

Comparing Recent Economic Performance in Canada and The United States:

A Provincial and State-level Analysis

Livio Di Matteo, Joel Emes, Charles Lammam, and Ben Eisen



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Executive summary

Conventional wisdom holds that Canada weathered the global financial crisis and recession better than most industrialized countries, particularly the United States. It is certainly true that overall, Canada has performed better economically than the United States immediately since the 2008-09 recession. For example, from 2010 to 2014 real (inflation-adjusted) gross domestic product (GDP) per person in the United States grew at an annual average rate of 1.2 percent while in Canada the rate was 1.4 percent.

At a glance, this seems to support the prevailing narrative of post-recession Canadian economic superiority (until the recent collapse in oil prices and weakness in the Canadian economy). However, an examination of sub-national data complicates this narrative considerably. There is substantial variation in the economic performance of the individual provinces and states within each of the two countries.

This study analyzes various sub-national economic indicators including the level and growth of real GDP per person, resource intensity, growth in real GDP per worker (labour productivity), employment growth (total, private, and public), the unemployment rate and business investment (the latter for Canada only due to data availability). It demonstrates that while Canada's overall economic performance has been relatively strong in recent years, specific regions and several individual provinces have in fact struggled.

Specifically, Ontario, Quebec, and the Maritimes have performed relatively weakly in the years following the recent recession. In fact, key economic metrics in these provinces and regions are closely aligned with, or are in some cases well below, the anemic American average.

For example, from 2010 to 2014, although relatively weak at just 1.2 percent annually, real per-capita growth in the United States was higher than in every Canadian province east of Manitoba. Average real per person growth in regions east of the Prairies ranged from a low of 0.1 percent in New Brunswick to a high of just 1.1 percent in Ontario. While Canada as a whole may have outperformed the United States over the period, some provinces and regions have had levels of economic growth that have either matched, or been significantly below those in the United States.

Instead of a simple narrative of Canadian economic superiority, the story that emerges from our analysis of the sub-national data is that very strong economic performance in specific resource-intensive jurisdictions (especially Alberta and Saskatchewan) are largely responsible for Canada's comparatively strong overall economic record relative to the United States. The very strong performance of these jurisdictions pulls up Canada's national average, and masks economic weakness elsewhere in the country.

The sub-national data from the United States tells a similar story: resource-intensive states generally show much stronger performance than other states. However, for Canada as a whole, the resource sector makes up a substantially larger share of total economic output (14.2 percent) than that of the US (5.9 percent). The result is that the strong growth rates in Canada's high performing, resource-intensive jurisdictions raise the national average much more than is the case south of the border, where the resource-intensive jurisdictions represent a comparatively small share of economic output.

Given the marked economic slowdown underway in Canada's resource-intensive provinces due to depressed commodity prices, there are important implications for Canada's future growth prospects. The resource boom, with its associated output, employment generation, and capital formation, has halted; at the same time, relatively weak growth in Central and Atlantic Canada persists despite lower commodity prices and a lower Canadian dollar. The key question remains: if energy-intensive provinces are struggling too, which provinces and regions will propel Canada's future economic growth?

Introduction

Overall, Canada as a whole has performed better economically (on various measures) than the United States since the recession of 2008-09. However, there is substantial variation in the economic performance of sub-national jurisdictions (provinces and states) within each of the two countries. By focusing only on national statistics, important regional and provincial or state level differences and trends can be overlooked. A closer look at the sub-national statistics demonstrates that while Canada's overall economic performance may have been comparatively strong in recent years, specific regions and individual provinces have, in fact, struggled.

Specifically, the data show that Ontario, Quebec, and the Maritimes have not performed strongly in the years following the recent recession. In fact, key economic metrics in these jurisdictions are closely aligned with the anemic American average. This complicates the straightforward narrative of Canadian economic superiority that was—until the recent collapse in oil prices and weakness in the Canadian economy—prevalent for several years. In other words, national statistics alone give an incomplete picture of the economic picture in Canada and the United States.

This study moves beyond national-level comparisons and examines recent economic performance in individual Canadian provinces and US states. For the 50 US states and 10 Canadian provinces, this paper examines recent state or provincial economic indicators for the post-recession period from 2010 to 2014. Including all US states and Canadian provinces allows for a comprehensive comparison among regional economies. Key indicators examined include the growth rates of real gross domestic product (GDP), employment (in total, and within the private and public sectors), and labour productivity. We also compare unemployment rates across the various jurisdictions.

The analysis of the sub-national data shows that rather than a straightforward story of superior Canadian economic performance, the very strong economic performance in Canada's energy and resource-intensive jurisdictions is largely responsible for the country's comparatively strong overall economic performance in recent years relative to the United States. A focus on national statistics alone hides the economic strength of

Canada's resource-intensive jurisdictions and the considerable economic weakness in other areas of the country.

The sub-national American data tell a somewhat similar story: economic performance is much stronger in resource-intensive states and much weaker in most other states. The key difference between the two countries is that energy producers in the US make up a substantially smaller share of total output than they do in Canada. As a result, the strong economic performance of energy-intensive jurisdictions in Canada has raised Canada's national economic performance metrics more than is the case in the United States.

The analysis raises pressing concerns about Canada's near-term economic prospects. Given that depressed commodity prices have led to a marked economic slowdown in Canada's resource dependent provinces, there are questions about where Canada's future growth and economic strength will come from. Moreover, the continuing slow real growth of the US economy also raises concerns about Canada's near- and longer-term economic prospects. This is especially troubling given the recent weak economic performance of Central and Atlantic Canada. The analysis also demonstrates that the prevalent narrative of a thriving Canada outperforming a struggling America is, at best, a serious oversimplification.

This study's first section compares economic performance in Canada and the United States both at the national and sub-national levels using a host of different measures. The following section analyzes these results and briefly discusses their policy implications.

Comparing Economic Performance

Using economic performance measures such as the level and growth of real gross domestic product (GDP) per person, resource intensity, growth in real GDP per worker (labour productivity), employment growth (total, private, and public), and the unemployment rate, this section compares the 50 US states and 10 Canadian provinces over the period 2010 to 2014—the period since the recession of 2008-09. The data come from Statistics Canada, the US Census Bureau, the US Bureau of Economic Analysis, and the US Bureau of Labour Statistics.

Economic output (GDP) comparisons

Figures 1 and 2 depict the level of per-capita GDP, the broadest measure of income available, as well as the growth in per-capita GDP from 2010 to 2014, after adjusting for inflation. Specifically, figure 1 presents average real per-capita GDP from 2010 to 2014 by jurisdiction, ranked from highest to lowest. Figure 2 presents the average annual growth rate of real per-capita GDP between 2010 and 2014.

From 2010 to 2014, the United States continued to have a higher real per-capita GDP than Canada at \$57,092 compared to \$48,041—approximately 19 percent higher (all numbers in Canadian dollars).¹

Average real per-capita GDP from 2010 to 2014 at the state or provincial level ranged from a high of \$88,336 for Alaska to a low of \$34,351 for Prince Edward Island. Of the top ten jurisdictions as measured by average real per-capita GDP, nine were American; Alaska, Wyoming, and Connecticut were first, second, and third. Alberta, Canada's only jurisdiction in the top 10, was fourth highest on this measure. Of the bottom ten in average real per-capita GDP, four were Canadian—Prince Edward Island, New Brunswick, Nova Scotia, and Quebec.

¹ Nominal US GDP values are converted to real using a rebased (2009 to 2007) implicit price deflator and are converted to Canadian dollars using the purchasing power parity (PPP) conversion rate.

Meanwhile, of the jurisdictions with the fastest average annual real per-capita GDP growth rates between 2010 and 2014 (figure 2), North Dakota and Texas experienced the fastest growth, followed by Alberta, Michigan, and Saskatchewan. Next highest were Ohio, Nebraska, New York, British Columbia, and Oklahoma. Three Canadian provinces were among the top 10 on this measure.

Of the bottom ten growth rates, nine were American and only one—New Brunswick—was Canadian. The economies of six US states had negative average real per-capita GDP growth during this period, including two of the resource-intensive states—Wyoming and Alaska.²

Critically, the fastest growing Canadian provinces—and the only ones with real per-capita GDP growth above the 1.2 percent average US growth rate—were all in Western Canada. All the Canadian provinces east of Manitoba saw average real per-capita GDP growth below that of the United States.

