

An Evaluation of the Recent Performance of British Columbia's Economy



Steven Globerman

Contents

Executive Summary / i

Introduction / 1

The Growth of the BC Economy and Its Population / 4

Labour Market Performance / 7

Capital Investment / 10

Government Spending and the Fiscal Burden / 13

Concluding Comments / 16

References / 18

About the authors / 20

Acknowledgments / 20

Publishing information / 21

Supporting the Fraser Institute / 22

Purpose, funding, and independence / 22

About the Fraser Institute / 23

Editorial Advisory Board / 24

Executive Summary

Over the past decade the British Columbia economy has enjoyed a faster rate of real (inflation-adjusted) economic growth than have Canada's other nine provinces, on average. Indeed, from 2010 to 2018, BC's real gross domestic product (GDP) grew at almost twice the average growth rate of Canada's other provinces. British Columbia's population also grew at a substantially faster rate than the average for other provinces, although the difference was not as marked as in the case of real GDP. Hence, the BC economy experienced an increase in real GDP per capita compared to the rest of Canada.

Examination of capital expenditure patterns supports what media reports and other commentaries have suggested. Namely, the province's economic growth over the past decade has been highly leveraged to residential housing construction and industries related to the housing sector such as real estate brokerage and mortgage services, architectural services, furniture and appliance producers, and the like.

Notwithstanding the province's above-average rate of economic growth, average hourly wages of full-time and part-time employees in British Columbia actually increased at a slower rate than in other provinces, on average, from 2010 to 2019. The data therefore suggest that other factors of production besides labour benefitted disproportionately from the province's residential housing boom, primarily owners of land and shareholders of companies that are linked to the residential housing industry.

The province's heavy reliance on residential housing as its driver of economic growth has made for an industrially unbalanced growth dynamic. Hence, any future downturn in the residential housing sector would have a particularly marked adverse effect on the BC economy. Furthermore, the fact that capital investment in productivity-enhancing assets such as machinery and equipment and intellectual property in the province lagged such investment in the rest of Canada, on average, suggests that the competitiveness of non-real-estate-related industries in British Columbia will be at a growing disadvantage compared to other parts of the country in the years ahead.

Introduction

Previous studies have documented a significant decline in capital investment in Canada in the post-2014 period, and this decline has not been restricted to the oil and gas sector but characterizes investment behaviour across a majority of Canadian industries.¹

From 1990 to 2018, British Columbia enjoyed an above-average rate of growth in net inflation-adjusted capital expenditures compared to other Canadian provinces. Indeed, it enjoyed the second fastest average annual growth rate in net investment in total fixed assets from 1990 to 2014—behind only Alberta. While the average annual growth rate declined from 2014 to 2018 compared to the 1990 to 2014 period, the decline was quite modest compared to most other provinces. Again, BC enjoyed the second fastest average annual growth in net investment in total fixed assets, in this case only trailing Newfoundland & Labrador.² To the extent that changes in capital investment rates signal changes in the competitiveness of individual provinces, these data suggest that British Columbia has been a relatively attractive business location in Canada over the previous two decades and particularly in the post-2014 period when there was a notable deterioration in investment performance in most other regions of Canada, especially in Alberta given the severe contraction of oil and gas exploration activity in that province.

The purpose of this essay is to provide a broader and more in-depth evaluation of British Columbia's economic performance relative to the economic performances of other Canadian provinces. In particular, it presents and assesses a range of macroeconomic performance measures that both embellish upon and deconstruct the relatively favourable picture described above, which is based on overall net investment. The main finding is that the growth of residential construction associated with a relatively rapid increase in the province's population has been the major underlying source of strength of British Columbia's economy relative to the rest of Canada, and this was particularly the case in the post-2014 period. While

¹ For evidence on recent patterns of capital expenditures at the industry level in Canada, see Globerman and Emes (2019a). Globerman and Emes (2020) presents and analyzes data on changes in capital expenditures at the provincial level.

² See Globerman and Emes (2020) for a full discussion.

this finding is not especially surprising given the widespread reporting about increasing housing prices in BC's Lower Mainland, the extent to which the province's economic activity has been tied to housing is noteworthy.³ The finding highlights the province's vulnerability to a slowing residential housing market, as well as the relevance of policies that would help make the province a more attractive location for technology-oriented manufacturing and service sector companies.

