



June 25, 2014

ECONOMIC GROWTH & INNOVATION

The Public Purse versus Private Wallets: Comparing Provincial Approaches to Investing in Economic Growth

by

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- Private-sector investment is a key driver of economic growth, as can be public investment in infrastructure. But which provinces are the big public spenders and which rely more on private-sector investment? The answer lies in the ratio of public-sector investment to private-sector investment in each province, which shows whether investment is being driven by business or government spending.
- One group of provinces has seen a marked shift towards public investment since 2000. Public investment grew to almost equal the amount of private investment in Nova Scotia, Prince Edward Island, New Brunswick and Quebec. In Ontario and Manitoba, public investment is over half of the level of private investment.
- However, in Alberta, Saskatchewan and Newfoundland, private-sector investment has more than doubled relative to public-sector investment in recent years, and private-sector investment represents between 10 and 26 percent of GDP in these provinces.
- Provinces that have seen a recent decline in private-sector investment – both as a share of GDP and relative to public-sector investment – should take steps to reverse the trend.

Private-sector investment is a key driver of economic growth and merits the close attention of policymakers, particularly in under-performing provinces. Private-sector business investment per worker has stagnated in many provinces, notably Ontario, Quebec and the Maritime Provinces (Dachis and Robson 2013). Meanwhile, the relative size of public-sector investment in those

I wish to thank several anonymous reviewers for comments on earlier drafts, as well as Benjamin Dachis, Senior Policy Analyst at the C.D. Howe Institute. Responsibility for any remaining errors rests with the author.



provinces has increased, with public-sector investment relative to private investment at or near its highest point in over 20 years.

In this E-Brief, I provide an overview of these investment trends by province since 1991, using a more useful definition of private investment than employed by the National Accounts of Statistics Canada, whose definition of “business investment” includes government-owned electricity utilities. With this new view, it becomes especially clear that Canada has seen a bifurcation in investment trends. On the one hand, Quebec, Ontario, and the Maritimes have experienced dismal private investment for more than a decade. Rapidly increasing public-sector investment in these provinces has not stimulated more business investment.¹ Public-sector investment has risen more than its private-sector counterpart in these provinces, as reflected in their above-average public-sector share of GDP, which requires high levels of government investment in everything from computers to buildings.² On the other hand, Alberta, Saskatchewan and Newfoundland have seen private investment soar.

Provincial policymakers and the public should be aware of the growth of public and private investment as a share of GDP and how much the public sector is investing relative to the private sector. That is the first step towards boosting private investment in the tools, equipment and plants Canadian workers need.³

Why is Business Investment so Important to Economic Growth?

Economists have long acknowledged the central role investment plays in economic growth. In the words of Minsky (1988, 191), “Investment is the essential determinant of the path of a capitalist economy. . . .” Business investment commits a firm to a strategic plan going forward. Large investments such as the oil sands, industrial plants or large office buildings require years of planning and building before completion. After the investment is made, production begins on a regular basis. As such, investment is a leading indicator of future spending (see Box 1 for how I define private- and public-sector investment for this E-Brief and Figures 1a and 1b for investment as a share of GDP in each province). The commitment to invest is also a good indicator of a firm’s willingness to hire more employees. As a result, periods of robust business investment almost always are periods of strong economic growth.⁴

Business investment also embodies technological change, as demonstrated by the investment in Alberta’s oil sands starting in the late 1990s, and in oil and gas throughout Western Canada in recent years. The development of the oil sands reflected new ways of mining bitumen. The development of shale oil and gas deposits, especially

1 For a clear articulation of the case for public-sector investment supporting private-sector investment and overall growth, see Mazzucato (2013).

2 According to Statistics Canada, in 2012, provinces with above-average public-sector shares of GDP were New Brunswick (33.1%), PEI (32.5%), Nova Scotia (32.2%), Manitoba (26.6%), Quebec (26.2%) and Ontario (22.9%). Below average were Alberta (13.0%), Saskatchewan (17.2%), Newfoundland (21.0%) and BC (21.6%). Utilities are included in the public sector except in Alberta. Utilities are consistently about 2.0% of GDP across the country, except Quebec where they are 3.9% of GDP. Data on industry shares of GDP are from Statistics Canada Cansim Table 379-0028 for 2013.

