000 period and particularly post-2014. As a frame of reference, investment in dwellings as a percentage of GFCF in Canada was five

<sup>9</sup> See OECD, Investment by asset (indicator). One small category of investment which is not reported in this section is cultivated biological resources, which primarily encompasses managed forests, livestock raised for milk, and other agricultural assets.

<sup>10</sup> Businesses also account for some investment in this category, particularly utility companies.

percentage points (or about 27 percent) higher than in the US over the period 1972–1999. Over the period 2000–2021, it was 10.8 percentage points (or approximately 65 percent) higher, and it was 15.6 percentage points or a dramatic 84 percent higher in the post-2014 period.

**Table 3: Investment in Dwellings as a Percentage of GFCF**  
Investment in Dwellings as a Percentage of GFCF

Time Period	Canada	United States
1972–2021	28.2	20.3
1972–1999	26.5	20.9
2000–2021	30.4	19.6
2014–2021	34.1	18.5

Source: OECD, 2024a; calculations by author.

The mean annual values of investments in other buildings and structures as percentages of GFCF for various time periods are reported in table 4. The data show that Canada consistently has a higher share of total investment in what might be identified as public physical infrastructure than does the US. Furthermore, the investment intensity difference between Canada and the US for this asset category increases over time. For the period 1972 to 1999, this asset category’s share of Canada’s GFCF was 8.7 percentage points (or 35 percent) greater than its share of US GFCF, but it was 10.7 percentage points (or 47 percent) higher over the period 2000 to 2021 and 13 percentage points (or 58 percent) higher post-2014.

**Table 4: Investment in Other Buildings and Structures as a Percentage of GFCF**

Time Period	Canada	United States
1971–2021	33.7	24.1
1971–1999	33.9	25.2
2000–2021	33.5	22.8
2014–2021	35.5	22.5

Source: OECD, 2024a; calculations by author.

The differences in investment intensity between Canada and the US for the transportation equipment asset category is the mirror image of the relationship for other buildings and structures. Specifically, as reported in table 5, the US has a consistently higher investment intensity for this asset category than does Canada, and the intensity gap increases over the full time period reported. For the period 1981 to 1999, investment in transportation equipment as a share of GFCF was 2.9 percentage points (or 48 percent) higher in the US compared to Canada, whereas it was also 2.9 percentage points (or 62 percent) higher over the period 2000 to 2021 and slightly more than 4.1 percentage points higher post-2014.

**Table 5: Investment in Transportation Equipment as a Percentage of GFCF**

Time Period	Canada	United States
1981–2021	5.32	8.22
1981–1999	6.07	8.99
2000–2021	4.67	7.55
2014–2021	3.94	8.02

Source: OECD, 2024a; calculations by author.

Tables 6 and 7 compare relative investment intensities for information and communication technology equipment and intellectual property products, respectively. These are arguably critical asset categories in terms of their contribution to productivity growth. While all physical assets increase the ratio of capital to labour and thereby should contribute to increased labour productivity, these two asset categories are the primary vehicles for introducing new technology into an economy. The data reported in table 6 shows that Canada’s investment in information and communication technology equipment as a share of GFCF is consistently below that of the US, with substantially larger differences in the post-2000 period—both for the full period 2000–2021 and for the post-2014 period. Specifically, as a share of GFCF, information and communications equipment for the US was approximately 1.5 percentage points (or 15 percent) higher compared to Canada from 1976–1999, whereas it was 4.5 percentage points (or about 40 percent) higher over the 2000–2021 period and 6.1 percentage points (or around 59 percent) higher post-2014. By any standard, this pattern reflects a substantial shortfall in a critical (for productivity

growth) category of Canadian business investment compared to the US post-2000, and this shortfall has deepened in recent years.

**Table 6: Investment in Information and Communications Technology Equipment as a Percentage of GFCF**

Time Period	Canada	United States
1976–2021	10.4	13.3
1976–1999	9.6	11.0
2000–2021	11.4	15.8
2014–2021	10.4	16.5

Source: OECD, 2024a; calculations by author.

**Table 7: Investment in Intellectual Property Products as a Percentage of GFCF**

Time Period	Canada	United States
1972–2021	10.9	20.9
1972–1999	8.9	17.4
2000–2021	13.5	25.3
2014–2021	12.6	27.7

Source: OECD, 2024a; calculations by author.

