



Policy



Paper

Private Sector Investment in Atlantic Canada

David Murrell, PhD,
University of New Brunswick

Jackson Doughart, MA,
Atlantic Institute for Market Studies

*Halifax, Nova Scotia,
November 2016*








The Atlantic Institute for Market Studies (AIMS)

AIMS is a Canadian non-profit, non-partisan think tank that provides a distinctive Atlantic Canadian perspective on economic, political, and social issues. The Institute sets the benchmark on public policy by drawing together the most innovative thinking available from some of the world's foremost experts and applying that thinking to the challenges facing Canadians.

AIMS was incorporated as a non-profit corporation under Part II of the *Canada Corporations Act* and was granted charitable registration by Revenue Canada as of 3 October 1994. It received US charitable recognition under 501(c)(3), effective the same date.

287 Lacewood Drive, Suite 204,
Halifax, Nova Scotia, Canada B3M 3Y7
Telephone: (902) 429-1143

 aims@AIMS.ca  facebook.com/AtlanticInstituteCA  [@aims_ca](https://twitter.com/aims_ca)
 www.AIMS.ca  [/company/atlantic-institute-for-market-studies](https://LinkedIn.com/company/atlantic-institute-for-market-studies)

Board of Directors

Chairman: John Risley

Former Chairman: John F. Irving

President and CEO: Marco Navarro-Génie

Vice-Chair: Laura Araneda (New Brunswick)

Vice-Chair: Leo Power (Newfoundland and Labrador)

Secretary: Fae Shaw

Treasurer: Doug Hall

Directors: Paul Antle, Lee Bragg, Robert Campbell, Stephen Emmerson, Richard Florizone, Nelson Hagerman, Mary Keith, Dennice Leahey, Scott McCain, Todd McDonald, Jonathan Meretsky, Don Mills, Andrew Oland, Bob Owens, Peter Woodward.

Advisory Council

George Bishop, Angus Bruneau, George Cooper, Ivan Duvar, Peter Godsoe, James Gogan, Frederick Hyndman, Bernard Imbeault, Phillip Knoll, Colin Latham, Norman Miller, James Moir, Jr., Gerald L. Pond, Allan C. Shaw, Joseph Shannon.

Board of Research Advisors

Advisors: Ian R. Brodie, Charles Colgan, J. Colin Dodds, Morley Gunderson, Doug May, Jim McNiven, Robert Mundell.

The author(s) of this document worked independently, and is solely responsible for the views presented here. The opinions are not necessarily those of the Atlantic Institute for Market Studies, its directors or supporters or of other organizations with which the author(s) may be affiliated. Any errors or omissions remain the responsibility of the author(s).

Private Sector Investment in Atlantic Canada

By David Murrell, PhD,
University of New Brunswick
and Jackson Doughart, MA,
Atlantic Institute for Market Studies

Table of Contents

Executive Summary	4
Introduction	6
Section I: Investment Spending in Atlantic Canada Since 2006-2007	9
Section II: Investment Expenditures in Atlantic Canada, 2006-2007 to 2015-2016	11
Section III: Provincial Government Statements Concerning Investment	17
Section IV: Conclusions and Recommendations	20
Appendix	23
Bibliography	25
Endnotes	27

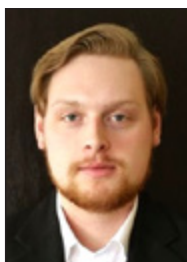
Halifax, Nova Scotia,

November 2016

About the Authors



David Murrell, PhD, is an Honorary Research Professor at the University of New Brunswick at Fredericton. He had taught public finance and regional economic development and policy there. He has published widely on the economy of Atlantic Canada, including articles in *Canadian Public Policy* and the *Canadian Journal of Regional Science*. In addition, he is a member of the advisory board of the *Canadian Journal of Regional Science* and former editor of the *Atlantic Canada Association Papers and Proceedings*.



Jackson Doughart, MA, is a policy analyst at the Atlantic Institute for Market Studies.

Executive Summary

This study analyzes the change in per capita real investment, by province and region in Canada, from two years before the Great Recession to the present. When looking at Canada as a whole during the post-recession recovery, we see that spending on real business investment — particularly machinery, equipment and intellectual property products — has been weak, despite strong spending on energy-related projects over the 11-year period that we examined. Strong spending on housing and government infrastructure has served to mask weak capital outlay by businesses.

The paper makes five points regarding investment trends in Atlantic Canada during this period:

1. The Maritimes have recorded the weakest performances in real per capita business spending in Canada. Total per person real outlay fell from \$4,844 in 2006-2007 to only \$3,377 in 2015-2016, a worrisome 30 per cent decline. The Maritimes' public infrastructure spending has remained roughly constant. Meanwhile, real business machinery and equipment expenditures have fallen by 35 per cent, and real business non-residential spending has fallen by 55 per cent.



2. Investment in Newfoundland and Labrador has soared dramatically since 2006-2007, tripling from \$5,181 to \$15,430 per capita. Much of this strong increase comes from public sector capital outlay (an increase of more than 400 per cent) and business non-residential spending (an increase of more than 200 per cent). However, increased public spending has now wrought negative consequences for the province's debt and deficit situation.
3. The Maritimes' poor business investment picture can be attributed in part to bad public policies. Governments have raised taxes, registered increasing provincial government debt and halted lucrative shale gas development.
4. The sharp decline in business investment spending points to slower economic growth, over the medium and long term, for the Maritimes.

TABLE A			
Per Capita Investment Expenditures* by Province/Region, 2006-2007 to 2015-2016 (in 2007 \$CAD)			
Province/Region	Column 1 2006-2007 Average	Column 2 2015-2016 Average	Column 3 Per cent Change
Newfoundland and Labrador	5,181	15,430	197.8
Prince Edward Island	4,150	3,252	- 21.6
Nova Scotia	4,489	3,215	- 28.4
New Brunswick	5,419	3,604	- 33.5
The Maritimes	4,844	3,377	- 30.3
Atlantic Canada	4,918	6,058	23.2
Quebec	4,248	3,511	- 17.3
Ontario	4,839	4,310	- 11.0
Western Canada	9,872	8,911	- 9.7
Canada	6,282	5,696	- 9.3

* Investment excludes (1) housing investment, (2) intellectual products investment, and (3) inventory investment.
Source: Data calculated by the authors.