The role of natural resource intensity

Clearly there has been substantial variation in economic performance across Canadian provinces and American states since the 2008-09 recession. Part of this variation is driven by the dependence on a jurisdiction's natural resource sector. Indeed, there is a positive correlation in this period between overall economic performance and high resource intensity. The economic performance of states or provinces with larger natural resource sectors has tended to be stronger during the period examined.³

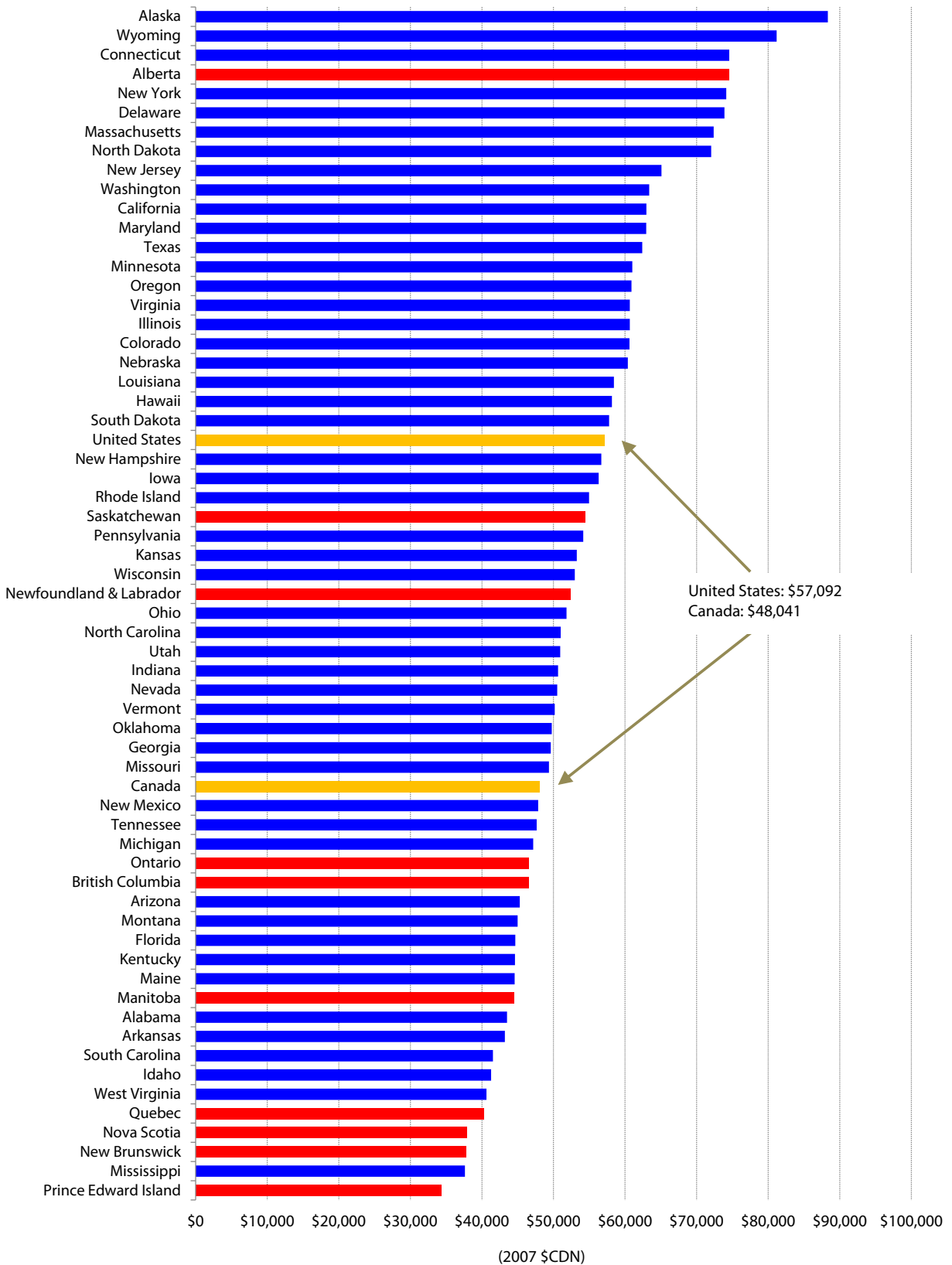
The importance of natural resources to the economy can be measured by presenting the share of GDP accounted for by the resource sector in each jurisdiction as done in figure 3.⁴ In Canada as a whole, the resource

² Between 2010 and 2014, the populations of Alaska, Wyoming, Nevada, Delaware, Virginia, and Louisiana grew 3.2 percent, 3.5 percent, 5 percent, 4 percent, 3.7 percent and 2.3 percent. Real GDP growth was 0.4 percent, 0.6 percent, 2.1 percent, 0.1 percent, 1.7 percent and -2.3 percent. In all six cases, population grew faster than output so real per-capita GDP shrank.

³ Keay (2007) emphasizes the impact of resource exports in economic development in Canada and the United States. For an analysis of energy producing states and provinces and the impact of resources, see Di Matteo, Clemens, and Emes (2014).

⁴ The natural resource sector generally includes agriculture, forestry, fishing, hunting, mining, quarrying, and oil and gas. More specifically, according to the North American Industry Classification (NAICS, codes in brackets), resource sector GDP includes: Agriculture, forestry, fishing, and hunting (11); Mining, quarrying, and oil and gas extraction (21); Utilities (22); Wood product manufacturing (321); Paper product manufacturing (322); Primary metals manufacturing (331); and Pipeline transportation (486).

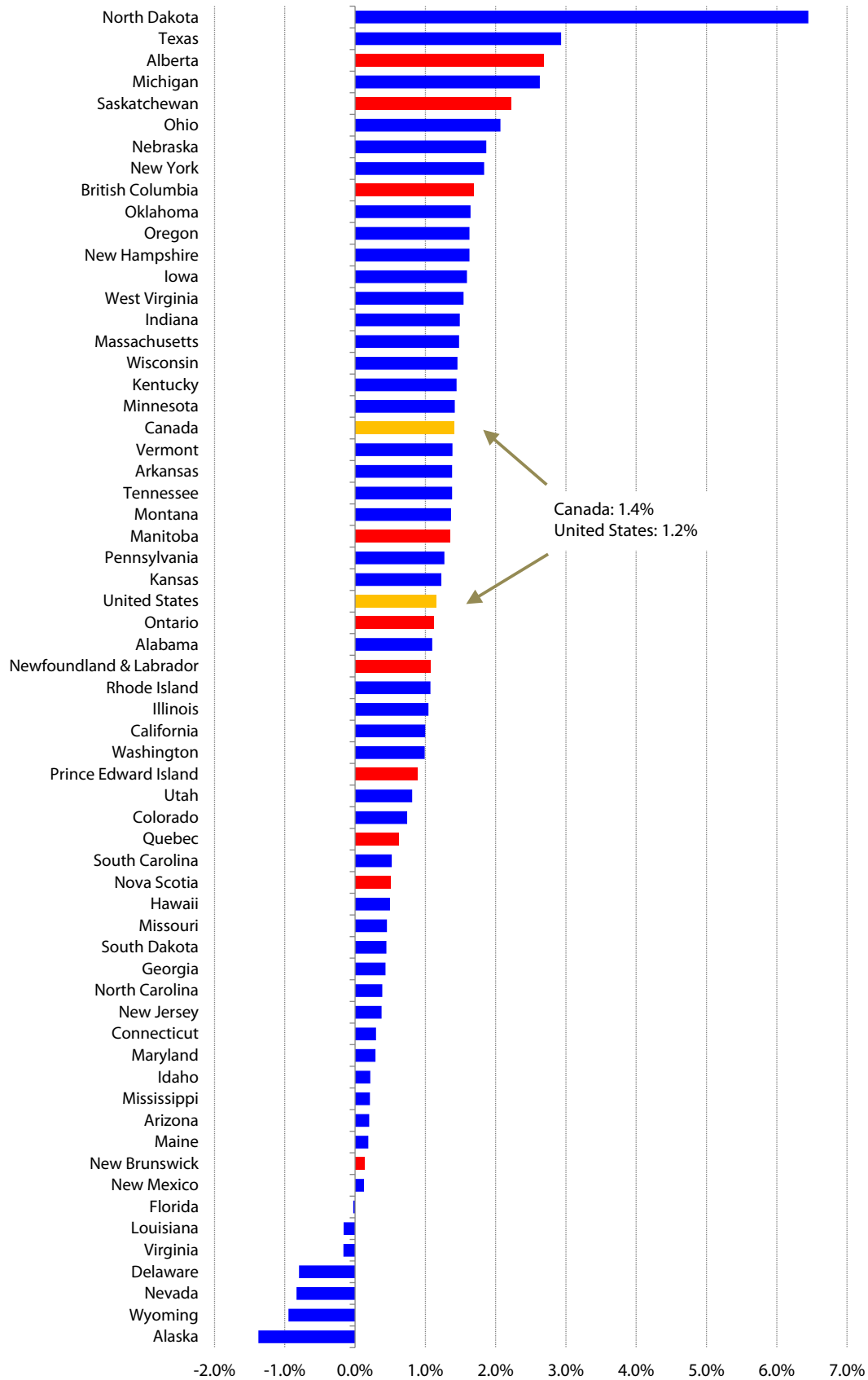
Figure 1: Average Real per Capita GDP, 2010-2014 (2007 \$CDN)



Sources: Statistics Canada (2015a, 2015d); US Bureau of Economic Analysis (2015a, 2015b, 2015c); International Monetary Fund (2014).