Table 7 reports the mean annual share in GFCF of investment in intellectual property products. Investments in intellectual property products comprise a somewhat larger share of overall GFCF than does investment in information and communication technology equipment. Furthermore, Canada’s relative investment gap with the US in intellectual property products is even larger than it is in information and communications technology equipment, and the gap also increases, albeit not consistently, over the time period for which data are reported. For the period 1972 to 1999, investment in intellectual property products as a share of GFCF was 8.5 percentage points (or 96 percent) higher in the US than in Canada, while it was 11.8 percentage points (or about 87 percent) higher over the

period 2000–2021, and 15.1 percentage points (or fully 120 percent) higher post-2014. These differences represent substantial divergences in the shares of overall capital investment that is arguably directed at promoting innovation.

In summary, over the past five decades, GFCF as a share of GDP for Canada has been quite comparable to that for the US. Indeed, over the period 1971 to 2021, the share for Canada slightly exceeded that for the US, with the US share being slightly larger over the 1972–1999 period and the opposite being true for the period 2000–2021.<sup>11</sup> Therefore, the observed differences in the investment performances between the two countries primarily reflect differences in the sectors and the related asset categories in which investment takes place.

In this regard, differences in investment intensities by sector are modest over the full period 1981–2021. However, this masks notable differences when comparing the first two decades of the full period to the second two decades—and particularly to the post-2014 period. For example, corporate investment as a share of GFCF was about 13 percent higher in the US than in Canada post-2014, whereas it was only three percent higher over the full period 1981–2021. Conversely, the share of household investment in GFCF was consistently higher in Canada than in the US, although the difference is substantially greater post-2014 when the share for Canada was 21 percent higher than for the US, while it was approximately nine percent higher over the full period 1981–2021. In the case of government’s investment shares, Canada’s approximate 14 percent deficit compared to the US over the period 1981–1999 converged to zero post-2014, which primarily reflects a significant decline in government’s share of GFCF in the US post-2000.

The pattern for investment shares by asset category largely parallels that for investment shares by sectors. Specifically, as discussed earlier, the shares of GFCF accounted for by information and communications technology equipment and intellectual property products for Canada declined significantly relative to the US shares post-2000—and especially post-2014. These are asset categories where investments are made primarily (although certainly not exclusively) by businesses. As was also discussed earlier, the higher share of household investment in Canada’s total GFCF compared to the US post-2000, but especially post-2014 is consistent with the dramatic increase in residential housing’s share of total investment in Canada compared to that asset category’s share of total investment in the US.

---

11 A more substantial difference is observed for the post-2014 period in which GFCF as a share of GDP for Canada was 14 percent higher than for the US, whereas over the full period 1972–2021, the share for Canada was only about two percent higher than for the US.

As a whole, the data reported and discussed above generally supports concerns expressed in previously referenced studies that investment in residential housing in Canada might be displacing economically important asset categories of business investment in recent years, and that the shift in the mix of sectoral and asset category investments away from productivity-enhancing business asset categories might be contributing to slower labour productivity growth in Canada compared to the US. In the next section, we compare labour productivity growth in the two countries with a focus on whether observed differences over time in this economic performance measure corresponds to differences over time in the composition of GFCF in the two countries.



## 5. Growth in Labour Productivity in Canada and the United States

While various factors influence changes in a nation's standard of living, usually measured by inflation adjusted GDP per capita, productivity growth is the primary contributor to increases in real GDP per capita. Hence, it is useful to consider differences over time in the productivity performances of Canada and the US to see if they are temporally linked to differences in investment patterns, where productivity is measured as GDP per hours worked.

Data for the annual percentage change in labour productivity is available for Canada and the US from 1995 through 2022.<sup>12</sup> Obviously, the last few years of the series on changes in labour productivity in both Canada and the US are likely to be affected by government policies that were imposed to contain the spread of the COVID virus. Hence, it is possible that different COVID-related policies in Canada and the US contributed to observed differences in productivity performance. For this and other reasons, any observed relationship between differences in the behaviour of capital investment and differences in labour productivity between the two countries would, at best, be only suggestive of a structural relationship between those economic measures. However, since the capital investment experiences of the two countries seem to have differed most dramatically in the post-2014 period, it is still useful to assess and compare the labour productivity performances of the two countries over as long a time period post-2014 as available data permit. In addition, data on labour productivity growth for the OECD countries as a whole is also reported, although data for the OECD only begins in 2001. Comparing the investment and productivity performances of Canada and the US to that of the OECD provides an additional potential insight into whether changes in Canada's investment performance, particularly post-2000 have adversely affected the standard of living of Canadians relative to other developed countries.

