

Following the Money Trail

Figuring out just how large subsidies to business are in Atlantic Canada

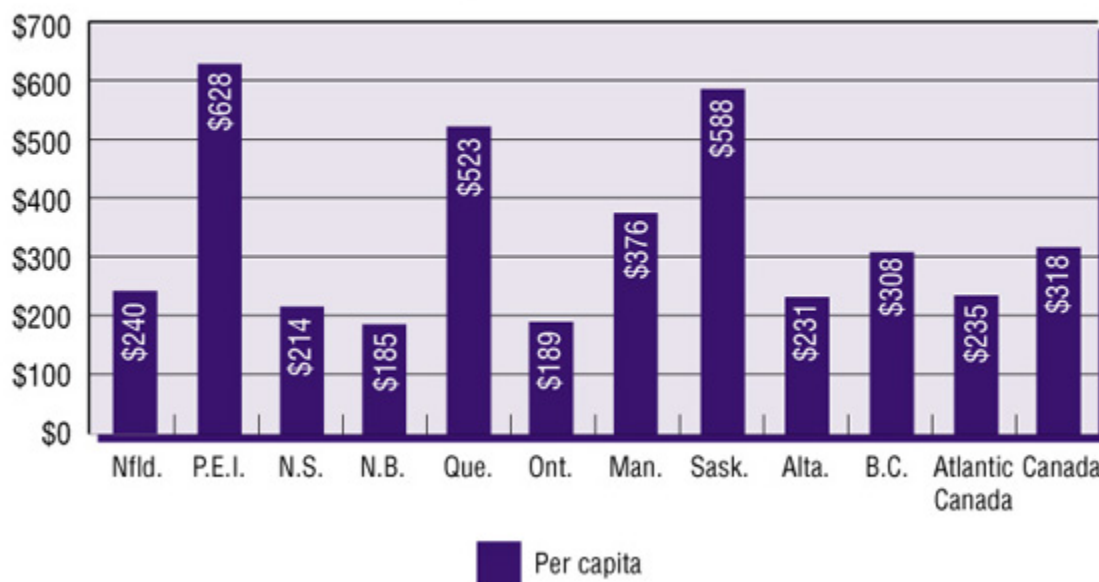
by Professor [David Murrell](#), Department of Economics, University of New Brunswick,
with research and editorial assistance by Charles Cirtwill.

I. Introduction

It has been suggested recently that government subsidies to business in Atlantic Canada are considerably lower than the Canadian norm.^[1] This runs directly counter both to popular perception and to the work of a number of analysts.^[2] Both views cannot be correct, and yet getting the right answer is vital if public policy is to help rather than hinder the arrival of prosperity in this region. So who's right?

Let's start with the evidence. Those who argue that Atlantic Canada in fact receives lower levels of business subsidy than the rest of the country use 1998 data from Statistics Canada (the last year of publicly available statistics) which show that per-capita federal and provincial subsidies^[3] to business in Atlantic Canada amount to \$235, about 26 percent less than the \$318 for Canada as a whole.^[4]

Figure 1 – Federal and Provincial Business Subsidies for 1998 on a Per-Capita Basis by Province



These statistics suggest that Atlantic Canada, and Atlantic Canadian business, is not awash in government money. Taken at face value, this would contradict the "transfer dependency" theorists, who have stated that part of the explanation for Atlantic Canada's underdevelopment is excessive government subsidies that have left no room for private investment^[5].

If, in fact, government subsidies to business are lower in Atlantic Canada, relative to the rest of the country, then private investment in the Atlantic region would be more, not less, efficient and we should look elsewhere for the cause of the region's relatively poor economic performance.

The per capita figures for 1998, however, are deeply misleading because they overlook vital factors such as the size of the private sector in the region, whether all subsidies are appropriately accounted for in these Statscan numbers, and whether 1998 is a representative year. Once these parts of the puzzle are accounted for, it becomes clear the per capita numbers significantly understate the relative level of subsidies to business in Atlantic Canada.