Note: Nominal US GDP values are converted to real using a rebased (2009 to 2007) implicit price deflator and are converted to Canadian dollars using the PPP conversion rate.

Figure 2: Average Annual Growth Rate of Real per Capita GDP, 2010-14



Sources: Statistics Canada (2015a, 2015d); US Bureau of Economic Analysis (2015a, 2015b, 2015c); International Monetary Fund (2014).

sector makes up a substantially larger share of GDP (14.2 percent) than in the United States (5.9 percent). Canadian provinces are generally more resource-intensive than are most US states. (Interestingly, Ontario is the only Canadian jurisdiction with a resource sector that as a share of GDP is as small as the US as a whole).

The top 10 most resource-intensive jurisdictions in Canada and the United States from 2010 to 2013⁵ are Newfoundland & Labrador, Alaska, Wyoming, Alberta, Saskatchewan, North Dakota, West Virginia, Oklahoma, Texas, and Manitoba. (British Columbia is close at 13th.) As a share of GDP, the top five are in a league of their own; as a share of GDP, their resource sectors account for more than 30 percent. Among the Canadian provinces, Ontario relies the least on resources while among the US states, Massachusetts and New York rely the least on resources.

For Canadian provinces and US states, figure 4 plots the real per-capita GDP growth rate from 2010 to 2014 against the average resource share of GDP over the 2010-13 period; a linear fit line is added to figure 4 to help readers visually identify the strength of the relationship between average real per-capita GDP growth and the share of the economy composed of resources. While there is a great deal of variation around the line, there is a positive correlation coefficient of 0.153 between resource intensity and real per-capita GDP growth in the period since 2009.

Figure 5 presents the real per-capita GDP growth rate from 2010 to 2014 for the Canadian provinces and for groupings of resource-intensive and non-resource-intensive jurisdictions. Specifically, if a state or province has a resource sector-to-GDP share greater than 15 percent in the 2010-2013 period, it was defined as “resource-intensive.”

Canada’s resource-intensive provinces are Alberta, Saskatchewan, and Newfoundland & Labrador. They are grouped together under the “Canada, resource-intensive provinces” group shown in figure 5.⁶ The “Canada, non-resource-intensive provinces” category shown in figure 5 is composed of the remaining seven provinces.

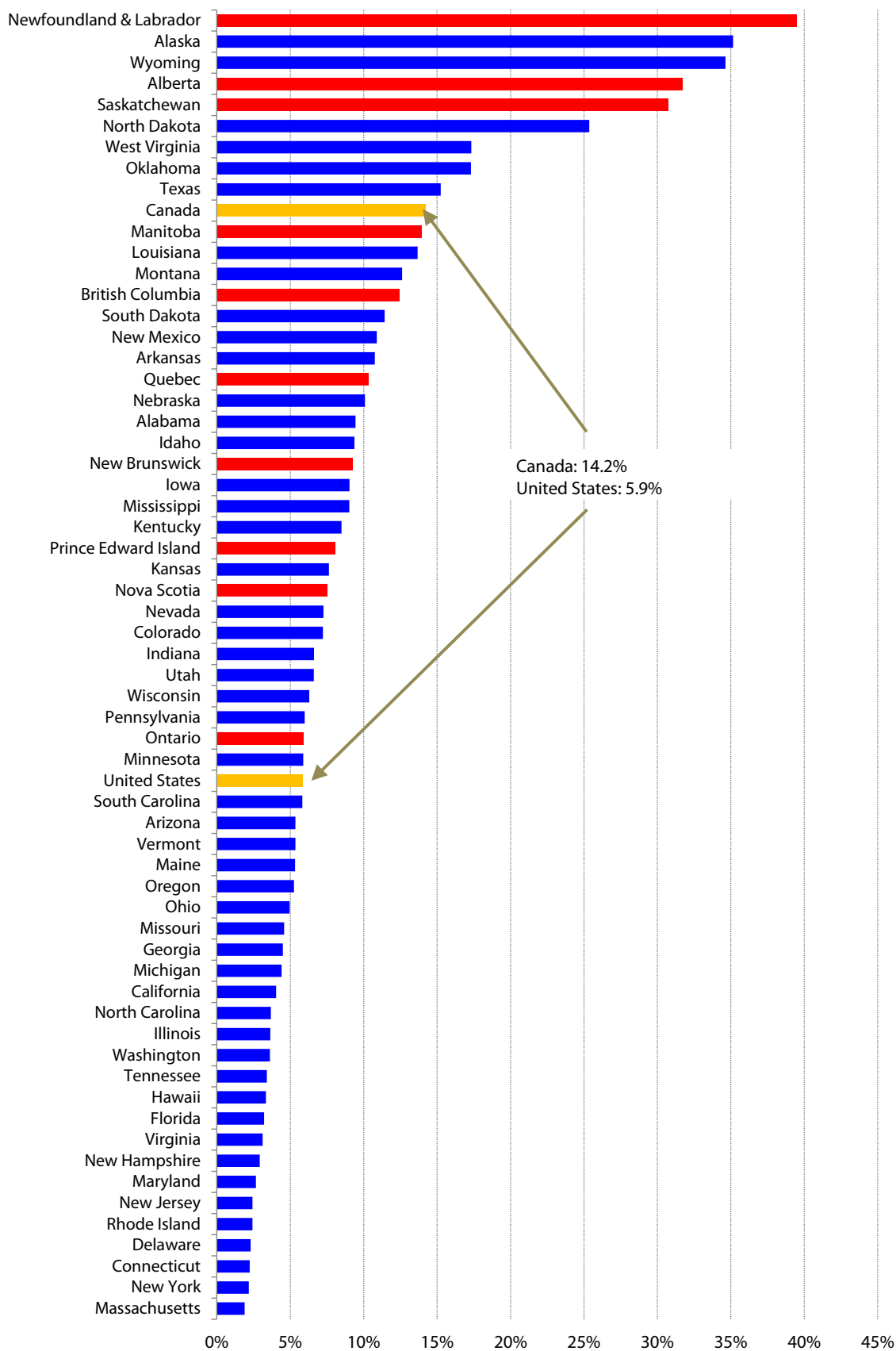
The major “resource-intensive US states” included in figure 5 are Alaska, North Dakota, Oklahoma, Texas, West Virginia, and Wyoming. Their resource sectors are also characterized by an emphasis on fossil fuel energy products.

Figure 5 shows that real per-capita GDP growth was higher in Canada than in the United States. It also shows that in both Canada and the

⁵ Data on the resource sector share of GDP were available to 2014 for Canadian provinces but only to 2013 for US states.

