

The background features a collage of Canadian currency, including 100 and 200 dollar bills, and a map of Canada. The text is overlaid on this collage.

Stagnation in Atlantic Canada's Private Sector Measuring Progress 2007 to 2019

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Executive Summary

The performance of the private sector in a province or region is the foundation for that jurisdiction's prosperity. It is the private sector, after all, that ultimately provides the resources for the government sector. For at least the two decades before the COVID-19 pandemic, Atlantic Canada's four provinces trailed the rest of Canada on various measures of prosperity.

Research has identified that Atlantic Canada's private sector was substantially underperforming that of the rest of Canada across most measures in 2019. If the region is to close its prosperity gap with the rest of Canada, improvement in the private sector must be a priority.

This study analyzes the private sector in Atlantic Canada and across the country by measuring five different economic indicators between 2007 and 2019: the size of government as a share of the economy, per worker business investment, private sector venture capital, the share of private sector employment in total employment, and new business creation.

Newfoundland and Labrador saw the second-largest increase in the size of government and the largest decrease in the business entry rate, with the fourth-best improvement in private sector employment and the best improvement in per worker business investment. Turning to levels, the province was in the middle of the pack for size of government and share of private sector employment, and third highest in per worker business investment and the business entry rate. Newfoundland and Labrador generally does not attract a meaningful share of the country's venture capital investment.

Prince Edward Island reported the largest decrease in the size of government while also being the only province to report an increase in business entries. The province fares poorly on per worker business investment, with the third-largest decline, as well as share of private sector employment (reporting the largest decline and the second-lowest level in 2019). Although the province experienced some positive change over the period examined, its size of government relative to population was the highest, on average, in Canada. It also had the lowest level of per worker business investment and second-lowest average share of private sector employment. The province does not generally attract venture capital investment, reporting only two years with private venture capital investments over the 2007–19 period.

Nova Scotia fared poorly across most measures. For the size of government, the province had the highest level in 2019, and the fifth-highest increase in the country. Nova Scotia's per worker business investment saw the fourth-largest decline and the lowest level in 2019, while the province also saw a decline in private sector employment. The business entry rate also declined and was second-lowest in the country, on average. Nova Scotia attracts the most venture capital investment in Atlantic Canada in both absolute and per capita terms, but still fails to attract a meaningful share of the national total.

New Brunswick also fared poorly across most measures, with the third-largest increase in the size of government (also third overall in terms of the 2019 level). The province reported the second-largest decline in per worker business investment, with the 2019 level being third-lowest in Canada. The province had the third-largest decline in private sector employment and the fourth-largest decline in the business entry rate. In terms of levels, the province reported the third-highest average size of government in the country, the fourth-lowest average per worker business investment, and third-lowest average business entry rate. It fared slightly better in the average share of private sector employment, ranking fifth. New Brunswick did have some level of venture capital investment during most years of the study period, but fails to attract a meaningful share of the national total.

Overall, the economies of the Atlantic provinces largely failed to converge with that of the rest of Canada during the 2007–19 period. Despite some exceptions, the region largely remains one of big government, low and declining business investment, a relatively smaller private sector, a disproportionately low share of national private venture capital investment, and below-average business entry rates.

Introduction

The performance of the private sector in a province or region is the foundation for that jurisdiction's prosperity. It is the private sector, after all, that ultimately provides the resources for the government sector. Thus, even those advocating for a larger role for the government must first ensure a thriving and vibrant private sector.

For most of recent history, Atlantic Canada has trailed the rest of the country when it comes to various measures of prosperity—for at least two decades before the COVID-19 pandemic when it comes to incomes and labour market outcomes (Eisen et al., 2019). Research has identified that, in 2019, Atlantic Canada's private sector was substantially underperforming that in the rest of Canada across most measures (Whalen and Li, 2022). If the region is to close its prosperity gap with the rest of Canada, improvement in the private sector must be a priority.

This study analyzes the private sector in Atlantic Canada and across the country by measuring five economic indicators: the size of government, business investment, venture capital investment, private sector employment as a share of total employment, and the business entry rate. With these indicators, we measure the state of markets in each Atlantic province over time to assess whether it has improved, stagnated, or declined.

Methodology

The period of analysis is 2007 to 2019. This 12-year period covers changes in the state of markets across Canada over a complete business cycle, beginning with the year before the second most recent recession (the 2008 recession and global financial crisis), and ending with the year before the most recent recession (the 2020 recession brought about by the global pandemic). The study uses data from Statistics Canada in most instances, and from the Canadian Venture Capital Association in the case of the analysis of venture capital.

We begin by measuring the size of government as a share of gross domestic product (GDP), followed by two measures of investment: per worker non-residential business investment and per person venture capital investment (excluding government-led investments). We go on to examine labour market performance—specifically, private sector employment as a share of total employment. Finally, we measure an indicator of entrepreneurship, the business entry rate per thousand businesses.

Size of government

The size of government is an important measure because of its relationship with economic growth. An extensive literature has found that the size of government as a share of the economy relative to economic growth follows an inverse U-shaped curve. When the size of government grows initially, economic growth tends to increase. Beyond a certain point, however, larger government, by tending to crowd out private sector activity, is associated with a decrease in the rate of economic growth (Whalen and Globerman, 2020).

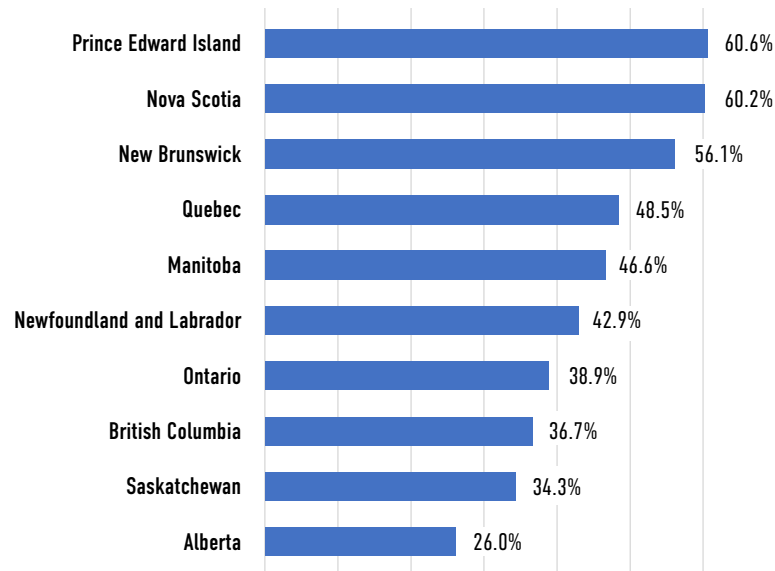
Table 1 and figure 1 present data on the size of government as a share of GDP for each province over time, as measured by total consolidated government spending. These data represent government spending at all three levels (municipal, provincial, and federal) as a share of provincial GDP.

