

**GOVERNMENT SUBSIDIES  
TO BUSINESS IN  
ATLANTIC CANADA  
DEBUNKING  
A MYTH**

by

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# GOVERNMENT SUBSIDIES TO BUSINESS IN ATLANTIC CANADA DEBUNKING A MYTH

## I. INTRODUCTION

There is an unresolved debate on the degree to which the business sector in Atlantic Canada is dependent on government subsidies. A study by the Atlantic Provinces Economic Council (APEC, (2000)) concluded that “provincial and federal subsidies to businesses, measured on a per capita basis for 1998, the last year for which data is available, are lower in New Brunswick and Newfoundland and Labrador than in any other province in Canada, with Nova Scotia not far behind.” On the other hand, a study by the Atlantic Institute for Market Studies (AIMS, (2001)) concluded that “Atlantic Canada’s level of subsidization of business exceeds the Canadian level by a significant margin over the three year period” from 1996 to 1998. Given the importance of this issue for the analysis and formulation of regional development policies, it is necessary to seek a resolution to this debate by investigating it in more detail.

This paper extends the analysis to the 1992- 1998 period in order to capture the effect of fiscal restraint on government subsidies to businesses. It uses three indicators to compare the Atlantic region to the rest of Canada - subsidies per capita, as a percent of private sector Gross Domestic Product (GDP), and the simple average of the two. It compares Atlantic Canada to the country as a whole, the “have-not” provinces as a group, and the sum of the four Western provinces. The results offer no support for the popular perception that businesses in Atlantic Canada are awash in government subsidies.

This paper is organized as follows. Section II discusses the major methodological issues and Section III presents some basic data on government subsidies. Section IV presents the results and the final section contains some concluding remarks.

## II. METHODOLOGICAL ISSUES

### 1. Definition

Business enterprises receive assistance from government through two main channels: (a) direct cash payments, and (b) indirect assistance through vehicles such as forgivable loans, loan guarantees, technical assistance, and preferential tax treatment in the personal and corporate income tax systems (tax expenditures). A complete analysis of government programs aimed at the business sector would include both groups of programs. In addition to representing a monumental task, this broad approach would go far beyond the scope of the current debate which is limited to direct cash transfers. This paper follows the same constraints in order to allow a consistent comparison with existing studies.

The data used in the APEC and AIMS studies, and also in this paper, are found in Statistics Canada's Provincial Economic Accounts (PEA). The APEC study used only the data in the PEA, but the AIMS study argues that Employment Insurance (EI) benefits to fishermen should be treated as subsidies to business. According to the AIMS study, agricultural subsidies end up as transfer payments to farmers and are similar in effect to the EI transfers received by fishermen. Therefore, it is argued, either we add those EI payments to the list of subsidies or we exclude the subsidies to farmers. This argument is not convincing for a number of reasons.

First, subsidies are paid to the business of farming while EI benefits are paid to individuals who earn a living as fishermen, although they may be self-employed. The two programs serve very different purposes. Individual fishermen must contribute to the EI program in order to be eligible for benefits, but farmers may receive government financial support without making contributions, as evidenced by the recent grants provided by the federal government. Farmers receive subsidies to offset the costs of producing food while fishermen receive benefits because they are not employed for part of the year. Combining the two involves a selective combination of transfers to business and transfers to persons.

Second, making selective additions to the list of subsidies introduces an element of arbitrariness which taints the results. As pointed out earlier, businesses benefit from a variety of government programs. These benefits are ultimately shared by consumers and factors of production, but in different proportions for each subsidy depending on market structures. Let us consider, for example, the special tax preferences for the oil and gas industry delivered by the corporate income tax ( the regional distribution of tax preferences contained in the corporate income tax system is analyzed by Leblanc and Vaillancourt (1995)). Since oil prices are set in the world market, the benefits of these indirect subsidies are not passed on to consumers but are shared by the governments of producing provinces, owners of capital and workers. With respect to the provincial distribution of federal benefits to businesses, the effects of this tax preference are not different from the direct subsidies to farming businesses or the indirect subsidies to fishermen. The tax preference benefits mostly Alberta residents, farm subsidies are largely received by western farmers and special EI benefits are largely a benefit to eastern fishermen. How can one justify adding the EI benefits to fishermen and not the tax preferences to oil and gas producers? Both items are not direct subsidies, they are delivered through special programs and yield the equivalent distributional results.