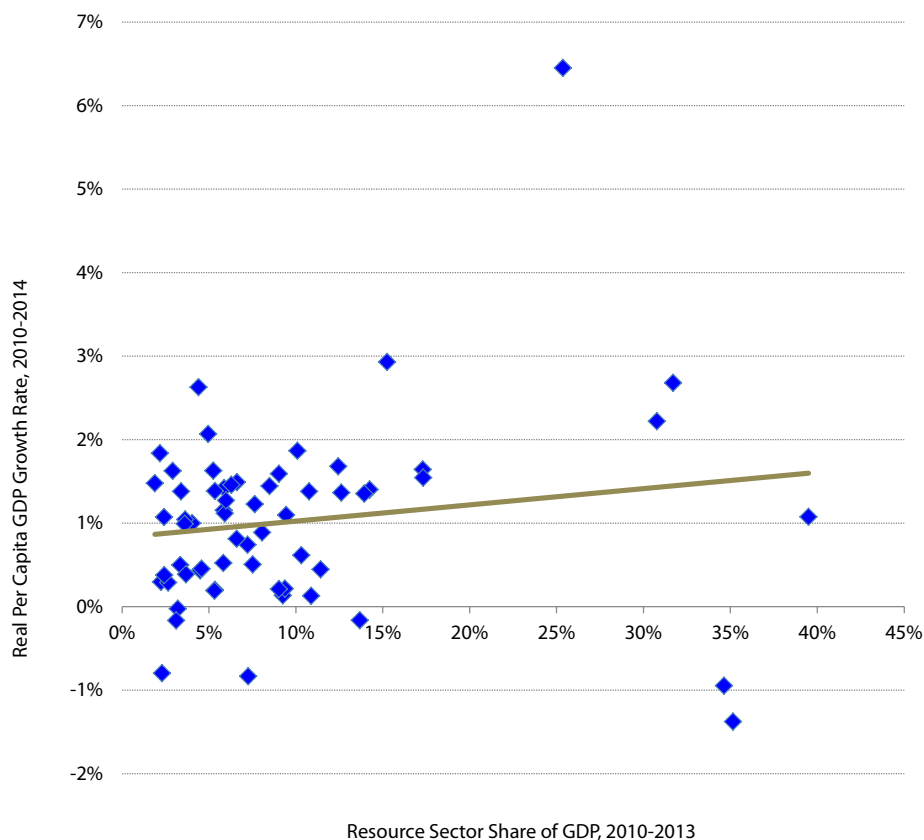
⁶ While not categorized as “resource-intensive” according to the 15 percent cut off discussed above, Manitoba (at 13.4 percent) and BC (at 12.0 percent) are quite close to the cut-off.

Figure 3: Resource Sector Share of GDP (%), Average 2010-13



Sources: Statistics Canada (2016a, 2016b); US Bureau of Economic Analysis (2015c, 2015d).

Figure 4: Average Annual Real per Capita GDP Growth versus Annual Average Resource Sector Share, with Linear Trend



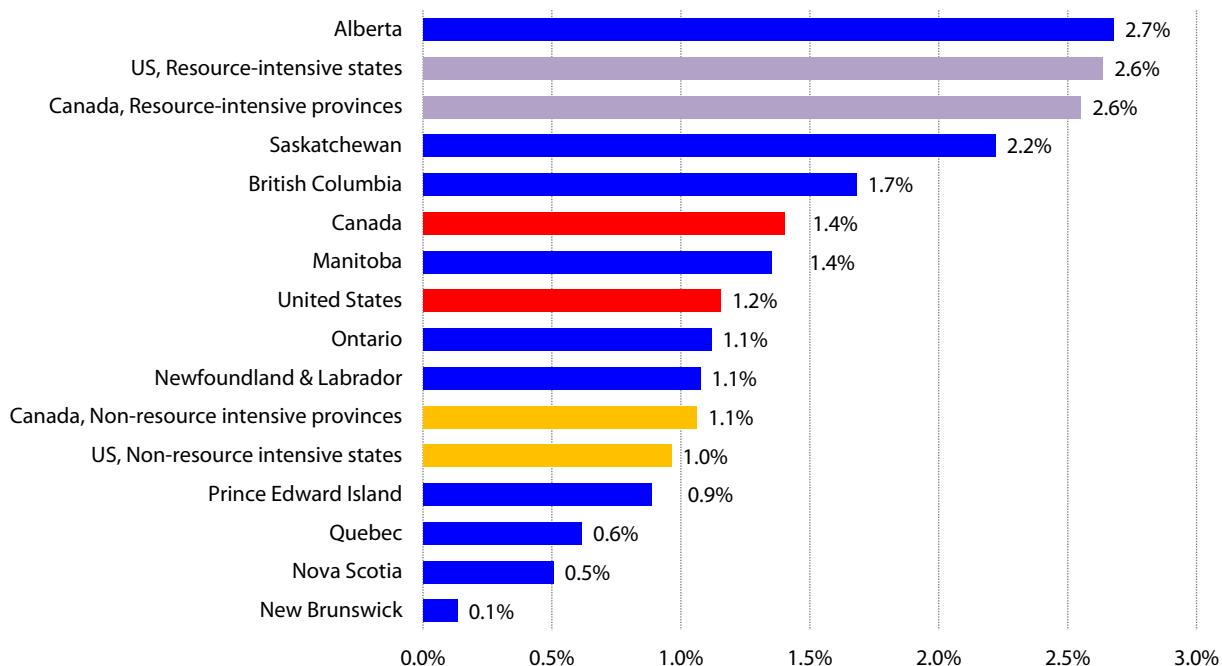
Sources: Statistics Canada (2015a, 2015d, 2016a, 2016b); US Bureau of Economic Analysis (2015a, 2015b, 2015c, 2015d); International Monetary Fund (2014).

Note: Correlation coefficient between the two variables is 0.153

United States, more resource-intensive jurisdictions had higher growth rates than non-resource-intensive jurisdictions. In fact, real per-capita GDP growth in Canada's energy-intensive provinces (2.6 percent) was more than twice the rate in non-resource-intensive Canadian provinces (1.1 percent). Similarly, resource-intensive American states grew more than twice as quickly (2.6 percent) as non-resource-intensive American states (1.0 percent).⁷

⁷ These growth rates were rounded. Canada's energy-intensive provinces actually grew at a slightly lower rate than the US energy-intensive states, at 2.55 percent versus 2.64 percent.

Figure 5: Average Real GDP Per Capita Growth, 2010-2014, Canadian Provinces and Canada-US Sub-Groupings



Sources: Statistics Canada (2015a, 2015d); US Bureau of Economic Analysis (2015a, 2015b, 2015c); International Monetary Fund (2014).

Note: These growth rates were rounded. Canada's energy intensive provinces actually grew at a slightly lower rate than the US energy intensive states, at 2.55% versus 2.64%.

A cross-border comparison of these two categories is also revealing. Figure 5 shows that economic growth rates from 2010 to 2014 in either category (resource-intensive jurisdictions and non-resource-intensive jurisdictions), were nearly identical on both sides of the border. Resource-intensive jurisdictions in both the US and Canada saw average annual real per-capita growth rates of approximately 2.6 percent during this period. Similarly, Canadian non-resource-intensive jurisdictions grew at an average annual rate of 1.1 percent during this period, only slightly faster than comparable US states, which grew at an average annual rate of 1.0 percent.

In short, these data show that from 2010 to 2014, a jurisdiction's natural resource intensity is a far better predictor of its economic growth than the side of the border on which it lies.

The evidence presented supports the proposition that much of Canada's economic performance from 2010 to 2014 was driven by a few resource-producing provinces—in particular, oil and gas producers.

While resource-intensive American states also demonstrated good economic performance, natural resource producers in the US make up a much smaller share of that country's total output than they do in Canada. Consequently, Canada's resource-intensive provinces made a proportionally greater contribution to national economic growth than did their US counterparts. The question now, however, is this: in light of recent depressed commodity prices and weakening economies in Canada's resource-intensive provinces, where will Canada's future robust growth come from, given the general lacklustre performance east of Manitoba in recent years?

Productivity comparisons

Another key economic performance measure⁸ is productivity, which refers to the ability of an economy to transform a given set of inputs, such as labour and capital, into useful outputs (i.e., goods and services). Productivity is an important measure⁹ of both current and future prosperity since both income and the goods and services available are a direct result of an economy's productive capacity. One measure to assess productivity is the growth of real GDP per worker. Figure 6 shows this measure for each province and for groups of resource-intensive and non-resource-intensive provinces and states.