Table 1: Total consolidated government spending as a share of GDP, by province, 2007-19

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2007-19 % Point Change
Newfoundland and Labrador	38.7%	36.0%	50.4%	44.7%	40.5%	43.2%	40.1%	40.1%	45.4%	46.4%	44.2%	44.4%	43.8%	5.1%
Prince Edward Island	61.6%	63.8%	65.7%	44.7%	62.8%	61.6%	60.5%	59.1%	58.5%	57.3%	57.4%	58.4%	58.0%	-3.6%
Nova Scotia	56.9%	57.5%	60.4%	44.7%	60.8%	62.6%	61.6%	60.9%	61.0%	60.6%	60.4%	60.9%	59.6%	2.7%
New Brunswick	52.7%	55.2%	57.2%	44.7%	55.4%	55.9%	56.7%	56.0%	56.2%	56.7%	56.6%	56.7%	57.3%	4.6%
Quebec	47.4%	48.1%	49.5%	44.7%	48.9%	48.9%	49.0%	48.7%	48.4%	48.5%	48.2%	47.8%	47.7%	0.3%
Ontario	35.8%	37.7%	41.0%	44.7%	40.8%	39.6%	39.7%	38.6%	38.2%	37.8%	38.0%	38.7%	38.7%	2.9%
Manitoba	45.0%	45.7%	48.9%	44.7%	48.6%	46.7%	46.1%	45.4%	45.9%	46.7%	46.0%	46.4%	47.5%	2.5%
Saskatchewan	37.7%	31.0%	36.5%	44.7%	33.0%	32.0%	29.9%	30.7%	33.6%	36.7%	35.7%	35.4%	36.8%	-0.8%
Alberta	22.4%	21.9%	27.8%	44.7%	24.8%	24.7%	23.3%	22.0%	27.0%	30.3%	29.3%	28.9%	29.5%	7.1%
British Columbia	34.8%	36.1%	39.0%	44.7%	37.6%	37.9%	37.6%	36.0%	36.5%	36.0%	35.3%	35.4%	36.0%	1.2%

Note: The data are restricted to direct spending only—that is, they do not include the costs of regulation or tax credits.

Sources: Statistics Canada (2022b, 2022g); authors' calculations.

Figure 1: Average size of government, by province, 2007-19

Sources: Statistics Canada (2022g); authors' calculations.

Table 1 reveals several insights. Overall, the size of government increased in every province except for Prince Edward Island (−3.6 percentage points change) and Saskatchewan (−0.8 of a percentage point change). The size of government relative to the private sector increased most in Alberta (7.1 percentage points) and Newfoundland and Labrador (5.1 percentage points), followed by New Brunswick (4.6 percentage points) and Ontario (2.9 percentage points).

In addition to these changes, figure 1 presents the size of government over the period examined. Despite experiencing the only decline in the size of government during that time, Prince Edward Island still had the largest average size of government at the end of the period, at 60.6 percent, followed by Nova Scotia at 60.2 percent, and New Brunswick at 56.1 percent. Conversely, although Alberta's size of government increased during the period, it still had the lowest average size of government in Canada, at 26.0 percent.

In sum, the size of government as a share of the overall economy increased across most provinces over the 2007–19 period. The Atlantic provinces, where government was already large compared with their economies at the beginning of the period, continued to have the largest governments among the provinces. Saskatchewan is the only province that began the period with a relatively low government size and did not increase it.

Private sector investment

Per worker business investment

In this part of the study, we measure non-residential business investment on a per worker basis. As Globerman and Emes (2022) note, business investment is a key factor in productivity growth, which, in turn, underlies improvements in living standards and real per person economic growth. Business investment excludes government investment, since we are principally concerned with the private sector. Further, the measure excludes investment in residential construction in order to focus exclusively on business-related investment in factories, plants, machinery, intellectual capital, and technologies. These are the types of private sector investment that improve both total factor and labour productivity.

Table 2 provides data on business investment by measuring per worker business investment, excluding residential construction, in each province and for Canada as a whole between 2007 and 2019, expressed in constant 2012 dollars. The growth rate over the time period is also presented.

Table 2: Business investment per worker, Canada and provinces, 2007-19

In 2012\$	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Newfoundland and Labrador	19,956	24,089	20,962	23,799	33,787	43,002	54,382	55,032	54,232	67,893	47,742	37,399	39,671
Prince Edward Island	12,542	12,117	8,615	8,389	9,370	8,517	9,976	9,368	7,876	9,012	10,401	10,128	9,875
Nova Scotia	11,762	10,429	11,881	14,144	13,159	9,068	10,215	11,310	11,555	13,037	11,726	10,211	9,603
New Brunswick	15,939	18,009	14,587	13,705	13,316	11,580	11,025	10,425	10,695	9,350	11,329	12,497	11,561
Quebec	13,269	13,319	1,443	11,548	12,572	13,624	13,316	12,191	11,328	10,883	11,603	11,978	12,511
Ontario	13,933	14,017	12,004	12,315	13,057	13,164	12,120	13,468	14,500	12,940	13,098	14,490	14,675
Manitoba	14,893	16,704	15,150	18,349	17,531	17,867	17,926	19,839	20,049	18,289	18,871	19,267	18,413
Saskatchewan	33,248	38,418	40,229	46,210	49,751	52,196	56,594	57,857	45,631	37,370	40,138	39,902	36,589
Alberta	54,203	53,506	36,734	46,452	52,221	56,626	63,017	64,270	46,746	36,766	37,111	36,879	33,846
British Columbia	17,480	18,558	15,983	17,392	18,276	18,263	17,290	18,038	15,423	14,467	14,945	15,487	19,077
Canada	19,958	20,455	16,613	18,472	20,143	21,168	21,722	22,446	19,686	17,267	17,337	17,939	18,113