Table 8 reports the average annual percentage change in labour productivity for Canada and the US for the period 1995–2022 and for the sub-periods 2001–2022 and 2014–2022. Data for the OECD is available post-2000 and is reported to provide a broader context for evaluating Canada's recent productivity performance. The data highlights the sharp deterioration in Canada's absolute and relative labour productivity growth performance post-2014. The relatively small difference between average labour productivity growth in

---

12 See OECD.Stat, Growth in GDP per capita, productivity and ULC.

Canada and the US over the period 2001–2022 implicitly suggests that 2014 marked a sharp discontinuity in productivity growth in Canada relative to the US and other developed countries of the OECD. Indeed, labour productivity growth in Canada averaged 1.13 percent per year from 2001–2022, while it averaged 1.25 percent annually in the US and 1.12 percent in the OECD over that period. For the period 1995–2014, labour productivity growth in Canada averaged 1.71 percent per year, whereas it averaged 1.55 percent annually in the US. However, from 2014–2022, labour productivity growth in Canada averaged only 0.34 percent annually, while it averaged 1.78 percent annually in the US and 0.95 percent annually in the OECD

**Table 8: GDP Per Hour Worked, Constant Prices, Annual Percentage Growth**

Time Period	Canada	United States	OECD
1995–2022	1.26	1.61	n/a
2001–2022	1.13	1.25	1.12
2014–2022	0.34	1.78	0.95

Source: OECD.Stat.

**Table 9: GDP Per Capita, Constant Prices, Annual Average Percentage Change**

Time period	Canada	United States	OECD
1971–2022	1.76	1.81	n/a
1981–1999	2.27	2.20	n/a
2000–2022	1.11	1.33	1.31
2014–2022	1.17	1.72	1.47

Source: OECD.Stat.

Finally, table 9 reports the annual average percentage change in inflation adjusted GDP per capita for Canada, the US, and the OECD for various time periods.<sup>13</sup> For the full period 1971–2022, the average annual rate of growth of real GDP per capita in Canada was virtually equal to that in the US. This reflects the fact that Canada’s real GDP growth

13 Data for the OECD is not reported prior to 2001. Hence, the annual average reported for the OECD in table 9 is for the series starting in 2001.

per capita exceeded that of the US from 1971–1999 and then lagged that of the US from 2000–2022. The gap with the US increased considerably post-2014, while it increased more moderately relative to the OECD.<sup>14</sup>

---

14 Over the period 1995–2014, real GDP growth per capita averaged 1.55 percent per annum in the US compared to 1.40 percent per annum in Canada. This underscores the sharp divergence in Canada’s economic performance relative to the US post-2014.

## 6. Conclusion

As discussed in the introduction to this essay, a growing number of economists, business journalists, central bank officials, and even politicians have identified Canada's declining productivity growth and the very sluggish growth in real per capita income as serious economic problems that need to be addressed. A slowdown in business investment is increasingly seen to be a major contributing factor to Canada's productivity and real economic growth slowdowns.

This essay provides comprehensive support for the increasingly widespread view that there was a fundamental change in Canada's investment environment post-2000 and particularly post-2014 that contributed to a significant shift in how investment capital is allocated across sectors and asset categories. Specifically, an increasing share of capital investment is going into the construction and renovation of household dwellings, while a decreasing share is going into information and telecommunications equipment technology and intellectual property products used by businesses. The opposite relationship characterizes investment patterns in the US.

It is beyond the scope of this essay to evaluate in any detail possible explanations for the diverging shares of investment by sector and asset category in Canada and the US. One popular hypothesis is that increased immigration in recent years has directly increased demand for dwellings in Canada, and the resulting higher average price for dwellings has stimulated an increased flow of capital into the construction and renovation of residential housing. At the same time, increased immigration has arguably reduced the real cost of labour in Canada, which, in turn, has encouraged businesses to substitute labour for capital equipment, on the margin.<sup>15</sup>

Immigration has grown faster in Canada than in the US in recent years. Specifically, over the period 2011 to 2021, the total number of immigrants in Canada increased by around 23 percent, whereas over a comparable time period (2010–2021), the total number of immigrants in the US increased by approximately 13 percent.<sup>16</sup> Hence, the greater

---

15 For a discussion of the linkages between increased immigration, housing costs, and business investment, see Mintz (2023).