It should be noted that the availability of data limits our analysis to the pre-Covid-19 period. Specifically, 2019 is the latest available year for most of the economic variables discussed. Clearly, much has changed in 2020 as a result of major public health and economic developments arising from the pandemic. In particular, there has been a substantial contraction in economic activity in Canada with varying magnitudes of declines across the different provinces. It is arguably too soon to assess how individual provinces, including British Columbia, will fare economically in 2020 and in the future, as Canada (and the rest of the world) is still in the midst of the Covid crisis. It is also a matter of speculation as to how economic activity in Canada and its major trading partners will be affected longer term by the Covid crisis, as well as the private and public sector responses to the crisis. In short, it is certainly possible that British Columbia's relative economic performance post-crisis will differ, perhaps substantially, from its relative performance over the 2010 to 2019 period.

A future essay will discuss the outlook for the British Columbia economy post-Covid with a particular focus on whether the recent sources of strength identified in this essay are likely to prevail over the next decade. It will also identify specific public policy initiatives that would help improve the competitiveness of BC's economy. At this point, we merely note the observations made by some economists that the relatively low incidence of Covid infections in British Columbia compared to other provinces in Canada likely means that the British Columbia economy will experience a below-average decline in economic activity in 2020 and an above-average economic recovery in 2021. For example, Craig Alexander, the chief economist for Deloitte Canada, calls for the BC economy to contract by about 5 percent in 2020 before experiencing real economic growth of just over 6 percent in 2021. He projects the Canadian economy to contract by 5.9 percent in 2020 before growing by 5.6 percent in 2021 (Orton, 2020).⁴ In short, while far from certain, it can be argued that the

³ For a study of changing shelter costs in different municipal areas in Canada, see Filipowicz, Globerman, and Emes (2020).

⁴ Economists at the Business Council of British Columbia forecast that the BC economy's Gross Domestic Product (GDP) will shrink 7.8 percent in 2020, which is a smaller decline than the 8 percent contraction projected for Canada as a whole.

fundamental strengths and vulnerabilities of the BC economy relative to the rest of Canada are unlikely to be substantially changed as a result of the Covid crisis.

However, if a second wave of the virus occurs, the contraction of the Canadian economy is likely to be closer to 9.5 percent. Furthermore, the projected recovery of Canada's GDP in 2021 (1.5 percent) is substantially below the forecasted recovery for the BC economy (4.8 percent) (see Orton, 2020).

The Growth of the BC Economy and Its Population

The data reported in table summarize the growth in the size of the BC economy as measured by the province's Gross Domestic Product (GDP) adjusted for inflation, as well as the growth relative to other provinces over the period from 2010 to 2018.⁵ This period is also broken into two sub-periods—pre- and post-2014—for the purposes of reporting this and other economic data. Other studies have shown that the investment environment in Canada deteriorated substantially after 2014, especially in the oil and gas sector.⁶ Given the concentration of oil and gas assets in the western provinces, especially Alberta, as well as the fairly obvious change in the overall Canadian business environment after 2014 as indicated by the substantial slowdown in business investment, it seems useful to assess the BC economy's performance in the two sub-periods, as well as over the entire period.

The first row of table 1 reports the simple (unweighted by population) average growth rate of GDP at market prices (chained 2012 dollars) of the 10 Canadian provinces between 2010 and 2018, as well as between 2010 to 2014 and 2015 to 2018. The second row reports the average growth rate of real GDP for the provinces excluding British Columbia over the same periods. The third row reports the growth rate for the BC economy alone. Since we are interested in comparing the province's economic performance relative to other individual provinces, it seemed desirable to use unweighted (by population) measures of the average performance of the provinces to avoid implicitly comparing BC's performance primarily to that of Canada's two largest provinces, Ontario and Quebec.

Table 1 shows that real economic growth in BC exceeded that of the country as a whole over the entire period from 2010 to 2018, as well as for each of the two sub-periods.⁷ Over the full sample period, BC enjoyed the

⁵ The last available year for real GDP at the time of writing was 2018.

⁶ For an overview of investment in the North American oil and gas industry pre- and post-2014, see Globerman and Emes (2019b).

