

Economic Growth in the Atlantic Region, 1880 to 1940

David Alexander

Volume 8, Number 1, Autumn 1978

URI: https://id.erudit.org/iderudit/acad8_1art03

[See table of contents](#)

Publisher(s)

The Department of History of the University of New Brunswick

ISSN

0044-5851 (print)

1712-7432 (digital)

[Explore this journal](#)

Cite this article

Alexander, D. (1978). Economic Growth in the Atlantic Region, 1880 to 1940. *Acadiensis*, 8(1), 47–76.

DAVID ALEXANDER

Economic Growth in the Atlantic Region, 1880 to 1940

It has been customary for historians to treat the Maritimes and Newfoundland as two regions rather than one. This reflects, very probably, nothing more credible than an academic inertia about widening horizons. While there were profound differences in the level of economic activity and in the rate of growth of the two economies before World War II, Caves and Holton rightly pointed out nearly two decades ago that they shared a common economic niche.¹

This essay has several purposes. The first is to encourage historians of the Atlantic region to make more efforts to bridge the Cabot Strait. This effort would add fresh perspectives on the troubles and successes of both the Maritimes and Newfoundland. It would also conform to modern political, economic and planning reality. A second purpose is to provide a systematic quantitative assessment of the growth of the Newfoundland economy from 1880 to 1940 in relation to the Maritimes. While work has been done on the Maritimes, little exists for Newfoundland for this period. This effort is only a beginning, but it does offer a new approach to the Island's economic record before Confederation. The final objective is controversial. In the Maritimes, even among some cautious academics, there is an 'underground hypothesis' that the provinces sacrificed their economic potential by entering the union with Canada in the 1860s and 1870s. By contrast, the sometimes unhappy history of Newfoundland is commonly attributed to its stubborn rejection of the 'Canadian wolf' until 1949. Given the economic and social similarities, it is unlikely that these two contradictory hypotheses can both be true. Therefore, does the comparative economic performance suggest that the date of entry into Confederation was a critical variable in the progress of either the Maritimes or Newfoundland?

The union of the British North American colonies provoked both fear and optimism in the Maritimes — fear that the provinces would be reduced to colonies of Upper Canada, and optimism that they would develop into the workshop of the new Dominion. That such opposite predictions existed is perhaps a sign of the critical turning point upon which the Maritimes was poised in the 1860s: that it became a dependency rather than a workshop, however, is not in itself proof that the doubters were prescient. The brief

1 R. E. Caves and R. H. Holton. *The Canadian Economy* (Cambridge, Mass., 1961), p. 145.

trade recession following Confederation, and the deeper recession of the 1880s and 1890s, were taken by opponents of the union as confirmation of their fears. But both were general to Canada and proved nothing. The great boom which swept Canada at the turn of the century, while only generating a mild flutter in the Maritime economy, could be taken as a more serious sign. But Maritime consciousness of economic stagnation and relative decline within the Dominion of Canada only assumed the stature of certainty and reality in the 1920s.² Since the Maritimes still commanded some weight in the country and the presence of sharp regional inequalities was something that still surprised and concerned Canadians as a whole, the interwar period was rich in official enquiries of royal stature. These enquiries were usually highly specific — fiscal problems and industry problems — which was a suggestion that the difficulties were not thought to be irrevocable. They began with Sir Andrew Duncan's enquiry into the coal industry in 1925, followed shortly by the more far-reaching enquiry into fiscal arrangements.³ Two years later distress in the fishing industry and the 'trawler question' generated a study by Hon. Justice MacLean.⁴ Duncan returned in 1932 with another study of the coal industry,⁵ and finally in 1934 the Province of Nova Scotia assembled a distinguished commission to undertake a wide-ranging enquiry into that province's economic troubles.⁶ A year later Sir Thomas White reviewed the earlier work of Duncan on Maritime claims.⁷

After 1935, however, the specific problems of the Maritime region were absorbed into the general problem of metropolitan Canada and 'the regions'. The great *Royal Commission on Dominion-Provincial Relations* began this tradition,⁸ although unlike its successor in the 1950s, the Gordon Commission,⁹ it at least published a background study on the Maritimes rather than simply a study of regionalism. It was left to Nova Scotia to undertake a major piece of postwar planning, under R. MacGregor Dawson.¹⁰ But apart from

2 See E. R. Forbes, "The Origins of the Maritime Rights Movement", *Acadiensis*, V (Autumn, 1975), pp. 55 - 61.

3 *Royal Commission Respecting the Coal Mines of Nova Scotia* (1926) and *Royal Commission on Maritime Claims* (1926).

4 *Royal Commission Investigating the Fisheries of the Maritime Provinces and the Magdalen Islands* (1928).

5 *Royal Commission Respecting the Coal Mines of Nova Scotia* (1932).

6 *Nova Scotia Royal Commission Provincial Economic Enquiry* (1934).

7 *Royal Commission on Financial Arrangements between the Dominion and the Maritime Provinces* (1935).

8 S. A. Saunders, *The Economic History of the Maritime Provinces* (Ottawa, 1939).

9 R. D. Howland, *Some Regional Aspects of Canada's Economic Development* (Ottawa, 1957).

10 *Royal Commission on Provincial Development and Rehabilitation* (1944).

another, almost inevitable study of postwar slump in the coal industry,¹¹ the nation eschewed further enquiries into the Maritimes of the formal magnificence of the interwar royal commissions. Since the problems had not disappeared, this might seem curious. It reflected, in part, the institutionalization of analysis within expanded provincial and federal civil services, where much more enquiry was undertaken in a continuous way rather than by the grand royal commission.¹² Moreover, the urgency of enquiry was muted by the growth of prosperity in the region, even if much of it was accounted for by unearned income. One also suspects that some of the urgency that was felt in the interwar years about the decline of the Maritimes was lost simply because the region had become an insignificant fraction of the nation, and its economic plight was accepted as lacking a solution.

Having ceased to be an important area of national concern,¹³ the burden of research fell upon the region itself. Perhaps this is as it should be, but in the 1950s the universities, while numerous, were mainly weak and it is only in recent years that any volume of work has emerged, frequently sponsored by government and private organizations.¹⁴ Historical analysis of the decline of the Maritimes is still not voluminous. The established interpretation began in the interwar period with Saunders, a product of the staples school of geographic determinism, who accepted Maritime decline as a function of the obsolescence of 'wind, wood and sail'.¹⁵ This was a narrow interpretation of the structure and dynamism of the nineteenth-century Maritime economy, and it has never been satisfactorily explained why the equally 'woody and windy' Scandinavians managed to pass, at great profit, into the vulgar world of oil-fired turbines.

This same geographic determinism accepted the inevitability of manufacturing and financial activity migrating to Upper Canada, and at the end of the Second War this resigned pessimism was given a scientific basis. B. S. Keirstead argued that the increasing size of firms at the turn of the century favoured growth in Ontario and Western Quebec, with its large population, excellent communications, and agglomerations of labour skills, capital and inter-industry linkages. The decline of the Maritimes, located on the fringe

11 *Royal Commission on Coal* (1946).

12 As, for example, in the recent study by the Economic Council of Canada, *Living Together: A Study of Regional Disparities* (Ottawa, 1977).

13 For example, it is unlikely the Department of Regional Economic Expansion would have been established in the absence of political and economic troubles in the Province of Quebec.

14 Dalhousie's Institute of Public Affairs was an early contributor to regional studies, and the establishment of APEC and later the Atlantic Development Board have contributed enormously to the production of regional studies.