Growth rate													
Newfoundland and Labrador		20.7%	-13.0%	13.5%	42.0%	27.3%	26.5%	1.2%	-1.5%	25.2%	-29.7%	-21.7%	6.1%
Prince Edward Island		-3.4%	-28.9%	-2.6%	11.7%	-9.1%	17.1%	-6.1%	-15.9%	14.4%	15.4%	-2.6%	-2.5%
Nova Scotia		-11.3%	13.9%	19.0%	-7.0%	-31.1%	12.6%	10.7%	2.2%	12.8%	-10.1%	-12.9%	-6.0%
New Brunswick		13.0%	-19.0%	-6.0%	-2.8%	-13.0%	-4.8%	-5.4%	2.6%	-12.6%	21.2%	10.3%	-7.5%
Quebec		0.4%	-14.1%	0.9%	8.9%	8.4%	-2.3%	-8.4%	-7.1%	-3.9%	6.6%	3.2%	4.5%
Ontario		0.6%	-14.4%	2.6%	6.0%	0.8%	-7.9%	11.1%	7.7%	-10.8%	1.2%	10.6%	1.3%
Manitoba		12.2%	-9.3%	21.1%	-4.5%	1.9%	0.3%	10.7%	1.1%	-8.8%	3.2%	2.1%	-4.4%
Saskatchewan		15.5%	4.7%	14.9%	7.7%	4.9%	8.4%	2.2%	-21.1%	-18.1%	7.4%	-0.6%	-8.3%
Alberta		-1.3%	-31.3%	26.5%	12.4%	8.4%	11.3%	2.0%	-27.3%	-21.3%	0.9%	-0.6%	-8.2%
British Columbia		6.2%	-13.9%	8.8%	5.1%	-0.1%	-5.3%	4.3%	-14.5%	-6.2%	3.3%	3.6%	23.2%
Canada		2.5%	-18.8%	11.2%	9.0%	5.1%	2.6%	3.3%	-12.3%	-12.3%	0.4%	3.5%	1.0%

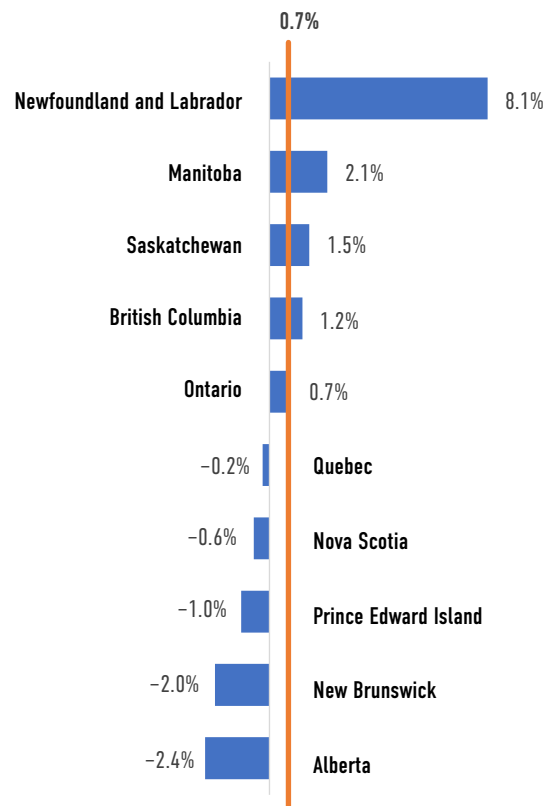
Note: In constant 2012 dollars (excluding residential construction).
Sources: Statistics Canada (2022d, 2022f); calculations by the authors.

In general, we find that business investment declined in Canada across the period. For Canada as a whole, the 2019 level of inflation-adjusted per worker business investment (excluding residential construction) was 9.2 percent lower than the level observed in 2007. Business investment declined in half the provinces during this period and rose in the other half.

The largest gains were in Newfoundland and Labrador, which saw a 98.8 percent increase in per worker business investment, followed by Manitoba at 23.6 percent and Saskatchewan at 10.0 percent. The largest declines were experienced in Alberta, at -37.6 percent, followed by the three Maritime provinces: New Brunswick's per worker investment level fell -27.5 percent, Prince Edward Island's -21.3 percent, and Nova Scotia's -18.4

percent. Figure 2 provides these data expressed in terms of average annual change, with Newfoundland and Labrador seeing an average increase of 8.1 percent per year, followed by 2.1 percent in Manitoba and 1.5 percent in Saskatchewan. Alberta's decline was -2.4 percent per year, on average, followed by New Brunswick at -2.0 percent, Prince Edward Island at -1.0 percent, and Nova Scotia at -0.6 percent.

Figure 2: Average annual growth rate of per worker business investment, by province, 2007-19



Sources: Statistics Canada (2022c, 2022d); authors' calculations.

When reviewing the provinces that experienced a decline in business investment adjusted for the number of workers, it is important to consider their starting points—that is, the level of business investment, rather than simply the change. Alberta, for example, experienced the largest decline over the period. Although this is a concern, the province led the country in investment at the beginning of the period and still had an investment level above average in 2019 (third in Canada).

Although they have mixed track records over the 2007–19 period, it is also notable that Newfoundland and Labrador, Alberta, and Saskatchewan, all oil- and gas-producing provinces, had the highest levels of business investment (adjusted by number of workers) during the entire period. Further, business investment in these provinces peaked in 2014–16 and declined thereafter.

The Maritime provinces, however, are in a much worse position, having experienced a decline from a relatively low starting point. In 2007, all three provinces were below the national average, with Nova Scotia ranking last, Prince Edward Island second-last, and New Brunswick in the middle. As explained above, all three experienced declines over the period examined, leaving Nova Scotia and Prince Edward Island with an unchanged ranking, followed by New Brunswick. Investment levels in New Brunswick and Prince Edward Island in 2019 were barely above 50 percent of the national average, and substantially trailed even those in the non-oil-producing provinces throughout the 2007–19 period.

In summary, key findings from the per worker business investment data include a low and declining level of investment in the Maritimes, a substantial increase in investment in Newfoundland and Labrador, modest increases in Manitoba, Saskatchewan, and British Columbia, and a marked decline in investment in Alberta (albeit from a larger base).

Venture capital investment

As first noted in relation to Atlantic Canada by Whalen and Li (2022), venture capital investment is a subset of overall business investment and relates to higher-risk capital invested in start-ups and emerging businesses. It is also highly connected to entrepreneurship and innovation, which are essential to economic growth (Globerman and Clemens, 2018).