⁷ The growth rate reported for 2010 to 2018 will not necessarily equal the sum of the growth rates for the two sub-periods. For one thing, it implicitly excludes the growth

Table 1: Percentage Change in Real GDP (Chained 2012 Dollars)

	2010-2018	2010-2014	2015-2018
Simple average—all provinces	14.4	8.3	5.2
Simple average—all provinces except BC	13.2	7.9	4.7
British Columbia	24.7	11.8	9.3

Source: Statistics Canada, Table 36-10-0222-01; and author's calculations.

fastest real GDP growth rate of all provinces.⁸ The economic outperformance of the BC economy as measured by real economic growth is especially marked in the second sub-period during which real GDP in British Columbia grew almost twice as fast as it did in the other 9 provinces, on average.

Whether the above-average increase in real GDP enjoyed by the British Columbia economy translated into above-average growth in real GDP per capita depends upon BC's population growth relative to the population growth of the other Canadian provinces. Table 2 reports unweighted population growth rate estimates for all 10 provinces, for the average of the 9 remaining provinces net of British Columbia, and for British Columbia alone. Since the population data are reported on a quarterly basis, the growth rates reported are the simple percentage changes between the first quarter of the beginning year of each period and the fourth quarter of the last year of each period. The periods covered in table 2 therefore correspond to those covered in table 1.⁹

The data reported in Table 2 identify a much faster population growth rate for British Columbia compared to the average for the other

between 2014 and 2015. For another, it also implicitly ignores the compounding of growth between the two sub-periods. Nevertheless, the period growth rates reported clearly convey the outperformance of the BC economy.

⁸ BC enjoyed the third fastest growth from 2010 to 2014 and the second fastest growth from 2015 to 2018.

⁹ Since within-year population changes are relatively small, estimating population growth between the beginning and end period quarters of each period should be quite similar to estimates based on averaging the quarterly estimates for each year and then using the beginning and end year values for each period to calculate the relevant percentage changes.

Table 2: Percentage Change in Population

	2010-2019	2010-2014	2015-2019
Simple average—all provinces	9.9	4.2	5.3
Simple average—all provinces except BC	9.3	4.0	5.0
British Columbia	15.0	6.0	7.6

Source: Statistics Canada, Table 17-10-0009-01; and author's calculations.

9 provinces, particularly for the 2015 to 2019 period.¹⁰ However, real per capita GDP in BC increased relative to other provinces since the differential in the growth of real GDP exceeded the differential in the growth rate of total population. Specifically, over the 2010 to 2018 period, BC's real GDP growth was 11.52 percentage points higher than unweighted simple average real GDP growth in the other 9 provinces. Over that same period, BC's total population growth was 5.7 percentage points above the average population growth rate for the other 9 provinces.

A faster growth of real GDP per person in British Columbia compared to other provinces does not necessarily mean that the average worker in British Columbia enjoyed a greater increase in real income than the average worker elsewhere in Canada. GDP measures the value of output produced in a domestic economy. While income accounting ensures that the value of output will equal payments to factors of production, including labour and capital (where the latter includes land), the share of domestic income going to various factors of production can differ across provinces. For example, the return to owners of land might be higher in one province than in another due to differential scarcity of land available for development. Also, some factors of production within a province may legally reside outside the province, in which case reported domestic real income will be less than real GDP. To illustrate, the profits (or compensation) earned by companies (or workers) doing business in a province but headquartered (or legally residing) outside of that province will not be captured in that province's reported domestic income. Hence, it would be informative to focus more narrowly on labour market conditions in British Columbia compared to the other provinces to assess how the economic welfare of workers in BC fared relative to other parts of Canada.

¹⁰ Since population data are available for 2019, the period for this variable was extended to 2019.

Labour Market Performance

Arguably the most widely used reference to labour market conditions is the unemployment rate. While there are various measures of unemployment, the “conventional” measure is the ratio of persons unemployed relative to the total number of persons in the workforce, where the latter encompasses individuals who are either currently employed or are looking for employment. In this regard, table 3 reports the average annual unemployment rate for all provinces, all provinces excluding British Columbia, and for British Columbia exclusively for the periods 2010 to 2014, 2015 to 2019, and 2010 to 2019. Given BC’s faster-than-average growth in real GDP, it is not surprising that BC enjoyed a below-average unemployment rate over the full 2010 to 2019 period, as well as for the two sub-periods.

While a relatively low unemployment rate is typically related to relatively strong demand for workers on the part of employers, it can also reflect a relatively slow growth of the labour force, either because the working-age population is growing relatively slowly and/or because a relatively large share of the working-age population is not participating in the work force. From the data reported in table 2, one can infer that BC’s relatively low unemployment rate is not due to below-average growth in the province’s population. Nor is it due to fewer people working relative to the size of the population as identified by the employment rate as shown

Table 3: Unemployment Rate (Percent)

	2010-2019	2010-2014	2015-2019
Average—all provinces	7.78	7.96	7.60
Average—all provinces except BC	7.97	8.08	7.85
British Columbia	6.13	6.92	5.34

Source: Statistics Canada, Table 14-10-0090-01; and author's calculations.