15 Saunders, *Economic History*, *op cit*.

of the tariff protected Canadian market, was inevitable, as was the relocation of its financial institutions.¹⁶ Historians have recently suggested that the process was not as neutral as Keirstead's arguments imply. E. R. Forbes points to the loss of regional control over the rate structure of the Inter-colonial Railway in 1918 as the cancellation of a critical tool of regional development which had served the Maritimes well during the previous forty years.¹⁷ T. W. Acheson has shown that Maritime entrepreneurs were remarkably successful in the early decades of Confederation in shifting the economy from a North Atlantic to a continental focus, although ultimately the absence of a strong regional metropolis left the region's industries vulnerable to take-over, and weak in pressing regional interests in national policy.¹⁸ The most direct attack on the widely-held Keirstead explanation of Maritime underdevelopment, however, was Roy George's demonstration that there were no cost disadvantages to manufacturing in Nova Scotia for the Atlantic and Central Canadian market in the 1960s which could explain the concentration of manufacturing in Ontario and Quebec.¹⁹ Stagnation in the region, in other words, was not inevitable and it is not beyond correction.

The accepted interpretation of Newfoundland's economic development is radically different from that of the Maritimes, for no one has argued that Newfoundland became relatively poorer or less developed, and few have been so bold as to suggest that it had any assured prospects. The first thorough enquiry into the country's economic state and prospects came with the Amulree Commission in 1933, which recommended the country be closed down.²⁰ At the end of World War II, the volume of studies by MacKay was generally gloomy about the country's past and future,²¹ and a more powerful unpublished work by Mayo saw little prospect for Newfoundland either as a Province of Canada or as an independent country.²² For a long time such pessimism was submerged by the ebullience of the Province's first premier,

16 B. S. Kierstead, *The Theory of Economic Change* (Toronto, 1948), pp. 269 - 81.

17 E. R. Forbes, "Misguided Symmetry: The Destruction of Regional Transportation Policy for the Maritimes", David Jay Bercuson, ed., *Canada and the Burden of Unity* (Toronto, 1977), pp. 60 - 86.

18 T. W. Acheson, "The National Policy and the Industrialization of the Maritimes, 1880 - 1910", *Acadiensis*, I (Spring, 1971), pp. 3 - 28; and "The Maritimes and 'Empire Canada' ", Bercuson, *Burden of Unity*, pp. 87 - 114.

19 Roy George, *A Leader and a Laggard* (Toronto, 1970), pp. 102 - 5.

20 *Newfoundland Royal Commission* (1933).

21 R. A. MacKay, ed., *Newfoundland: Economic, Diplomatic and Strategic Studies* (Toronto, 1948).

22 H. B. Mayo, "Newfoundland and Canada: The Case for Union Examined" (unpublished D.Phil. thesis, Oxford University, 1948).

activity in the new resource frontier in Labrador, and the general prosperity which swept the Western World in the 1950s and 1960s. But underneath the new optimism was the serious problem of a huge, decaying fishing industry and its dependent rural population. When this issue re-emerged in the mid-1960s a bitter and still unresolved debate ensued between those who recommended a planned reduction of the Island's population,²³ and those who fought for a revitalized rural fishing economy.²⁴ While the relatively late development of the province's university has meant that historical work on Newfoundland's economic development is only in its infancy, what exists has not confirmed the argument that the Province was or is hopelessly unproductive.²⁵ Indeed, the economist Gordon Goundrey has noted that the proportion of Gross Provincial Product arising in the goods producing sectors in Newfoundland exceeds that for Canada as a whole.²⁶

Although identification of the turning point is still uncertain, it is agreed that by 1940 the Maritimes' economy had declined in size relative to Canada. But what was its position compared with Newfoundland? Population and labour force growth is a crude and sometimes misleading index of economic expansion, but a useful beginning to analysis. From the mid-nineteenth to the mid-twentieth century population growth was highest in the territories of overseas settlement, such as Australia, the United States and Canada, all of which recorded rates of growth of over 19% per decade.²⁷ Between 1871 and 1941 the Canadian rate of growth was 1.64% per annum. In the Maritimes it was only 0.55% compared with 1.0% in Newfoundland between 1869 and 1935. The Maritimes' share of the national population fell by 50%, compared with

23 P. Copes, *The Resettlement of Fishing Communities in Newfoundland* (Ottawa, Canadian Council on Rural Development, 1972).

24 This has largely been the creation of Memorial University's Institute for Social and Economic Research. Among many publications are Cato Wadel, *Marginal Adaptations and Modernization in Newfoundland* (St. John's, 1969); Ottar Brox, *Newfoundland Fishermen in the Age of Industry* (St. John's, 1972); Nelvin Farstad, *Fisheries Development in Newfoundland* (Oslo and Bergen, 1972); and David Alexander, "The Political Economy of Fishing in Newfoundland", *Journal of Canadian Studies* (February, 1976), pp. 32 - 40.

25 See Peter Neary, *The Political Economy of Newfoundland* (Toronto, 1973), and David Alexander, "Development and Dependence in Newfoundland", *Acadiensis*, IV (Autumn, 1974), pp. 3 - 31; "Newfoundland's Traditional Economy and Development to 1934", *Acadiensis*, V (Spring, 1976), pp. 56 - 78; "The Decline of the Saltfish Trade and Newfoundland's Integration into the North American Economy", Canadian Historical Association, *Historical Papers*, 1976, pp. 229 - 48; and *The Decay of Trade* (St. John's, 1977).

26 "The Newfoundland Economy: A Modest Proposal", *Canadian Forum* (March, 1974), p. 18.

27 Simon Kuznets, *Modern Economic Growth* (New Haven, 1966), Table 2:5.

25% in Ontario and 9% in Quebec.²⁸ In the United States, where a comparable westward shift took place, there was not an equivalent imbalance of regional population growth. Between 1860 and 1950, the North East share of population declined by 22% and the South by only 12%.²⁹ The labour force in the Maritimes also fell during this period, from 18% of the Canadian in 1891 to 9% in 1941. Between 1891 and 1911 the Maritime labour force grew by only 0.3% compared with a rate five times greater in Ontario and Quebec, and in 1911 - 41 the absolute and relative performance was no better. In international perspective the Maritimes was also a poor performer; between 1913 and 1938 small countries like Denmark, the Netherlands, Norway and Sweden increased the size of their labour force by 27 to 49% compared with less than 14% in the Maritimes, which ranked with larger, troubled countries like Belgium (4%), Italy (9%) and France (-11%).³⁰ In Newfoundland, however, the labour force actually grew faster between 1891 and 1911 (1.9% per annum) than in Ontario and Quebec, and in 1911 - 1941 at a rate close to that of Ontario.³¹

Although Newfoundland's population and labour force grew substantially faster than in the Maritimes, this is not unequivocal evidence of a more satisfactory economic performance. The utilisation of the labour force on the Island is almost impossible to measure, and there were also more formidable barriers to emigration. The faster growth might indicate nothing more than an increasingly impoverished population, both absolutely and relatively. If this were so, it should be revealed in the structural stagnation of the labour force.

In 1901, as Table I reveals, the distribution of labour force in the Maritimes was much more concentrated in agriculture and fisheries than was the case in Quebec and Ontario, with relative under-representation concentrated more in the industry than the services sector. Between 1901 and 1941 the re-allocation of labour from primary industries proceeded rapidly in Ontario but at about the same rate in the Maritimes and Quebec. Quebec had the most 'modern' distribution in 1901, but this mantle had passed to Ontario by

28 Calculations from M. C. Urquhart and K. A. H. Buckley, *Historical Statistics of Canada*, Series A2 - 14; and Government of Newfoundland, *Historical Statistics of Newfoundland*, Table A1. For migration patterns in the Maritimes, see Alan A. Brookes, "Out-Migration from the Maritime Provinces, 1860 - 1900: Some Preliminary Considerations", *Acadiensis*, V (Spring, 1976), pp. 26 - 55.

29 Calculated from Peter B. Kenen, "A Statistical Survey of Basic Trends", Seymour E. Harris, ed., *American Economic History* (New York, 1961), Table 2, p. 68.