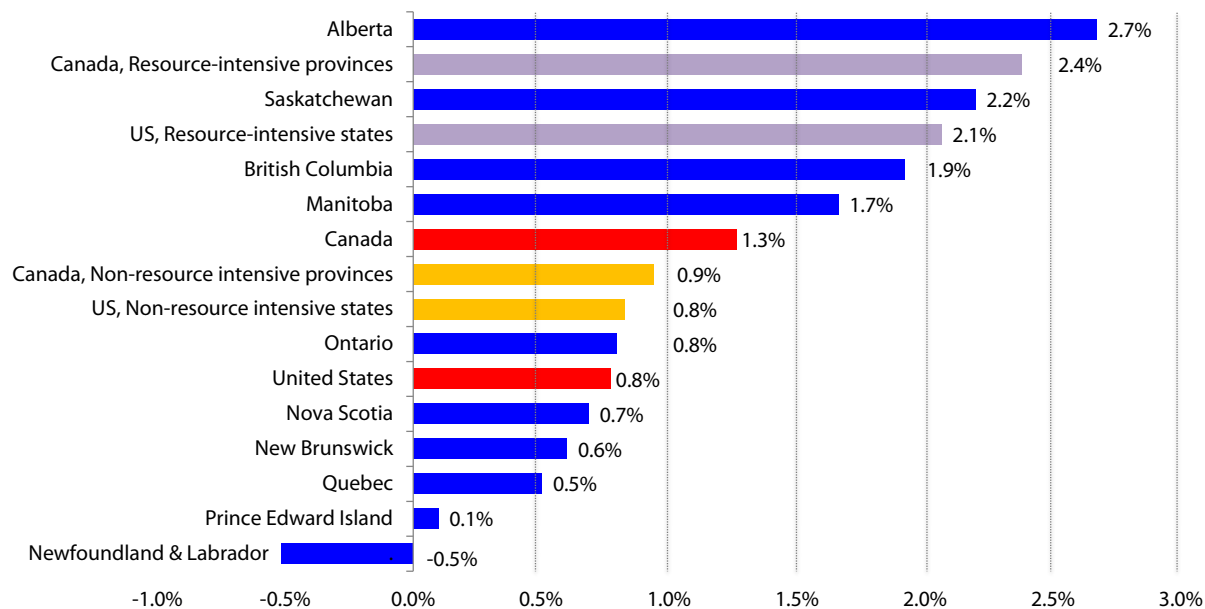
Figure 6 indicates that Canada's average annual labour productivity growth rate since 2009 was 1.3 percent, which surpassed the US rate of 0.8 percent. With one major exception—Newfoundland & Labrador—Canada's superior performance was again rooted in its resource-intensive provinces, particularly in Western Canada. The country's resource-intensive provinces saw productivity growth of 2.4 percent compared to 0.9 percent for the non-resource intensive provinces (figure 6). Meanwhile, US resource-intensive states saw productivity growth of 2.1 percent while productivity growth in the other states was about 0.8 percent.

The average annual productivity growth in all of Canada's western provinces—Alberta, Saskatchewan, Manitoba, and British Columbia—sur-

⁸ Another critical measure of economic performance is investment. Unfortunately, such data are not available at the state level for the US. Data are, however, available for the Canadian provinces, which we present later on.

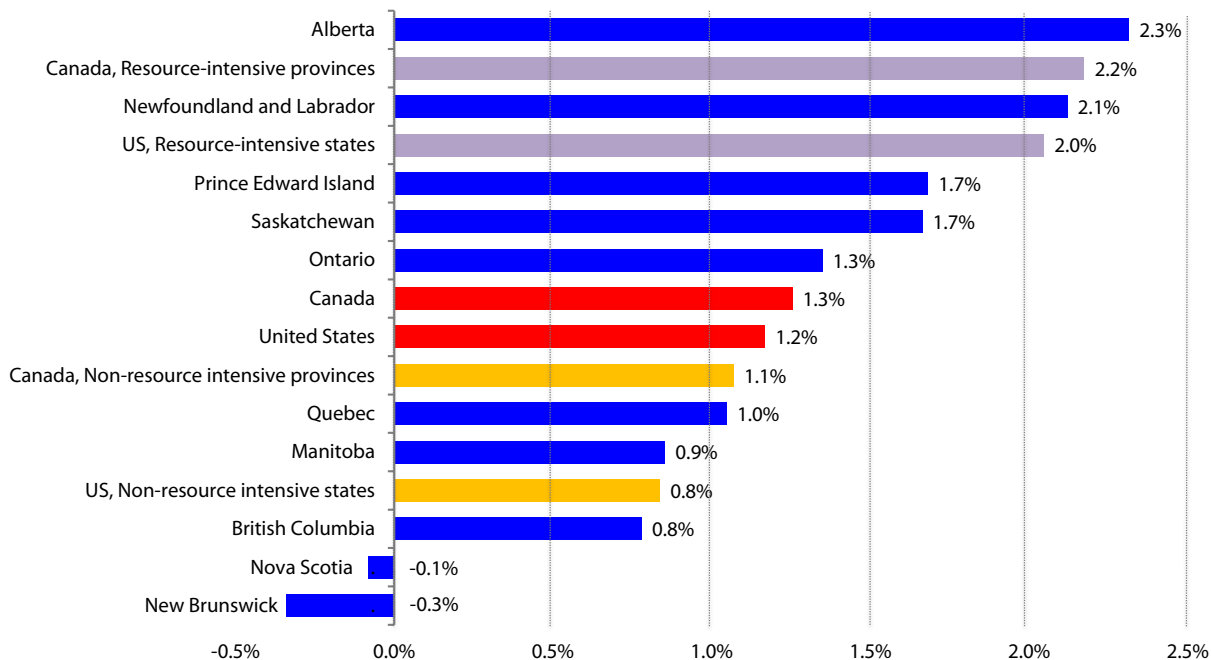
⁹ Estimates of productivity growth are also subject to some debate. Noted economist and internationally recognized productivity expert Erwin Diewert of the University of British Columbia recently questioned the accuracy of Canada's productivity statistics from a methodological perspective (Diewert, 2012). For an overview of the general issues related to productivity and its measurement, see Law, 1999.

Figure 6: Average Growth Rate of Real GDP per Worker, 2010-2014, Canadian Provinces and Canada-US Sub-Groupings



Sources: Statistics Canada (2015b, 2015d); US Bureau of Economic Analysis (2015b, 2015c); US Department of Labor (2010-2014a, 2015a); International Monetary Fund (2014).

Figure 7: Average Growth Rate of Total Employment, 2010-2014, Canadian Provinces and Canada-US Sub-Groupings



Sources: Statistics Canada (2015b); U.S. Department of Labor (2010-2014a, 2015a).

passed 1.7 percent. On the other hand, Ontario, Quebec, and the Atlantic provinces all had poor productivity growth compared to the western provinces. Newfoundland & Labrador, despite being resource-intensive, actually saw negative productivity growth (that is, a drop in productivity). This geographically lopsided economic performance is particularly troubling given the current downturn in Canada's energy sector, which is affecting Alberta and Saskatchewan in particular.

When it comes to labour productivity, US states account for seven of the top 10 productivity growth jurisdictions: North Dakota is in first place, recording an average annual growth in real GDP per worker of 5.6 percent from 2010 to 2014. Alberta, Saskatchewan, and British Columbia are the only Canadian provinces amongst the top ten on this measure. Aside from Manitoba, which placed 14th, all the remaining Canadian provinces rank in the bottom half.

Labour market performance

The next set of indicators focus on labour market performance, specifically job creation and the unemployment rate.¹⁰ These indicators assess the degree to which jurisdictions were able to generate jobs. The job creation numbers, as demonstrated by the average annual growth rates in total employment (figure 7) show differences across the jurisdictions.