Table 4: Average Annual Employment Rate (Percent)

	2010-2019	2010-2014	2015-2019
Simple average—all provinces	60.8	61.2	60.4
Simple average—all provinces except BC	60.8	61.3	60.3
British Columbia	60.7	60.1	61.3

Source: Statistics Canada, Table 14-10-0090-01; and author's calculations.

by data reported in table 4. Specifically, the ratio of total employed persons to total population for British Columbia on an average annual basis is virtually identical to the simple unweighted average of that of the other provinces over the full 2010 to 2019 period, though it is slightly below average for 2010 to 2014 and slightly above average for 2015 to 2019. In short, BC's relatively low unemployment rate appears to reflect a relatively strong demand for employment in the province.

Relatively strong growth in employment is not equivalent to relatively strong growth in labour compensation. As noted above, the returns to different factors of production can vary across locations. For example, a scarcity of developable land in the Lower Mainland of British Columbia relative to the availability of labour could mean that the growth in labour compensation in British Columbia is suppressed relative to the growth of labour compensation in other parts of Canada where labour is a relative scarce factor of production, notwithstanding the faster growth of overall employment in British Columbia. In addition, the average skill level of the workforce can differ across locations, in part because of a different mix of industries. Hence, to the extent that Ontario enjoys a disproportionate share of employment in relatively high paying occupations in the finance, technology, and public administration sectors, average compensation in Ontario could remain higher than in British Columbia with a concentration of employment in construction and retail services.¹¹

In this regard, table 5 reports the average hourly wage rate for both full time and part-time employees (15 years of age and older) in Canada and in British Columbia for the same time periods as in earlier tables.¹²

¹¹ Changes in the mix of industries in British Columbia relative to the country as a whole will be considered in the next section of the essay.

¹² For convenience, the comparison reported in table 5 is simply that between British Columbia and all of Canada including the territories. Given the virtually identical

Table 5: Average Hourly Wage Rate for Full-Time and Part-Time Employees (Current Dollars)

	2010-2019	2010-2014	2015-2019
Canada	25.04	23.69	26.36
British Columbia	24.82	23.58	26.07

Source: Statistics Canada, Table 14-10-0064-01; and author's calculations.

The data show that the average hourly wage rate in British Columbia was marginally lower than in all of Canada for all three time periods, although the differences are likely not statistically significant. In short, BC's stronger labour market did not translate into higher wage rates compared to the rest of the country.

It should be noted explicitly that average hourly wages do not reflect full employee compensation, as fringe benefits such as employers' contributions to supplementary health care are not included. However, there is no reason to believe that the mix of compensation, i.e., wages relative to benefits, differs substantially across provinces. It is also possible that differences in the mix of full time to total employment exist across the provinces which contributes to the observed differences in average hourly wage rates reported in table 5. In fact, full-time employment as a share of total employment is lower in British Columbia than elsewhere in Canada. Specifically, over the full period from 2010 to 2019, full-time employees as a percentage of total employees averaged 80.0 in Canada, whereas it averaged 78.4 in British Columbia. However, full-time employment in BC still grew more than 3 percentage points faster than in the other 9 provinces, on average (12.89 percent compared to 9.56 percent) over the 2010 to 2019 period. Moreover, the average hourly wage in BC grew by 21.6 percent from 2010 to 2019, whereas it grew by 24.02 percent in Canada overall. The conclusion one might draw is that while the BC economy grew total as well as full-time employment at a more robust rate than the rest of Canada, the jobs created were less well-paying, on average, than in the rest of Canada.¹³

values of the BC estimate and that for the country as a whole, it can be taken that the average for the 9 other provinces approximates the value for BC.

¹³ The data on full-time employment are from the same source as the data in table 3, whereas the data on average hourly wages are from the same source as table 5.

Capital Investment

Labour productivity growth is the main determinant of wage growth over time. The growth in capital investment, in turn, is a major determinant of the growth of labour productivity. Hence, it is useful to consider how capital investment growth performed in British Columbia relative to the rest of Canada to better understand the relative performances of provincial labour markets and, particularly, the behaviour of wage rates.