30 See Angus Maddison, *Economic Growth in the West* (London and New York, 1964), Table D-2, p. 213.

31 All calculations from the 1891 and 1941 *Census of Canada*, and the 1935 and 1945 *Census of Newfoundland and Labrador*.

1941. The most dramatic labour force shifts, however, occurred in Newfoundland. While labour force allocation to the industrial sector in 1901 was not massively below that of the two large Maritime Provinces, service sector employment was strikingly under-represented. Between 1901 and 1945 there was a major shift of labour out of primary activities, a growth in industry employment equivalent to that on the Mainland, and a massive gain in service employment. This latter phenomenon reflected the expansion of the transport

TABLE 1: LABOUR FORCE DISTRIBUTION

	Primary			Industry			Services		
	1901 %	1941 %	Change %	1901 %	1941 %	Change %	1901 %	1941 %	Change %
Canada	42	27	-15	31	32	1	27	41	14
Maritimes	47	31	-16	28	31	3	25	38	13
N.S.	44	25	-19	30	35	5	26	40	14
N.B.	47	31	-16	29	31	2	24	38	14
P.E.I.	67	59	- 8	15	12	-3	18	29	11
Nfld.	65	33	-32	26	30	4	9	37	28
Ont.	41	19	-22	32	37	5	27	44	17
Que.	39	22	-17	34	37	3	27	41	14

Note: 'Industry' includes logging, mining, manufacturing, construction and unspecified labourers. 'Services' includes all professional and personal service employment, trade, finance, clerical, public service, transport and communications. 'Primary' therefore includes only agriculture, fishing and trapping. The terminal date for Newfoundland is 1945. For 1901 in Newfoundland, 10% of those enumerated as 'otherwise employed' are assumed to be in transport and communications (the 1935 share) and are allocated to services. All calculations omit those without stated occupations.

Source: *Census of Canada, 1941; Tenth Census of Newfoundland and Labrador, 1935; and Dominion Bureau of Statistics, Province of Newfoundland: Statistical Background* (Ottawa, 1949), Table 81.

TABLE 2: LABOUR FORCE LOCATION QUOTIENTS

	MARITIMES		NEWFOUNDLAND	
	1911	1941	1911	1945
Agriculture	0:97	1:30	{ 16:40	13:90]
Fishing	10:17	2:26		
Logging	1:50	2:14	2:17	2:89
Mining	2:66	2:58	1:32	1:07
Manufacturing	0:66	0:52	0:50	0:33
Construction	0:80	0:93	—	1:03
Transport	1:03	1:13	—	0:99
Trade and Finance	0:78	0:86	0:20	0:80
Professional	0:96	1:19	1:03	1:36
Clerical	0:75	0:62	1:40	0:54

Note: The location quotient is:

$$LQ = \frac{S_i/S}{R_i/R} \quad \text{where, } S_i = \text{number in industry 'i' in the region}$$

$$S = \text{number in industry 'i' in the 'nation'}$$

$$R_i = \text{number in regional labour force}$$

$$R = \text{number in 'national' labour force.}$$

The 'nation' includes Newfoundland, the Maritimes, Quebec and Ontario.

Source: *Census of Canada, 1941: Census of Newfoundland and Labrador, 1935 and 1945.*

and communications system on the Island, as well as the rapid development (from a rather backward starting point) of modern educational, health and public service facilities.

A three sector analysis of labour force distribution is, of course, a blunt instrument of analysis. Table 2 calculates labour force location quotients for a more detailed breakdown, wherein a value in excess of 1:00 indicates a specialization greater than would be expected given the region's share of the total labour force.³² In this case the regions are the Maritimes and Newfoundland while the 'nation' includes these and Central Canada.³³ In 1911 the Maritimes had a roughly balanced share of employment in agriculture, transportation and professional services. Not surprisingly, it had a disproportionately large share of fishing employment and a less dramatically large share of logging and mining employment. On the other hand, it was under-represented in manufacturing employment and in construction, which may be taken as an index of fixed capital investment, and trade and financial activity, which may be an index of entrepreneurial activity. Between 1911 and 1941 the disproportionate concentration in fishing was modified, but otherwise the heavy specialization in primary activities solidified, and the manufacturing ratio deteriorated. The disproportionate share of professional employment reflects the large educational and health establishment relative to the labour force which remained in the region, and perhaps the tendency for the region's middle class to concentrate in socially prestigious professions when entrepreneurial opportunities were poor. In Newfoundland, the fragility of the 1911 census invites caution in intertemporal comparison, although the data does suggest an equivalent structural development to the Maritimes. By the 1940s both sub-regions of the 'nation' were well established as producers and transporters of primary products, and dependent upon the central sub-region for finished goods and entrepreneurial and associated labour force activity.

Since population and labour force data are inconclusive indices of relative economic growth, it is essential to compare output data. The difficulty here is that no compatible set of output statistics exists. For the Maritimes, the most satisfactory are Alan Green's Gross Value Added (GVA) series for 1890, 1910, 1929 and 1956. No comparable series exists for Newfoundland, and the prospects for creating one are doubtful. The only recent estimate of output is a limited three sector Gross Value of Production (GVP) series pre-

32 For a discussion of the location quotient, see W. Isard, *Methods of Regional Analysis* (Cambridge, Mass., 1960), pp. 123 - 6.

33 The West has been excluded because its growth from the turn of the century distorts trends in the older settled regions, which must be the reference point for analysis of Atlantic development.

TABLE 3: GROSS VALUE OF PRODUCTION: NEWFOUNDLAND

(\$000 1935 - 39)

	Agri.	Forest.	Mining	Fish	Manuf.	Total	Per Capita
1884	1,245	214	761	9,456	2,520	14,196	72
1891	1,693	447	935	9,220	2,175	14,470	72
1901	3,383	755	1,513	12,242	3,311	21,204	96
1911	5,368	1,396	1,931	13,119	3,982	25,796	106
1921	6,116	3,386	446	7,846	4,320	22,114	84
1929	6,318	14,581	3,003	12,867	6,711	43,480	156
1939	7,980	14,928	8,903	6,869	9,596	48,276	160

NOTE: Agricultural output 1891 - 1921 derived from Department of Overseas Trade, *Industries and Resources of Newfoundland for 1925* (HMSO, 1926), p. 14. These estimates include the value of the animal stock, which in 1921 was about 40% of the value of field crops and animal products. Census returns indicate the ratio of animals to field crop production was relatively constant, and hence the Department of Trade estimates for 1891 - 1921 have been deflated accordingly. Output in 1884 is estimated by the value of output in 1891 weighted by the relative physical productivity of field crops in the two years. For 1929 the estimate is the 1935 field crop output plus the 1921 animal products ratio. For 1939 as given in Newfoundland Industrial Development Board, *Industrial Survey*, vol. 1, p. 92.

—All other sector estimates derived from the Newfoundland Customs Returns, *Journals of the House of Assembly*, and *Census of Newfoundland and Labrador*, 1884, 1891, 1901, 1911, 1921 and 1935; and for 1939 as estimated in Industrial Development Board, *Industrial Survey*, vol. 1, p. 92. The forestry sector includes only lumbering and pulp and paper. The manufacturing sector is net of pulp and paper. The fishing sector includes an estimate for domestic consumption.

—All estimates deflated by the General Wholesale Price Index for Canada in M. C. Urquhart & K. A. H. Buckley, *Historical Statistics of Canada*, Series J34, and for mining J35.

pared by the Royal Commission on the Economic State and Prospects of Newfoundland and Labrador, for various years between 1891 and 1948.³⁴ Therefore, in order to compare Newfoundland and Maritimes development it is necessary to create a new set of indices. Tables 3 to 5 provide a GVP series in five goods producing sectors for Newfoundland, the Maritimes and Canada, using published Dominion Bureau of Statistics estimates for the Mainland, and a wider variety of sources for the Island.³⁵ Tables 6 and 7 attempt to compare real output growth rates and sectoral contributions to real output growth for the three economies.