3 This brief paper does not explore causality as it relates to the determinants of business investment, the impact of public-sector investment on private investment and on overall growth, or the appropriate ratio of public- to private-sector investment.

4 For more on the key role of business investment in Canada, see Cross (2011).

Box 1: Identifying Public versus Private Investment

Investment data come from Statistics Canada's annual survey of Public and Private Investment in Canada. The data begin in 1991, and include investment intentions for 2014. Investment covers all non-residential spending on structures, machinery and equipment. I define the public sector as public administration, education, health and utilities, all of which includes investments made by all levels of government. Unlike the standard Statistics Canada definition of the business sector, I include utilities in the public sector since they often act as extensions of the government, and hence I allocate them to public-sector investment. Examples of government controlling key decisions by their utilities are numerous: Ontario Power Generation closing its coal-burning power plants, to be replaced by wind and solar power; or the highly publicized cases of privately owned companies not building natural gas electricity generating plants upon order from the Ontario provincial government; Hydro-Québec openly using cheap hydro rates to guide industrial development; New Brunswick deciding to sell NB Hydro assets to Hydro-Québec (later cancelled). The only exception concerns utilities in Alberta, which were privatized starting in 2001. As a result, I allocate Alberta utilities to the private and not the public sector starting in that year. Province and industry-level data come from Cansim table 029-0005.

The impact of including utilities in the public sector varies from province to province. Utilities in the Maritimes are only about 20 percent of total public-sector investment in 2014, since they do not have the large generating capacity that other provinces have. The share of utilities is larger in Ontario and Quebec, but still less than 30 percent. Utilities account for nearly 40 percent of public-sector investment in Manitoba, Saskatchewan and BC. Newfoundland is an exceptional case. After decades with one of the lowest shares of utilities in public-sector investment, the development of a large hydro project suddenly boosted its share to over 50 percent in 2013 and 2014.

in Saskatchewan and British Columbia, reflected new drilling techniques embodied in recent investments. These technologies allowed the exploitation of resources that had lain dormant for decades.

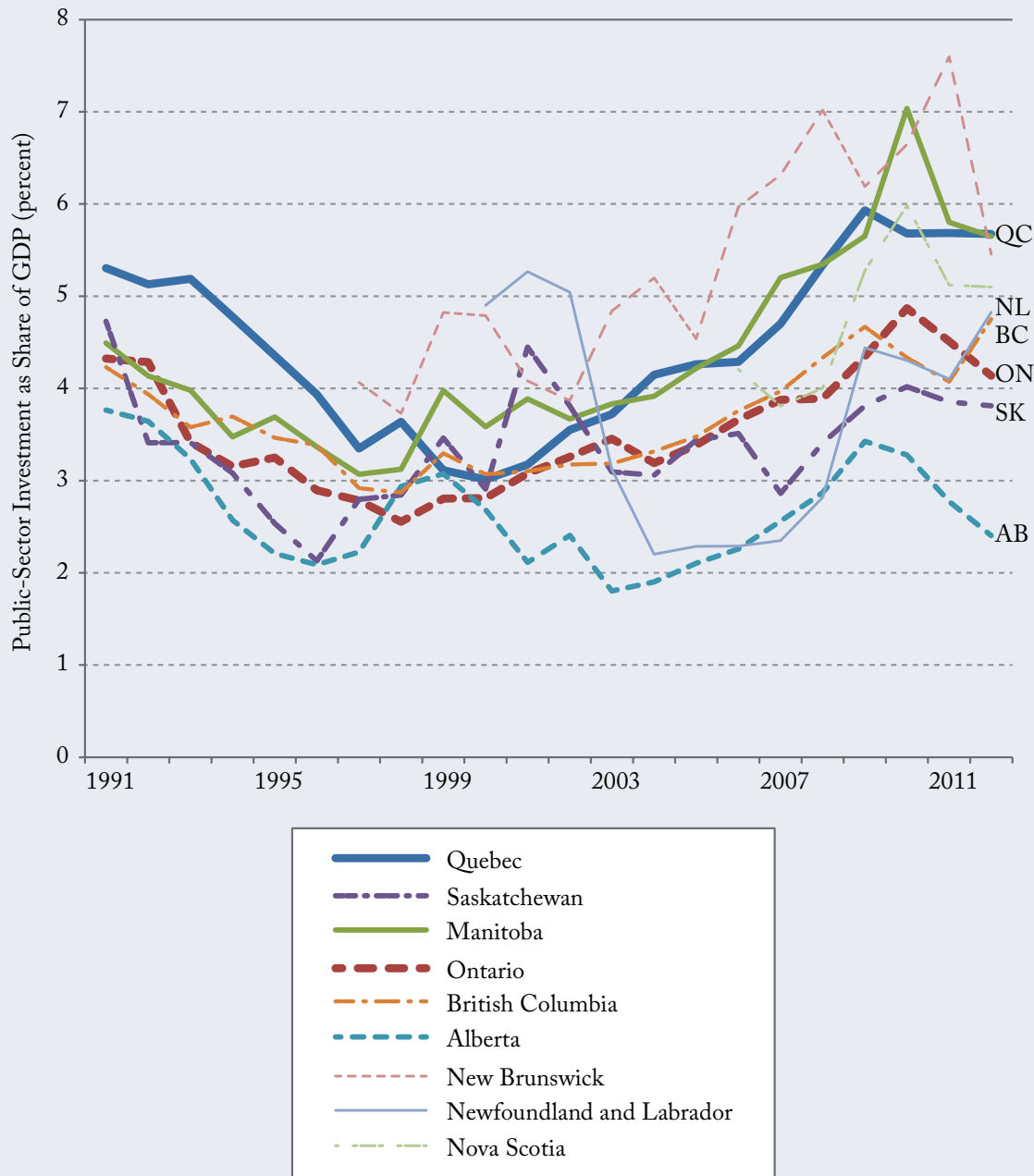
The relationship of public-sector investment to economic growth is more ambiguous. Some types of public-sector investment can foster economic growth, especially investment in infrastructure. However, more public-sector investment may discourage some business investment – by crowding out the funds available for firms in financial markets, for example, or signalling more government intervention in the economy. This paper does not explore possible causal links between private-sector and public-sector investment.