16 The estimates for Canada and the US are the author's using data reported in Statistics Canada, Immigrant status and period of immigration by gender and age: Canada, provinces and territories, and United States Census Bureau, Foreign-Born Data Tables.

increase in immigration to Canada compared to the US quite plausibly has contributed to the diverging sector and asset investment allocation patterns between the two countries in recent years.<sup>17</sup>

St-Arnaud (2024) argues that household demand for mortgages and other dwelling-related financial capital may have “outcompeted” corporations for financing in Canada, specifically in the post-2000 period. Real ex-post interest rates were substantially lower in the period 2001–2021 than they were in the prior two decades. Indeed, the ex post real interest rate on 10-year government bonds was actually negative from 2014–2021. As St-Arnaud (2024) notes, lower-inflation adjusted returns to lending likely increased competition among borrowers for loanable funds, while discouraging lending at the margin. He asserts that households were advantaged in the intensified competition for loanable funds for two reasons: 1) A higher risk on corporate loans relative to loans to households, especially considering the appreciating value of collateral for mortgage lending associated with fast-rising house prices over the past two decades; 2) Higher regulatory capital requirements for lending to corporations leading to costlier loans compared to lending to households.

To the extent that Canada continues to experience rapid immigration and households are advantaged relative to corporations in capital markets, significant changes in public policy may be required to promote increased business investment, even as government policy prioritizes increased residential housing construction. Such changes might include reducing corporate tax rates and regulatory burdens on small and medium-sized businesses and putting more emphasis on taxing consumption while reducing taxes on income and capital gains.<sup>18</sup>

It is also beyond the scope of this essay to identify the contribution of diverging sector and asset allocation patterns between Canada and the US to productivity and real per capita income growth in the two countries. Certainly, the declining share of corporate investment in GFCF in Canada post-2000, combined with an increasing share in the US is consistent with the US outperforming Canada with respect to labour productivity growth and real per capita GDP growth, especially post-2014. However, it should be underscored

---

17 Differences in total population growth between Canada and the US mirror differences for immigration. Specifically, from 2011 Q1 to 2022 Q4, Canada’s population increased by 15 percent, while the US population increased by seven percent. The source for Canada’s population growth is Statistics Canada, Population estimates quarterly. The source for US population growth is World Bank Data, Population, total—United States.

18 The role that relatively high marginal personal income and corporate tax rates play in discouraging business investment and innovation is discussed in Globberman (2023).

that the share of GFCF comprising investments in information and communication equipment and intellectual property products in Canada increased in absolute terms when comparing the approximately three decades prior to 2000 to the approximately two decades post-2000. Hence, the absolute decline in labour productivity growth post-2000 might well reflect factors beyond capital investments in machinery and equipment and intellectual property—including factors affecting how efficiently those assets are utilized.

Overall, this extensive historical examination of capital expenditure patterns in Canada and the US reinforces the need for policymakers in Canada to focus much more attention on why business investment performance in Canada has diverged so sharply from that of the US in recent years, particularly compared to patterns evident in earlier decades. It also underscores the importance of ensuring that policies designed to promote increased investment in residential housing do not undermine the incentives and ability of companies to invest in new equipment and other productivity-enhancing assets.