It is also useful to consider the type of capital investment undertaken in BC relative to other parts of Canada, since the productivity impacts of specific types of capital assets are likely to differ. For example, while residential housing serves an important function in facilitating access to employment, as well as providing social and health-related benefits, that asset category is unlikely to provide the same improvements to labour productivity as investments in machinery and equipment or investments in intellectual property products (IPP), since the latter asset categories are the primary vehicles through which new technology is introduced into an economy.

With this consideration in mind, tables 6 to 8 report investment behaviour for three broad capital asset categories. Specifically, table 6 reports the average annual investment in residential building construction (in billions of current dollars) for Canada and for British Columbia over the full period (2010 to 2019), as well as for the two sub-periods (2010 to 2014 and 2015 to 2019).¹⁴ It also reports the percentage of all residential building construction in Canada that took place in British Columbia. The data show a sharp increase in BC's total share of investment in residential construction between the first and second sub-periods. It also highlights the disproportionate share of total investment in residential construction accounted for by British Columbia. Specifically, over the entire 2010 to 2018 period, BC's GDP (in current dollars) accounted for approximately

¹⁴ For convenience, the data for Canada reported in tables 6 to 8 include territories, although the latter are small contributors to the total values reported for Canada. As well, the Canada total includes values for British Columbia. Hence, the ratio of residential construction in BC relative to the other 9 provinces would obviously be higher than that reported in table 6.

Table 6: Average Annual Investment in Residential Construction (\$billions current)

	2010-2019	2010-2014	2015-2019
Canada	95.3	92.7	97.9
British Columbia	16.5	12.9	20.1
British Columbia/Canada (%)	17.2	13.9	20.5

Source: Statistics Canada, Table 34-10-0175-01; and author's calculations.

Table 7: Average Annual Investment in Non-Residential Building Construction (\$billions current)

	2010-2019	2010-2014	2015-2019
Canada	50.8	49.1	52.4
British Columbia	5.9	5.1	6.6
British Columbia/Canada (%)	11.6	10.4	12.6

Source: Statistics Canada, Table 34-10-0175-01; and author's calculations.

Table 8: Average Annual Investment in Machinery and Equipment and IPP (\$billions current)

	2010-2019	2010-2014	2015-2019
Canada	133.1	138.5	126.1
British Columbia	13	12.4	13.8
British Columbia/Canada (%)	9.8	9	10.9

Source: Statistics Canada, Table 36-10-0096-01; and author's calculations.

13.5 percent of Canada's GDP, whereas residential construction in BC accounted for over 17 percent of residential construction in all of Canada.¹⁵ Furthermore, since BC's share of Canada's total GDP was only marginally higher in the post-2014 period than prior to 2014, the disproportionate amount of residential construction that took place in British Columbia compared to other parts of Canada is particularly noteworthy for the 2015 to 2019 sub-period.

Table 7 reports average annual investment in non-residential building construction for Canada and British Columbia. In contrast to the case for residential building construction, non-residential construction in BC as a share of non-residential construction in the country as a whole is consistently lower than that province's share of national GDP over the full sample period. Table 8 reports average annual investment in machinery and equipment plus intellectual property products for all industries for Canada as a whole and for British Columbia. The province's share of total national investment in this broad asset category is well less than its share of overall GDP over the full sample period.

Tables 6 to 8 therefore underscore the point that investment in residential housing was disproportionately large in British Columbia compared to the rest of Canada, whereas it was relatively weak for other asset categories, especially those that are most closely linked to productivity growth. In particular, the relative growth of investment in machinery and equipment and IPP in BC has not matched the growth of the province's GDP relative to GDP growth of the country as a whole. Taken together, tables 6 to 8 document how disproportionately important residential housing construction has been to the growth of GDP and employment in British Columbia, particularly after 2014.¹⁶ Indeed, the investment data reported understate the importance of residential housing's contribution to overall economic activity in the province as it excludes investment in businesses linked to the housing sector including brokerage, mortgage, and architectural services, producers of furniture and household appliances, and so forth. Finlayson and Peacock (2016) attempt to account for all housing-related expenditures in British Columbia in 2016, which leads them to conclude that around 40 percent of BC's economic growth in that year was directly or indirectly derived from the residential housing sector.

¹⁵ Again, Canada's GDP in this case includes all provinces plus territories. The estimate is from data reported in Statistics Canada, *Table 36-10-0222-01, Gross Domestic Product, Expenditure-Based, Provincial and Territorial, Annual*. The latest year for which the data are reported is 2018.