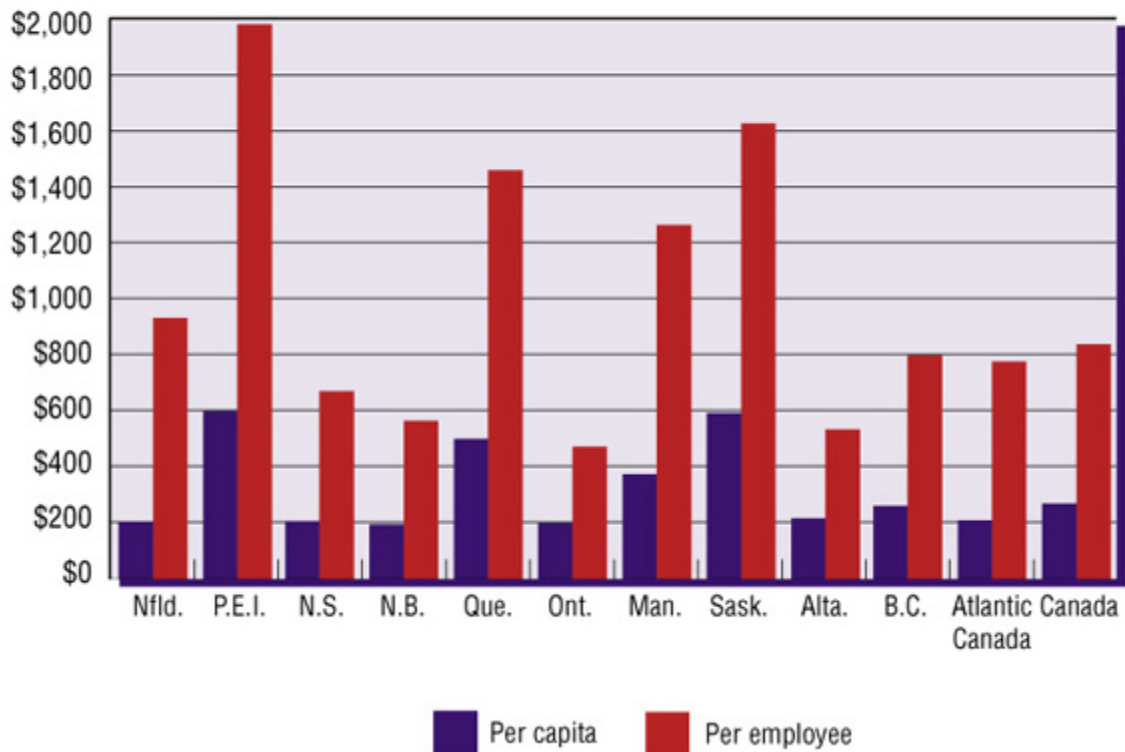
II. Alternative Measures of Government Subsidies to Business

1. A "per-capita" measure understates subsidies to businesses, since total population in a region may not reflect the amount of business economic activity there.

Atlantic Canada, for instance, is characterized by high unemployment rates, low labour force participation rates, and disproportionately high public employment. ("Public" employment being defined as including not only government departments and agencies, but hospitals, public education, and other non-commercial agencies). If the goal is to look at the comparative size of government subsidies to private business, we should relate subsidies to the size of the private-sector economy – the number of private jobs and the level of private sector investment^[6] – not simply to the total population, since the size of the population in a region does not determine the amount of business activity there.

Looking at government subsidies per commercial employee first, 1998 subsidies to Atlantic Canada business were still lower than for Canada as a whole, but the relative gap between the Atlantic region and Canada narrows. For total government, Atlantic Canada subsidies are about \$807 per commercial employee (16 ½ percent lower than Canada as a whole); looking at federal and provincial government subsidies alone, they are \$764 per commercial employee (about 9 percent lower). A similar narrowing of the gap also holds when we look at subsidies per dollar of commercial capital invested. Atlantic Canada had rates of 8 ½ percent and 8 percent for total government and federal plus provincial government subsidies, rates 20 percent and 13 percent lower respectively than the Canadian rate. (see Table 1 in the Appendix for a full breakdown of the comparative provincial figures for these two alternative measures of subsidization.)

Figure 2 – Federal and Provincial Subsidies, Per Capita versus Per Employee, Business Subsidy Measures for 1998 by Province



2. *Government subsidies to business, as reported by Statistics Canada, include farm subsidies, the bulk of which are income transfer payments to farm households. If such payments are included as subsidies, then employment insurance payments to fishermen ought to be included as well.*

Payments to farmers are mostly income transfer payments to farm families, whereas incentive payments for new investment and new innovation (i.e., for economic development) comprise a very small portion^[7]. Farm subsidies are disproportionately weighted to areas outside of Atlantic Canada, so including them in as business subsidies exaggerates the size of regional development subsidies outside of Atlantic Canada relative to Atlantic Canada.