Introduction

Canadian provincial economies are largely driven by exports from natural resources, secondary manufacturing and commercial services. Capital is a key factor in the production of exports, making current business investment spending and intentions a leading indicator of export demand.¹ Greater capital investment increases the capacity of an economy to produce goods and create employment opportunities for residents. By increasing its capital per worker rate, a jurisdiction improves labour productivity, and will consequently realize higher wages.² As such, trends in investment are a strong signal of economic progress and health and, therefore, an important avenue for academic investigation.

A province's exports — whether to other provinces or to international destinations — are the main driver of economic growth. However, as a province's exports develop, additional spin-off activity (e.g., indirect jobs) takes place in the form of expanded retail trade, housing, other local commercial services and local government services. In the jargon of regional economics, these latter sectors are residentiary industries. It is important when measuring capital spending to include both export investment and spin-off investment. Exports drive economic growth, but indirect spin-off activity is included as part of real GDP growth. This point is particularly true for Canada's Atlantic region, where stagnant population growth over the past 10 years has limited significant residentiary industry development.

In Atlantic Canada, provincial governments operate economic development programs to attract investment. The federal government also dedicates various federal agencies across Canada's many regions, including the Atlantic Canada Opportunities Agency, that are designed to facilitate business innovation and spur greater capital for the economy. Unfortunately, the injection of government monies into regional projects does not always have the intended stimulating effect. When subsidies for a given program dry up, private actors will not necessarily offset the drop in public funds with private dollars, and some projects that are supported by well-intentioned government investments die once public funding ends. In addition, state subsidy comes with various other costs, including political meddling, making it inferior to private spending as a means of affecting economic growth. Taxpayers supply government funds, which necessitates taking additional money out of the economy to make subsidies possible. This diverts spending from other services or from repaying public debt. It also distorts the market by supporting business that would not be viable absent state intervention, contributing to unreliable forecasts for business



opportunity. When one aims to research investment trends, it is therefore important to sequester public from private spending and to stress the centrality of private investment to robust economic development.

Despite the stress on investment as a major component for healthy economic growth, there has been little commentary since the beginning of the 2008-2009 recession on lagging business investment in Canada. Aside from the authors cited above, business commentary may mention fledgling investment numbers, but mostly in passing. The discussion of Canada's economy lacks a vital grounding in these investment figures, showing a beleaguered national recovery from the 2008-2009 economic crisis.

There are some exceptions in economic commentary, mostly concerning decreased spending levels from energy producers.³ The Conference Board of Canada, for example, notes, "Business investment will see a third consecutive year of decline, led by large cuts in the energy sector."⁴ The National Bank says that given the energy price shock, "much of the initial drag on growth came via investment, which suffered a precipitous drop last year."⁵ Jean Boivin, former deputy governor of the Bank of Canada, said in a 2016 speech,

[T]he slow recovery of investment in this cycle is particularly surprising in light of relatively favourable financial conditions: interest rates remain low and the exchange rate facilitates imports of machinery and equipment.⁶

Although there has been a smattering of commentary at the national level on the sagging investment picture, the decline in business spending has not captured the public's attention. Moreover, if the weakness of Canada's capital spending has taken place mostly unnoticed, the discussion of the investment situation in the Atlantic region has been even scarcer.

This paper helps to offset this dearth in information by analyzing business investment in Canada from 2006-2007 to 2015-2016, with a particular focus on private sector investment and the Atlantic region.

From the paper's accounting exercise, we reach three conclusions:

1. Since 2006-2007, the Maritime Provinces have recorded the weakest performance in real per capita business spending in the country. The total per capita real outlay (business and government) fell from \$4,844 in 2006-2007 to only \$3,377 in 2015-2016, a worrisome 30 per cent decline. Since 2006-2007, the Maritimes' public infrastructure spending has remained roughly constant at a 1 per cent annual increase. Meanwhile, real per person business machinery and equipment



expenditures fell by 35 per cent and real per person business non-residential spending fell by 55 per cent.

2. Over the same period, real per capita investment in Newfoundland and Labrador soared dramatically, tripling from \$5,181 to \$15,430. Much of this strong increase came from public sector capital outlay (a more than 400 per cent increase) and business non-residential spending (a more than 200 per cent increase). These figures are significant because total business investment spending decreased elsewhere in Canada. Compared with the Maritimes, Newfoundland and Labrador's binge of government spending deserves special mention, since these huge increases bear implications for the province's current debt and deficit situation.
3. Finance ministers in the Maritimes have made no acknowledgment of weak business investment. Meanwhile, their counterparts in Newfoundland and Labrador have pointed to the dramatic surge in capital spending as a source of provincial economic growth. As of the most recent budget speech, however, the province had to acknowledge a public finance calamity in the wake of collapsed oil prices. The province's situation triggered numerous tax increases, jeopardized the viability of social programs and the large civil service, and made probable a return of Newfoundland and Labrador to have-not status within the structure of fiscal federalism.

Section 1 describes investment spending at the national level since 2006-2007. Section 2 does the same for the four Atlantic Provinces against a backdrop of corresponding outlay in other provinces. Section 3 surveys statements from finance ministries in Atlantic Canada about business investment expenditures in their respective provinces. Section 4 ties the conclusions of the paper to various policy trends in the four Atlantic Provinces and recommends a change-of-course economic policy that would help to reverse the worrisome tide of business withdrawal from the region.

We offer two comments as to the data used. First, unless noted as "*current* dollars," all numbers cited in this paper are described in *constant* dollars, i.e., adjusted for inflation, for the purpose of comparison. Second, mention of two consecutive years in the style of "2006-2007" refers to the average for the two years in question. Throughout most of the paper, we report per cent changes from one two-year period (2006-2007) to the most recent two-year period (2015-2016). We do this to minimize volatile year-to-year jumps in the data.



