NEW BRUNSWICK BUSINESSES ARE NOT AWASH IN GOVERNMENT SUBSIDIES

by

G.C. Ruggeri

Working Paper Series 2001-03



DEPARTMENT OF ECONOMICS THE UNIVERSITY OF NEW BRUNSWICK FREDERICTON, CANADA

NEW BRUNSWICK BUSINESSES ARE NOT AWASH IN GOVERNMENT SUBSIDIES

G.C. Ruggeri

Vaughan Chair in Regional Economics

Department of Economics
University of New Brunswick

P.O. Box 4400, Fredericton, N.B. E3B 5A1

Phone (506) 447-3320, Fax (506) 453-4514, e-mail ruggeri@unb.ca

I. INTRODUCTION

There is a popular perception that businesses in New Brunswick receive above-average amounts of government subsidies compared to businesses in the rest of Canada. This perception is not supported by the facts. Using information published by Statistics Canada, this paper shows that businesses in New Brunswick receive subsidy levels lower than the national average and lower than the average for all "have-not" provinces, for the Atlantic provinces and even for the four Western provinces.

In order to identify the major sources of subsidies, this paper separates the federal component from the provincial-local component. Total government subsidies are analyzed in Section II, the federal component is discussed in Section III and the provincial-local component is analyzed in Section IV. The final section contains some concluding comments.

II. TOTAL GOVERNMENT SUBSIDIES

Information on subsidies provided to businesses by federal, provincial and local governments is published by Statistics Canada. The most recent year for which published data are available is 1998. I analyzed the provincial distribution of these subsidies over the 1992-98 period in order to capture the effects of fiscal restraint.

Total subsidies provided by federal and provincial-local governments to businesses in New Brunswick are shown in Table II-1. During the 1992-98 period, New Brunswick businesses received on average \$171 million per year in total government subsidies. Over two-thirds of this amount was

provided by the federal government. There is a noticeable downward trend in the subsidies offered by governments, but the reduction is much larger at the provincial-local level. From 1992 to 1998 provincial-local subsidies fell by 53%, more than double the percentage reduction at the federal level.

Table II. 1 Government Subsidies to Business in New Brunswick: 1992-98, \$ Million

	1992	1993	1994	1995	1996	1997	1998	Average	% change
Federal	140	120	117	104	111	119	106	117	-24.3
Provincial and Local	83	58	53	55	49	42	41	54	-50.6
Total	223	178	170	159	160	161	147	171	-34.1
Prov-Local as % of Total	37.2	32.6	31.2	34.6	30.6	26.1	27.9	31.6	-25.0

Three indicators were used to compare New Brunswick with the rest of Canada. The first indicator is per capita subsidies and addresses the following question: if these subsidies to businesses were distributed to individuals on an equal per capita basis, how much would each person receive? The second indicator is the ratio of subsidies to output in the private sector, measured by Gross Domestic Product (GDP) net of government spending. This indicator addresses the following question: how much does the private sector receive in subsidies for each dollar of output produced? The third indicator is the simple average of the other two. The first two indicators represent polar cases which delineate the range of conclusions that may be reached with respect to inter-regional comparisons of government subsidies. The indicator of per capita values provides a more favorable comparison

for the less affluent provinces because it is not related to economic activity which is relatively more sluggish in those provinces. The indicator based on the relation of subsidies to private output provides a less favourable comparison for the above provinces for three reasons: (a) per capita output is lower in the less affluent provinces, (b) these provinces have a relatively larger government sector, and (c) this indicator includes the effects of oil and gas production and prices. The third indicator is a compromise between these two polar cases and tries to capture the fact that not all subsidies such as those given to Canada Post or provided as incentives for research - are directly related to the production of private goods and services. These three indicators were used to compare subsidies in New Brunswick to the average for Canada as a whole and to three selected sub-groups of provinces: (a) "have-not" provinces, (b) Atlantic provinces, and (c) the four Western provinces (a discussion of methodological issues is found in Ruggeri (2001).

The results are shown in Table II-2. Three time-frames will be used for the comparisons: (a) the average of the entire period, (b) the change from 1992 to 1998, and (c) 1998.