Third, the distribution of subsidies to business can be evaluated in two ways. One may confine the analysis to the official classification used in Statistics Canada's publications, which is based on the businesses that receive these direct payments. Alternatively, one may look at the incidence of these subsidies by allocating them to the ultimate beneficiaries. Combining the two approaches selectively may result in misleading conclusions. Given the complexity of including all government programs aimed at businesses, the analysis in this paper is limited to the list of subsidies contained in the PEA.

## 2. Time-frame

The provincial distribution of subsidies is likely to change over time, therefore, the conclusions reached depend on the period under consideration. Some items, such as agricultural subsidies, fluctuate widely from year to year. Other programs are temporary. For example, federal subsidies under the Petroleum Compensation Fund reached a peak of \$2.4 billion in 1984 and now no longer

exist. Because of the above factors, the choice of any period involves an arbitrary decision. The use of a single year provides only limited information and poses the highest constraint to the generalization of conclusions. It offers a single snapshot and gives no information about past trends. Using a three-year average, as is done in the AIMS study, is not a great improvement. Only if there were a three-year cycle in the pattern of business subsidies would this average represent the trend. A three-year average will reduce the effects of the peculiarities of a single year, but does not necessarily provide a more reliable picture of the provincial distribution of subsidies. Broader insights into the pattern of subsidies can be gained by analyzing a longer period, year by year, to detect general patterns and emerging trends. In this paper, the period from 1992 to 1998 inclusive was selected because this period is associated with fiscal restraint by all levels of government and, therefore, represents a suitable base for determining the effects of fiscal retrenchment on business subsidies.

### 3. Dis-aggregation by Order of Government

Subsidies to business are provided by federal, provincial and local governments and are recorded separately by Statistics Canada. Whether one performs the analysis on aggregate data for all three levels of government or for each government separately depends on the question being asked. This paper addresses the debate on whether the business sector in Atlantic Canada is over-subsidized relative to the national average. In this case, the appropriate data set is the total amount of subsidies received. Therefore, the sum of the subsidies provided by federal, provincial and local governments will be used.

### 4. Choice of Indicators

The different conclusions reached by the APEC and AIMS studies using the same data show how sensitive the conclusions are to the choice of indicator. Atlantic Canada is seen to receive below-average or above-average subsidies depending on whether these subsidies are expressed as ratios to the population or to employment. When selecting an indicator of business “subsidies” two points

should be kept in mind: (a) the choice of the indicator depends on the question that is being asked, and (b) given the diversity of government subsidies, a single indicator will likely generate misleading results.

Per capita values of federal subsidies address the following question: if the amount of all these subsidies were given directly to individuals, how much would each one of them receive? In the case of provincial-local subsidies, since these subsidies are fully paid by the residents of a province, per capita values can also address a different question: if the costs to taxpayers were allocated on an equal per capita basis, how much would each individual contribute?

Relating subsidies to economic activity is a more complex exercise. If these subsidies were offered to all businesses, a suitable indicator would be a measure of private output such as Gross Domestic Product (GDP) produced in the private sector. This measure is consistent with the PEA which defines subsidies as *“transfers from government to business, whether incorporated or unincorporated, towards current costs of production. These transfers, because they are related to the quantity or value of output produced, exported or consumed, represent additions to the income of producers from current production.”* Because subsidies to businesses are highly selective, measuring them in relation to a broad measure of economic activity does not allow us to derive general conclusions about their effects on economic efficiency. To make those kinds of judgements would require a detailed analysis of each subsidy within the context of the industry that receives it. This broad indicator is useful in answering questions such as : how much does the private sector receive in subsidies for each dollar of output produced?

Within the framework of regional analysis, the above two indicators represent polar cases. If subsidies are based on economic activity, per capita values will tend to underestimate the relative importance of subsidies in the less affluent regions for two reasons: (a) these regions have below-average levels of output per capita and (b) they have above-average government sectors which create larger differences in per capita output in the private sector relative to the national average. Not all subsidies, however, have a strictly economic objective which can be captured by their ratio to private

sector output. For example, subsidies to Canada Post are aimed to benefit all Canadians and subsidies to housing serve largely a social objective. This ratio, therefore, is likely to generate a biased indicator with the bias in the opposite direction to that associated with the per capita indicator. As a reasonable compromise between these two polar indicators one may use a simple average of the two. In this paper, information is provided on all three indicators. A comparison of the first two, subsidies per capita and as percentage of private sector GDP, provides a measure of the range of the estimates while the third indicator will be used to derive general conclusions.