Section I

Investment Spending in Canada since 2006-2007

TABLE 1						
Investment Spending in Canada 2006-2007 to 2015-2016 (in 2007 \$CAD billions)						
Year	Column 1 Total Capital Spending	Column 2 Residential Structures	Column 3 Non-Residential Structures	Column 4 Machinery/ Equipment	Column 5 Intellectual Property Production	Column 6 Government Spending
2006	356,905	107,087	79,886	77,865	34,262	55,382
2007	368,210	110,676	81,727	80,209	34,860	59,078
2008	374,198	105,084	88,141	80,278	36,048	61,898
2009	331,663	98,234	71,067	63,263	29,671	67,808
2010	370,062	106,442	83,368	69,814	32,752	75,506
2011	387,224	108,182	96,639	75,721	34,632	69,753
2012	406,154	114,244	108,614	77,793	34,655	67,686
2013	404,308	113,829	117,051	72,613	32,851	63,439
2014	407,327	116,638	116,558	73,317	31,458	64,798
2015	389,508	121,085	99,374	71,572	27,683	66,296

Source: Statistics Canada, CANSIM Table #380-8064 Historical Releases of Gross Domestic Product, Expenditure-based, Annual (millions of dollars).

Aggregate capital spending in Canada has increased more or less steadily from 2006 to 2015 (see Column 1). This steady, though slow, increase perhaps explains how capital outlay, sluggish as it has been, receives so little public commentary.

The rise in total capital spending comes from two main sources. First, Canada's buoyant housing market has remained strong (see Column 2). New residential spending rose from approximately \$107-billion in 2006 to approximately \$121-billion in 2015. Second, government investment spending has also been strong — spurred in part by the federal government's deficit-financed stimulus program (Canada's Economic Action Plan). This component consists mostly of public spending on new and renovated schools, hospitals, parks, roads and government buildings. As one can see in Column 6, real government capital spending increased sharply between 2006 (\$55-billion) and 2010 (\$75.5-billion). Since 2011, public investment expenditures have hovered in the \$63.5-billion to \$67.5-billion range.

Whereas housing and government outlay has remained strong, the same cannot be said about the three components of business capital spending (see Columns 3 to 5).



It is true that the sharp drop in energy prices can explain much of the decline since mid-2014, and yet much of the decline in spending started before 2014. Capital outlay in machinery and equipment, for example, was slightly more than \$80-billion in 2007 and 2008, but it has since declined, averaging about \$71.5-billion in 2015. Spending on intellectual property products (e.g., software, research and development, literary and artistic development) has declined from more than \$34.5-billion (from 2006-2007 to 2011-2012) to only \$27.5-billion in 2015. Real expenditures on non-residential structures, such as buildings and mines, did increase steadily from 2006 to 2014 but then fell in 2015.

TABLE 2				
Per Capita Investment in Canada 2006-2007 to 2015-2016 (in 2007 \$CAD)				
Row	Variable Name	2006-2007 Average	2015-2016 Average	Per cent Change
Row 1	Business non-residential structures*	2,150.97	2,087.59	- 2.95
Row 2	Business machinery equipment**	2,561.51	1,748.67	- 31.73
Sub-total (Rows 1-2)		4,712.48	3,836.26	- 18.59
Row 3	Government investment*	1,569.24	1,859.52	+ 18.50
Sub-total (Rows 1-3)		6,281.72	5,695.78	- 9.33
Row 4	Housing (national accounts)**	3,322.73	3,423.87	+ 3.04
Row 5	Intellectual Property (national accounts)**	1,051.47	751.31	- 28.55
Total (Rows 1-5)		10,655.92	9,870.96	- 7.37

* The authors calculated the data. Spending estimates are from Capital and Repair Expenditures (CANSIM Table #029-0005). Data are in per capita constant dollars.

** The authors calculated the data. Spending estimates are from the National Accounts (CANSIM Table # 380-0084). Data are in per capita dollars, deflated.

Table 1 shows that household and government investment has remained strong. However, business investment has been weak, and much of this weakness took place before the sharp fall in energy prices. Table 1 uses National Accounts statistics, with data available up to 2015. Table 2 shows investment intentions data for three available components, which includes 2016. The data are in per capita terms. In Table 2, we average the 2015 and 2016 years and compare these averages with 2006 and 2007, the years before the Great Recession. Table 2 tells a story similar to that of Table 1. Per capita real business investment has fallen since the pre-recession years, and the decline has been particularly acute in machinery and equipment, as well as in intellectual property products (Rows 2 and 5 in Table 2). Business spending on non-residential structures has fallen slightly, and government and residential investments, in contrast, have risen since 2006-2007.

Section II

Investment Expenditures in Atlantic Canada, 2006-2007 to 2015-2016

The change in per capita investment spending in Atlantic Canada is best illustrated in contrast with the same trends throughout the rest of the country. This section takes current dollar data from Statistics Canada's public and private investment survey⁷ and deflates them for expression in per person terms, akin to those of Table 2 above. We are essentially extrapolating, by province and/or region as relevant to the paper, the data presented in Rows 1 to 3 of Table 2. We use the term "total real investment" to mean the sum of government, business non-resident, business machinery and equipment outlay. We omit residential housing data and intellectual property spending because these sectors are not included in the Statistics Canada survey.

TABLE 3			
Per Capita Investment Expenditures* by Province/Region 2006-2007 to 2015-2016 (in 2007 \$CAD)			
Province/Region	Column 1 2006-2007 Average	Column 2 2015-2016 Average	Column 3 Per cent Change
Newfoundland and Labrador	5,181	15,430	197.8
Prince Edward Island	4,150	3,252	- 21.6
Nova Scotia	4,489	3,215	- 28.4
New Brunswick	5,419	3,604	- 33.5
The Maritimes	4,844	3,377	- 30.3
Atlantic Canada	4,918	6,058	23.2
Quebec	4,248	3,511	- 17.3
Ontario	4,839	4,310	- 11.0
Western Canada	9,872	8,911	- 9.7
Canada	6,282	5,696	- 9.3

* Investment excludes (1) housing investment, (2) intellectual products investment, and (3) inventory investment. Source: Data calculated by the authors.

Table 3 shows the provincial breakdown for total per capita investment since 2006-2007. Total real per capita national investment in Canada (i.e., business non-residential, machinery and equipment plus government investment) declined by 9.3 per cent from immediately before the Great Recession to 2015-2016. The decline for Western Canada, 9.7 per cent, roughly equals the decline for the country.



The corresponding per cent decrease for Ontario was slightly worse, at 11 per cent, and Quebec's worse still, at slightly over 17 per cent. However, the drop for the three Maritime Provinces is precipitous, at over 30 per cent — 21.5 in Prince Edward Island, 28.5 in Nova Scotia and 33.5 in New Brunswick.