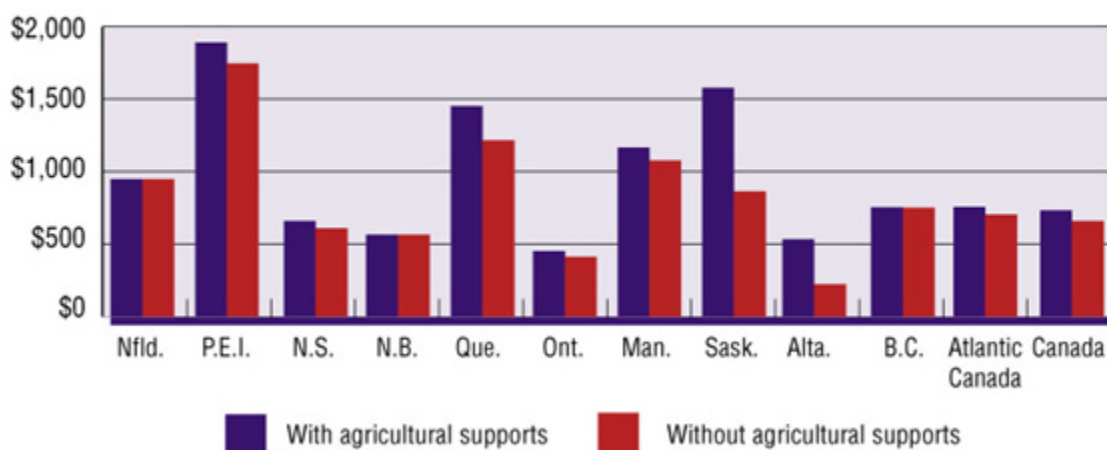
Similarly, Employment Insurance payments to fishermen (a rather large subsidy program^[8]) are an income subsidy and not a subsidy for capital investment. In contrast to the income subsidies for farmers, however, support for fishermen is treated by Statistics Canada as a transfer to persons and not a business subsidy. Fishermen are the only entrepreneur class eligible for EI payments, and clearly are disproportionately represented in Atlantic Canada.

For comparative purposes, the choice is simple – either both agricultural and fisheries supports must be excluded, or they must both be left in. (Again, Table 1 in the Appendix fully outlines the 1998 subsidy figures for each of these alternatives.) Eliminating farm subsidies from subsidies to business shows that, on a per-employee and percentage-of-investment basis, subsidies to business in Atlantic Canada are roughly equal to Canada as a whole. Leaving both agricultural and fisheries subsidies in the equation, Atlantic Canada, at \$1042 per employee, was somewhat higher than the nation as a whole (\$987) but remained equal on the basis of percentage of private investment.

3. The Quebec provincial government has increased subsidies to business during the past decade, and outspends other provinces by far. Excluding Quebec from the national subsidy average gives a more accurate benchmark of an overall subsidy average.

The English-speaking media has largely ignored the issue, but in recent years the Quebec government has embarked on a large program of various business subsidies tax credits and holidays^[9], to attract business investment into the province. Then Quebec Finance Minister Bernard Landry had announced generous incentives in recent budgets, and the newly-formed *Investissement Quebec* is now spearheading increased investment-attraction programs.

**Figure 3 – Federal and Provincial Business Subsidies for 1998
Per Employee With and Without Agricultural Supports by Province**