### III. BASIC FACTS

Table III. 1 Major Components of Federal Subsidies to Business: 1992-99, \$ Million

	1992	1993	1994	1995	1996	1997	1998	1999	Average
Agricultural	2,377	570	405	374	399	544	559	972	774
Transportation	1,432	1,354	1,232	842	538	988	677	250	914
Housing Assistance	984	964	990	1,081	1,217	917	832	919	988
Research Incentives	296	160	139	121	102	118	172	153	158
Employment Development and Training	122	187	173	146	70	66	78	78	115
Grants to Canada Post	154	122	120	104	105	118	82	18	103
Miscellaneous	489	438	449	602	959	1,251	1,582	1,517	911
Basis Adjustment to Accrual	-1,267	-209	-69	0	-138	-6	236	67	-173
Total	4,587	3,586	3,439	3,270	3,252	3,996	4,218	3,974	3,791

Table III. shows the major components of federal subsidies. Three main observations can be made from this table.

1. On average during the 1992-99 period, the federal government paid nearly \$3.8 billion per year in subsidies to business. Annual values followed a downward trend with a fluctuating pattern falling by 13.4% from 1992 to 1999 ( or \$613 million).
2. Only a portion of these subsidies can be classified as financial assistance to business in the production of private goods and services. Nearly one-quarter of total federal subsidies is paid for transportation, an additional one-quarter is paid for housing assistance which serves largely social objectives, 20% is paid in the form of what may be viewed as transfer payments to farmers, and 10% is paid for the combination of grants to Canada Post and incentives for research and for employment development.
3. The diversity of federal subsidies underscores the point made earlier that a single indicator is unable to capture accurately the economic implications of federal subsidies and does not provide a reliable basis for making inter-regional comparisons.

Table III-2 provides a comparison of federal and provincial-local subsidies for Canada as a whole and for the Atlantic regions. Inspection of this table leads to the following observations.

1. The federal government is the main provider of business subsidies in Atlantic Canada. Provincial-local governments offered about one-third of total subsidies.
2. The opposite conclusion applies to the country as whole. Provincial-local governments offered over 60% of total subsidies.
3. Subsidies by federal and provincial-local governments fell by similar percentages during the 1992-98 period. However, the pace of “de-subsidizing” by both levels of government was nearly twice as fast in Atlantic Canada than in the country as a whole.

Table III-2. Subsidies to Business, Federal versus Provincial-Local: 1992-98, \$ Million

A. Atlantic Provinces									
	1992	1993	1994	1995	1996	1997	1998	Average	% Change
Federal	481	425	403	387	376	472	384	418	-20.2
Provincial and Local	250	243	248	230	219	198	204	227	-18.4
Total	731	668	651	617	595	670	588	646	-19.6
Prov-Local as % of Total	34.2	36.4	38.1	37.3	36.8	29.6	34.7	35.1	1.5
B. Canada									
Federal	4,587	3,586	3,439	3,270	3,252	3,996	4,218	3,764	-8.0
Provincial and Local	7,736	6,796	6,169	5,476	5,459	5,403	6,899	6,277	-10.8
Total	12,323	10,382	9,608	8,746	8,710	9,399	11,117	10,041	-9.8
Prov-Local as % of Total	62.8	65.5	64.2	62.6	62.7	57.5	62.1	62.5	-1.1

#### IV. INDICATORS OF TOTAL SUBSIDIES

Table IV-1. Selected Indicators of Total Subsidies to Business, 1992-98

A. Per Capita									
	1992	1993	1994	1995	1996	1997	1998	Average	% Change
Atlantic Canada	307.3	280.1	272.8	259.0	249.9	281.6	247.9	271.2	-19.4
A.C. as % of Canada	70.8	77.4	82.5	86.9	85.1	89.8	67.5	78.6	-4.7
A.C. as % of "Have-Not" Provinces	52.6	58.1	58.4	61.9	62.2	69.6	47.8	57.9	-9.1
A.C. as % of Western Prov.	49.9	59.0	67.0	80.3	83.4	87.7	67.4	67.6	35.1
B. As % of Private Sector GDP									
Atlantic Canada	2.70	2.40	2.23	1.95	1.83	2.00	1.64	2.11	-39.3
A.C. as % of Canada	112.0	123.7	133.5	137.3	134.6	146.0	104.5	125.6	-6.7
A.C. as % of "Have-Not" Provinces	68.2	75.7	76.9	79.6	81.0	91.7	60.5	75.4	-11.3
A.C. as % of Western Prov.	83.1	102.6	118.6	137.3	144.1	153.8	109.3	114.1	31.5