Table II-2. Selected Indicators of Total Subsidies to Business in New Brunswick, 1992-98

	1992	1993	1994	1995	1996	1997	1998	Average	% Change
				A. Per	Capita				
N.B.	297.9	237.5	226.4	211.5	212.5	213.5	195.1	228.0	-34.5
N.B. as % of Canada	68.5	65.7	68.4	71.0	72.4	68.1	53.1	66.8	-22.6
N.B. as % of "Have-Not" Provinces	51.0	49.3	48.4	50.4	52.9	52.8	37.6	48.9	-26.3
N.B. as % of Atlantic Prov.	97.0	84.8	83.0	81.7	85.0	75.8	78.7	83.7	-18.8
N.B. as % of Western Prov.	48.4	50.1	55.5	65.6	70.9	66.2	53.1	58.6	9.6
			B. As %	6 of Priva	ate Sector	r GDP			
N.B.	2.46	1.87	1.69	1.43	1.41	1.38	1.21	1.64	-49.2
N.B. as % of Canada	102.1	96.1	101.4	100.7	104.2	101.3	76.8	97.5	-24.8
As % of "Have-Not" Provinces	62.3	58.9	58.4	58.5	62.4	63.6	44.4	58.4	-28.6
N.B. as % of Atlantic Prov.	91.1	77.8	76.2	73.4	77.0	69.4	73.3	76.9	-17.3
N.B. as % of Western Prov.	75.7	79.8	90.3	100.8	111.6	106.8	80.2	92.2	5.9

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

N.B. as % Canada	85.4	80.9	84.9	85.9	88.3	84.7	65.0	82.2	-23.9
N.B. as % of "Have-Not" Provinces	56.6	54.1	53.4	54.4	57.7	58.2	41.0	53.6	-27.6
N.B. as % of Atlantic Prov.	94.0	81.3	79.6	77.6	81.0	72.6	76.0	80.3	-19.1
N.B. as % of Western Prof.	62.0	65.0	73.0	83.2	91.2	86.5	66.6	75.4	7.4

a. The Average of 1992-98

Table II-2 shows that, if the total subsidies were given to individuals on an equal per capita basis, each New Brunswick resident would have received \$228 per year on average during the 1992-98 period. This value is two-thirds of the national average, less than half the average of the "have-not" provinces, 16% less than the average of the Atlantic provinces and 41% lower than the average of the four Western provinces.

Over the 1992-98 period, total subsidies to businesses in New Brunswick amounted on average to 1.6 cents per dollar of output produced by the private sector. This value is slightly lower than the average for the country as a whole, less than sixty percent of the average for the "have-not" provinces, and 23% and 8% lower than the average for the Atlantic provinces and the Western provinces, respectively.

The summary indicator (the average of the of the two) shows that businesses in New Brunswick received below-average subsidies, whether the comparison is made with respect to the country as a whole, the "have-not" provinces, the Atlantic provinces or the four Western provinces.

b. Change from 1992 to 1998

All three indicators used in this paper show a strong downward trend in total subsidies received by businesses in New Brunswick. Per capita subsidies fell by 34% from 1992 to 1998, while subsides as percent of private GDP fell by nearly 50%. The drop in the average indicator during the same period was 24%. The percentage reduction in each indicator of subsidies in New Brunswick was higher than for the country as a whole, for the Atlantic region and for the "have-not" provinces. As a result, the ratio of each New Brunswick indicator to those three groups of provinces fell considerably. This ratio increased moderately only with respect to the Western provinces.

c. Subsidies in 1998

Because of the different rates of change in subsidies among the different provinces, the relative position of New Brunswick in 1998 is different from the average of the entire period. Under all three indicators, a comparison with the other four selected groups of provinces shows that New Brunswick businesses received relatively lower subsides in 1998 than during the entire period as a whole. What is striking in 1998 is how low business subsidies in New Brunswick are relative to the selected groups of provinces. On a per capita basis they range from 38% of the "have-not" provinces to 78% of the Atlantic provinces. As percent of GDP, they range from 44% of the "have-not" provinces to 80% of the Western provinces. Whether 1998 is a better indicator of future patterns than the average during 1992-98 depends on whether the current policies by both orders of government are maintained or are changed in response to improving fiscal positions.