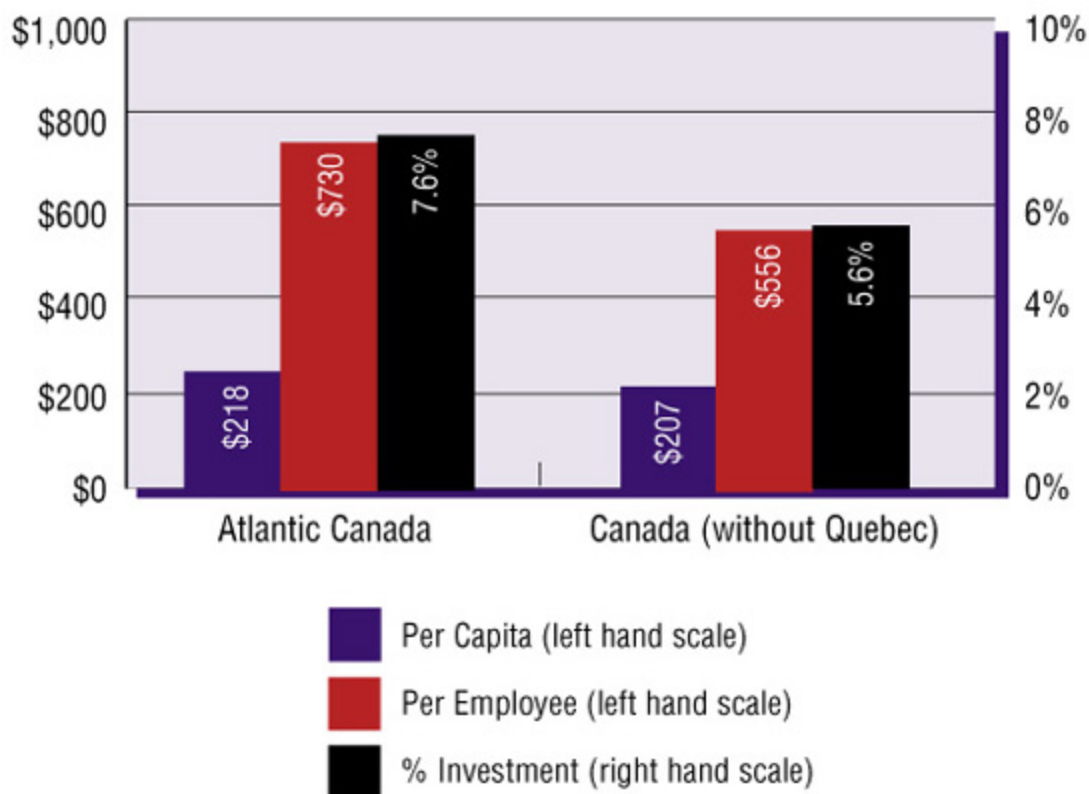


In 1998, for example, the Government of Quebec gave \$994 in non-agricultural subsidies per non-farm, commercial employee, a significant contrast to \$383 for Canada as a whole, or \$213 for the Atlantic region. Subtracting Quebec's provincial subsidies from the Canada total, the provincial governments in the "rest of Canada" contributed only \$199 per non-farm business employee. Indeed, in 1998 the Quebec provincial government gave away \$3.13-billion to businesses, far more than the \$2.28-billion subsidies given by the other nine provincial governments combined!^[10]

Omitting government subsidies in Quebec changes the comparative statistics considerably. Atlantic Canada now shows a significantly higher per-employee and percent-of-investment subsidy level than the rest of the country (without Quebec). If you exclude agricultural subsidies, Atlantic Canada receives subsidies of \$730 per-employee, while the Canadian figure is only \$556. If you include support for the fishery, Atlantic Canadian businesses receive 5.6% more in subsidies per-capita, 18.7% more per-employee and 37.5% more as a percentage of private investment.

Consequently, looking at 1998 alone, the argument ought to be that not only is Atlantic Canada highly dependent on government subsidies to business, but so is Quebec. In fact, Eastern Canada in general has far higher government subsidies compared to the five provinces west of the Ottawa River.