C. Average of Per Capita and % of Private Sector GDP

A.C. as % Canada	91.4	100.6	108.0	112.1	109.8	117.9	86.0	102.1	-5.9
A.C. as % of "Have-Not" Provinces	60.4	66.9	67.6	70.8	71.6	80.6	54.2	66.7	-10.3
A.C. as % of Western Prov.	66.5	80.8	92.8	108.8	113.8	120.8	88.4	90.8	32.9

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The selected indicators of government subsidies - per capita, as % of private sector GDP and the simple average of the two - are shown in Table IV-1. The first comparison is with Canada as a whole. One may argue that, to the extent that subsidies serve a regional development objective, they will tend to be relatively higher in "have-not" provinces. In this case, it may be more relevant to ask whether Atlantic businesses are favoured with respect to businesses in the less affluent provinces than for the country as a whole. This paper provides this additional comparison and also a comparison between Atlantic Canada and the four Western provinces. Comparisons are made with respect to three time-frames: (a) 1998, the last year for which PEA data are available, (b) the average over the entire period 1992 to 1998, and (c) the changes from 1992 to 1998.

a. Subsidies in 1998

In 1998, subsidies to businesses in Atlantic Canada amounted to the equivalent of \$248 per person. This per capita amount was two-thirds of the national average and the average of the four Western provinces, and less than half the average of the "have-not" provinces. These subsidies were equivalent to 1.6 cents per dollar of output produced by the private sector in Atlantic Canada. This is less than two-thirds the amount for the "have-not" provinces, but somewhat higher than the national average and the average for the Western provinces. For 1998, businesses in Atlantic Canada received lower subsidies than businesses in "have-not" provinces, whether measured in per capita terms or as a proportion of private sector GDP. Compared to the country as a whole and to the

Western provinces, businesses in Atlantic Canada received substantially lower per capita subsidies but moderately higher subsidies as percent of private sector GDP.

The difference between per capita values and percentages of private sector GDP depends on three main factors. First, output per capita in the Atlantic region is lower than the national average and the average of “have” provinces. Second, the public sector’s share of total output is relatively larger in the Atlantic provinces. Finally, the inclusion of Alberta in the national average and the average of the Western provinces captures the effect of both oil and gas production and prices on private sector GDP. As was suggested earlier, the two indicators address different questions. Moreover, the diversity of government subsidies to businesses makes a single indicator an unreliable measure of the economic dimensions of these subsidies. A reasonable compromise is represented by the simple average of the two indicators in order to capture the differences between subsidies aimed at specific businesses in the production of goods and services and subsidies that serve a more general purpose.

This compromise indicator shows that, for 1998, the wide-spread perception that Atlantic Canada businesses are more heavily subsidized than businesses in the rest of Canada is not supported by the facts. The calculations presented in this paper show that subsidies to businesses in Atlantic Canada were 14% lower than the national average, 46% lower than in the “have-not” provinces as a group and 12% lower than in the four Western provinces.

#### b. The Average of 1992 to 1998

The average for the entire period heightens the differences between subsidies per capita and as a percentage of private sector GDP. Compared to the average of the “have-not” provinces, subsidies to businesses in Atlantic Canada are still substantially lower under either measure. Compared to the national average and the average of the Western provinces, they are lower ( 21% and 32%, respectively) on a per capita basis, but higher (26% and 14%, respectively) in relation to private sector GDP. The general conclusions based on the average indicator, however, do not change. By this measure, on the average during the 1992-98 period, businesses in Atlantic Canada received

subsidies at about the national average, 9% lower than the Western provinces and one-third lower than the average of the “have-not” provinces.