¹⁶ It might be argued that residential construction would have grown even faster along with population had shelter costs not increased so dramatically in British Columbia's municipalities, especially in the Lower Mainland.

Government Spending and the Fiscal Burden

Another relevant factor to consider in an evaluation of British Columbia's economy is the size of government. While governments provide services that clearly have value to their citizens, the opportunity cost of providing those services is foregone output produced by the private sector, as capital, labour, and other productive inputs are bid away from the private sector by government. Put simply, government must ultimately fund its expenditures through taxes imposed on the private sector in order to buy the inputs it needs to provide services. Furthermore, to the extent that government borrows money to fund its expenditures, the interest obligation associated with government debt is an additional future cost imposed on the private sector as the interest must ultimately be paid for through taxes on private sector income.

Since higher tax rates reduce incentives to invest and innovate, government spending can impose a fiscal burden on the private sector. The use of the conditional tense is deliberate. Government spending on activities such as education, health care, basic research and development, and the provision of tangible and intangible infrastructure such as roads, bridges, and public safety contribute to improved economic efficiency, thereby economizing on the private sector's need for productive inputs. It is beyond the scope of this essay to review the fairly extensive literature on the relationship between the size of government and real economic growth.¹⁷ Briefly, while there is no consensus on the precise "optimal" size of government, the evidence suggests that beyond some relevant size, increased government spending as a share of GDP results in reduced real economic growth. Furthermore, there are grounds to argue that the federal and provincial governments in Canada might already exceed existing estimates of optimal size (Whalen and Globerman, forthcoming).

¹⁷ Reviews of the literature can be found in Di Matteo (2013) and Whalen and Globerman (forthcoming). It might also be noted that the impact of government on private sector activity extends beyond spending and taxes. In particular, government regulation can affect the efficiency of the private sector and can be seen as an extension of the size of government. For a discussion of this point, see Cross (2014).

Table 9: Total Consolidated Government Spending as a Percentage of GDP (Average for Period)

	2010-2018	2010-2014	2015-2018
Canada	45.3	45.2	45.4
Canada except British Columbia	46.2	46.2	46.6
British Columbia	36.8	35.9	35.8

Source: Whalen and Globerman (forthcoming).

Table 10: Fiscal Burden (Percent)

	2010-2018	2010-2014	2015-2018
All provinces	16.1	15.6	16.7
All provinces except British Columbia	16.2	15.7	16.8
British Columbia	15.0	14.6	15.6

Source: Statistics Canada, Tables 10-10-0147-01, 10-10-0016-01, 36-10-0222-01; and author's calculations.

Table 11: Total Government Expenditures on Debt Interest as a Percent of Total Government Spending

	2010-2018	2010-2014	2015-2018
All provinces	8.01	8.52	7.35
All provinces except British Columbia	8.12	8.62	7.47
British Columbia	7.02	7.6	6.28

Source: Whalen and Globerman (forthcoming).

Tables 9 to 11 provide an overall picture of the relative size of government in British Columbia and the fiscal performance of the province relative to other provinces as identified by the fiscal burden and the share of government spending going to interest payments. Specifically, table 9 reports total consolidated government spending as a percentage of GDP for Canada as a whole and for British Columbia specifically. Table 10 compares BC's fiscal burden to that of other provinces, where fiscal burden measures taxes and compulsory transfers paid to government by individuals, businesses and non-residents expressed as a percentage of GDP. Finally, Table 11 reports total government expenditures on debt interest as a percentage of total government spending.

The main inference to be drawn from the data on government fiscal performance is that the BC government has managed its finances relatively well compared to other provinces. Specifically, provincial government spending as a percentage of provincial GDP was lower than for the country as a whole, as well as for the other provinces, on average, over each of the two sub-periods, although it was still higher than some estimates of the percentage beyond which an incremental share of GDP going to government spending reduces real economic growth. Moreover, and notwithstanding the above-average economic growth that the BC economy has enjoyed since 2014, government spending relative to GDP has remained essentially constant in BC, whereas it has increased in the rest of Canada between the two sub-periods, on average. British Columbia's interest payments on government debt as a percentage of total government spending is also below that of other provinces, which implies a lower relative future tax burden, other things constant. Finally, the fiscal burden imposed by the BC government is lower than it is elsewhere in Canada, on average, although it increased after 2014.