Investment by Province as a Share of GDP

In all four Western provinces, investment by the private sector has grown rapidly since 1991, and especially since the resource boom began in 2003. In Alberta, business investment as a share of GDP was 25.7 percent in 2012, the highest of any province partly because utilities in Alberta were transferred to the private sector in 2001.⁵ Investment by utilities after 2001 has been the fastest growing of any province outside of Newfoundland,

5 2012 is the latest year nominal provincial GDP is available.

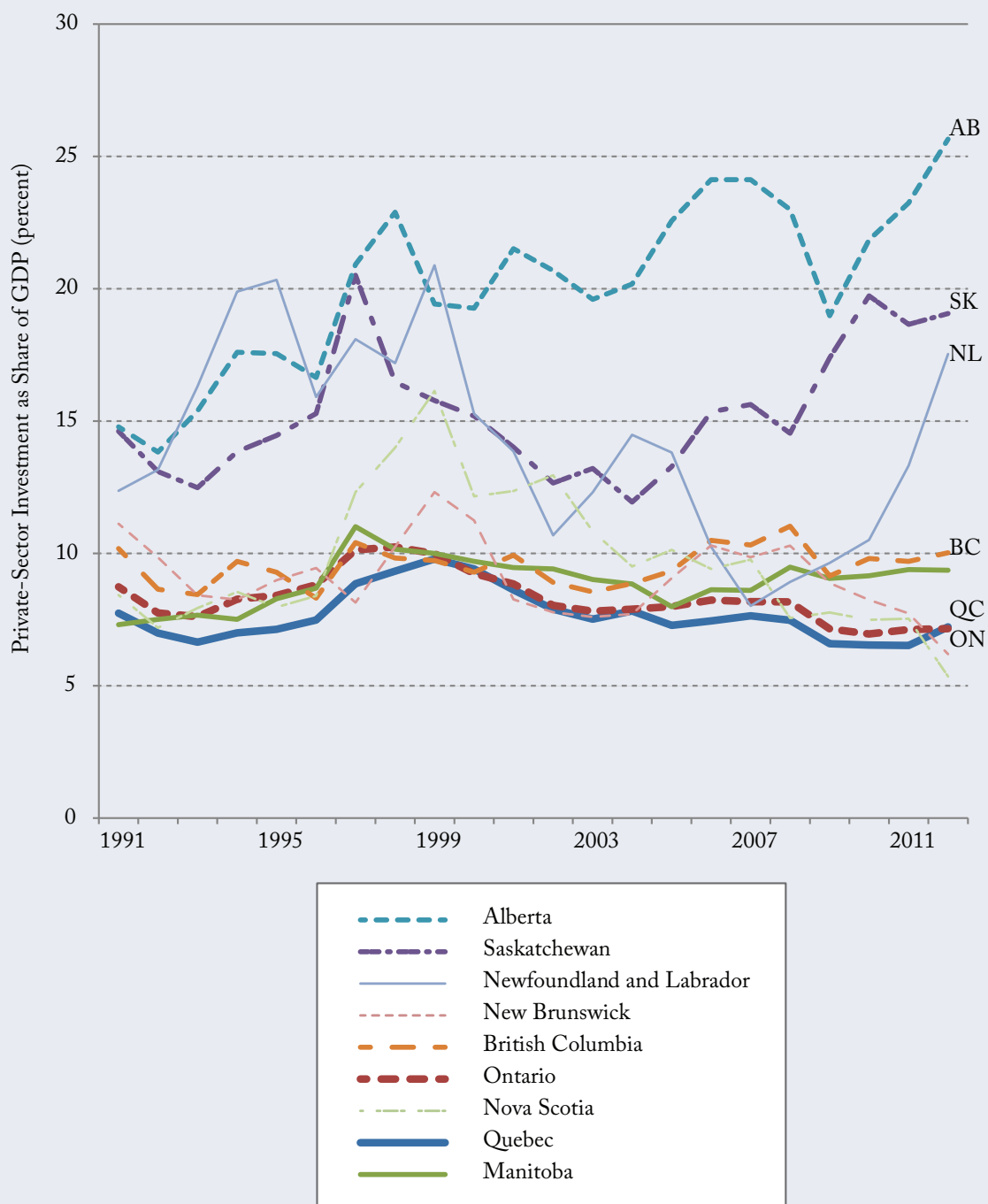
Figure 1a: Public-Sector Investment as Share of GDP, by Province, 1991-2012