A 2014 study, for instance, using data from 14 industrialized countries, showed that successful venture capital has a pronounced impact on GDP per capita (Cumming et al., 2013). Other studies focused on US data have shown that increases in the supply of venture capital have a positive effect on business starts, employment, and aggregate income (Samila and Sorenson, 2011).

Table 3 presents data on private¹ venture capital investments in Canada by province from 2007 to 2019. The first portion of the table reports private venture capital investment in aggregate terms across all ten provinces and a total for Canada as a whole. The second portion of the table shows each province's share of total private venture capital investment in each year, which helps illustrate which provinces are attracting venture capital investment over time and how those shares have changed. Per capita amounts are also included for reference.

Table 3: Venture capital investment with a lead private firm, Canada and provinces, 2007-19

Total in Millions	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Canada	\$643	\$513	\$420	\$913	\$1,134	\$1,165	\$1,658	\$1,957	\$1,689	\$1,771	\$2,375	\$2,466	\$4,516
Newfoundland and Labrador	\$-	\$-	\$25	\$-	\$1	\$-	\$2	\$4	\$2	\$6	\$7	\$8	\$5
Prince Edward Island	\$-	\$-	\$-	\$-	\$8	\$-	\$-	\$-	\$-	\$-	\$-	\$1	\$-
Nova Scotia	\$5	\$1	\$10	\$3	\$24	\$40	\$9	\$13	\$42	\$15	\$59	\$0	\$50
New Brunswick	\$8	\$-	\$-	\$-	\$2	\$6	\$6	\$16	\$-	\$17	\$2	\$50	\$-
Quebec	\$105	\$48	\$77	\$197	\$365	\$202	\$279	\$268	\$550	\$267	\$830	\$744	\$1,197
Ontario	\$389	\$284	\$154	\$421	\$479	\$690	\$845	\$873	\$701	\$993	\$1,044	\$1,310	\$2,035
Manitoba	\$4	\$7	\$-	\$27	\$-	\$-	\$20	\$39	\$5	\$86	\$6	\$-	\$-
Saskatchewan	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$6	\$-	\$24
Alberta	\$-	\$-	\$48	\$43	\$102	\$69	\$248	\$43	\$107	\$21	\$27	\$75	\$106
British Columbia	\$132	\$174	\$107	\$222	\$153	\$157	\$248	\$701	\$282	\$366	\$394	\$279	\$1,099

1. For the purposes of this section, private means a venture capital investment with a non-lead government firm. The authors have reviewed raw data from the Canadian Venture Capital and Private Equity Association with government-led deals filtered out, given that we are concerned with measuring private sector activity. Some venture capital investments have multiple partners. In cases where government or a quasi-government organization was a non-lead partner, the investment is included in the data, given the private sector leadership. Further, it is not always perfectly clear which participants are government-backed versus from the private sector. Although care has been taken in filtering the data, the authors acknowledge these items as limitations.

Table 3 (continued)

Share of Total	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Newfoundland and Labrador	0.0%	0.0%	5.9%	0.0%	0.1%	0.0%	0.1%	0.2%	0.1%	0.3%	0.3%	0.3%	0.1%
Prince Edward Island	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Nova Scotia	0.9%	0.2%	2.4%	0.3%	2.1%	3.5%	0.5%	0.7%	2.5%	0.8%	2.5%	0.0%	1.1%
New Brunswick	1.2%	0.0%	0.0%	0.0%	0.2%	0.5%	0.3%	0.8%	0.0%	1.0%	0.1%	2.0%	0.0%
Quebec	16.3%	9.3%	18.2%	21.6%	32.1%	17.3%	16.8%	13.7%	32.6%	15.1%	35.0%	30.2%	26.5%
Ontario	60.5%	55.3%	36.6%	46.1%	42.3%	59.3%	51.0%	44.6%	41.5%	56.1%	44.0%	53.1%	45.1%
Manitoba	0.7%	1.3%	0.0%	3.0%	0.0%	0.0%	1.2%	2.0%	0.3%	4.8%	0.3%	0.0%	0.0%
Saskatchewan	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.5%
Alberta	0.0%	0.0%	11.4%	4.7%	9.0%	5.9%	15.0%	2.2%	6.3%	1.2%	1.1%	3.1%	2.3%
British Columbia	20.5%	34.0%	25.5%	24.3%	13.5%	13.5%	15.0%	35.8%	16.7%	20.7%	16.6%	11.3%	24.3%

Per Capita	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Canada	\$19.5	\$15.4	\$12.5	\$26.8	\$33.0	\$33.5	\$47.3	\$55.2	\$47.3	\$49.1	\$65.0	\$66.5	\$120.1
Newfoundland and Labrador	\$-	\$-	\$47.9	\$-	\$1.5	\$-	\$4.4	\$7.2	\$4.2	\$10.9	\$12.7	\$14.9	\$10.3
Prince Edward Island	\$-	\$-	\$-	\$-	\$55.2	\$-	\$-	\$-	\$-	\$-	\$-	\$3.9	\$-
Nova Scotia	\$5.9	\$1.0	\$10.8	\$2.9	\$25.1	\$42.9	\$9.4	\$13.9	\$45.0	\$15.6	\$62.3	\$0.0	\$51.6
New Brunswick	\$10.3	\$-	\$-	\$-	\$2.8	\$7.7	\$7.6	\$20.8	\$-	\$22.8	\$2.2	\$64.6	\$-
Quebec	\$13.6	\$6.1	\$9.8	\$24.8	\$45.5	\$25.0	\$34.4	\$32.9	\$67.3	\$32.5	\$100.0	\$88.6	\$140.7
Ontario	\$30.5	\$22.0	\$11.8	\$32.1	\$36.2	\$51.6	\$62.5	\$64.1	\$51.2	\$71.6	\$74.2	\$91.5	\$139.9
Manitoba	\$3.6	\$5.6	\$-	\$22.4	\$-	\$-	\$16.2	\$30.7	\$3.9	\$65.3	\$4.6	\$-	\$-
Saskatchewan	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$4.9	\$-	\$20.7
Alberta	\$-	\$-	\$13.0	\$11.5	\$26.9	\$17.9	\$62.3	\$10.5	\$25.7	\$5.1	\$6.4	\$17.5	\$24.2
British Columbia	\$30.7	\$40.1	\$24.3	\$49.7	\$34.1	\$34.4	\$53.7	\$149.0	\$59.0	\$75.3	\$80.0	\$55.7	\$215.8

Note: In current 2023 dollars.