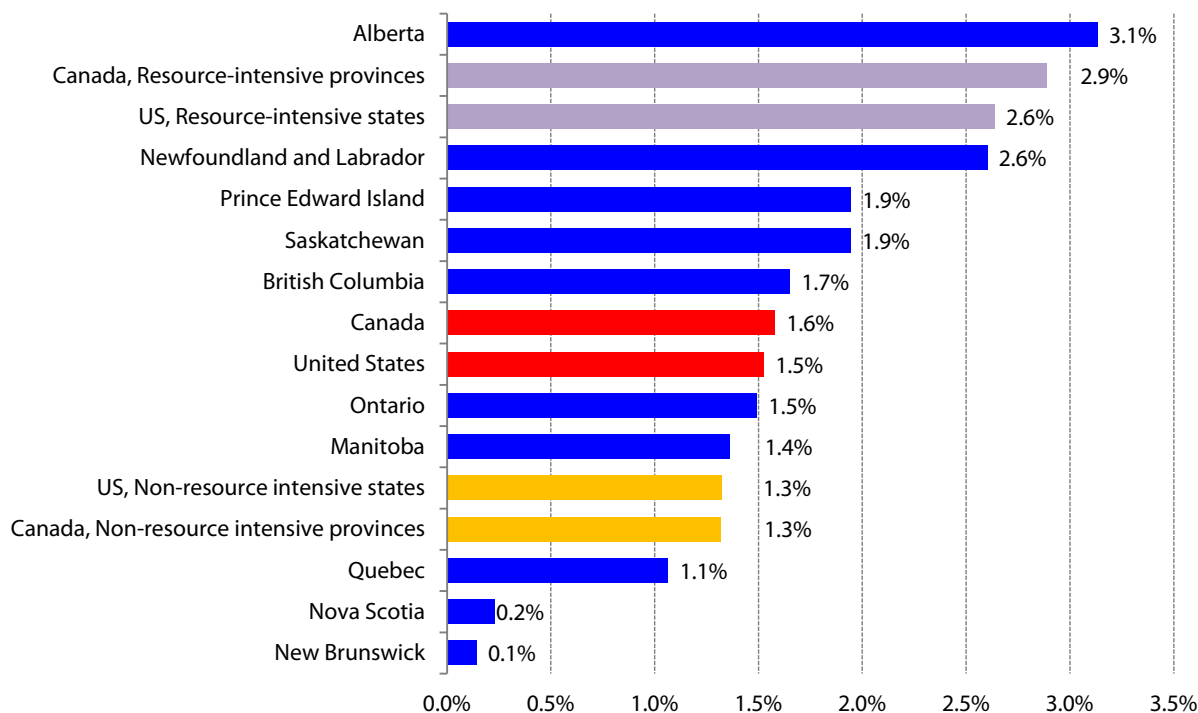
Between 2010 and 2014, total employment in Canada grew at an annual average rate of 1.3 percent compared to 1.2 percent for the United States.

Employment in Canada's resource-intensive provinces grew at 2.2 percent while for the equivalent US states it grew at 2.0 percent. Meanwhile, Canadian provinces that were not resource-intensive saw their employment grow at 1.1 percent annually while their US counterparts had employment growth of 0.8 percent. Across Canada's provinces employment growth varied greatly, rising to highs of 2.3 and 2.1 percent in Alberta and Newfoundland & Labrador and falling to -0.1 and -0.3 percent in Nova Scotia and New Brunswick.

These employment numbers also shed some light on Newfoundland & Labrador's insipid labour productivity performance. From 2010 to 2014, the province saw its total employment grow at an average annual rate of 2.1 percent while its real GDP expanded by an average rate of only 1.6 percent, resulting in falling productivity. Newfoundland & Labrador

¹⁰ Canadian data are from Statistics Canada's "R3" supplemental unemployment rate, which the organization says is "comparable to the United States rate." The main difference between the two is that R3 excludes full-time students.

Figure 8: Average Growth Rate of Private Sector Employment, 2010-2014, Canadian Provinces and Canada-US Sub-Groupings



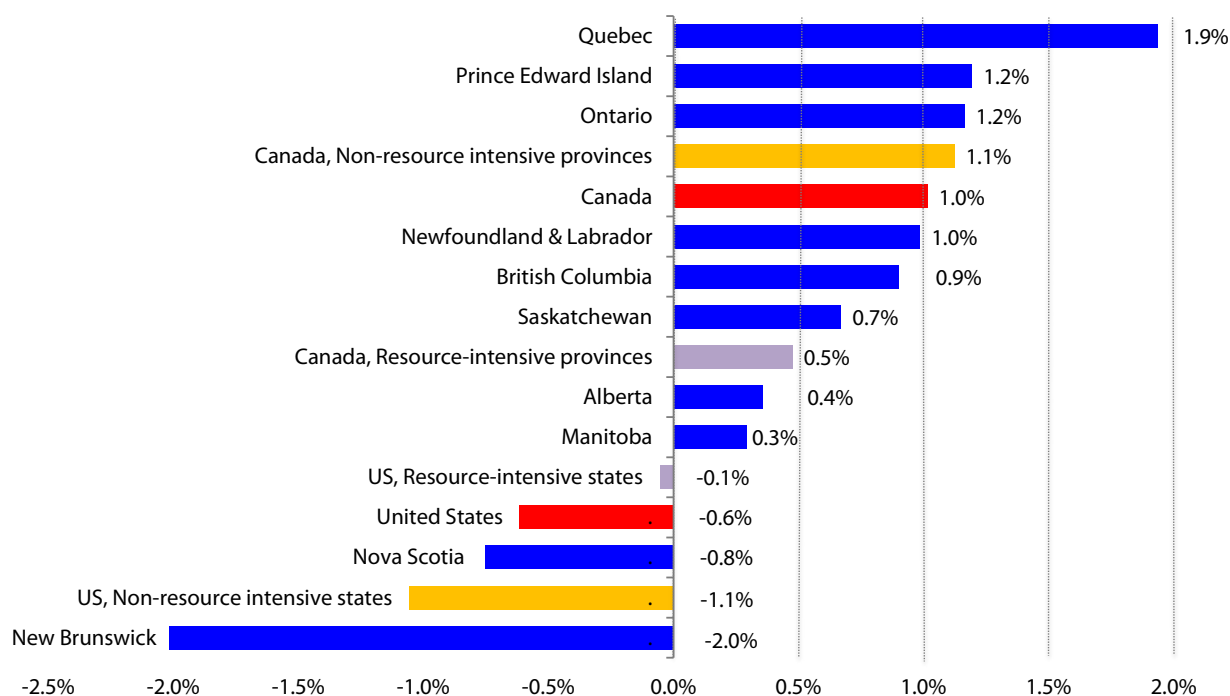
Source: Statistics Canada (2015b); U.S. Department of Labor (2010-2014a, 2015a).

was the only province where average employment growth exceeded real GDP growth. Given the overall robust economic growth as a result of its resource sector, this poor productivity performance suggests the province has not capitalized well on its resource sector and has retained an inefficient labour market structure.

When the employment numbers are broken down in comparisons of private and public sector employment growth, some additional interesting results emerge.¹¹ Canada's superior overall private sector employment growth compared to the United States can also be attributed to the re-

¹¹ The *total employed* is for all industries and includes private sector employees, public sector employees, and the self-employed for both sexes. "Public sector employees" are defined as those who work for a local, provincial, or federal government, for a government service or agency, a crown corporation, or a government-funded establishment such as a school (including public universities) or hospital. "Private sector employees" are defined as those who work as employees of a private firm or business. If a worker is not in an employer-employee relationship, then they are deemed to be self-employed.

Figure 9: Average Growth Rate of Public Sector Employment, 2010-2014, Canadian Provinces and Canada-US Sub-Groupings



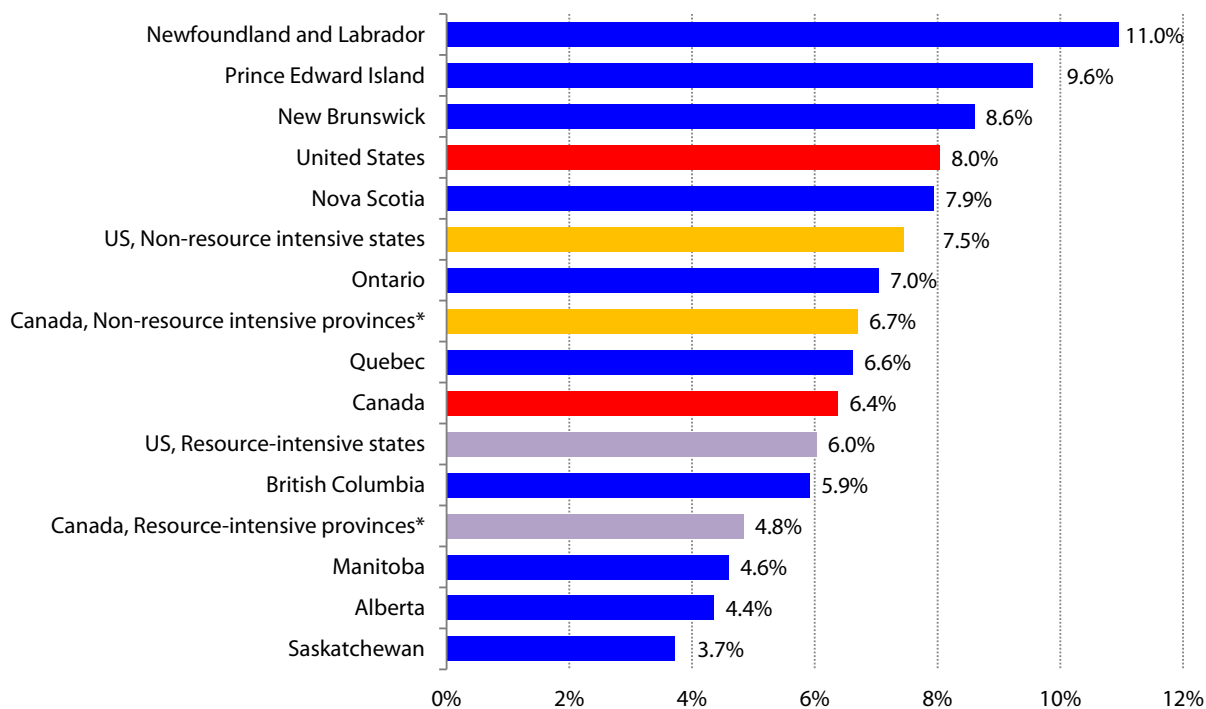
Sources: Statistics Canada (2015b); US Department of Labor (2010-2014a, 2015a).