Media commentary on business investment has focused on the investment cutbacks by large energy-producing firms in Alberta, Saskatchewan and Newfoundland and Labrador. Yet, we find that the most severe investment cuts have taken place in the Maritimes. Meanwhile, note from Table 3 that total per capita real investment in Newfoundland and Labrador shot up by an astonishing 198 per cent since 2006-2007.

From Section 1, we saw that government investment for Canada increased from 2006-2007 to 2015-2016. Most of this increase can be explained by the federal government's infrastructure investment spending, with much of the cost shared with provincial and municipal governments.

TABLE 4			
Per Capita Government Institutional Investment by Province/Region, 2006-2007 to 2015-2016 (in 2007 \$CAD)			
Province/Region	Column 1 2006-2007 Average	Column 2 2015-2016 Average	Column 3 Per cent Change
Newfoundland and Labrador	1,113	5,999	438.9
Prince Edward Island	1,215	1,349	11.0
Nova Scotia	1,232	1,250	1.5
New Brunswick	1,518	1,505	- 0.9
The Maritimes	1,347	1,362	1.1
Atlantic Canada	1,296	2,393	84.6
Quebec	1,543	1,633	5.8
Ontario	1,422	1,782	25.3
Western Canada	1,811	1,978	9.2
Canada	1,569	1,860	18.5

Source: The authors calculated the data.

Table 4 details the provincial breakdown of the rise in public investment. As one can see in Column 3, the three Maritime Provinces posted only a 1 per cent increase in after-inflation per capita public investment — substantially lower than the increase at the national level (at 18.5 per cent). This difference is in part logical, since the Maritimes' zero-population growth since 2006-2007 implies less need for new provincial and local government outlay.



On the other hand, we are startled to see that Newfoundland and Labrador's public investment expenditures in real per capita terms grew by a whopping 440 per cent, an extraordinary quintupling of public investment. For context, note that Quebec's per person public investment grew by nearly 6 per cent, and Western Canada's grew by more than 9 per cent during the same period. Per person government investment in Ontario expanded by more than 25 per cent because of the federal Economic Action Plan and initiatives by the Ontario government.⁸

TABLE 5			
Per Capita Machinery and Equipment Investment by Province/Region, 2006-2007 to 2015-2016 (in 2007 \$CAD)			
Province/Region	Column 1 2006-2007 Average	Column 2 2015-2016 Average	Column 3 Per cent Change
Newfoundland and Labrador	1,911	2,657	39.0
Prince Edward Island	1,724	1,268	- 26.5
Nova Scotia	2,190	1,390	- 36.5
New Brunswick	2,155	1,433	- 33.5
The Maritimes	2,141	1,398	- 34.7
Atlantic Canada	2,090	1,678	- 19.6
Quebec	1,985	1,045	- 47.3
Ontario	2,391	1,476	- 38.3
Western Canada	3,293	2,649	- 19.6
Canada	2,562	1,749	- 31.7

Source: The authors calculated the data.

Between 2006-2007 and 2015-2016, Canada's per capita business investment fell by 31.7 per cent. Table 5 details the provincial breakdown for the national decline in business spending on machinery and equipment. From Column 3, the Maritime Provinces saw their real per person machinery and equipment outlay decline by a worrisome 35 per cent. Prince Edward Island's dropped 26.5 per cent; Nova Scotia's, 36.5 per cent; and New Brunswick's, 33.5 per cent. The corresponding declines for Ontario (at more than 38 per cent) and Quebec (at more than 47 per cent) were even worse. The sharp drop in real per capita spending in Quebec is perplexing — particularly in light of the rise in per capita spending in business non-residential spending in that province. For Ontario, the economist Philip Cross attributes the drop in private sector expenditure to poor public policy: high taxes and increased electric power rates.⁹

One might therefore suppose that the national decline could be attributed to cutbacks in capital spending by energy corporations. However, the corresponding decline in Western Canada, the heartland of the energy industry, is estimated at 19.5 per cent. This is a somewhat better performance than those of Central Canada and the Maritimes. Finally, we see that Newfoundland and Labrador is anticipating a strong 39 per cent gain in real per person machinery and equipment spending.

TABLE 6			
Per Capita Spending on Business Non-residential Structures, 2006-2007 to 2015-2016 (in 2007 \$CAD)			
Province/Region	Column 1 2006-2007 Average	Column 2 2015-2016 Average	Column 3 Per cent Change
Newfoundland and Labrador	2,157	6,774	214.0
Prince Edward Island	1,210	635	- 47.6
Nova Scotia	1,067	575	- 46.1
New Brunswick	1,746	666	- 61.9
The Maritimes	1,356	617	- 54.5
Atlantic Canada	1,531	1,986	29.7
Quebec	721	834	15.7
Ontario	1,142	1,052	- 7.9
Western Canada	4,768	4,283	- 10.2
Canada	2,151	2,088	- 3.0

Source: The authors calculated the data.

Table 6 shows the provincial breakdown of per capita business spending on non-residential structures. From Column 3, Canada's national per cent change from 2006-2007 to 2015-2016 comes in at negative 3 per cent. However, the Maritimes saw a very steep decline of 54.5 per cent. Prince Edward Island dropped 47.5 per cent; Nova Scotia, 46 per cent; and New Brunswick, 62 per cent. In contrast, Newfoundland and Labrador is expected to show a sharp increase in real per capita business structures spending of 214 per cent. Western Canada's corresponding figure shows a 10 per cent decline over the same period. Whereas modest per capita decline in real business structures across Canada can be attributed to cutbacks in outlay from the energy sector, we note that in the Maritimes — where the three provinces have little energy sector production activity — per person spending in this sector was profoundly weaker than the corresponding per cent change for the country as a whole.

We briefly mention one more set of statistics to illustrate the distinction of the Maritime Province's circumstances. If we look at absolute levels of real capital spending across provinces, we see the noticeable disparity in a different way. Looking at per capita business spending on machinery and equipment (Table 5) for the 2015-2016 period, we see that real expenditures for Newfoundland and Labrador and Western Canada are roughly equal at approximately \$2,650 per person, but corresponding machinery and equipment spending in the three Maritime Provinces is only \$1,400 per resident, with the Canada average at \$1,750 per individual.

Looking at per capita differences in business real investment spending on structures (i.e., non-residential buildings), the disparity in 2015-2016 averages is even more startling. Business spending in Newfoundland and Labrador, at \$6,774 per resident, dwarfs the corresponding amount for the Maritimes, which is only \$617 per individual. Western Canada's corresponding figure is \$4,283, and the total for Canada is \$2,088 per person.