Sources: CVCA (2023); Statistics Canada (2022a).

Some insights emerge from table 3. First, three provinces—Quebec, Ontario, and British Columbia—are consistently responsible for a majority of private venture capital investment in Canada, attracting at least 80 percent of all private venture capital in Canada in every year measured, with most years exceeding 90 percent. In most years during the period of analysis, no province other than these three attracted a substantial portion of the national total.

A second observation is that private venture capital investment in Canada has been increasing over time. In fact, the national average total in the last five years of our period of analysis was approximately 3.5 times higher (at \$2.56 billion) than in the first five years of the period (\$725 million). Further, the national total increased year over year in nine of twelve years.

A third observation is that venture capital flows in the provinces are not proportional to population. In each year between 2007 and 2019, the combined populations of Quebec,

Ontario, and British Columbia represented either 74 or 75 percent of the total Canadian population (Statistics Canada, 2022a), while these provinces were attracting venture capital at rates much higher than that—exceeding 90 percent in most years measured. Conversely, the four Atlantic provinces² represented either 6 or 7 percent of the national total population during the period (Statistics Canada, 2022a), yet, in 12 of 13 years measured, their total venture capital investment was less than this, most often between 1 and 3 percent of the national total.

This examination of investment from the perspective of both business investment and venture capital investment reveals important insights. The Maritime provinces fare poorly in both the level and change in per worker business investment, and do not attract a proportional share of the national total of venture capital investment. Newfoundland and Labrador performs well on both the level and change in business investment, but also does not attract a proportional share of national venture capital investment.

Turning to business investment, outside Atlantic Canada, Saskatchewan is the only province with a relatively high and rising level of business investment. Alberta's level of investment remains high, but has been declining. Venture capital investment remains concentrated in Quebec, Ontario, and British Columbia, which was largely the case during the entire period examined.

2 An adjustment was made to the data to account for an outlier for Newfoundland and Labrador in 2019. One company in that province, Verafin, received a \$515 million investment, which happened to be the largest venture capital investment in the country that year. Although this was one of six disclosed deals in that province in 2019, it represented 98.3 percent of the province's total venture capital investment for the year. Therefore, table 3 shows the province's venture capital performance with this investment excluded. With the Verafin deal included, Newfoundland and Labrador ranked fourth in the country in venture capital that year, at \$607 million.

Labour markets and entrepreneurship

In this part of the study, we look at both a measure of the labour market and a measure of entrepreneurship. Specifically, we measure private sector employment as a share of total employment to assess the degree to which the labour force consists of private sector workers versus government sector workers. Second, we examine the business entry rate, given the importance of new business creation to economic growth.

Private sector employment as a share of total employment

Given the linkages between the size of government and economic growth discussed above, it is important to measure the relative shares of the private sector and government sector in the workforce. Table 4 presents data on private sector employment as a share of total employment between 2007 and 2019. Specifically, the table shows the share of workers who were employed by a firm in the private sector versus by a government entity.

From the data, we can see that, for Canada as a whole, the share of workers employed in the private sector remained steady between 2007 and 2019, at 65.5 percent of total employed persons. The share of private sector employment increased in half the provinces and decreased in the other half.

Among the provinces with a declining share of private sector employment are the three Maritime provinces as well as Alberta and Ontario. Prince Edward Island experienced the largest decrease, with a 0.9 of a percentage point decline between 2007 and 2019, followed by Ontario at 0.8 of a percentage point and New Brunswick at 0.5 of a percentage point. Provinces with an increased share of private sector employment were Manitoba, with the largest increase at 1.8 percentage points, followed by British Columbia at 1.6 percentage points, Saskatchewan at 0.9 of a percentage point, Newfoundland and Labrador at 0.8 of a percentage point, and Quebec at 0.2 of a percentage point.

Table 4: Private sector employment as a share of total employment, Canada and provinces, 2007-19

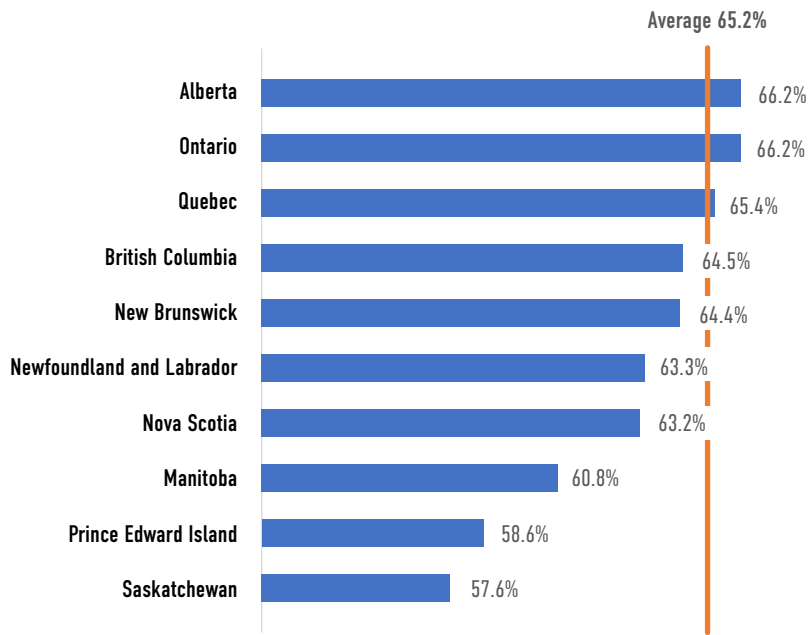
Share of total employed	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2007-19 % Point Change
Newfoundland and Labrador	62.6%	61.9%	61.7%	61.9%	62.2%	62.5%	62.9%	64.4%	66.1%	65.2%	64.2%	64.4%	63.4%	0.80%
Prince Edward Island	61.1%	59.7%	58.0%	55.8%	57.3%	57.3%	56.9%	58.3%	57.5%	58.6%	59.9%	60.6%	60.3%	-0.89%
Nova Scotia	64.1%	63.4%	62.5%	63.1%	62.6%	63.9%	63.4%	63.2%	63.0%	63.0%	62.5%	63.1%	63.9%	-0.18%
New Brunswick	65.3%	64.0%	63.2%	62.4%	63.9%	63.3%	65.2%	65.2%	64.5%	65.4%	65.2%	64.8%	64.9%	-0.46%
Quebec	65.3%	65.5%	64.7%	65.1%	65.7%	65.4%	65.5%	65.3%	65.5%	65.9%	65.7%	65.5%	65.5%	0.23%
Ontario	67.3%	66.4%	65.3%	65.7%	65.8%	66.0%	65.9%	66.4%	66.0%	66.3%	66.6%	66.4%	66.4%	-0.82%
Manitoba	60.2%	60.3%	60.2%	59.3%	60.2%	61.0%	61.3%	61.3%	61.4%	60.9%	61.1%	60.9%	62.0%	1.85%
Saskatchewan	57.8%	57.8%	56.3%	56.6%	57.3%	57.8%	57.1%	57.8%	57.9%	57.7%	57.8%	57.9%	58.6%	0.87%
Alberta	66.0%	66.7%	64.9%	65.5%	66.7%	67.3%	67.1%	67.5%	66.8%	66.1%	65.4%	64.7%	65.9%	-0.09%
British Columbia	64.0%	64.1%	62.7%	63.4%	63.7%	64.1%	64.3%	65.1%	64.7%	64.9%	66.1%	65.6%	65.6%	1.62%
Canada	65.5%	65.2%	64.1%	64.5%	64.9%	65.1%	65.2%	65.5%	65.3%	65.4%	65.5%	65.3%	65.5%	0.0%