**Figure 4 – Comparative Business Subsidies for 1998
Atlantic Canada and Canada (Without Quebec)**



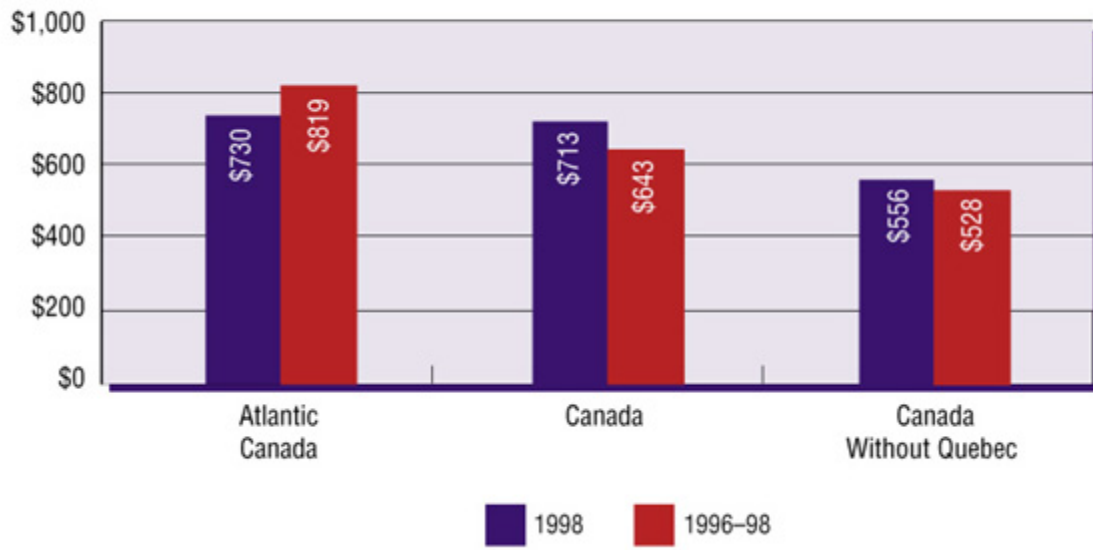
4. 1998 may be an unusual year, and multi-year averages ought to be used to make trend comparisons.

The statistics discussed so far are likely misleading in that they reflect only one-year's worth of government spending. It may be the case that certain provincial governments are undertaking restraint, or that ACOA or some other agency budgeted more expenditures in a different year. A better view would be given by averaging government spending over a number of years

By re-calculating all of the components discussed above as three-year averages, for 1996-1998, we find that government subsidies in Atlantic Canada rise in comparison to Canada as a whole, and especially against Canada subtracting the large subsidies in Quebec. Looking at federal and provincial subsidies, excluding both farm assistance and fisheries support, and comparing Atlantic Canada to Canada minus Quebec, Atlantic Canada's subsidies are much higher. Atlantic Canada outspends Canada (less Quebec) by 55 percent per commercial employee (\$819 vs. \$528), and by 70 percent per commercial investment dollar (9.9 vs. 5.8 percent).

Even if Atlantic Canada is compared to Canada including Quebec, however, Atlantic Canada's level of subsidization of business exceeds the Canadian level by a significant margin over the three year period. For instance, subsidies per employee were 27% higher in Atlantic Canada (\$819 vs. \$643), while subsidies as a percentage of private sector investment were 29% higher than the Canadian level (9.9 vs. 7.7 percent).

Figure 5 – Federal and Provincial Business Subsidies Per Employee Without Agricultural Supports, 1998 versus 1996–98 Average



It is worth noting, however, that the numbers for the Atlantic region conceal wide variations between provinces. For example, if we include all non-farm, non-fishery subsidies over the 1996-98 period, New Brunswick and Nova Scotia businesses vie for the title of least dependent. New Brunswick's subsidy per private sector employee is actually below the Canadian figure for Canada as a whole (\$613 vs. \$643), but somewhat above the figure for Canada excluding Quebec (\$613 vs. \$528). On this measure, Nova Scotia's performance lags New Brunswick's: it is somewhat over the Canadian figure for per employee subsidies (\$666 vs. \$643). Newfoundland's level of subsidization, by contrast, is nearly twice the national level, and is more than twice the national level when Quebec is excluded. PEI is three times the national figure, and four times over the national level with Quebec left out.

This ranking changes appreciably, however, when one looks at subsidies as a percentage of investment. Perhaps reflecting the very strong private sector investment in the offshore, Newfoundland scores best on this measure at 8.3 percent, although this is still above the national average (7.7 percent) and well above the average if Quebec is excluded (5.8 percent). Nova Scotia comes second (8.7 percent), New Brunswick third (9.8 percent), and PEI fourth (40.1 percent).