source sector. Figure 8 shows that Alberta and Newfoundland & Labrador led private sector employment growth in Canada, while Nova Scotia and New Brunswick were at the bottom. Private sector annual employment growth in the resource-intensive jurisdictions was robust in both Canada and the United States at 2.9 percent and 2.6 percent, respectively. When the non-resource-intensive jurisdictions are compared, the United States growth rate matches Canada's at 1.3 percent.

From 2010 to 2014, public sector employment in Canada and the United States performed quite differently. As figure 9 reveals, in Canada, employment in the government sector grew, whereas in the United States it shrank. The balance between the public and private sectors is important to policymakers because private sector wealth generation is the foundation for the resources that the public sector uses to provide services. Moreover, public sector employment growth may also crowd out private sector employment (see Di Matteo, 2015).

In Canada as a whole, public sector employment growth averaged 1 percent annually compared to -0.6 percent in the United States.

Figure 10: Average Annual Unemployment Rate, 2010-2014, Canadian Provinces and Canada-US Sub-Groupings



*Rate calculated as an average of individual provincial rates weighted by labour force share within each sub-group. Sources: Statistics Canada (2015c); US Department of Labor (2010-2014b, 2015b).

Public sector employment growth was generally greater in Canada's non-resource-intensive provinces at 1.1 percent versus 0.5 percent in the resource-intensive provinces. Leading the pack in Canada were Quebec, Prince Edward Island, and Ontario, with average annual public sector growth rates of 1.9, 1.2, and 1.2 percent respectively. In the United States, government sector employment shrank by -0.1 percent annually in resource-intensive jurisdictions, while in non-resource-intensive ones it shrank by -1.1 percent.¹²

Changes in employment and the labour force are ultimately reflected in the unemployment rate and this is displayed in figure 10. The average

¹² While government sector employment as a whole declined in the United States, the top two jurisdictions for government sector employment growth were US states. The ten jurisdictions with the highest average annual government sector employment growth rates were: Colorado (3.8 percent), Hawaii (2.0 percent), Quebec (1.9 percent), Delaware (1.8 percent), Alaska (1.3 percent), Missouri (1.3 percent), Prince Edward Island (1.2 percent), Ontario (1.2 percent), South Dakota (1.1 percent), and Newfoundland & Labrador (1.0 percent).

annual unemployment rate was higher in the United States than Canada at 8.0 percent versus 6.4 percent. However, with the exception of Newfoundland & Labrador—which had the highest average unemployment rate of all these jurisdictions—all of the resource-intensive jurisdictions generally had unemployment rates in the bottom half. Again, this reinforces the observation that resource-intensive jurisdictions, whether in Canada or the United States, generally did a better job of weathering the aftermath of the 2008-09 downturn.

Analysis and Implications

The conventional wisdom regarding Canada's performance in the post 2009 period asserts that Canada weathered the global financial crisis and recession well and had the best performance of the G-7 countries. This superior performance has been attributed to Canada's strong fiscal position at the start of the recession, its strong banking sector, positive fiscal and monetary policy as well as the strength of the resource-intensive sector (*The Economist*, 2014, May 3).

This positive performance has certainly been part of the Canadian government's narrative about the economy in numerous federal documents and budgets.¹³ Accounts of Canada's performance have stressed how the decline in output in Canada during the recession was the smallest of the G-7 countries, how Canada was the only country in the G-7 to have quickly recouped the loss in output and employment, and particularly how the Canadian labour market fared significantly better than that in the United States (Canada, 2010).

The aggregate evidence comparing economic output, employment, and productivity in Canada and the United States since 2009 does suggest that Canada performed better. Average annual real per-capita GDP growth from 2010 to 2014 was 1.4 percent in Canada and 1.2 percent in the United States, while real GDP per worker grew at 1.3 percent in Canada and 0.8 percent in the United States. Total employment growth in Canada averaged 1.3 percent versus 1.2 percent in the United States, while the average unemployment rate was 6.4 percent in Canada versus 8.0 percent in the United States.

Yet these aggregate numbers mask some substantial regional variation that, when accounted for, suggests that Canada's national economic

¹³ For example: "Since the beginning of the recovery, the Canadian economy has continued to create jobs, with over 1 million more Canadians working today than during the worst part of the recession—the best job creation record of any Group of Seven (G-7) country... Despite significant global weakness emanating in particular from the United States, our largest trading partner, the Canadian economy has continued to expand modestly, enjoying one of the best performances among G-7 countries over the recovery" (Canada, 2014: 1).

metrics look as good as they do largely because of the positive economic effects of the country's resource-intensive provinces, particularly their economies' energy sectors. When we set these provinces aside and look at the rest of the country, we see that the economic performance of important provinces and regions has been lacklustre. In fact, the economic performance of many of Canada's non-energy jurisdictions has been closely aligned with, and in some cases worse than, the anemic American average in recent years.

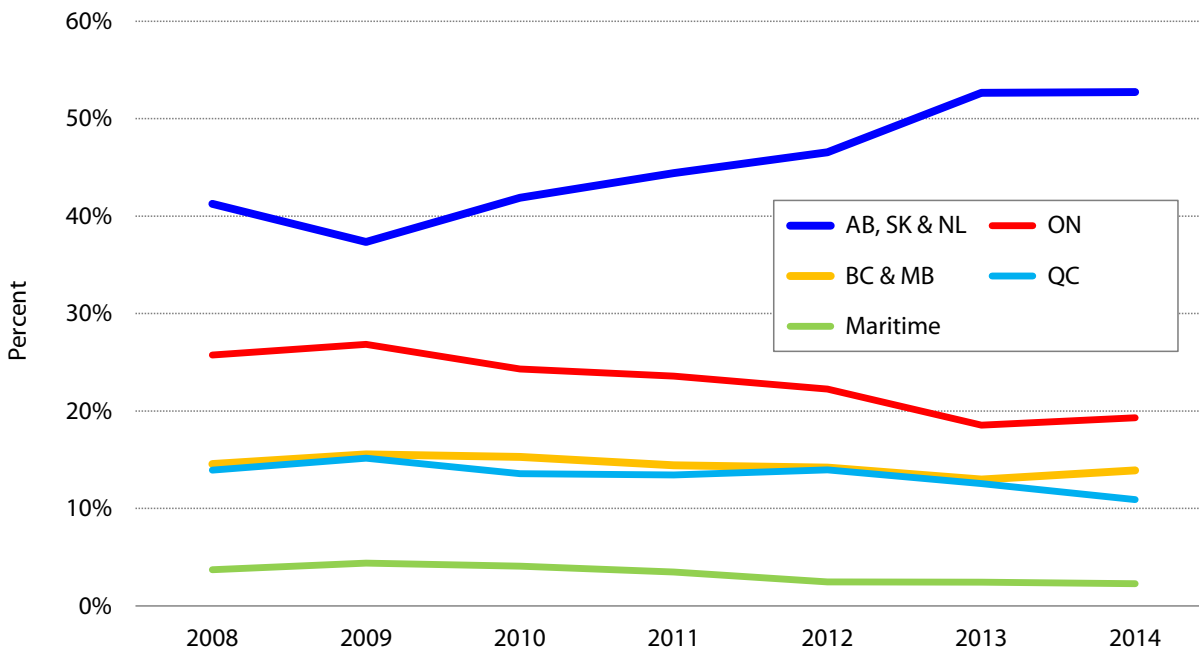
Indeed, the sub-national data suggest that, over the period under review, a particular state or province's economic performance is better predicted by the amount of natural resources it produces than on which side of the border it lies. The economic performance of resource-intensive states in the US closely matched that of Canadian resource-intensive provinces, while the performance of Canada's non-resource-intensive provinces more closely matched that of their US counterparts.