### c. Changes from 1992 to 1998

It was shown earlier that both federal and provincial-local subsidies have followed a declining trend over the period of fiscal restraint. In Atlantic Canada, the fall in total subsidies was nearly 20% on a per capita basis. This decline was higher than for the country as a whole and for the “have-not” provinces. As a result, per capita subsidies to Atlantic Canada businesses relative to those in the above two groups were lower in 1998 than in 1992. The opposite is true for the comparison with the Western provinces. A similar pattern is apparent when subsidies are measured as a percent of private sector GDP or by the average indicator. In analyzing the economic effects of government subsidies to businesses, it is important to keep in mind two facts: (a) during most of the 1990s, the trend at both federal and provincial-local levels has been towards reduced subsidies, and (b) the reduction has been more pronounced in the Atlantic region than in the country as a whole.

## VI. CONCLUSIONS

There is a widespread perception that businesses in Atlantic Canada are awash in government subsidies. This paper analyzed the regional distribution of subsidies during the 1992-98 period to determine the factual foundations of this perception. The facts provide no support for this myth. According to our summary indicator, on the average during the 1992-98 period, the level of total government subsidies to businesses in Atlantic Canada was roughly equal to the national average and lower than the average for the “have-not” provinces and the four Western provinces.

The concern for high subsidies arises from the idea that subsidies hamper economic performance by interfering with private sector decisions. If subsidies were unusually high in Atlantic Canada, they would hamper the region’s ability to converge to national average levels. A thorough evaluation of

this issue requires a detailed analysis of each industrial sector receiving large subsidies, a task beyond the scope of this paper. Nonetheless, a few general comments can be made.

First, direct subsidies represent only one vehicle for the delivery of government assistance to businesses. Other vehicles, such as loans, loan guarantees, technical assistance and special tax preferences incorporated in the personal and corporate income tax systems, may be larger in size and stronger in effect. Second, subsidies are not very large in relation to the value of production. On the average during the 1992-98 period they amounted to about two cents out of each dollar of output generated by the private sector in Atlantic Canada. Third, there has been a marked trend towards lower government subsidization of business. From 1992 to 1998, the level of total subsidies, unadjusted for inflation, fell by nearly ten percent for the country as a whole. The percentage reduction in the Atlantic region was twice the national average. Finally, although all subsidies interfere with private decisions, in some cases this interference leads to higher economic efficiency. When private decisions generate social benefits, the private sector will produce socially sub-optimal amounts of particular goods and services. In this case, subsidies will help private firms make socially-optimal decisions. An example of this situation is the subsidization of housing for low-income Canadians.

In summary, there is no factual support to the idea that businesses in Atlantic Canada receive above-average government subsidies. Whether the level of subsidization across the country creates major economic distortions is an empirical question which can be answered only with the help of detailed investigations.

## REFERENCES

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APEC (2000), “Challenging Some Myths about Atlantic Canada,” *Atlantic Report*, August 2,000  
*pp. 6-7.*

M. Leblanc and F. Vaillancourt (1995), “Regional Distribution of Federal Corporate Tax Expenditures,” *Choices*, Vol. 1. No. 13, IRPP.

Statistics Canada, various CANSIM series, as shown in the Appendix.

APPENDIX

Table A-1: CANSIM Series Used

	Subsidies			Population	GDP	Government Spending	
	Federal	Provincial	Local			Prices	Current
NFLD	D27887	D27888	D27890	C892586	D24227	D24200	D24201
PEI	D27903	D27904	D27906	C892904	D24261	D24234	D24235
NS	D27919	D27920	D27922	C893222	D24295	D24268	D24269
NB	D27935	D27936	D27938	C893540	D24329	D24302	D24303
Quebec	D27951	D27952	D27954	C893858	D24363	D24336	D24337
Ont.	D27967	D27968	D27970	C894176	D24397	D24370	D24371
Man.	D27983	D27984	D27986	C894494	D24431	D24404	D24405
Sask.	D27999	D28000	D28002	C894812	D24465	D24438	D24439
Alb.	D28015	D28016	D28018	C895130	D24499	D24472	D24473
B.C.	D28031	D28032	D28034	C895448	D24533	D24506	D24507
Yukon	D28047	D28048	D28050	C895766	D24567	D24540	D24541
NWT	D28063	D28064	D28066	C896084	D24601	D24574	D24575
CAN.	D18410	D27871	D18622		D24166	D24193	D24167