There are a number of limitations surrounding the use of these data. It proved impossible to create long term estimates of output in construction, electric power, transportation and the service industries. The assumption, nonetheless, is that this more limited series will serve as a proxy of the comparative rate of growth of the three economies, and that there is no serious distortion of the progress of one against the others.³⁶ Secondly, since the estimates are of GVP rather than GVA, the absolute values must be used with caution as indicators of comparative productivity and well-being.³⁷ Thirdly, the series have been deflated by the General Wholesale Price Index to estimate the value of real output growth. While the use of sectoral deflators would more accurately estimate real GVP in Canada and the Maritimes, whether this would also be true for Newfoundland is less certain. It is true that the Island's growing dependence on Canada and the competitive nature of much of its output, suggests that Canadian sectoral deflators would be appropriate. But on crude data, a crude deflator seemed less risky than a finer one. Finally, the early 1880s was chosen as the initial date because of data limitations before that decade. The terminal year of 1939 was adopted because the War had powerful stimulative effects on both Newfoundland and the Maritimes which inflates the historic growth performance prior to Newfoundland's entry into Confederation. For any of the economies it may be argued that some other date would be more appropriate than the one chosen. This objection is insurmountable unless one has annual estimates of output, or some other index of trade cycle behaviour. In their absence, and

34 Alan G. Green, *Regional Aspects of Canada's Economic Growth* (Toronto, 1971), Appendix B; Newfoundland, *Report of the Royal Commission on the Economic State and Prospect of Newfoundland and Labrador* (St. John's, 1967), Table 3. GVP is the value of shipments, while GVA is this less the value of inputs.

35 Where possible, all Newfoundland estimates were double checked against other sources.

36 In the case of the service sector, the labour force analysis gives some support for these assumptions.

37 In the case of the Maritimes and Newfoundland, however, the broad similarities of industrial mix and the state of technology in most sectors should not lead to serious distortions.

TABLE 4: GROSS VALUE OF PRODUCTION: MARITIMES

(\$000 1935 - 39)

	Agric.	Forest.	Mining	Fish	Manuf.	Total	Per Capita
1880	41,956	13,297	3,115	14,918	42,626	115,912	133
1890	40,222	16,194	6,112	15,465	71,978	149,971	170
1900	58,763	17,199	14,424	20,253	56,414	167,053	187
1910	71,447	26,619	18,683	19,627	85,915	222,291	237
1920	81,283	22,317	18,235	9,183	105,642	236,660	237
1929	87,726	21,160	26,301	14,976	108,354	258,517	259
1939	77,241	30,164	31,198	14,935	124,120	277,658	252

NOTE: Agricultural output 1900-1939 from *Canada Year Book*, 1914, Table 9; 1924, pp. 203 - 4; 1934 - 35, pp. 254 - 5; 1941, pp. 152 - 3. For 1880 and 1890, O. J. Firestone, *Canada's Economic Development* (London, 1958), Table 69, p. 193, estimate of Canadian agricultural gross value of production. For Maritimes' share, Maritimes share of occupied farms in Canada weighted by the relative productivity in 1900 as estimated from *Canada Year Book*, 1914, Table 9.

—Forestry sector includes lumber and pulp and paper, from Canada, *The Maritime Provinces Since Confederation* (Ottawa, 1927), pp. 60 - 61; and Canada, *The Maritime Provinces in their Relation to the National Economy of Canada* (Ottawa, 1948), pp. 68 - 9, and 73.

—Mining from *Maritime Provinces in Relation*, *op. cit.*, Table 30, pp. 85 - 8.

—Fisheries is marketed value from *Maritime Provinces in Relation*, Table 13, p. 58.

—Manufacturing is net of lumber and pulp and paper as calculated from *Maritime Provinces in Relation*, *op. cit.*, Table 36, pp. 98 - 100.

—All estimates deflated by the General Wholesale Price Index for Canada in M. C. Urquhart & K. A. H. Buckley, *Historical Statistics of Canada*, Series J34, and for mining J35.

given the close relationship among the three economies, the decision was made to measure at common dates. The value of any decennial comparison is doubtful; but the approach should not seriously compromise conclusions drawn from growth rate calculations of over sixty years, or even for sub-periods of thirty years.

What were the sectoral and aggregate growth patterns in these three economies? It is logical to begin with agricultural production, where Newfoundland has always faced a comparative weakness. In 1880 agricultural output represented 44% of goods production (excluding construction) in Canada, 36% in the Maritimes and only 9% in Newfoundland.³⁸ By 1939 the relative contribution of agriculture to output had declined by 48% in Canada but only 22% in the Maritimes. In Newfoundland, however, the government launched a major initiative at the turn of the century to stimulate food production and, despite the climate and soil conditions, output expanded under the watchful eyes of a myriad of local agricultural societies and a newly established Department of Agriculture from 9% of goods production in 1884 to 21% in 1910. In subsequent decades the relative share fell as other sectors of the economy expanded rapidly, but in 1939 agricultural output still accounted for a respectable 17% of goods production.

From the 1880s into the interwar period, the number of people employed in the farm sector of the Maritimes declined, from 140,000 in 1880 to 96,000 in 1941, or from 18% of the population to 8%. In Newfoundland the full-time agriculturalist was a rarity, but the absolute number of full-time farmers rose from 1500 in 1891 to 4200 by 1935. While this represented only 1.5% of the population, the bulk of the country's 35,000 fishermen were also subsistence farmers. In Canada, employment in agriculture rose from 662,000 in 1881 (15% of population) to over one million by 1921, after which it stabilized to 1941, representing 9% of the population. Thus, over the period the relative commitment of population to agriculture was about the same in the Maritimes as in Canada, but the numbers shrank in the former while they rose in the latter into the interwar period.

The number of occupied farms in the Maritimes rose from 78,000 to 113,000 in 1891, after which the number declined steadily. In Canada, because of Western settlement, farm numbers increased until 1931, but not in the Central Provinces for neither Quebec nor Ontario had significantly more farms at the end of the interwar period than they had after Confederation. Yet, while the trends were the same in the Maritimes and in Central Canada, the decline in occupied farms in the Maritimes between 1891 and 1941 was 45% compared with only 17% in Ontario and 12% in Quebec. Nor

38 Henceforth, the qualification "excluding construction" will not be made.

TABLE 5: GROSS VALUE OF PRODUCTION: CANADA

(\$000 1935 - 39)

	Agri.	Forest.	Mining	Fish	Manuf.	Total	Per Capita
1880	369,080	45,960	14,125	20,195	385,345	385,345	192
1890	456,035	76,900	26,290	26,400	623,205	1,208,830	250
1900	647,435	88,225	97,805	34,550	682,700	1,550,715	289
1910	924,840	101,565	123,150	28,170	1,383,760	2,561,485	355
1920	739,175	218,300	103,230	24,235	1,605,790	2,690,730	306
1929	1,309,055	313,780	220,385	38,365	2,802,960	4,684,545	467
1939	1,182,770	311,400	441,210	40,480	3,198,485	5,174,345	459

NOTE: For the forestry sector, sawmilling, pulp and paper production estimated as 60% of 'Wood Products' in Firestone, *Canada's Economic Development*, Table 78, p. 213. For 1900 and 1910 *Canada Year Book*, 1924, pp. 293 - 4 and 296. For 1920 - 39, Canada, *The Maritime Provinces in their Relation to the National Economy of Canada*, Tables 20 and 24, pp. 69, 74.

—Agricultural output 1880 - 1920 as in Firestone, *op.cit.*, Table 69, p. 193. For 1929 and 1939 farm output as in *Canada Year Book*, 1934 - 35, pp. 254 - 5; and 1941, pp. 152 - 3.