Since energy/resource-intensive states in the US make up a smaller share of total output than in Canada, their overall impact on the US economy was more muted. Thus, the overall "superior" performance attributed to Canada is more the artifact of weighting due to the larger share of natural resources and energy in the Canadian economy. On the one hand, this means that resources are indeed important to Canada's economic performance, a source of its economic strength and not something to be downplayed. On the other hand, it also signals that the non-resource-intensive regions have some serious economic deficiencies.

The contribution of the three major energy/resource producers to Canada's economic performance is also clearly evident when it comes to investment spending and capital formation. Figure 11 plots the distribution of non-residential business investment across Canadian provincial groupings as well as the percentage shares of GDP. From 2008 to 2014, Alberta, Saskatchewan, and Newfoundland & Labrador accounted for an average of 23 percent of national output (GDP) and 16 percent of national population. Yet, between 2008 and 2014, their share of non-residential business investment grew from 41.3 to 52.7 percent. Moreover, as a share of GDP, by 2014, this investment spending amounted to nearly a quarter of their economies. Unfortunately, investment data for the United States are not available by state.

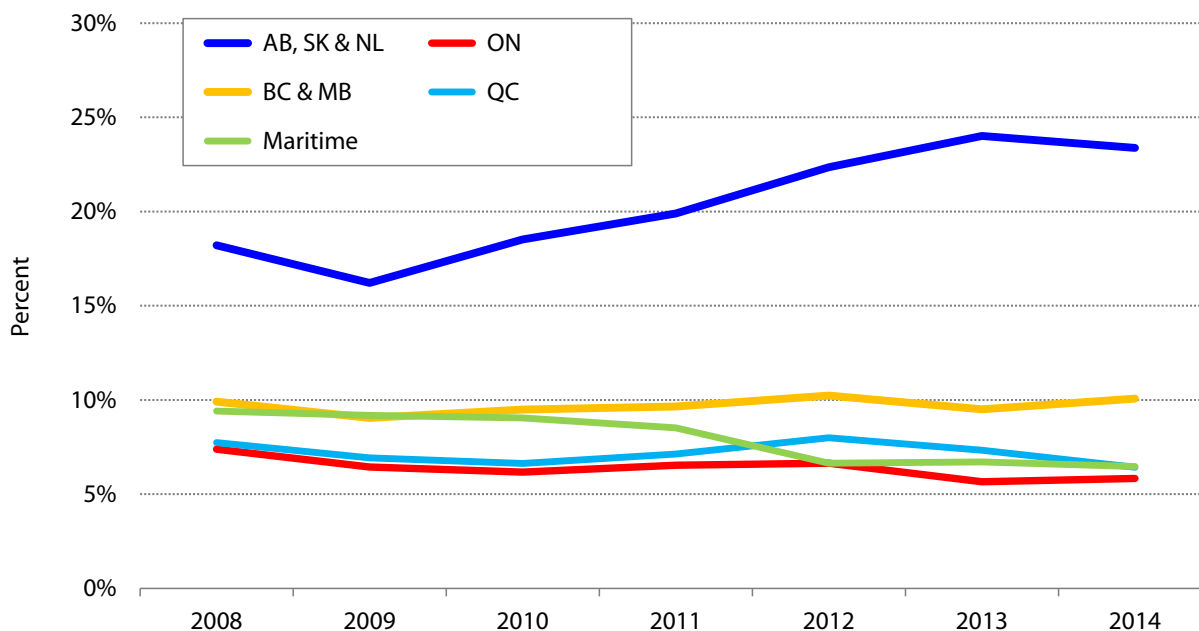
This period saw the economies of Newfoundland & Labrador, Saskatchewan, and Alberta propelled by a massive investment boom and associated private sector employment growth, which had a significant spillover on the performance of the Canadian economy overall. In con-

Figure 11a: Percent Distribution of Non-Residential Business Investment, 2008-2014, Canadian Sub-Groupings



Source: Statistics Canada (2015d).

Figure 11b: Non-Residential Business Investment as a Percent of GDP, 2008-2014



Source: Statistics Canada (2015d).

trast, and compared to those provinces, private sector employment growth in Quebec and Ontario was poorer.¹⁴

Given the marked economic slowdown now underway in Canada's resource dependent provinces due to depressed commodity prices, the fundamental question is which provinces and regions will propel Canada's future economic growth? This is especially concerning if the anemic economic performance in central Canada and Atlantic Canada persists. The resource boom with its associated output and employment generation and capital formation is currently over. Central Canada and the Maritimes have yet to see their economies spurred even though commodity prices and the Canadian dollar are both lower. It remains to be seen where the future impetus will come for the Canadian economy.

Moreover, while sound economic policy is important for all of Canada, it is particularly vital east of Manitoba where provinces have pursued fiscal policies in recent years that are damaging to future growth prospects. Ontario in particular has taken on a massive debt burden at a time of high economic uncertainty, sluggish growth, and severely depressed commodity prices. Moreover, the federal government is also substantially increasing its deficit financing. In general, these governments, along with Alberta, are engaged in deficit spending, increasing government debt, and higher taxes. Such fiscal paths will only unsettle business and investor confidence at a time when productivity-boosting private sector investment in the economy is needed.

¹⁴ While Canada's government sector employment growth was higher than that in the United States, this is not a positive long-term development given the accompanying deficits required to produce the spending that enabled the employment expansion.

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About the authors

Livio Di Matteo

Professor Livio Di Matteo is a Senior Fellow at the Fraser Institute and Professor of Economics at Lakehead University in Thunder Bay, Ontario, where he specializes in public policy, health economics, public finance, and economic history. His recent research has focused on health care spending and its sustainability. Di Matteo is a member of the CIHI National Health Expenditure Advisory Panel, the Evidence Network (EvidenceNetwork.ca), and is a contributor to the economics blog Worthwhile Canadian Initiative. He has been listed in Canadian Who's Who since 1995 and holds a PhD from McMaster University, an MA from the University of Western Ontario, and a BA from Lakehead University.

Joel Emes

Joel Emes is Fraser Institute Senior Fellow who rejoined the Institute after a stint as a senior advisor to British Columbia's provincial government. He previously served as a senior analyst, then as executive director (2009 to 2011), at the BC Progress Board. Prior to that, Joel was a senior research economist at the Fraser Institute, where he initiated and led several flagship projects in the areas of tax freedom and government performance, spending, debt, and unfunded liabilities. Joel holds a BA and an MA in economics from Simon Fraser University.

Charles Lammam

Charles Lammam is Director of Fiscal Studies at the Fraser Institute. He holds an MA in public policy and a BA in economics with a minor in business administration from Simon Fraser University. Since joining the Institute, Mr. Lammam has published over 70 studies and 260 original articles on a wide range of economic policy issues including taxation, government finances, pensions, investment, income mobility, labour, entrepreneurship, public-private partnerships, and charitable giving. His articles have appeared in every major national and regional newspaper in Canada (including the *Globe and Mail* and *National Post*) as well as prominent US-based

publications (including *Forbes* and *The American*). Mr. Lammam's career in public policy spans nearly a decade. He regularly gives presentations to various groups, comments in print media, and appears on radio and television broadcasts across the country to discuss the Institute's research. He has also appeared before committees of the House of Commons as an expert witness.

Ben Eisen

Ben Eisen is the Associate Director of Provincial Prosperity Studies at the Fraser Institute. He holds a BA from the University of Toronto and an MPP from the University of Toronto's School of Public Policy and Governance. Prior to joining the Fraser Institute Mr. Eisen was the Director of Research and Programmes at the Atlantic Institute for Market Studies in Halifax. He also worked for the Citizens Budget Commission in New York City, and in Winnipeg as the Assistant Research Director for the Frontier Centre for Public Policy. Mr. Eisen has published influential studies on several policy topics, including intergovernmental relations, public finance, and higher education policy. He has been widely quoted in major newspapers including the *National Post*, *Chronicle Herald*, *Winnipeg Free Press* and *Calgary Herald*.

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