## References

- Finlayson, Jock (2022). *After years of weak business capital spending, Canada needs an investment turnaround—Is one coming?* Business Council of British Columbia. <<https://bccbc.com/insight/after-years-of-weak-business-capital-spending-canada-needs-an-investment-turnaround-is-one-coming/>>, as of April 30, 2024.
- Globerman, Steven, and Trevor Press (2018). *Capital Investment in Canada: Recent Behaviour and Implications*. Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/capital-investment-in-canada-recent-behaviour-and-implications.pdf>>, as of April 30, 2024.
- Globerman, Steven, and Joel Emes (2021). *An International Comparison of Capital Expenditures*. Fraser Institute. <<https://www.fraserinstitute.org/studies/an-international-comparison-of-capital-expenditures>>, as of April 30, 2024.
- Globerman, Steven (2023). *Taxes, Innovation, and Productivity Growth*. Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/taxes-innovation-and-productivity-growth.pdf>>, as of April 30, 2024.
- Hill, Tegan, and Joel Emes (2023). *Comparing Business Investment per Worker in Canada and the United States, 2002–2021*. Fraser Institute. <<https://www.fraserinstitute.org/studies/comparing-business-investment-per-worker-in-canada-and-the-united-states-2002-2021>>, as of April 30, 2024.
- Janzen, Nathan, and Abbey Xu (2023, April 4). Canada’s economy can’t afford a slump in business investment. *RBC Proof Point*. <<https://thoughtleadership.rbc.com/proof-point-canadas-economy-cant-afford-a-slump-in-business-investment/>>, as of April 30, 2024.
- Mintz, Jack M. (2023, July 21). Rapid immigration isn’t the only way to grow. *Financial Post*. <<https://financialpost.com/opinion/jack-mintz-rapid-immigration-isnt-the-only-way-to-grow>>, as of April 30, 2024.
- Organisation for Economic Cooperation and Development [OECD] (2024a). Investment by asset (indicator). <<https://data.oecd.org/gdp/investment-by-asset.htm#indicator-chart>>, as of April 30, 2024.
- Organisation for Economic Cooperation and Development [OECD] (2024b). Investment by sector (indicator). <<https://data.oecd.org/gdp/investment-by-sector.htm>>, as of April 30, 2024.
- OECD.Stat (n.d.). Growth in GDP per capita, productivity and ULC. <[https://stats.oecd.org/Index.aspx?DataSetCode=PDB\\_GR](https://stats.oecd.org/Index.aspx?DataSetCode=PDB_GR)>, as of April 30, 2024.
- Rendell, Mark (2024, March 26). Bank of Canada warns of low productivity ‘emergency,’ making it harder to control inflation. *Globe and Mail*. <<https://www.theglobeandmail.com/business/article-bank-of-canada-warns-of-low-productivity-emergency-making-it-harder-to/>>, as of April 30, 2024.

- St-Arnaud, Charles (2024, April 11). How Canada's housing obsession is cannibalizing economic productivity. *Globe and Mail*. <<https://www.theglobeandmail.com/business/commentary/article-how-canadas-housing-obsession-is-cannibalizing-economic-productivity/#:~:text=Most%20of%20the%20increase%20in,machinery%2C%20equipment%20and%20intellectual%20property>>, as of April 30, 2024.
- Statistics Canada (2023). Immigrant status and period of immigration by gender and age: Canada, provinces and territories. Table 98-10-0347-01. <<https://doi.org/10.25318/9810034701-eng>>, as of May 2, 2024.
- Statistics Canada (2024). Population estimates, quarterly. Table 17-10-0009-01. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000901>>, as of May 2, 2024.
- United States Census Bureau (2024). Foreign-Born Data Tables. <<https://www.census.gov/topics/population/foreign-born/data/tables.html>>, as of May 2, 2024.
- Williams, David (2022). *Stuck in the Slow Lane: A Closer Look at Capital Investment Trends in Canada and British Columbia*. British Columbia Business Council. <<https://www.bcbc.com/insight/2022/08/02/stuck-in-the-slow-lane-a-closer-look-at-capital-investment-trends-in-canada-and-british-columbia?rq=Stuck%20in%20the%20Slow%20Lane>> as of May 6, 2024.
- World Bank (n.d.). Gross fixed capital formation (% of GDP). <<https://data.worldbank.org/indicator/NE.GDI.FTOT.ZS>>, as of April 30, 2024.
- World Bank Data (n.d.). Population, total—United States. <<https://data.worldbank.org/indicator/SP.POP.TOTL?locations=US>>, as of May 2, 2024.



## About the Author

**Steven Globerman** is a senior fellow and Addington Chair in Measurement at the Fraser Institute. Previously, he held tenured appointments at Simon Fraser University and York University and has been a visiting professor at the University of California, University of British Columbia, Stockholm School of Economics, Copenhagen School of Business, and the Helsinki School of Economics. He has written more than 200 academic articles and monographs and is the author of the book *The Impacts of 9/11 on Canada-U.S. Trade* as well as a textbook on international business management. He served as a researcher for two Canadian Royal Commissions on the economy as well as a research advisor to Investment Canada on the subject of foreign direct investment. He earned his B.A. in economics from Brooklyn College, his M.A. from the University of California, Los Angeles, and his Ph.D. from New York University.