Per capita	\$255	\$628	\$231	\$195	\$560	\$242	\$412	\$610	\$300	\$317	\$668	\$248	\$368	\$294
Per Employee	\$994	\$1903	\$718	\$606	\$1667	\$606	\$1380	\$1682	\$686	\$824	...	\$807	\$967	\$760
% of investment	7.2%	35.3%	7.3%	8.2%	25.7%	7.6%	18.5%	13.0%	3.5%	12.1%	8.2%	8.5%	10.6%	7.7%
Federal and Provincial business subsidies only														
Per capita	\$240	\$628	\$214	\$185	\$523	\$189	\$376	\$588	\$231	\$308	\$658	\$235	\$318	\$253
Per employee	\$936	\$1903	\$668	\$573	\$1458	\$474	\$1261	\$1623	\$530	\$801	N/A	\$764	\$838	\$635
% investment	6.8%	35.3%	6.8%	7.7%	22.5%	6.0%	16.9%	12.5%	2.7%	11.8%	8.0%	8.0%	9.2%	6.6%
Federal and Provincial business subsidies minus agricultural subsidies and without fisheries support														
Per capita	\$240	\$528	\$194	\$177	\$431	\$169	\$296	\$257	\$111	\$298	\$658	\$218	\$261	\$207
Per-employee	\$941	\$1768	\$618	\$564	\$1235	\$434	\$1097	\$877	\$273	\$790	N/A	\$730	\$713	\$556
% of investment	6.8%	34.7%	6.3%	7.6%	19.1%	5.5%	15.4%	6.7%	1.3%	11.6%	8.0%	7.6%	7.9%	5.6%
Federal and Provincial business subsidies including agricultural subsidies and support for the fisheries														
Per capita	\$409	\$762	\$280	\$225	\$599	\$242	\$415	\$611	\$300	\$327	\$671	\$320	\$375	\$303
Per employee	\$1595	\$2310	\$870	\$699	\$1672	\$606	\$1389	\$1684	\$687	\$849	N/A	\$1042	\$987	\$847
% investment	11.5%	42.8%	8.9%	9.4%	25.8%	7.6%	18.6%	13.0%	3.5%	12.5%	8.2%	11.0%	10.9%	8.0%
Source: data calculated from Provincial Economics accounts; Labour force Survey; Public and Private Investment Survey; population estimates; unpublished data provided to the author														

Table 2 – Government Subsidies to Business, Various Measures, 1996-98 Averages by Province

	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Terr.	Atl. Can.	Can.	Can./WQ
Federal, Provincial and Municipal business subsidies														
Per capita	\$292	\$652	\$227	\$207	\$485	\$227	\$406	\$565	\$252	\$295	\$811	\$259	\$325	\$273
Per employee	\$1190	\$2033	\$732	\$657	\$1389	\$582	\$1235	\$1589	\$589	\$764	N/A	\$875	\$874	\$722
% investment	8.7%	37.4%	9.6%	10.4%	23.5%	7.8%	18.0%	12.2%	3.4%	11.6%	11.4%	10.6%	10.5%	7.6%
Federal and Provincial business subsidies only														
Per capita	\$278	\$649	\$212	\$198	\$419	\$180	\$370	\$546	\$191	\$287	\$801	\$248	\$281	\$237
Per employee	\$1143	\$2026	\$686	\$628	\$1199	\$461	\$1125	\$1537	\$446	\$743	N/A	\$837	\$757	\$636
% investment	8.4%	37.2%	8.9%	9.9%	20.2%	6.2%	16.4%	11.8%	2.5%	11.3%	11.2%	10.1%	9.0%	6.9%
Federal and Provincial business subsidies minus agricultural subsidies and without fisheries support														
Per capita	\$275	\$586	\$210	\$188	\$350	\$156	\$288	\$208	\$115	\$278	\$801	\$236	\$230	\$192
Per employee	\$1142	\$2031	\$666	\$613	\$1028	\$410	\$974	\$725	\$292	\$735	N/A	\$819	\$643	\$528
% investment	8.3%	40.1%	8.7%	9.8%	17.5%	5.5%	14.9%	5.4%	1.7%	11.2%	11.2%	9.9%	7.7%	5.8%
Federal and Provincial business subsidies including agricultural subsidies and support for the fisheries														
Per capita	\$426	\$800	\$287	\$237	\$487	\$227	\$409	\$565	\$252	\$303	813	\$333	\$332	\$283
Per employee	\$1749	\$2499	\$926	\$750	\$1394	\$582	\$1244	\$1591	\$589	\$785	N/A	\$1122	\$894	\$840
% investment	12.8%	45.9%	12.2%	11.8%	23.6%	7.8%	18.1%	12.2%	3.4%	11.9%	11.4%	13.6%	10.7%	8.2%
Source: data calculated from Provincial Economics accounts; Labour force Survey; Public and Private Investment Survey; population estimates; unpublished data provided to the author														