Note: Prince Edward Island and some years of Atlantic Provinces are excluded from public investment because of data confidentiality.

Sources: Cansim table 029-0005 and Cansim table 384-0038.

Figure 1b: Private-Sector Investment as Share of GDP, by Province, 1991-2012



Note: I exclude Prince Edward Island for comparability to Figure 1.

Sources: Cansim table 029-0005 and Cansim table 384-0038.

expanding over four-fold. Public-sector investment has levelled off at less than 3 percent of GDP, despite the demands of a rapidly growing population.⁶

In Saskatchewan, private-sector investment was driven by large investments in its oil and gas industry as well as other natural resources such as potash and uranium. These industries accounted for half of private-sector investment growth. The share of business investment in GDP was 19.1 percent in 2012, the second-highest in Canada. Despite the recent reversal of its long-term population decline, the province's public-sector investment has risen only 16 percent since 2008, leaving its share of GDP at 3.8 percent, the second lowest in Canada.

Newfoundland saw private investment begin to strengthen late in the 1990s, and then soar again as a share of GDP in 2012 to 17.5 percent. The surge of private-sector investment lifted Newfoundland from a perpetual 'have not' province in terms of the equalization formula to one with Canada's highest GDP per capita. Public-sector investment has tripled since 2008, reflecting more capital spending by utilities – notably the Muskrat Falls hydro project – that outweighed a 10 percent cut in spending elsewhere in the public sector. This lifted public-sector investment as a share of GDP to 4.8 percent.

In BC, private-sector investment in 2012 as a share of GDP stood at 10 percent. Business investment has been led by the development of natural gas in Northeastern BC, which outweighed a deep slump in its forestry industry. As well, manufacturing investment nearly doubled in the last two years surveyed, despite lingering weakness in traditional forestry-based mills. Public-sector investment in BC has doubled since 2003, boosting its share of GDP to a record 4.8 percent. All the recent increase in public-sector investment has been in utilities, with cutbacks in the other public-sector industries after they had more than doubled in size earlier in the decade.

Manitoba also experienced a surge in business investment and cuts in the public sector in the 1990s. Since 2000, both private- and public-sector investment have more than doubled. Mining investment has led this growth, although mining accounted for less than half of private-sector investment expansion. Public-sector investment doubled after 2000 to reach 5.7 percent of GDP, as utilities tripled their investment between 2002 and 2010.