Concluding Comments

From 2010 to 2019, British Columbia's economy performed relatively well compared to other provinces. In particular, it enjoyed substantially above-average real economic growth, particularly from 2015 to 2018. However, with an accompanying increase in population, the average wage rate of workers in BC did not increase relative to the average wage rate of workers elsewhere, even though real economic growth outpaced the growth of population in British Columbia over the period studied. This outcome presumably reflects a greater share of income going to non-labour factors of production in British Columbia compared to other parts of Canada. In particular, the return to real property in British Columbia arguably accounts for a larger share of provincial income than is the case for other provinces.

The fact that residential construction was the major driving force of the province's growth rate, particularly from 2015 to 2019, is consistent with an argument that increased demand for housing drove up returns to land as a relatively scarce factor of production. As well, the fact that shelter costs in cities in British Columbia, especially Vancouver and in other Lower Mainland locations, rose at an above-average rate compared to the rest of Canada, combined with the fact that the nominal average wage in British Columbia did not increase relative to the average wage elsewhere, implies that the real incomes of workers in British Columbia decreased relative to the real incomes of workers in many other parts of the country. In short, for many workers, BC's relatively fast overall economic growth rate did not translate into increased real economic prosperity.

The reliance on residential construction as a driver of economic growth in the province also raises substantive concerns about the sustainability of that growth in the future. Legitimate concerns can be raised about whether housing affordability issues, especially in the Lower Mainland, will limit population growth at the same time as it makes starting new businesses uneconomical. The below-average growth rate in productive assets such as machinery and equipment and in new technology suggest that the future rate of growth of labour productivity of BC workers might lag behind that of workers in other parts of Canada, which might further discourage investment outside of the residential construction sector.

In sum, the future of BC's economy might well depart from recent experience absent policies that encourage improved economic competitiveness across a broader range of industries, as well as more affordable housing. While the full consequences of the Covid crisis are extremely difficult to predict, one possible outcome might be increased flexibility of skilled employees to work outside the office. This development would increase the geographical mobility of skilled workers. The relatively high cost of living in BC municipalities, which is apparently not being compensated in higher monetary wages would, in such circumstances, further undermine the competitiveness of the provincial economy and threaten its future economic growth.

References

Cross, Phillip (2014). *Estimating the True Size of Government: Adjusting for Regulation*. Macdonald-Laurier Institute. <<https://www.macdonald-laurier.ca/files/pdf/MLIPCrossSizeOfGovernmentPaper0514.pdf>>, as of August 31, 2020.

Di Matteo, Livio (2013). *Measuring Government in the Twenty-First Century: An International Overview of the Size and Efficiency of Public Spending*. The Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/measuring-government-in-the-21st-century.pdf>>, as of August 31, 2020.

Filipowicz, Josef, Steven Globerman, and Joel Emes (2020). *Changes in the Affordability of Housing in Canadian and American Cities, 2006-2016*. The Fraser Institute. <www.fraserinstitute.org/sites/default/files/changes-in-the-affordability-of-housing-in-canadian-and-american-cities.pdf>, as of August 31, 2020.

Finlayson, Jock, and Ken Peacock (2016, July 15). *No Surprise: The Residential Real Estate Complex a Big Economic Engine in BC*. Insights and Opinions. British Columbia Business Council. <<https://bcbc.com/insights-and-opinions/no-surprise-the-residential-real-estate-complex-a-big-economic-engine-in-bc>>, as of August 31, 2020.

Globerman, Steven, and Joel Emes (2019a). *Private Sector Capital Expenditures in Canada: An Industry-Level Analysis*. The Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/private-sector-capital-expenditures-in-canada.pdf>>, as of August 31, 2020.

Globerman, Steven, and Joel Emes (2019b). *Investment in the Canadian and US Oil and Gas Sectors: A Tale of Diverging Fortunes*. The Fraser Institute <<https://www.fraserinstitute.org/sites/default/files/investment-in-canadian-and-us-oil-and-gas-sector.pdf>>, as of August 31, 2020.

Globerman, Steven, and Joel Emes (2020). *Capital Investment in Canada's Provinces: A Provincial Report*. The Fraser Institute. <<https://www.fraser->

[institute.org/sites/default/files/capital-investment-in-canadas-provinces.pdf](https://www.fraserinstitute.org/sites/default/files/capital-investment-in-canadas-provinces.pdf)>, as of August 31, 2020.