Look now at the levels of real per person spending for government-based investment (Table 4). We set aside for the moment the unusually high per capita figure for Newfoundland and Labrador, an astounding \$6,000 per resident. Public real capital spending in the Maritimes is approximately \$1,360, somewhat less than the \$1,860 Canada-wide average and only slightly less than the corresponding figures for Quebec (\$1,633) and Ontario (\$1,782). Unlike per capita business investment, where the disparity in levels between the Maritimes vis-à-vis Canada is clearly substantial, the gap in public investment between the Maritimes and Canada is relatively small.

Why the difference between the Maritimes and Canada in public and private investment? The three Maritime Provinces depend heavily on federal transfers, where some of the money can be allocated to public infrastructure projects such as road building and refurbishing schools and hospitals. And through special agreements, provinces can cost-share spending on public infrastructure with the federal government. Despite federal and provincial policies to attract business investment to the Maritimes, the weakness in private sector investment spending is alarming and helps to explain the region's poor economy.

Our data findings lead to the obvious question: Why have the Maritimes performed so poorly in real per capita business investment, while Newfoundland and Labrador has done so well? We separate our thinking into two parts: public policy forces and non-policy, circumstantial forces.



Newfoundland and Labrador has fostered development of the offshore oil sector since the 1980s. In contrast, Nova Scotia and New Brunswick have closed the door on shale gas development. We also stress, however, that non-policy factors might have played a role. New Brunswick and Nova Scotia, for example, have relatively large forestry sectors. After the severe 2007-2009 U.S. housing depression, many lumber mills in the two provinces shut down. In the post-recession recovery, many mills were brought back on line with minimal capital outlay. Newfoundland and Labrador, in contrast, enjoyed buoyant oil prices up to mid-2014, and this good fortune assisted in the increase of capital spending in the energy sector. Therefore, while it is true that public policy explains much of the investment disparity between the two regions in Atlantic Canada, it does not explain it all.

In sum, our data from 2006-2007 to 2015-2016 show the following:

1. The three Maritime Provinces have experienced a sharp decline in business investment, including structures, machinery and equipment.
2. Newfoundland and Labrador has experienced a sharp rise in business capital spending.
3. The Maritime Provinces have seen a levelling off in real government investment outlay, whereas Newfoundland and Labrador has witnessed a huge upsurge — a quintupling — of government sector capital outlay.



Section III

Provincial Government Statements Concerning Investment

Business and government investment in Newfoundland and Labrador has skyrocketed since 2006-2007, while business capital spending in the three Maritime Provinces has fallen sharply. However, are Maritime governments aware of the sharp drop? In this section, we summarize the public discussion on business investment in Atlantic Canada. We scrutinize statements by the respective ministers of finance for the last three provincial government budgets, which should be sufficient to determine if provincial governments demonstrate awareness of the situation.

A. New Brunswick

In the government of New Brunswick's most recent budget speech by Finance Minister Roger Melanson, there was no mention of the province's economic performance, including that of business investment.¹⁰ In the 2015 budget, he talked about "improved levels of investment" in 2014, and in the 2015 statement, he promised a "stronger domestic economy ... supported by an improvement in investment activity, led by government and private sector investment."¹¹ In the 2014 budget, Finance Minister Blaine Higgs spoke optimistically of investment projects yet to be approved by governments:

The development of the Sisson Brook mine will contribute to improved growth prospects in the mining sector over the next three to five years. Longer term, the Energy East Pipeline and the development of a natural gas industry have the potential to significantly boost investment, job creation, and government revenues for years to come.¹²

B. Prince Edward Island

The government of Prince Edward Island, in its last two budget speeches by Finance Minister Allen Roach, makes no mention of capital spending in the economic conditions sections.¹³ In its 2014 budget, the provincial government stressed that capital spending was a positive indicator in 2013 (a recovery year), when it said that capital spending grew by 7.1 per cent in 2013. This statistic is true, but the government failed to mention that total investment in 2013, excluding housing, was down by approximately 20 per cent in current dollar terms from 2011.¹⁴



C. Nova Scotia

The last three budgets tabled by the government of Nova Scotia contain no mention of capital spending in the province.¹⁵ The 2014 and 2015 budgets, by Finance Minister Diana Whalen, contain sections reviewing the Nova Scotia economy.¹⁶ The 2016 budget speech by Minister Randy Delorey made no mention of private investment levels in the province.

D. Newfoundland and Labrador

In contrast with the three Maritime Provinces, Newfoundland and Labrador has enjoyed strong investment spending driven by the growth in demand for oil and other export resources. The government of Newfoundland and Labrador has stressed the rise in business capital spending in recent budgets.¹⁷ In the 2014 budget speech, for example, then-minister of finance Charlene Johnson mentioned that total “capital investment increased by over 31 per cent last year to a record high of \$12.3-billion” and that “strength in commercial and residential spending also contributed to record high levels of investment.”¹⁸ In the 2015 budget, then-minister of finance Ross Wiseman again stressed that investment spending was “at very high levels in 2014,” totalling “\$12.2 billion a year”¹⁹ and “are expected to remain high through 2015.”²⁰ The 2015 budget document included a bar chart showing the sharp rise in total current dollar investment spending from 1993 to 2015.²¹

With its 2016 budget speech, the tenor of the provincial government has changed regarding the strong public investment outlay. Minister of Finance Cathy Bennett’s speech mentioned that several large investment projects were still going strong (e.g., Muskrat Falls) but that other projects (e.g., Hebron and Vale) were winding down.²² The most recent budget also focused on the provincial government’s ballooning deficits and debt, detailing provincial government steps to reduce recent deficits. The speech stressed that the province’s net debt in 2014, including that of provincial Crown corporations, was \$15-billion and is projected to reach \$16.5-billion.²³ The budget document suggests that part, though not all, of the rise in net debt comes from high investment spending by Nalcor Energy, the provincial government-owned electric power company.²⁴



To summarize, the three Maritime provincial governments, with low per capita capital spending, have tended in recent speeches to underemphasize or omit investment spending as a driver of provincial economic growth. In contrast, recent budgets from Newfoundland and Labrador have highlighted the government's strong capital spending. One contribution of this paper is to raise a warning flag about the dearth of private sector capital spending in Nova Scotia, New Brunswick and Prince Edward Island. On a per cent change basis, the three Maritime Provinces have registered, since 2006-2007, comparatively large decreases in real per capita investment spending.