## Acknowledgments

The author is grateful to the Barbara and Bob Mitchell Fund for its support of this study. He also thanks the two anonymous reviewers for excellent comments and suggestions on an earlier draft. Any remaining errors or omissions are the sole responsibility of the author. As the researcher has worked independently, the views and conclusions expressed in this paper do not necessarily reflect those of the Board of Directors of the Fraser Institute, the staff, or supporters.

## Publishing Information

### Distribution

Fraser Institute publications are available from <<http://www.fraserinstitute.org>> in Portable Document Format (PDF) and can be read with Adobe Acrobat® or Adobe Reader®, versions 8 or later. Adobe Reader® DC, the most recent version, is available free of charge from Adobe Systems Inc. at <<http://get.adobe.com/reader/>>. Readers having trouble viewing or printing our PDF files using applications from other manufacturers (e.g., Apple's Preview) should use Reader® or Acrobat®.

### Ordering publications

To order printed publications from the Fraser Institute, please contact:

- e-mail: [sales@fraserinstitute.org](mailto:sales@fraserinstitute.org)
- telephone: 604.688.0221 ext. 580 or, toll free, 1.800.665.3558 ext. 580
- fax: 604.688.8539.

### Media

For media enquiries, please contact our Communications Department:

- 604.714.4582
- e-mail: [communications@fraserinstitute.org](mailto:communications@fraserinstitute.org).

### Copyright

Copyright © 2024 by the Fraser Institute. All rights reserved. No part of this publication may be reproduced in any manner whatsoever without written permission except in the case of brief passages quoted in critical articles and reviews.

### Date of issue

June 2024

### ISBN

978-0-88975-787-5

### Citation

Globerman, Steven (2024). *Comparing the Investment Performances of Canada and the United States over the Past Five Decades*. <<http://www.fraserinstitute.org>>

## About the Fraser Institute

Our mission is to improve the quality of life for Canadians, their families, and future generations by studying, measuring, and broadly communicating the effects of government policies, entrepreneurship, and choice on their well-being.

*Notre mission consiste à améliorer la qualité de vie des Canadiens et des générations à venir en étudiant, en mesurant et en diffusant les effets des politiques gouvernementales, de l'entrepreneuriat et des choix sur leur bien-être.*

### Peer review—validating the accuracy of our research

The Fraser Institute maintains a rigorous peer review process for its research. New research, major research projects, and substantively modified research conducted by the Fraser Institute are reviewed by experts with a recognized expertise in the topic area being addressed. Whenever possible, external review is a blind process. Updates to previously reviewed research or new editions of previously reviewed research are not reviewed unless the update includes substantive or material changes in the methodology.

The review process is overseen by the directors of the Institute's research departments who are responsible for ensuring all research published by the Institute passes through the appropriate peer review. If a dispute about the recommendations of the reviewers should arise during the Institute's peer review process, the Institute has an Editorial Advisory Board, a panel of scholars from Canada, the United States, and Europe to whom it can turn for help in resolving the dispute.

# Editorial Advisory Board

## Members

Prof. Terry L. Anderson

Prof. Robert Barro

Prof. Jean-Pierre Centi

Prof. John Chant

Prof. Bev Dahlby

Prof. Erwin Diewert

Prof. J.C. Herbert Emery

Prof. Steven Globerman

Prof. Jack L. Granatstein

Prof. Herbert G. Grubel

Dr. Jerry Jordan

Prof. Robert Lawson

Prof. Ross McKittrick

Prof. Michael Parkin

Prof. Friedrich Schneider

Prof. Lawrence B. Smith

Dr. Vito Tanzi

## Past members

Prof. Armen Alchian\*

Prof. Michael Bliss\*

Prof. James M. Buchanan\* †

Prof. Stephen Easton\*

Prof. James Gwartney\*

Prof. Friedrich A. Hayek\* †

Prof. H.G. Johnson\*

Prof. Ronald W. Jones\*

Prof. F.G. Pennance\*

Prof. George Stigler\* †

Sir Alan Walters\*

Prof. Edwin G. West\*

\*deceased; † Nobel Laureate