Source: Statistics Canada (2022c); calculations by authors.

Figure 3 provides additional data on the level of private sector employment as a share of total employment observed over the period examined. Specifically, the figure shows the average level of private sector employment (again, as a share of total employment) in each province between 2007 and 2019. We see that Alberta, Ontario, and Quebec had rates of private sector employment above the average of all provinces. The remaining provinces rank below the national average, with Manitoba, Prince Edward Island, and Saskatchewan reporting the lowest levels.

In sum, we observe that the Maritime provinces failed to improve the share of private sector employment over the period examined. Further, all four Atlantic provinces continued to rank below the Canadian average by this measure, with New Brunswick ranking fifth, Newfoundland and Labrador sixth, Nova Scotia seventh, and Prince Edward Island ninth.

Figure 3: Average private sector employment as a share of total employment, by province, 2007-19



Sources: Statistics Canada (2022c); author's calculations.

Business entry rate per thousand businesses

The final measure focuses on new business creation as a way of measuring entrepreneurship. Academic research has demonstrated a relationship between the level of entrepreneurship (as measured by business start-up rates) in a given economy and GDP growth. For example, one study with data from 125 countries from the years 2004 to 2011 found that the business entry rate had a positive impact on GDP per capita (as well as on other variables such as increased patents per population and reduced unemployment) (Cumming et al., 2013).

Business creation is an imperfect measure of entrepreneurship. Definitions of entrepreneurship usually emphasize disruption of existing practices, innovation, or new combinations of resources, as distinct from the creation of a new business that might undertake none of the above. In reviewing the literature on this topic, however, Globerman and Clemens (2018) note that new business creation is associated with successful entrepreneurial activity, that small and medium-sized businesses disproportionately contribute to innovation as well as to rising productivity and standards of living as a result. Further, Godin et al. (2008: 7) note that “business creation is a critical measure of entrepreneurship as starting a new business represents one of the primary ways in which entrepreneurs

bring new ideas to the market,” adding that “business creation rates measure the extent to which people perceive an entrepreneurial opportunity and act to bring that opportunity to fruition.”

With this in mind, in this section we present data on the business entry rate per thousand businesses in each province and over the 2007–19 period (table 5). Presenting the data on a per thousand business basis allows for a comparison across provinces with vastly different numbers of businesses in total.

Table 5: Business entry rate per thousand businesses, by province, 2007-19

Entry Rate (per 1000)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Newfoundland and Labrador	182	177	162	184	162	159	145	150	137	132	130	130	127
Prince Edward Island	164	167	160	152	146	160	147	146	150	160	179	175	166
Nova Scotia	130	127	125	125	117	112	109	116	118	117	124	121	123
New Brunswick	141	144	135	133	126	122	120	119	122	121	120	112	117
Quebec	119	117	109	109	108	105	103	102	102	103	108	108	112
Ontario	170	160	149	149	144	139	136	139	135	133	137	136	162
Manitoba	146	150	140	139	135	136	131	132	124	125	126	129	124
Saskatchewan	162	175	158	148	151	155	146	141	129	120	131	128	122
Alberta	195	178	152	154	163	167	154	155	139	130	143	146	162
British Columbia	181	165	145	146	146	140	137	142	140	140	146	143	145
Average	159	156	144	144	140	140	133	134	130	128	134	133	136

Change	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Newfoundland and Labrador	-2.7%	-8.5%	13.6%	-12.0%	-1.9%	-8.8%	3.4%	-8.7%	-3.6%	-1.5%	0.0%	-2.3%	-2.7%
Prince Edward Island	1.8%	-4.2%	-5.0%	-3.9%	9.6%	-8.1%	-0.7%	2.7%	6.7%	11.9%	-2.2%	-5.1%	0.3%
Nova Scotia	-2.3%	-1.6%	0.0%	-6.4%	-4.3%	-2.7%	6.4%	1.7%	-0.8%	6.0%	-2.4%	1.7%	-0.4%
New Brunswick	2.1%	-6.3%	-1.5%	-5.3%	-3.2%	-1.6%	-0.8%	2.5%	-0.8%	-0.8%	-6.7%	4.5%	-1.5%
Quebec	-1.7%	-6.8%	0.0%	-0.9%	-2.8%	-1.9%	-1.0%	0.0%	1.0%	4.9%	0.0%	3.7%	-0.5%
Ontario	-5.9%	-6.9%	0.0%	-3.4%	-3.5%	-2.2%	2.2%	-2.9%	-1.5%	3.0%	-0.7%	19.1%	-0.2%
Manitoba	2.7%	-6.7%	-0.7%	-2.9%	0.7%	-3.7%	0.8%	-6.1%	0.8%	0.8%	2.4%	-3.9%	-1.3%
Saskatchewan	8.0%	-9.7%	-6.3%	2.0%	2.6%	-5.8%	-3.4%	-8.5%	-7.0%	9.2%	-2.3%	-4.7%	-2.2%
Alberta	-8.7%	-14.6%	1.3%	5.8%	2.5%	-7.8%	0.6%	-10.3%	-6.5%	10.0%	2.1%	11.0%	-1.2%
British Columbia	-8.8%	-12.1%	0.7%	0.0%	-4.1%	-2.1%	3.6%	-1.4%	0.0%	4.3%	-2.1%	1.4%	-1.7%

Source: Statistics Canada (2022e); calculations by authors.