We have emphasized the strong rise in investment spending in Newfoundland and Labrador, but much of the rise can be accounted for by Nalcor's Muskrat Falls hydro project. The spending for this project has been financed by borrowed money flowing to Nalcor, driving up the province's net debt. The strong government investment spending in this province has come at a high cost, which local taxpayers are now paying.



Section IV

Conclusions and Recommendations

This paper used the most recent Statistics Canada public and private investment data set related to business investment, converted the data into per capita constant dollar numbers and calculated per cent changes from 2006-2007 to 2015-2016. We have argued that business investment plays a crucial role in the short run (i.e., recovery after the Great Recession) and in the medium and long run (i.e., expanding productive capacity for a province's economy).

Our paper reaches three conclusions:

1. **Maritime Provinces:** Per capita business investment in non-residential construction and machinery and equipment has fallen dramatically in the three Maritime Provinces since 2006-2007. The decline is steeper than the decline in Western Canada and in Canada as a whole. Furthermore, the economic malaise in the three Maritime Provinces contradicts the false impression that Canada's countrywide investment decline fully centres on energy-producing jurisdictions. These results are striking because they highlight the overall stagnation of the Maritime economy.
2. **Newfoundland and Labrador:** Real business capital expenditures in Newfoundland and Labrador have risen dramatically since 2006-2007. Meanwhile, public investment in the province has skyrocketed, which is accounted for by spending on the large Muskrat Falls hydro dam project.
3. **Statements by Ministers of Finance:** During budget speeches, Maritime ministries of finance have made little to no mention of the serious decline in investment spending. Over the past three years, growth in investment preceding the collapse in oil prices figured prominently in the same speeches from Newfoundland and Labrador's finance ministers, who had highlighted resource-based capital spending as a major source of provincial growth. The most recent budget marries a discussion of investment with warnings of serious budget deficits and debt, stressing the need for Nalcor to start cutting waste and bureaucracy.²⁵
4. **The poor economic prospects for the Maritimes:** Given the absolute decline in constant dollar business spending in the Maritimes, long-term prospects for strong economic growth in the region remain poor. The history of economic development in Canada's peripheral provinces (e.g., Alberta, Saskatchewan, Newfoundland and Labrador) has been defined by strong private sector investment spending.



The poor economic health of the Maritime Provinces is exacerbated by the maintenance of poor policies in the region. Proper action by provincial governments to reverse these policies could help to bridge the economic stagnation gap between the Maritimes and the rest of the country. The policies include:

1. **Growth-inhibiting tax regimes:** High taxes are a deterrent to investment. Tax regimes in the Maritime Provinces are steep, particularly in comparison with regionally competing jurisdictions. By some measures, Nova Scotia and New Brunswick are the highest-taxed jurisdictions in North America. See AIMS' study [I'll Take New England Any Day!](#) (2016).
2. **Refusal to develop natural resources:** Nova Scotia and New Brunswick possess substantial gas reserves, the harnessing of which could bring considerable employment, revenue and investment to these provinces. Unfortunately, provincial legal and regulatory moratoria on hydraulic fracturing have stymied the possibility of taking advantage of these resources for economic benefit. See AIMS' study [Gas Opportunities for Atlantic Canada](#) (2016).

Meanwhile, Newfoundland and Labrador's fall from economic grace in the wake of oil-price collapse has produced a series of significant policy challenges including

1. **Punitive tax increases:** In response to the present budget crisis, the Newfoundland government has hiked taxes and fees to help recover. With the province's spending problem, further burdening residents with taxes will not offset unsustainable spending levels, and it risks provoking a flight of capital from the province.
2. **An unsustainable public sector:** The major cause of Newfoundland and Labrador's money shortfall is its bureaucratic wage bill. The province has the largest public sector by share of total jobs (25 per cent of employment in Newfoundland is provincial government employment) in Canada. Its rate is also high in terms of employees relative to the size of the population. On average, Canadian provinces employ 83 public servants per 1,000 residents; Newfoundland and Labrador employ 109 public servants per 1,000 residents, or 24 per cent more. See AIMS' study [The Size and Cost of the Public Sector in Atlantic Canada](#) (2014).²⁶
3. **Poor management of resource revenue:** During the oil boom, the province ought to have followed the lead of Alberta and Scandinavian countries in setting aside oil revenue. This policy would have allowed the province to remain disciplined in its entitlement spending, while still making necessary infrastructure investments and saving for non-boom times. See AIMS' study [A Good Problem to Have](#) (2015).



Finally, we note some shortcomings with the analysis in this paper. We use Statistics Canada's survey of public and private investment, since the survey includes a projection of survey intentions for 2016. This survey is useful to us, since using 2015-2016 data (as an average over two years) gives us relevant, updated data with which to describe the present situation. However, these statistics exclude intellectual property products (e.g., computer software spending, patent rights, etc.), a key component of business investment. Statistics Canada does keep data on intellectual property intentions, but the current available numbers go back to only 2013 and could therefore not be used for this study. Meanwhile, national and provincial accounts data do include intellectual property investment, but the provincial accounts have these data to 2014 only. For this reason, we decided to base the study on the public and private investment survey.

Note further that investment in intellectual property products at the Canada-wide level has declined from \$34.7-billion in 2012 to \$27.7-billion in 2015. From 2006 to 2012, this important investment component moved range-bound between \$30-billion and \$36-billion. The national pattern in intellectual property products closely follows Canada's lagging investment in machinery and equipment. The provincial economic accounts do publish provincial data in intellectual property investment,²⁷ which is available from 1981 to 2014. A worthwhile future project would be to establish credible updating techniques for the 2014 provincial data and to study investment in intellectual property in Atlantic Canada.



Appendix

This appendix outlines the method of calculation for the data and lists the sources of data for the tables shown in this paper. We do this for each table, in order.

Table 1: The Canada constant dollar investment spending (in 2007 prices) comes from StatCan's income and expenditure accounts, CANSIM Table #380-8964. These data are quarterly, so we convert them into annual averages.