—Mining for 1880 - 90 as in *Canada Year Book*, 1941, pp. xiv - xvi plus coal. For 1900 - 39 all metallic and non-metallic production (excluding cement) as in M. C. Urquhart & K. A. H. Buckley, *Historical Statistics of Canada*, Series N1-26 and N89-119 and N170.

—Manufacturing is net of lumber and pulp and paper, as derived from *Maritime Provinces in their Relation*, *op.cit.*, Table 36, p. 100.

—Fisheries as in *Maritime Provinces in their Relation*, *op.cit.*, Table 13, p. 58.

—All estimates deflated by the General Wholesale Price Index for Canada in *Historical Statistics*, Series J34, and for mining J35.

was this relatively greater loss of farms in the Maritimes compensated by growth in average farm size. Improved acreage per farm was 36 acres in 1871 compared with 48 acres in Quebec and 51 acres in Ontario. By 1941 there was no significant change in the acreage of the average Maritime farm, but the Quebec farm was by then two-thirds larger and the Ontario farm was twice as large.³⁹ Compared with Western Europe, the average Maritime farm was not especially small, for in England in the 1930s improved acreage per farm was 51 acres, in Denmark 39, Germany and France 21, and in Sweden 18 acres.⁴⁰ But European farmers in this period were not very prosperous, and compared with the Maritime farmer they had access to large urban markets and better opportunities for exploiting possibilities of 'high farming'.

Newfoundland farm output grew by over six times, although from an insignificant base of \$1.2 million in 1884 to only \$8.0 million in 1939. The fastest rate of growth was secured in the 1884 - 1911 period at 5.6% per annum, and this accounted for some 35% of the real growth in output for the economy. Very clearly, there were important dividends gained from the agricultural programme introduced during these years, as well as from the opening of the west coast of the Island and improved transport links to the urban markets. In the 1911 - 1939 period, however, the growth rate fell back to 1.4% per annum, which reflected both the strong relative growth of other sectors of the economy and the real limits to output imposed by natural conditions and the small urban market.

The Maritime output of \$42 million in 1880 and \$77 million in 1939 was obviously huge compared with Newfoundland; but the growth performance of the sector was relatively weak. In 1880 - 1910 output grew at 1.8% per annum and in 1910 - 1939 at only 0.3%, compared with 3.1% and 0.9% for Canada. In the period when the West was opened, it is understandable that Canadian growth should be higher than in a long-established region like the Maritimes. And while a growth rate of only 0.3% in 1911 - 1939 might appear dismal, it was no worse than the performance of Quebec and Ontario combined.⁴¹ Moreover, through rural depopulation in the 1920s, Maritime farm efficiency drew very close to that of Quebec/Ontario. In 1910 real output per acre in the Maritimes was about \$21 compared with \$28 in Quebec/Ontario; by 1939 this had narrowed to \$24 compared with \$26.⁴² The difference in the two

39 Calculated from, Canada, *The Maritime Provinces in their Relation to the National Economy of Canada* (Ottawa, 1948), Table 3, pp. 44 - 5.

40 W. S. and E. S. Woytinsky, *World Population and Resources* (New York, 1953), Table 209, pp. 44 - 5.

41 The comparable Quebec/Ontario rate calculated from deflated values in *Canada Year Book*, 1914, Table 9: 1924, pp. 203 - 4; 1934 - 35, pp. 254 - 5; and 1941, pp. 152 - 3.

42 Cash farm sales in the Maritimes were substantially lower than in Quebec/Ontario, but this reflects relative marketization and not the well-being of the population.

TABLE 6: REAL OUTPUT GROWTH RATES
(% per annum)

	Agri.	Forest.	Mining	Fish	Manuf.	Total	Per Capita
NFLD.							
1884-1911	5.6	7.2	3.5	1.2	1.7	2.2	1.4
1911-1939	1.4	8.9	5.7	-2.3	3.2	2.3	1.5
1884-1939	3.4	8.0	4.5	-0.6	2.4	2.2	1.4
MARITIMES							
1880-1910	1.8	2.3	6.1	0.9	2.3	2.2	1.9
1910-1939	0.3	0.4	1.8	-0.9	1.3	0.8	0.2
1880-1939	1.0	1.4	4.0	0.0	1.8	1.5	1.1
CANADA							
1880-1910	3.1	2.7	7.4	1.1	4.3	3.8	2.0
1910-1939	0.8	3.9	4.4	1.2	2.9	2.4	0.9
1880-1939	2.0	3.3	6.0	1.2	3.7	3.2	1.5

NOTE: Calculated from Tables 3 to 5. All calculated rates are compound rates per annum and not fitted trends.

TABLE 7: SECTORAL CONTRIBUTIONS TO REAL OUTPUT GROWTH
%

	Agri.	Forest.	Mining	Fish	Manuf.
NFLD.					
1884-1911	35.5	10.2	10.1	31.6	12.6
1911-1939	11.6	60.2	31.0	-27.8	25.0
1911-1939 (exld fish)	9.1	47.1	24.3	—	19.5
MARITIMES					
1880-1910	27.7	12.5	14.6	4.4	40.7
1910-1939	10.5	6.4	22.6	-8.5	69.0
1910-1939 (exld fish)	9.6	5.9	20.8	—	63.6
CANADA					
1880-1910	32.2	3.2	6.3	0.5	57.8
1910-1939	9.9	8.0	12.2	0.5	69.5

NOTE: Calculated from Tables 3 to 5.

farming regions came from the larger average farm size up the St. Lawrence, for in 1939 output per farm was \$1.726 in Quebec/Ontario and \$1.465 in the Maritimes. But if a comparison is made with Ontario alone, the disparities widen. For example, the value of output per head of population in 1939 was \$68 in the Maritimes, \$62 in Quebec and \$100 in Ontario. Nonetheless, Maritime farming was not a notably deficient sector of the economy, since it grew at a rate comparable to Quebec/Ontario (although not Ontario alone, with its urban market advantages) and the contribution of the sector to the growth of total output was comparable to that for the Canadian economy. If one is searching for explanations of Maritime economic problems in the period, enquiry into the farm sector will not yield large dividends. In Newfoundland's case, there were greater opportunities for gains in output and productivity given the very low initial base. Clearly, some of these gains were being harvested, since output expanded throughout the period at a higher rate than in either the Maritimes or Canada.

Rather than the agricultural sector, difficulties in the forest industry are more obviously important in explaining sluggish growth in the Maritimes. Towards the end of the century the Maritime lumber industry entered a long period of depression as a result of demand shifts and supply competition. While pulp mills were established in the region in the 1890s, it was not until the late 1920s that newsprint mills were built. In 1911 pulp production represented only 7% of lumber output, rising to 55% by 1926. In the 1930s expanding pulp and paper output overtook the badly depressed lumber sector.

The lumber industry in the Maritimes contracted sharply in the interwar period under the impact of less competitive wood supplies and trade protectionism, and the recovery which emerged in the second half of the 1930s was weaker than in Canada as a whole. In the 1920s the real capital/labour ratio was comparable to the national level,⁴³ but the output/labour ratio was 20% to 30% lower.⁴⁴ In the 1930s the position of both ratios moved sharply against the Maritimes relative to Canada. The efficiency of capital employment (as measured by the output/capital ratio) was also substantially lower in the Maritimes in the 1920s, although it improved in the 1930s. The pulp and paper industry compensated for some of the problems in the lumber sector, but here too output growth was slower than in Canada, as the mills were generally smaller and less efficient.⁴⁵ These troubles were reflected in the comparative

43 In 1926 it was \$3,618 in the Maritimes and \$3,833 for Canada. Calculated from *Maritime Provinces in Relation*, Table 20, pp. 68 - 9.