Several key findings emerge from the data. In general, rates of new business creation across Canada declined during the 2007–19 period. This is true not only for the country

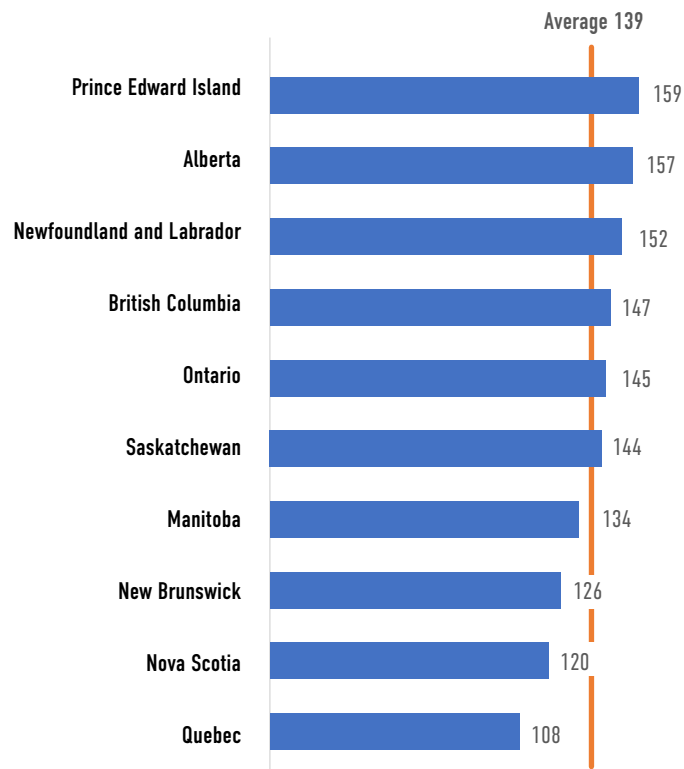
as a whole, which saw a decline in the business entry rate over the period,³ but also for the provinces, as every province except for Prince Edward Island reported a business entry rate lower in 2019 than in 2007.

There are, however, important differences among the provinces in terms of both the change and level of business entry rate over the period. Substantial declines in the business entry rate are observed in Newfoundland and Labrador (–2.7 percent average annual change) followed by Saskatchewan (–2.2 percent), British Columbia (–1.7 percent), New Brunswick (–1.5 percent), Manitoba (–1.3 percent), and Alberta (–1.2 percent). Lesser declines occurred in Quebec (–0.5 percent), Nova Scotia (–0.4 percent), and Ontario (–0.2 percent). As noted, Prince Edward Island experienced a slight increase, 0.3 percent, on an average annual basis.

In terms of the level of the business entry rate, some provinces stand out as having had substantial declines from a relatively low base level in 2007. This is true in Nova Scotia, New Brunswick, Quebec, Manitoba, and Saskatchewan, which all had relatively low and declining rates of business entry. Although Alberta and British Columbia experienced declines, they remained the provinces with the third- and fourth-highest rates as of 2019. Prince Edward Island's rate remained steady during the period, but the deterioration in other provinces caused it to go from fifth highest in 2007 to highest in 2019.

Figure 4 presents data on the average business entry rate over the 2007–19 period, with Prince Edward Island, Alberta, and Newfoundland and Labrador reporting the highest rates above average. Also above average were British Columbia, Ontario, and Saskatchewan. Manitoba, New Brunswick, Nova Scotia, and Quebec, in that order, had the lowest average business entry rates over the period.

3 A substantial body of research shows that demographics are a driving factor in rates of business entry. In reviewing the literature on this topic, Emes et al. (2018) reference a number of studies suggesting rates of entrepreneurship (as defined by the business entry rate) follow an inverted U-curve, increasing with age until approximately the thirties, then declining thereafter. For additional context, consider that Canada had low and declining rates of self-employment compared with other member countries of the Organisation for Economic Co-operation and Development (OECD) during this study's period of analysis (OECD, 2023). In fact, Canada's rates of self-employment were either fourth or fifth lowest in the OECD in every year between 2007 and 2019, and declined every year except for two during the same period. Although the data in this section clearly show declining business entries across Canada, this is within the context of a country in which relatively fewer people are choosing self-employment than in its peers.

Figure 4: Average business entry rate per thousand businesses, by province, 2007-19

Sources: Statistics Canada (2022e); authors' calculations.

Summary of results

The results for Atlantic Canada are generally worse than for the country as a whole, summarized as follows:

- Newfoundland and Labrador saw the second-largest increase in the size of government and the largest decrease in the business entry rate, with the fourth-best improvement in private sector employment and the best improvement in per worker business investment. Turning to levels, the province was in the middle of the pack for size of government and share of private sector employment, and third highest in per worker business investment and the business entry rate. Newfoundland and Labrador generally does not attract a meaningful share of the country's venture capital investment.
- Prince Edward Island reported the largest decrease in the size of government while also being the only province to report an increase in business entries. The province fares poorly in per worker business investment, with the third-largest decline, as well as in the share of private sector employment (reporting the largest decline and the second-lowest level in 2019). Although the province experienced some positive change over the 2007–19 period, its size of government relative to population was the highest, on average, in Canada. It also had the lowest level of per worker business investment and second-lowest average share of private sector employment. Prince Edward Island does not generally attract venture capital investment, reporting only two years with private venture capital investments over the study period.
- Nova Scotia fared poorly across most measures. For size of government, the province had the highest level in 2019 and the fifth-highest increase in the country. The province saw the fourth-largest decline in per worker business investment and the lowest level in 2019, while also experiencing a decline in private sector employment. Nova Scotia's business entry rate also declined, and was second lowest in the country, on average, over the period. Nova Scotia attracts the most venture capital investment in Atlantic Canada in both absolute and per capita terms, but still fails to attract a meaningful share of the national total.