Table 2: The current dollar business non-residential and business machinery and equipment investment — and the current dollar public investment data — at the Canada level (Rows 1-3) come from CANSIM Table #029-0005. The data are available up to 2016 inclusive, where the 2016 data are stated intentions data. These data are then deflated by implicit expenditure price indexes, calculated by the authors in the following manner:

1. We obtain current and constant dollar spending available from CANSIM Table #380-0064.
2. We then divide current dollar investment spending (for the appropriate component) by constant dollar spending to obtain the relevant implicit price deflator. For 2006 to 2015, we compute annual averages — then deflate the investment data from Table #029-0005.
3. We then forecast a figure for 2016 by computing per cent changes, first quarter 2016 over first quarter 2015, then apply the per cent changes to 2015 to get a forecasted deflator for 2016.
4. We then use these 2016 deflator numbers to deflate the current dollar investment data.
5. We then take all the data and compute per capita for 2006 to 2015 using the Canadian population data from Statistics Canada Table #051-0001.
6. We forecast a total population number for 2016 (for Canada) by computing a year-over-year per cent change number (first quarter 2016 over first quarter 2015) and apply the per cent change to the 2015 Canadian population estimate.

For Rows 4 and 5 in Table 2, we take the published 2006 to 2015 data (from Table #1) and divide by the total Canadian population to obtain per capita population data. The 2016 figures were calculated as follows:



1. We calculate constant dollar numbers, in 2016, by using per cent change data (first quarter 2016 over first quarter 2015) to the 2015 numbers.
2. We then calculate per capita numbers using the population estimates obtained as per the paragraph above.

Tables 3-6: Essentially, the calculation procedure for the provincial estimates follows the same methodology as was used in Rows 1-3 of Table 2; therefore, we only discuss specific data sources and changes to updating procedures needed to project 2015 and 2016 data.

The current dollar estimates of investment, by province and by component for 2006 to 2016 come from CANSIM Table #029-0045. We converted the data into constant dollar numbers by using the appropriate price deflator, by province and by investment component, available from Table #384-0039. This procedure was done for 2006 to 2014, since the provincial deflator data, like all income and expenditure accounts statistics, are only available to 2014 inclusive. Therefore, we updated the provincial implicit price deflator data for each component for the 2015 and 2016 years as follows: We use the national price deflators computed in Table 2 above and apply them to the provincial deflators for the following components: machinery, equipment and government capital expenditures. For business non-residential investment deflators, we forecast the 2014 data forward using urban, non-residential prices available from Table #327-0043. The data has all the 2015 data points, but to forecast 2016, we used the first quarter of 2016 over the first quarter of 2015.



Bibliography

- Babad, M., "Resource Firms, Factories to Slash Spending as 'Holy Grail' of Recovery Elusive," *The Globe and Mail*, May 10, 2016: <http://www.theglobeandmail.com/report-on-business/top-business-stories/resource-firms-factories-slash-spending-as-holy-grail-of-recovery-elusive/article29950684/>.
- Bernard, M., Browarski, S. and Stewart, M. (2009), "Ontario Budget 2009: Big Stimulus, Big Deficits," The Conference Board of Canada, April 6, 2009: http://www.conferenceboard.ca/topics/economics/budgets/on_2009_budget.aspx.
- Boivin, J., The "Great" Recession in Canada: Perception vs. Reality, speech made to the Montreal CFA Society, March 28, 2011: <http://www.bankofcanada.ca/2011/03/great-recession-canada-perception-reality/>.
- Bougrine, H., "The Role of Capital Formation in Economic Disparities among Canadian Regions: 1991-1990," *Canadian Journal of Regional Science*, vol. 15, no. 1, Spring 1992, pp. 21-33.
- "Capital Expenditures Decrease in Non-res Construction, Machinery, Equipment: Stats Can Report," *On-Site Magazine*, July 13, 2015: <http://www.on-sitemag.com/construction/capital-expenditures-decrease-in-non-res-construction-machinery-equipment-stats-can-report/1003718841/>.
- Cross, P., "Government Mismanagement is Bleeding Ontario Dry: Philip Cross in the Financial Post," Macdonald-Laurier Institute, May 13, 2016: <http://www.macdonaldlaurier.ca/government-mismanagement-is-bleeding-ontario-dry-philip-cross-in-the-financial-post/>.
- Dachis, B. and W.B.P. Robson, "Equipping Canadian Workers: Business Investment Loses a Step against Competitors Abroad," C.D. Howe Institute, E-Brief, November 6, 2013: https://www.cdhowe.org/sites/default/files/attachments/research_papers/mixed/e-brief_167_0.pdf.
- Dachis, B., Jacobs A. and Robson, W.B.P., "A Crisis of Capital: Canadian Workers Need More Tools, Buildings and Equipment," C.D. Howe Institute, E-Brief, December 16, 2015: https://www.cdhowe.org/sites/default/files/attachments/research_papers/mixed/e-brief_223%20final.pdf.
- Financial Markets, "Sub-1% Growth for Canada?" The National Bank, *Special Report, Economics and Strategy*, January 22, 2016: <https://www.nbc.ca/content/dam/bnc/en/rates-and-analysis/economic-analysis/special-report-22Jan2016.pdf>.
- Government of New Brunswick, "Investing in New Brunswick's Priorities: Jobs. Education. Health. 2016-2017 Budget," Department of Finance, Roger Melanson, Minister of Finance, February 2, 2016: <http://www2.gnb.ca/content/dam/gnb/Departments/fin/pdf/Budget/2016-2017/BudgetSpeech2016-2017.pdf>.
- Government of New Brunswick, "Facing Our Challenges Together: 2015-2016 Budget," Department of Finance, Roger Melanson, Minister of Finance, March 15, 2015: <http://www2.gnb.ca/content/dam/gnb/Departments/fin/pdf/Budget/2015-2016/BudgetSpeech2015-2016.pdf>.
- Government of New Brunswick, "Putting Our Resources to Work, 2014-2015 Budget," Department of Finance, Blaine Higgs, Minister of Finance, February 4, 2014: <http://www2.gnb.ca/content/dam/gnb/Departments/fin/pdf/Budget/2014-2015/2014-2015Budget.pdf>.
- Government of Newfoundland and Labrador, "2016 Budget Speech: Restoring Fiscal Confidence and Accountability," Department of Finance, Cathy Bennett, Minister of Finance, April 14, 2016: http://www.budget.gov.nl.ca/budget2016/speech/budget_speech.pdf.
- Government of Newfoundland and Labrador, "Budget 2015: Balancing Choices for a Promising Future," Department of Finance, Ross Wiseman, Minister of Finance, April 30, 2015: http://www.budget.gov.nl.ca/budget2015/speech/2015_Budget_Speech.pdf.