III. FEDERAL SUBSIDIES

The indicators of federal subsidies are shown in table III-1.

a. The Average of 1992-98

On a per capita basis, federal subsidies to businesses in New Brunswick amounted to \$155 on the average over the entire period. This amount was 22% higher than the national average and 8% higher than the "have-not" provinces. It was moderately lower than the Atlantic provinces and the Western provinces. Federal subsidies in New Brunswick were equivalent to 1.1 cents per dollar of private sector output. This value was substantially higher than the national and the Western provinces, but lower than the "have-not" provinces and the Atlantic provinces. A similar pattern is noticeable when we use the average indicator.

b. Change from 1992 to 1998

The pattern of change of federal subsidies to New Brunswick businesses is similar to that of total subsidies and leads to similar comparative results. Under any of the three indicators, the relative level of federal subsidies to New Brunswick businesses fell with respect to the national average, the "have-not" provinces and the Atlantic provinces, but increased with respect to the Western provinces.

c. Subsidies in 1998

The comparisons based on 1998 data do not differ much from those based on the average over the entire period. On a per capita basis, federal subsides to businesses in New Brunswick were at the national average and lower than the "have-not" provinces, the Atlantic provinces and the Western provinces. As a percent of private sector GDP, and also for the average indicator, they were lower than the Atlantic provinces, but higher for the other groups of provinces.

One can conclude that the notion that New Brunswick businesses enjoy a relatively generous subsidy treatment has some factual foundation only when confined to the federal side.

Table III-1. Selected Indicators of Federal Subsidies to Business in New Brunswick, 1992-98

	1992	1993	1994	1995	1996	1997	1998	Average	% Change
				A. Per 0	Capita				
N.B.	187.0	160.1	155.8	138.3	147.3	157.8	140.7	155.0	-24.8
N.B. as % of Canada	115.7	128.2	131.6	124.2	134.5	118.4	100.9	121.9	-12.8
N.B. as % of "Have-Not" Provinces	101.0	103.5	105.9	104.2	124.3	117.5	98.6	107.8	-2.3
N.B. as % of Atlantic Prov.	92.5	89.9	92.2	85.2	93.3	79.5	86.9	88.5	-6.1
N.B. as % of Western Prov.	71.1	91.9	92.3	100.0	125.5	108.1	83.9	96.1	18.0
			B. As %	% of Priva	ite Sector	r GDP			
N.B.	1.55	1.26	1.17	.94	.98	1.02	.87	1.11	-43.8
N.B. as % of Canada	172.2	187.7	195.1	176.1	193.6	176.1	145.9	178.1	-15.2
As % of "Have-Not" Provinces	123.4	123.5	127.7	120.7	146.6	141.6	116.8	128.6	-5.4
N.B. as % of Atlantic Prov.	87.0	82.5	84.7	76.6	84.6	72.8	81.0	81.3	-6.9
N.B. as % of Western Prov.	111.3	146.5	149.7	153.6	197.1	174.3	126.8	151.3	14.0

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

N.B. as % Canada	144.0	158.0	163.4	150.2	164.1	147.2	123.4	150.0	-14.3
N.B. as % of "Have-Not" Provinces	112.2	113.5	116.8	112.4	135.4	129.6	107.0	118.2	-4.0
N.B. as % of Atlantic Prov.	89.8	86.2	86.2	88.4	80.9	76.2	84.0	84.9	-6.5
N.B. as % of Western Prof.	91.2	119.2	121.0	126.8	161.2	141.2	105.4	123.7	15.6

a. The Average of 1992-98

The data in this table show the opposite pattern to that of federal subsidies. Under all three indicators, provincial-local subsidies to businesses in New Brunswick were substantially below the national average and the average of selected provincial sub-grouping. They amounted to \$72 per capita and half a cent per dollar of private sector GDP. The summary indicator shows that, on average during the 1992-1998 period, provincial-local subsidies in New Brunswick were less than half the national average and the average of the Western provinces, a quarter of the average for the "have-not" provinces and less than three-quarters of the average for the Atlantic provinces. As was shown in Section II, for New Brunswick, the below-average level of provincial-local subsides more than offsets the above average level of federal subsides. The net result is a less generous subsidization of New Brunswick businesses than the national average or the average for the selected sub-groupings of provinces.

b. Change from 1992 to 1998

There was a dramatic reduction in provincial-local subsidies to businesses in New Brunswick during the 1992-98 period. These subsidies fell by 53% on a per capita basis and 48% as a percent of GDP.