- New Brunswick also fared poorly across most measures, with the third-largest increase in size of government (and also third overall in terms of the 2019 level). The province reported the second-largest decline in per worker business investment, with the 2019 level being third lowest in Canada. New Brunswick had the third-largest decline in private sector employment and the fourth-largest decline in the business entry rate. In terms of levels, the province reported the third-highest average size of government in the country, the fourth-lowest average per worker business investment, and third-lowest average business entry rate. It fared slightly better in the category of the average share of private sector employment, ranking fifth. The province did have some level of venture capital investment most years, but fails to attract a meaningful share of the national total.

Conclusion

In this study, we examined the state of private markets in Canada's provinces over a period spanning from the year before the second-most-recent recession, 2007, to the year before the most recent recession, 2019. We conducted this analysis using three measures covering the size of government, business investment, venture capital investment, private sector employment as a share of total employment, and the business entry rate. For each measure, we examined both the level observed and the change over the period examined.

In general, the results point to a generally declining state of markets across Canada during the period. Most provinces experienced an increase in the size of government as well as a decline in the business entry rate. Business investment declined in the country as a whole and in five of ten provinces. The share of private sector employment in total employment was flat for the country as a whole, declining in five provinces and improving in the other five. Private venture capital investment increased substantially for Canada as a whole, but these gains were tightly concentrated in three provinces, with the remaining seven provinces seeing little to no progress on this measure. With the state of markets being so closely tied to economic growth and living standards, governments and individuals across the country should be concerned about these results.

In Atlantic Canada, the focus of this paper, the results are more pronounced. In general, the region's four provinces began the period with private sectors that trailed and largely failed to converge with those of the rest of Canada by most measures we used over the period. Although some exceptions exist, the region largely remains one of big government, low and declining business investment, a relatively smaller private sector, a disproportionately low share of national private venture capital investment, and below-average business entry rates.

References

- Canada, Department of Finance (2022). Fiscal Reference Tables (November 2022). < <https://www.canada.ca/en/department-finance/services/publications/fiscal-reference-tables/2020.html> >, as of August 15, 2022.
- Cumming, Douglas, Sofia Johan, and Minjie Zhang (2013). The Economic Impact of Entrepreneurship: Comparing International Datasets. *Global Perspectives on Entrepreneurship: Public and Corporate Governance* 22, 2 (March): 162–78.
- CVCA (Canadian Venture Capital and Private Equity Association) (2023). Canadian Venture Capital Market Overview, Q1 2023. < <https://reports.cvca.ca/books/mdds/> >, as of August 3, 2023.
- Eisen, Ben, Milagros Palacios, Fred McMahon, and Alex Whalen (2019). *Catching Up with Canada: A Prosperity Agenda for Atlantic Canada*. Fraser Institute. < <https://www.fraserinstitute.org/studies/catching-up-with-canada-prosperity-agenda-for-atlantic-canada> >, as of January 15, 2024.
- Emes, Joel, Taylor Jackson, and Steven Globerman (2018). Small Business Entry Rates, Demography and Productivity Performance in Selected Developed Countries. In Steven Globerman and Jason Clemens (eds.), *Demographics and Entrepreneurship: Mitigating the Effects of an Aging Population* (Fraser Institute): 77–110. < <https://www.fraserinstitute.org/studies/demographics-and-entrepreneurship-mitigating-the-effects-of-an-aging-population> >, as of January 15, 2024.
- Globerman, Steven, and Jason Clemens (eds.) (2018). *Demographics and Entrepreneurship: Mitigating the Effects of an Aging Population*. Fraser Institute. < <https://www.fraserinstitute.org/studies/demographics-and-entrepreneurship-mitigating-the-effects-of-an-aging-population> >, as of January 15, 2024.
- Globerman, Stephen, and Joel Emes (2022). *Promoting Capital Investment in Atlantic Canada: An Imperative for Prosperity*. Fraser Institute. < <https://www.fraserinstitute.org/sites/default/files/promoting-capital-investment-in-atlantic-canada.pdf> >, as of January 15, 2024.
- Godin, Keith, Jason Clemens, and Niels Veldhuis (2008). *Measuring Entrepreneurship: Conceptual Frameworks and Empirical Indicators*. Fraser institute. < <https://www.fraserinstitute.org/sites/default/files/MeasuringEntrepreneurship2008.pdf> >, as of January 15, 2024.
- OECD (Organisation for Economic Co-operation and Development) (2023). *Self-employment Rate (Indicator)*. OECD Employment Outlook. < <https://data.oecd.org/emp/self-employment-rate.htm> >, as of January 15, 2024.

- Samila, Sampsa, and Olav Sorenson (2011). Venture Capital, Entrepreneurship, and Economic Growth. *Review of Economics and Statistics* 93, 1: 338–49.
- Statistics Canada (2022a). Table 17-10-0005-01. Population estimates on July 1st, by age and sex. < <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000501> >, as of March 4, 2022.
- Statistics Canada (2022b). Table 36-10-0222-01. Gross domestic product, expenditure-based, provincial and territorial, annual (x 1,000,000). < <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610022201> >, as of March 4, 2022.
- Statistics Canada (2022c). Table 14-10-0027-01. Employment by class of worker, annual (x 1,000). < <https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1410002701> >, as of March 4, 2022.
- Statistics Canada (2022d). Table 36-10-0096-01. Flows and stocks of fixed non-residential capital, by industry and type of asset, Canada, provinces and territories (x 1,000,000). < <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610009601> >, as of March 4, 2022.
- Statistics Canada (2022e). Table 33-10-0087-01. Business dynamics measures, by industry, per province or territory. < <https://doi.org/10.25318/3310008701-eng> >, as of March 4, 2022.
- Statistics Canada (2022f). Table 14-10-0393-01. Labour force characteristics, annual. < <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410039301> >, as of March 4, 2022.
- Statistics Canada (2022g). Table 36-10-0450-01. Revenue, expenditure and budgetary balance—general governments, provincial and territorial economic accounts. < <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610045001> >, as of March 9, 2022.
- Whalen, Alex, and Stephen Globerman (2020). *The Changing Size of Government in Canada, 2007-2018*. Fraser Institute. < <https://www.fraserinstitute.org/sites/default/files/changing-size-of-government-in-canada-2007-2018.pdf> >, as of January 15, 2024.
- Whalen, Alex, and Nathaniel Li (2022). *The State of Markets in Atlantic Canada*. Fraser Institute. < <https://www.fraserinstitute.org/sites/default/files/state-of-markets-in-atlantic-canada.pdf> >, as of January 15, 2024.

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