- Government of Newfoundland and Labrador, "Budget Speech 2014: Shared Prosperity, Fair Society, Balanced Outlook," Department of Finance, Charlene Johnson, Minister of Finance, March 27, 2014: http://www.budget.gov.nl.ca/budget2014/speech/budget_Speech_2014.pdf.
- Government of Nova Scotia, "Budget 2016-2017: Working Together for a Stronger Nova Scotia," Ministry of Finance and Treasury Board, Randy Delorey, Minister of Finance: <http://www.novascotia.ca/finance/site-finance/media/finance/budget2016/Budget-Address.pdf>.
- Government of Nova Scotia, "Budget Address 2015-2016," Ministry of Finance, Diana Whalen, Minister of Finance: http://www.novascotia.ca/finance/site-finance/media/finance/budget2015/Budget_Address.pdf.
- Government of Nova Scotia, "Budget Address 2014-2015," Ministry of Finance, Diana Whalen, Finance Minister: http://www.novascotia.ca/finance/site-finance/media/finance/budget2014/Budget_Address.pdf.
- Government of Prince Edward Island, "Budget Address," Department of Finance, Allen F. Roach, Minister of Finance, April 19, 2016: <http://www.gov.pe.ca/photos/original/budget2016Add.pdf>.
- Government of Prince Edward Island, "Budget Address," Department of Finance, Allen F. Roach, Minister of Finance, June 19, 2015: <http://www.gov.pe.ca/photos/original/budgetadd2015.pdf>.
- Government of Prince Edward Island, "Budget Address 2014," Department of Finance, Energy and Municipal Affairs, Wesley J. Sheridan, Minister of Finance, April 8, 2014: http://www.gov.pe.ca/photos/original/fema_budget14.pdf.
- Hussain, Y., "Canada's Oilpatch Suffers Biggest Drop in Investment in Almost 70 Years, CAPP Warns," *Financial Post*, April 7, 2016: <http://business.financialpost.com/news/energy/canadas-oil-patch-suffers-biggest-drop-in-investment-in-almost-70-years-capp-warns?lsa=9365-e064>.
- Rao, S., "Investment and Productivity: Why is M&E Investment Important to Labour Productivity?" The Conference Board of Canada, Hot Topics, 2011: <http://www.conferenceboard.ca/hcp/hot-topics/investprod.aspx>.
- Sitwell, O.F.G. and Seifried, N.R.M., *The Regional Structure of the Canadian Economy*, Toronto: Methuen, 1984.
- Statistics Canada, "Capital and Repair Expenditures Survey, 2014 (preliminary) and 2015 (intentions)," July 6, 2015: <http://www.statcan.gc.ca/daily-quotidien/150706/dq150706a-eng.htm>.
- Stewart, M., "Canadian Outlook Executive Summary: Winter 2016," The Conference Board of Canada, February 4, 2016: <http://www.conferenceboard.ca/e-library/abstract.aspx?did=7719>.



Endnotes

1. Bougrine, H. (1992).
2. Rao (2011), p. 1; Dachis and Robson (2013), p. 1; Dachis et al. (2015), p. 1.
3. Babad, M. (2016), "Capital Expenditures Decrease in Non-res Construction, Machinery, Equipment: Stats Can Report" (2015), Hussain, Y. (2016).
4. Stewart M. (2016).
5. Financial Markets (2016), p. 1.
6. Boivin, J. (2016), p. 5.
7. Statistics Canada (2015).
8. Bernard et al. (2009).
9. Cross (2016).
10. Government of New Brunswick (2016).
11. Government of New Brunswick (2015), p. 6-7.
12. Government of New Brunswick (2014), p. 8.
13. Government of Prince Edward Island (2016) and (2015).
14. Government of Prince Edward Island (2014), p. 3.
15. Government of Nova Scotia (2016), (2015) and (2014).
16. "The Economic Picture" (2014), p. 4-5; "The Economy: The Best Fiscal Plan is the Strong Economy" (2015), p. 5-6.
17. Government of Newfoundland and Labrador (2014), (2015) and (2016).
18. Ibid. (2014), p. 2.
19. Ibid. (2015), p. 13.
20. Ibid. (2015), p. 14.
21. Ibid. (2015), p. 15.
22. Ibid. (2016), p. 5.
23. Ibid. (2016), pp. 4, 8.
24. Ibid. (2016), p. 6-7.
25. Government of Newfoundland and Labrador (2016), p. 8.
26. This paper was published in 2014 using 2013 figures. The two numbers cited in this paragraph, i.e., a national average of 83 employees per 1,000 residents and the Newfoundland and Labrador level of 109 employees per 1,000, remain the same for 2015 (the most recent numbers available).
27. Statistics Canada CANSIM Table #384-0038.





ATLANTIC INSTITUTE FOR MARKET STUDIES

Making a Donation

AIMS is a registered charity that operates with the financial support of foundations, corporations and individuals and offers tax receipts for donations. AIMS does not receive government funding nor does it contract itself for specific research projects thereby enhancing the Institute's ability to think freely, to hold decision-makers accountable for the choices they make, and maintain its professional integrity and intellectual independence.

Cost of Research: Each research project has its own parameters with respect to the amount and quality of the information available, the level of expertise required by the researcher and the amount of time that it takes to complete the paper. The total cost tends to range between \$10,000 - \$20,000+ which includes the author's fee, oversight and guidance by our Director of Research, proofreading, time, peer review, formatting, communications, radio ads, and media relations.

AIMS would like to invite you to join our group of valued supporters by filling in the form below. AIMS has been an influential voice in Canada for over 20 years and those who support our mission and believe in moving it forward are integral to AIMS' continued success.

Name:

Organization:

Address:

Telephone:

Email:

Payment Method: Visa Mastercard Cheque
 \$50 \$75 \$100 Other

Card Number:

Expiry Date:

Card Holder:

Signature:

Please mail this form to:

287 Lacewood Drive,
Suite 204, Halifax, NS
B3M 3Y7

Or you may email it to aims@aims.ca

If you wish to donate using our online portal,
go to the Contribute to Atlantic Prosperity page on
our website: aims.ca/donate