Investment in the two Central Canadian provinces followed a nearly identical path. In the 1990s, private-sector investment's share of GDP was 10 percent in Ontario and Quebec, while public-sector investment shrank. However, business investment has tapered off since 2000, and its share of GDP fell to 7.2 both in both provinces by 2012.

In Ontario, public-sector capital spending fell outright between 1991 and 1998, reflecting a retrenchment after a burst of spending during the 1990 recession and a halving of utilities investment. By 1998, public-sector investment as a share of GDP was the lowest in Canada at 2.6 percent.⁷ After 2008, the increase in investment by the public sector, even excluding utilities, was the fastest in Canada after Quebec and Nova Scotia.

In Quebec, a sizeable cut in government investment between 1991 and 2000 accompanied a surge in business investment. The drop in public-sector capital spending was concentrated in utilities, after Hydro-Québec completed several major dam developments in the early 1990s. Since 2000, public-sector capital spending as a share of GDP has nearly doubled. At the same time, business investment has stagnated. As a result, business

6 Expenditure-based provincial GDP data from 1991 to 2012 are from Statistics Canada, Cansim, Table 384-0038. The 2013 data are from the industry measure of provincial GDP in Cansim Table 379-0030. Like the monthly data, industry-based measures of GDP are available on a more timely basis, but are not as comprehensive as the expenditure-based estimate of GDP, which are the preferred source whenever available.

7 Data for PEI and Nova Scotia are unavailable for 1998, because of confidentiality restrictions.

investment as a share of GDP in Quebec was the lowest in Canada for several years, before a slight rebound in 2012. Based on 2014 investment intentions, business investment is currently only marginally larger than the public sector's, a significant shift from 2000 when it was three times as large. Public-sector investment was 5.7 percent of GDP in 2012, equalling Manitoba for the most in Canada.

The three Maritime provinces (New Brunswick, Nova Scotia and Prince Edward Island) all have similar dynamics, with public-sector investment growing faster than private-sector investment for long periods of time. As a result, business investment as a share of GDP fell to 6.2 percent in New Brunswick in 2012 and 5.4 percent in both PEI and Nova Scotia, the lowest in Canada. Recently, public-sector investment almost pulled even with the size of private-sector investment in each of the three provinces. This convergence reflects a secular stagnation in business investment combined with rapid growth in public-sector capital spending. Public-sector investment ranges between 5.1 percent in both PEI and Nova Scotia and 5.5 percent in New Brunswick, among the highest in Canada.⁸

Public-Sector Investment as a Percentage of Private-Sector Investment

The course of private investment relative to public-sector investment (including investment plans in 2014) by province is summarized in Figure 2, which shows their ratio.⁹ While in principle there is no reason to expect the relative growth of private-sector to public-sector investment to behave in a particular way, the graph does summarize many of the trends discussed in the presentation of the results by province. In particular, it shows how the ratio of public to private investment fell in almost all provinces during the 1990s, a decade of buoyant business investment in most provinces and fiscal austerity across Canada. Starting around 2000, however, the provincial ratios take markedly different paths. In the Maritime provinces and Quebec, public-sector investment rose to at least 80 percent the level of private-sector investment. Ontario and Manitoba saw their ratio double from 30 percent to 60 percent. In contrast, the ratio of public- to private-sector investment remained low, at about 20 percent, in Saskatchewan and Newfoundland, while it fell to below 10 percent in Alberta. BC is squarely between these two groups of high and low ratios of public to private investment, at just under 50 percent.