End Notes

1. See the article, "Challenging Some Myths about Atlantic Canada", *Atlantic Report*, The Atlantic Provinces Economic Council, August 2000, pp. 6-7. They calculated analogous numbers, as we do, calculating federal plus provincial government subsidies to business, and omitting local government subsidies. The Atlantic Provinces Economic Council data thus is similar to the first line of section 2 of Table 1, the data differing slightly.

2. See e.g. Fred McMahon, *Retreat From Growth: Atlantic Canada and the Negative Sum Economy*, Atlantic Institute for Market Studies, 2000.
3. Total per-capita subsidies to business, unless otherwise noted, are “provincial government plus federal government subsidies to business”, and are taken from the *Provincial Economic Accounts, Annual Estimates, 1999*. Per capita numbers are calculated by dividing total subsidies by total population.
4. Adding local government subsidies to federal and provincial totals widens the gap even more. Using this definition, per-capita subsidies in the Atlantic region were \$248 in 1998 in contrast to \$368 for the nation as a whole – or 32 1/2 percent less. See Appendix for a detailed table outlining the combined impact of subsidies from all levels of government.
5. See for example Fred McMahon, “Chapter 6: Policy and the Business Sector”, *Retreat from Growth*, pp. 108-125. See also Fred McMahon, *Road to Growth: How Lagging Economies Become Prosperous*, Atlantic Institute for Market Studies, 2000.
6. Employment figures come from Statistics Canada’s Labour Force Survey. Investment is defined by new commercial (i.e. “private”), non-housing capital formation
7. Consider federal government subsidies to farmers. Of the \$1.4-billion total grants and contributions paid out by Agriculture and Agri-food Canada, \$1.046-billion was paid through the following: \$222.6-million for the Crop Insurance Program, \$144.1-million for the Safety Net Companion program; \$233.6-million through the Net Income Stabilization Account, and \$590.1-million through the Agriculture Income Disaster Assistance program. See the Public Accounts 2000-2001 *Estimates: Report on Plans and Priorities*, Agriculture and Agri-Food Canada, p. 49.
8. See Fred McMahon, Chapter 7, “Rural Development and the Fishing Industry”, *Retreat from Growth: Atlantic Canada and the Negative-Sum Economy*, Atlantic Institute for Market Studies, 2000, pp. 126-143. See also Peter Fenwick, “Appendix A: The Effect of 1996 EI Reform on Fish Harvesters”, in R. Audas and D. Murrell, *Beyond a Hard Place: The Effects of Employment Insurance Reform on Atlantic Canada’s Economic Dependency*, Atlantic Institute for Market Studies, 2000, pp. 46-52 for a discussion as to the possible economic distortions resulting from EI subsidies to the fishing sector.
9. In this paper, we ignore “corporate tax expenditures”, i.e., tax reductions to attract business investment. To include such incentives would go beyond the scope of this short paper.
10. Data calculated from the Provincial Economics Accounts and the Labour Force Survey. For comparative purposes the provincial non-agricultural subsidies to business, per non-farm, commercial employee, for the remaining provinces are: Newfoundland (\$351), Prince Edward Island (\$692), Nova Scotia (\$149), New Brunswick (\$128), Ontario (\$113), Manitoba (\$481), Saskatchewan (\$120), Alberta (\$55), and British Columbia (\$497). The significant differences in provincial subsidization and the perception of varying degrees of federal contributions in various provinces leaves open the opportunity for further in depth analysis into both inter provincial and intra provincial subsidization. This paper is concerned only with the question of the comparative dependency of the various provincial business communities on government subsidies and not the relative contribution to that dependency by the governments involved.
11. It is important to note that the governments of Nova Scotia and New Brunswick (for budget cutting reasons) have only recently reduced subsidies to business markedly, to \$618 and \$564 respectively per employee in 1998. This is in contrast to the \$941 and \$1768 handed out by the governments of

Newfoundland and Prince Edward Island. Note that the PEI government subsidies are unusually large (they exclude farm subsidies), and merit further research.