Orton, Tyler (2020, June 28). BC Will Lead Post-Pandemic Recovery. *Business in Vancouver*. <<https://www.westerninvestor.com/news/british-columbia/b-c-will-lead-post-pandemic-recovery-1.24160236>>, as of August 31, 2020.

Statistics Canada (2020a). *Table 36-10-0222-01: Gross Domestic Product, Expenditure-Based, Provincial and Territorial, Annual (x 1,000,000)*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610022201>>, as of August 31, 2020.

Statistics Canada (2020b). *Table 14-10-0090-01: Labour Force Characteristics by Province, Territory and Economic Region, Annual*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410009001>>, as of August 31, 2020.

Statistics Canada (2020c). *Table 17-10-0009-01: Population Estimates, Quarterly*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000901>>, as of August 31, 2020.

Statistics Canada (2020d). *Table 2: Fiscal Burden as a Percentage of Gross Domestic Product, 2008 to 2018*. Statistics Canada. <<https://www150.statcan.gc.ca/n1/daily-quotidien/191120/t002b-eng.htm>>, as of August 31, 2020.

Statistics Canada (2020e). *Table 14-10-0064-01: Employee Wages by Industry*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410006401>>, as of August 31, 2020.

Statistics Canada (2020f). *Table 34-10-0175-01: Investment in Building Construction*. Statistics Canada. www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3410017501.

Statistics Canada (2020g). *Table 36-10-0096-01: Flows and Stocks of Fixed Non-Residential Capital by Industry and Type of Investment, Canada, Provinces and Territories*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610009601>>, as of August 31, 2020.

Whalen, Alex, and Steven Globerman (forthcoming). *The Changing Size of Government in Canada*. The Fraser Institute.



About the author

Steven Globerman

Steven Globerman is Resident Scholar and Addington Chair in Measurement at the Fraser Institute as well as Professor Emeritus at Western Washington University. 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 published more than 150 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. In the early 1990s, he was responsible for coordinating Fraser Institute research on the North American Free Trade Agreement. He earned his BA in economics from Brooklyn College, his MA from the University of California, Los Angeles, and his PhD from New York University.

Acknowledgments

The author thanks two external reviewers for helpful comments and suggestions on an earlier draft. Any remaining errors 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

These 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
- 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.

Copyright

Copyright © 2020 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

December 2020

ISBN

978-0-88975-615-1

Citation

Steven Globerman (2020). *An Evaluation of the Recent Performance of British Columbia's Economy*. Fraser Institute. <<http://www.fraserinstitute.org>>.

Supporting the Fraser Institute

To learn how to support the Fraser Institute, please contact

- Development Department, Fraser Institute
Fourth Floor, 1770 Burrard Street
Vancouver, British Columbia, V6J 3G7 Canada
- telephone, toll-free: 1.800.665.3558 ext. 548
- e-mail: development@fraserinstitute.org
- website: <http://www.fraserinstitute.org/donate>

Purpose, funding, and independence

The Fraser Institute provides a useful public service. We report objective information about the economic and social effects of current public policies, and we offer evidence-based research and education about policy options that can improve the quality of life.

The Institute is a non-profit organization. Our activities are funded by charitable donations, unrestricted grants, ticket sales, and sponsorships from events, the licensing of products for public distribution, and the sale of publications.

All research is subject to rigorous review by external experts, and is conducted and published separately from the Institute's Board of Trustees and its donors.

The opinions expressed by authors are their own, and do not necessarily reflect those of the Institute, its Board of Trustees, its donors and supporters, or its staff. This publication in no way implies that the Fraser Institute, its trustees, or staff are in favour of, or oppose the passage of, any bill; or that they support or oppose any particular political party or candidate.

As a healthy part of public discussion among fellow citizens who desire to improve the lives of people through better public policy, the Institute welcomes evidence-focused scrutiny of the research we publish, including verification of data sources, replication of analytical methods, and intelligent debate about the practical effects of policy recommendations.

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. Stephen Easton

Prof. J.C. Herbert Emery

Prof. Jack L. Granatstein

Prof. Herbert G. Grubel

Prof. James Gwartney

Prof. Ronald W. Jones

Dr. Jerry Jordan

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. Friedrich A. Hayek* †

Prof. H.G. Johnson*

Prof. F.G. Pannance*

Prof. George Stigler* †

Sir Alan Walters*

Prof. Edwin G. West*

* deceased; † Nobel Laureate