44 In 1926 it was \$2,337 in the Maritimes and \$2,958 for Canada, *loc. cit.*

45 The Maritime capital/labour ratio in pulp and paper in the 1920s was about 20% lower, as was output per worker. In the 1930s, however, with the spread of newsprint mills the Maritime ratios converged with the Canadian.

growth rates. Over the period 1880 - 1939 real output expanded at 1.4% compared with 3.3% for Canada. In the sub-period 1880 - 1910 the relative performance was more satisfactory (2.3% and 2.7%) and it was really in the 1910 - 1939 period that the Maritimes' industry stood virtually still compared with Canada (0.4% and 3.9%). Accordingly, while the forest sector accounted for some 6% of total output growth in the Maritimes, it contributed some 8% to the faster growing Canadian economy.

Newfoundland had not possessed the kind of forest resources which had allowed the Maritimes to develop a large lumbering industry at an early stage in its history. In 1873 the country imported over \$76,000 of lumber and other forest products against exports of only \$7,100.⁴⁶ Expansion was rapid in subsequent years, however, and by 1901 (before the establishment of pulp and paper) the lumbering labour force had grown from 450 to 1,400, and by 1911 Newfoundland earned a surplus on non-pulp and paper trade of \$63,500.⁴⁷ Depressed markets for lumber in the interwar period, however, meant that the mills were forced back into dependence upon domestic consumption. Most of these mills were small, two-man and part-time operations; while there were a handful of large mills each employing several hundred, the 534 licensed mills in 1929 only produced some \$400,000 of lumber, compared with \$15.5 million in the 650 Maritime mills.⁴⁸ In 1938 lumber output was still only \$450,000 and at the end of the interwar period net imports of lumber were about 20% of the value of domestic output.⁴⁹

The transformation of Newfoundland's forest industry came with the establishment of pulp and paper capacity. The big newsprint mill opened at Grand Falls in 1910 produced \$1.2 million of products compared with \$1.5 million in the twelve Maritime pulp mills; and with the addition of the Corner Brook mill in 1925 Newfoundland's output equalled that of the Maritimes. In 1938 the two Newfoundland mills employed only 70% of the employees, but paid-out in wages and salaries 90% of the compensation paid in Maritime mills. The average Newfoundland wage was 27% higher than in the Maritimes and 21% higher than in Canada,⁵⁰ and this high wage characteristic has persisted to the present.⁵¹ It was for no idle reason that a good job in Newfoundland

46 Customs Returns, *Journal of the House of Assembly*, 1873.

47 *Ibid.*, 1912.

48 Department of Overseas Trade, *Economic Conditions in Newfoundland* (London, HMSO, 1931), p. 28; and *Maritime Provinces in their Relation*, Table 20, pp. 68 - 9.

49 Newfoundland Industrial Development Board, *Industrial Survey* (St. John's, 1949), vol. II, pp. 34 - 5.

50 Calculated from *Industrial Survey*, vol. II, p. 37; and *Maritime Provinces in their Relation*, Table 24, pp. 74 - 5.

51 Economic Council, *Living Together*, p. 43.

was known as a 'Grand Falls job'.

The expansion of output for the domestic lumber market, the large packaging industry for the fishery, and the spectacular growth of pulp and newsprint in the twentieth century, were reflected in the industry growth rate for Newfoundland. Beginning from a low base, the sector grew at a rate of 7.6% per annum to 1901 (prior to the first newsprint mill) and by 8.9% in the 1911 - 1939 period. The sector accounted for nearly half of non-fisheries goods production growth in the period, and nearly a third of the value of measured goods production by 1939. Even though the industry was foreign owned and purchased substantial inputs from outside Newfoundland, in 1935 wages paid in logging and paper manufacturing probably accounted for up to 25% of earnings in the economy.⁵² In 1880 forest products accounted for only 1.5% of goods production in Newfoundland compared to 5.5% in Canada and 11% in the Maritimes. In subsequent decades, the relative importance of the sector in the Maritimes was unchanged, while it rose modestly to 6.0% in Canada, and rose enormously in Newfoundland to 5.4% in 1910 and 31.0% in 1939. The sector offered a major net addition to output in Newfoundland, whereas in the Maritimes pulp and paper mainly offset the decline of the lumber industry.

The mining industry, because of its instability and harsh working conditions, has had a greater social and economic impact on the Atlantic region than is reflected in its contribution to output. In 1880 mining contributed 5% of goods production in Newfoundland, 3% in the Maritimes and 2% in Canada; by 1939 these shares had risen to 18%, 11% and 9% respectively. Nova Scotia dominated mining in the Maritimes with gold, gypsum and coal. It was the latter, of course, which gave Nova Scotia its prominence, and coal production was never less than 80% of total mineral output. In the 1880s and 1890s Maritime mineral output was close to 25% of the Canadian total, but with expansion in Northern Quebec and Ontario, Alberta and British Columbia, this share fell to 15% in 1900 - 1910 and to 7% by 1941. It is less well known that Newfoundland was an important mineral producer by the last quarter of the nineteenth century. The Notre Dame Bay copper mines, opened in 1864 and operated until 1917, made the country the fourteenth largest copper producer in the world.⁵³ This was followed by the opening of the Bell Island iron mines in 1895, which quickly came to account for some two-thirds of mineral exports. This had fallen to around 40% by the end of the 1930s, reflecting both uncer-

52 An estimate derived from wages paid in 1938, as given in *Industrial Survey*, vol. II, pp. 32 - 6, and total earnings for 1935 as given in *Tenth Census of Newfoundland and Labrador*, 1935, vol. II, part 1, sec. II, p. 85.

53 Michael J. Prince, *Provincial Mineral Policies: Newfoundland 1949 - 75* (Kingston, Centre for Resource Studies, 1977), p. 4.

tain markets for iron ore, and the opening of the base metal mines at Buchans in 1928 and the fluorspar mine at St. Lawrence in 1933.

In the 1880 - 1910 period, world output of the major metallic, non-metallic and mineral fuels was growing at 4.5% per annum.⁵⁴ Expansion in Canada (7.5%) and the Maritimes (6.1%) was substantially in excess of world growth, but it was lower in Newfoundland (3.5%). In 1910 - 1939, however, while world output expansion fell to 2.3%, the Canadian rate remained substantially higher (4.4%). In the Maritimes, the coal industry confronted growing competition from the United States as well as the postwar shift to alternative fuels, and this, combined with the absence of major new mining developments, yielded a comparatively slow rate of growth (1.8%). In Newfoundland, on the other hand, the new ventures opened in the interwar years, combined with the high productivity of the Wabana iron fields, generated a growth rate (5.7%) substantially above both world and Canadian levels.

Mineral output per head was normally substantially higher in the Maritimes than in Canada until the interwar period. It was then that the relatively poor growth performance began to tell, and by 1941 output was about \$26 per person in the Maritimes compared with about \$40 for Canada. Until the 1930s Newfoundland's output per head was substantially lower than in either Canada or the Maritimes, but with output of some \$22 per head in 1941 the country was pointed towards its postwar stature as the major mining centre of the Atlantic region. In Canada the growth of mining output contributed some 12% to total growth of goods production, but in the Atlantic region it was much more important at 20% and 24% in the Maritimes and Newfoundland. While Newfoundland's growth rate substantially exceeded that of the Maritimes and Canada in 1911 - 1939, the expansion of the industry did not generate the same local benefits as noted with the forest products sector. While the sector accounted for 18% of goods production in Newfoundland in 1939, it accounted for less than 5% of total earnings in 1935.⁵⁵

The major structural difference between Newfoundland and the Maritimes is revealed in the relative dependence of the two economies on the fishing industry. In 1884 some 67% of goods production in Newfoundland was accounted for by fish products, compared with only 13% in the Maritimes and 2% in Canada. If fishing and agriculture are combined, the difference in relative dependence on primary activities is narrowed (75% and 50%) but remains striking, and emphasizes the vulnerability of Newfoundland's dependence upon a one product export economy. By 1910 the fishery contribution to output had fallen to 51% in Newfoundland and 9% in the Maritimes,

54 Woytinsky, *World Population*, Table 322, p. 571.

55 Calculated from *Tenth Census of Newfoundland*, vol. II, p. 85.

and by 1939 (reflecting the interwar depression in the industry) only 14% and 5% respectively. By that time the Maritimes was relatively more dependent upon fisheries and agriculture than Newfoundland (33% compared with 31%), although that also reflected the comparative poverty of arable food production on the Island.