This reduction was steeper than in any of the selected groups of provinces. As a result, under all three indicators, provincial-local subsidies to businesses in New Brunswick fell relative to the national average, and the average of the "have-not" provinces, the Atlantic provinces and the Western provinces.

c. Subsidies in 1998

The relatively low level of provincial-local subsides to businesses in New Brunswick is even more evident when the comparisons are based on 1998 data. In this year, according to the average indicator, the level of provincial-local subsidies in New Brunswick was less than two-thirds the average of the Atlantic provinces, a third of the Western provinces, 30% of the national average and one-sixth the average of the "have-not" provinces.

Table IV-1. Selected Indicators of Provincial-Local Subsidies to Business in New Brunswick, 1992-98

	1992	1993	1994	1995	1996	1997	1998	Average	% Change
				A. Per 0	Capita				
N.B.	110.9	77.4	70.6	73.2	65.1	55.7	51.8	72.1	-53.3
N.B. as % of Canada	40.6	32.7	33.2	39.2	35.4	31.5	22.7	35.6	-44.1
N.B. as % of "Have-Not" Provinces	27.8	23.7	22.0	25.6	23.0	20.6	13.8	22.3	-19.8
N.B. as % of Atlantic Prov.	105.5	76.0	67.9	75.9	70.8	66.9	60.8	75.6	-42.4
N.B. as % of Western Prov.	31.5	25.8	29.5	39.8	35.8	31.6	25.9	30.9	-1.9

B. As % of Private Sector GDP

N.B.	.83	.61	.53	.50	.43	.42	.32	.52	-37.3
N.B. as % of Canada	55.0	48.0	49.5	56.2	50.6	53.2	33.0	49.5	-40.0
As % of "Have-Not" Provinces	30.8	28.1	27.9	29.9	27.0	29.0	16.3	26.9	-47.1
N.B. as % of Atlantic Prov.	92.2	67.0	62.4	68.5	63.2	71.2	56.1	69.3	-39.2
N.B. as % of Western Prov.	44.6	41.2	48.2	61.7	55.8	59.2	39.0	48.2	-12.6
	C.	Average	e of Per (Capita an	d % of P	rivate Se	ctor GDP		
N.B. as % Canada	47.8	34.1	41.4	47.7	43.0	42.4	27.8	42.6	-41.8
N.B. as % of "Have-Not" Provinces	29.3	25.9	25.0	27.8	25.0	24.8	15.1	24.6	-48.5
N.B. as % of Atlantic Prov.	98.9	71.5	65.2	72.2	67.0	69.1	58.4	72.4	-41.0
N.B. as % of Western Prof.	38.1	33.5	38.9	50.8	45.8	45.4	32.5	39.6	-14.7

V. CONCLUSIONS

This paper analyzed the data on government subsidies to businesses in New Brunswick during the 1992-98 period. The results show that there is no factual foundation to the perception that businesses in New Brunswick receive above-average amounts of government subsidies. On the average over the 1992-98 period, government subsidies in New Brunswick were below the national average whether they were measured in per capita terms or as a percentage of private sector GDP. This

conclusion holds true when the comparison is made with respect to "have-not" provinces, Atlantic provinces or Western provinces. Moreover, during this period, subsidies to New Brunswick businesses fell at twice the rate of the national average. Therefore, the shortfall of subsidies to New Brunswick businesses relative to the national average and the selected sub-groupings was larger in 1998 than for the average of the entire 1992-98 period.

Subsidies do distort private decisions. Whether these distortions affect negatively the performance of the economy depends on a variety of factors and determining their economic implications requires a separate study. With respect to the size of the provincial distribution of subsidies the facts are quite clear: New Brunswick businesses are less subsidized than businesses in the rest of Canada.

REFERENCES

Ruggeri, G.C. (2001), "Government Subsidies to Business in Atlantic Canada: Debunking a Myth," Department of Economics, University of New Brunswick, mimeo.

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	_		Current	Capital	
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	<u>.</u>	D24193	D24166	D24167	

•		
•		