Conclusion

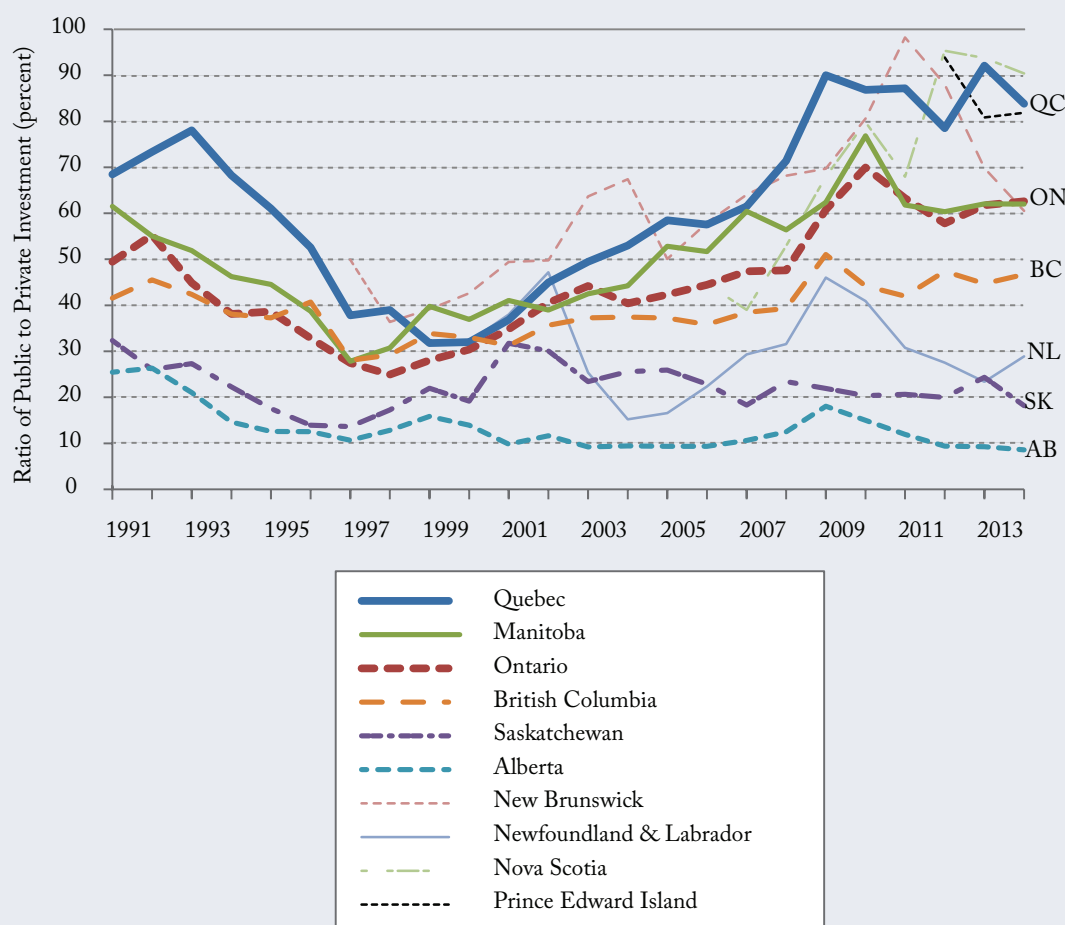
After having relatively similar ratios of private to public investment in the late 1990s, Canada's provinces are increasingly falling into one of two groups. In one group of provinces, public and private investment are converging in relative importance. In the other group, private investment is still far and away the main source of new investment.

Ontario and Quebec substantially increased public-sector investment after 2000, and have seen historically weak business investment. In British Columbia and Manitoba, private investment has held steady, but public-sector investment, especially in utilities, has grown. The Maritime provinces have expanded their investment in the public sector to almost the same size as the private sector.

8 Data on investment by utilities is not available for several years in all three provinces, mostly in the 1990s, due to confidentiality restrictions.

9 Several years are not available for the Atlantic provinces due to confidentiality restrictions.

Figure 2: Ratio of Public to Private Investment, 1991-2014



Source: Author's calculations from Cansim table 029-0005.

Meanwhile, business investment growth has led the expansion of investment in Alberta, Saskatchewan, and Newfoundland. Increasing investment in their booming natural resource bases has obviously played a major role in the growth of business investment in these provinces.

For governments concerned about stimulating economic growth while addressing deficits, the potential for writing cheques to pay for rising public-sector investment has limits. Provinces that have seen a decline in private-sector investment should look for new ways to boost it.

References

- Cross, Philip. 2011. "Recent trends in business investment." *Canadian Economic Observer*, Statistics Canada Catalogue No 11-010, Vol 24 No 3, March.
- Dachis, Benjamin, and William B.P. Robson. 2013. "Equipping Canadian Workers: Business Investment Loses a Step against Competitors Abroad." E-Brief 167. Toronto: C.D. Howe Institute. November 6.
- Mazzucato, Mariana. 2013. *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*. Anthem Press, New York, 2013.
- Minsky, Hyman. 1988. *Stabilizing an Unstable Economy*. McGraw Hill.

This E-Brief is a publication of the C.D. Howe Institute.

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