Large and old industries, like the Atlantic fishery, are often characterized by relatively low rates of growth, and this was certainly the case with the fishing sector. In Newfoundland in 1884 - 1911 fisheries output grew by only 1.2% and in the Maritimes at less than 1.0% per annum. It was in 1910 - 1939, however, that the industry was overwhelmed by troubles. In Newfoundland real output growth contracted at a rate of -2.3% and in the Maritimes at almost -1.0% per annum. The industry was extraordinarily dependent upon international trade, and returns to production factors were especially sensitive to the host of interwar disturbances, including the postwar inflation, rising protectionism, the Depression, and the collapse of the multilateral payments system in the 1930s. Compounding these external problems was a highly conservative and defeatist approach to potential changes in product, catching and marketing on the part of industry and government.⁵⁶ The less bad performance of the Maritimes reflected its greater product diversification and its access to the United States market, for Newfoundland was much more dependent upon saltfish and the highly competitive and disturbed European markets. Given the unusual importance of the industry to the Newfoundland labour force, and hence to the revenues of the government, its virtual collapse in the interwar period seriously compromised the gains which were won from expansion of other sectors of the economy. Thus, while in the Maritimes fisheries contraction was -8.5% of total output growth, in Newfoundland it was -27.8% over the 1911 - 1939 period.

Economic policy in Newfoundland consistently focussed upon developing and expanding resource sectors. In the Maritimes there were much greater expectations for manufacturing. The contribution of manufacturing (excluding lumber and pulp and paper throughout this discussion) to the three economies in 1880 ranged from a low of 18% of goods production in Newfoundland to 37% in the Maritimes and 46% in Canada. By 1939 this had risen only to 20% in Newfoundland, but it was now 45% in the Maritimes and 62% in Canada. Relative to Canada, therefore, the contribution of manufacturing to total output had declined over the period in both Newfoundland and the Maritimes.

In 1880 current dollars, manufacturing gross value was \$40 per capita in the Maritimes, \$60 in Canada and only \$10 in Newfoundland. By 1890 the Maritimes relative position improved from 63% of the Canadian level to

56 This is discussed in Alexander, *Decay of Trade*, ch. 1.

68%, with a per capita production of \$67. Much of this output consisted of unsophisticated raw material processing and small shop output (as it did everywhere at this time); nonetheless, the Maritimes and Canada ranked favourably with other countries in the world. While such comparisons are fraught with difficulties, the order of achievement is suggested by an 1888 output per head (in \$U.S.) of \$117 in the United Kingdom, \$65 in France and Germany, \$50 in Sweden and the Netherlands, and as little as \$25 in Italy and Spain.⁵⁷ Although there are special difficulties with the Newfoundland data which lead to underestimation of finished goods production, clearly it was not a significant manufacturer by any standard.⁵⁸

By 1937 the Maritimes relative position had changed dramatically. Per capita output in that year was \$140, compared with \$80 in Newfoundland and \$330 in Canada. Between 1890 and 1937, therefore, the Maritimes' position relative to Canada had fallen from 68% to 42%, and it had even deteriorated against Newfoundland. In the United Kingdom in 1935 output per head was \$290, in Germany \$285 and in Italy about \$115.⁵⁹ If basic iron and steel manufacturing is removed from the Maritime data, then its output per head falls to \$95, which is not substantially in advance of the Newfoundland level. Between 1880 - 1910 real manufacturing output grew at 2.3% per annum in the Maritimes compared with 4.3% in Canada.⁶⁰ In the 1880s the Maritime growth rate was probably higher than Canada's (around 5.4% compared with 4.9%), but it fell below the Canadian performance in the 1890s and substantially so in 1900 - 1910 (4.3% and 7.3%). Manufacturing's contribution to total output growth was only 41% in the Maritimes compared with 58% in Canada. In the 1910 - 1939 period, Maritimes real output grew at a much lower rate than before the War, and at only half the Canadian rate (1.3% and 2.9%). The 1920s was an especially bad period for the Maritimes, with a growth of only 0.3% compared with 6.1% in Canada. Still, in the badly depressed interwar economy of the Maritimes, this slow growing manufacturing sector still accounted for 69% of total output growth, which was almost the same as in Canada.

It is well established that Maritimes' manufacturing stagnated after the War. While its position relative to Canada was not one of equality at the

57 Calculated from Woytinsky, *World Population*, p. 1003.

58 The lower level of market activity in Newfoundland biases the results against the Island for all sectors. For the development of the manufacturing sector, see John Joy, "The Growth and Development of Trades and Manufacturing in St. John's, 1870 - 1914" (unpublished M.A. thesis, Memorial University of Newfoundland, 1977).

59 Woytinsky, *World Population*, Table 423, p. 997.

60 For both the Maritimes and Canada the actual rate might be somewhat higher because of a change in reporting which reduced the enumeration of output in 1910 relative to 1880.

beginning of Confederation, the Maritimes was relatively strong both nationally and internationally. Except in the 1880s, however, non-forest products manufacturing grew much more slowly than in Canada and the world, leaving the region more backward by the end of the interwar period than it had been in the last quarter of the nineteenth century. Newfoundland had no significant manufacturing capacity in the 1880s, and despite tariff barriers that came to exceed Canadian levels, it did not have a large per capita output by 1939. Nonetheless, in the 1910 - 1939 period, the country achieved a rate of growth of non-forest products manufacturing equal to that of Canada, and by 1947 domestic production of manufactures accounted for 25% of domestic consumption.⁶¹ With the removal of the tariff barriers in 1949 much of this capacity was wiped out; but in a few product lines local firms were able to meet the competition and even export to the Mainland. Thus, even in Newfoundland it was possible for efficient secondary manufacturing to locate and produce for the national market.

This review of growth in five key sectors of the Atlantic economy now allows for a general answer to the first question posed at the beginning of this paper: how did Newfoundland's economic growth compare with the Maritimes in the decades prior to its union with Canada? A succinct answer is possible. In both 1880 and 1911 goods production in Newfoundland was about 12% of the Maritimes level, but by 1939 it had increased to about 20%. Relative to Canada, the Maritimes accounted for 14% of goods production in 1880, only 9% in 1911 and 5% by 1939. The Maritimes economy, therefore, shrank relative to both Newfoundland and Canada.

Behind these trends in relative size lies the growth rates for goods production in the three economies. In the 1880 - 1910 period Newfoundland and the Maritimes grew at the same rate (2.2%), which was 50% less than the growth rate in Canada (3.8%). Angus Maddison has estimated the growth of Gross Domestic Product (GDP) in twelve European and North American economies over 1870 - 1913 to average 2.7% per annum, ranging between 1.4% for Italy and 4.3% for the U.S.A.⁶² If our estimates of goods production parallel that of GDP,⁶³ then the results suggest a pace of development in the Atlantic region more akin to that of the large and developed economies of Western Europe than the North American territories of settlement.

In the 1910 - 1939 period growth everywhere in the world was slower than in the preceding decades. For example, total output in Denmark, Sweden and

61 *Industrial Survey*, vol. 1, p. 90.

62 Maddison, *Economic Growth*, p. 28.

63 Maddison's GDP estimate for Canada is 3.8%, which is identical to our estimate for goods production growth.

the Netherlands expanded by some 2.2% per annum and in Norway at a somewhat faster rate of 2.8%.⁶⁴ In Canada and Newfoundland, goods production expanded by 2.4% per annum,⁶⁵ a rate three times greater than that achieved in the Maritimes. Although the Canadian rate was equalled by Newfoundland, on a per capita basis Newfoundland was consistently the least productive of the three economies. In 1884 with \$72 per capita of goods production, it stood at only 54% of the Maritimes and 40% of Canada. By 1910 its position relative to the Maritimes had fallen to 45% and relative to Canada to 34%. But the industrial developments of the 1910 - 1939 period reversed this trend, and in 1939 Newfoundland's per capita output relative to the Maritimes had improved sharply to 64%. Still, with goods production in 1939 of only \$160 compared with \$460 in Canada, it is obvious that the Island was extremely vulnerable to the kind of trade and financial crisis which overwhelmed it in the 1930s. In terms of growth performance, it is also apparent that Newfoundland was developing from its low initial base at a more satisfactory pace than the Maritimes secured from its stronger initial position. Both communities were growing at a per capita rate on the level of Maddison's twelve countries in 1870 - 1913. But between 1910 - 1939 per capita growth in Newfoundland was higher than in Canada (1.5% and 0.9%), while in the Maritimes there was little real per capita growth in the goods producing sector (0.2%).

The sectoral contributions to aggregate growth in the Newfoundland economy were characterized by a major shift after the turn of the century. In 1884 - 1911 a third of the growth of output was gained in the agricultural sector, another third in fisheries, and the remainder was spread relatively evenly across forestry, mining and manufacturing. Agricultural contributions to growth were only slightly less important to the Maritimes and Canada, but the major sectoral contribution for both came from manufacturing. In the Maritimes, however, manufacturing provided only 40% of the contribution to total output that it did in Canada, with forestry, mining and fishing contributing much larger shares.

In the 1911 - 1939 period, negative growth in the fisheries was a major drag on output growth in Newfoundland, as it was in the Maritimes. Almost half of positive contributions to Newfoundland output were accounted for by the lumber and paper industry, and another quarter by mining. The relative contribution of manufacturing fell in this period, and the gains from the agricultural sector were modest. In the Maritimes and Canada, both agriculture and forestry were minor contributors to output growth, as was mining for Canada. Manufacturing in Canada, however, contributed over two-thirds of

64 *Ibid.*, Table A-2.

65 Maddison's estimate of total production growth in Canada for 1910 - 38 is 2.0%.

the growth in the period, whereas it added 20% less in the Maritimes. On a net value of production basis, of course, the contribution of the manufacturing sector would be substantially less; but the data do pinpoint the relative weakening of finished goods production in the Maritimes relative to Canada. Thus, the rapid rate of growth in Newfoundland had its origins in the expansion of two new resource sectors. Had these sectors not developed when they did, the economic troubles of the country would have been still more terrible. In the Maritimes the resource sectors had undergone earlier and more substantial development, and the region could not look to these areas for fresh impetus to growth. Manufacturing growth was essential to the development of the Maritimes if it was to maintain its stature within Canada and relative to Newfoundland. This was not accomplished, and while the sector contributed almost 60% of output growth in the 1910 - 1939 period, it was a contribution to a real growth in total output that was absolutely and relatively very small.

A postwar estimate of Newfoundland's per capital national income for the years 1936 - 1939 showed it to be only 62% of the weighted average of the Maritime provinces.⁶⁶ This was probably a substantial *relative* improvement over what it had been some sixty years earlier. In 1880 Newfoundland was structurally backward in terms of its labour force and output distributions. Much of the responsibility for this lay in the natural obstacles to food production, for if the same per capita production had been achieved in Newfoundland (output in other sectors remaining the same), per capita goods production would have been 86% of the Maritimes' level rather than 54%. Given the low productivity levels in the fishery, it is reasonable to believe that output in other sectors would not fall under such an assumption. Indeed, given an adequate agricultural base, there is little doubt that population would have been larger, monetization of the economy more pervasive, and incomes substantially higher in all sectors. The effort that was made to raise agricultural output was important, but there was nothing Newfoundland could do about the weather and the soil. The task before the country was to overcome this natural disadvantage by maximum efficiency in other sectors. In the 1884 - 1911 period, although the impact of modernization and diversification efforts had little quantitative impact,⁶⁷ by Canadian, Maritime and Western European standards the growth of goods production was at a reasonable rate. Population growth, however, absorbed a large share of this with the consequence that output per capita in 1911 was lower relative to the

66 Calculated from MacKay, *Newfoundland*, Appendix B. The gross value of production series which has been used in this essay shows a ratio of 63%.

67 See David Alexander, "Traditional Economy", *op cit*

Maritimes and Canada than it had been in 1880. For Newfoundland, the 1884 - 1911 period was one of *extensive* growth within the traditional economic framework, notwithstanding the industrial developments which dominated the final years of the period. Unless one posits major changes in the general level of education and the quality of entrepreneurship, it is difficult to see how in this period Newfoundland could have developed at a more satisfactory rate than it did.

The Maritimes was a more sophisticated and prosperous economy in 1880 than Newfoundland, with a per capita output which was closer to the Canadian average than Newfoundland's was to the Maritimes. The major economic advantages which the region enjoyed were the early commercial potential of its agricultural and forestry resources, and its location closer to the markets and stimulus of the fast-growing eastern seaboard of the United States. While goods production did not grow any faster in the Maritimes than in Newfoundland, the ease of emigration lowered population growth, and in 1911 per capita goods production relative to Canada was only three percentage points lower than it had been in 1880. With its already highly developed primary sectors, the Maritimes had to rely more upon expansion in finished goods or export sales of services, such as shipping, to maintain or improve its position. But the shipping industry collapsed and manufacturing output expanded at little better than half the Canadian rate.

While the roots of the changes lay in the earlier period, a major break with continuity was visible in both Newfoundland and the Maritimes in the 1910 - 1939 period. Newfoundland began rapidly to assume its modern character as a major resource production centre, with an aggregate growth of output which matched that of Canada. Heavy emigration in the 1920s generated a per capita growth in goods production which was substantially higher than in Canada. The country's major failure, however, lay in the fisheries sector. Spectacular rates of growth could not be expected in the difficult trading climate of the 1920s and 1930s, but a long term growth between 1910 - 1939 of at least 1.5% per annum was possible for an efficient and imaginative fishing country.⁶⁸ If such a growth rate had been achieved (making no adjustments for population growth or linkage impacts on other sectors), total per capita output in 1939 would have been \$237 rather than \$160, representing 52% of the Canadian level rather than 35%. Yet, whatever opportunities were

68 Between 1920 and 1937, Newfoundland's share of output in the North Atlantic fishery fell by twelve percentage points, and in the markets the country steadily lost ground against its major competitors. Whatever the trading difficulties (and they were not uniquely faced by this country) they were compounded by a backward technology in primary fishing, poor product quality, and inefficient and fragmented marketing. See Alexander, *Decay of Trade*, chs. 2 and 3.

missed in Newfoundland in this period, its overall performance was exceedingly good compared with the Maritimes, where on both a total and a per capita basis goods production fell drastically relative to both Canada and Newfoundland. No sector of the economy which was measured grew at as much as half the rate of the equivalent Canadian sector, or even close to the rates in Newfoundland. The obvious question is whether this performance was in some way inevitable?

The Maritimes' agricultural sector was not markedly inferior to Ontario and somewhat better than Quebec by some measures. The slightly higher growth of output for Canada was largely attributable to the residue of Western expansion. Unlike the situation in Newfoundland and much of Canada, the forestry sector was already a mature industry. Newsprint manufacturing was relatively slow in coming to the Maritimes, and while higher growth was a possibility in the sector, the rate of growth recorded in Newfoundland was not. The mining growth rate was the highest in the Maritime economy, due partly to coal subsidies, but unlike Newfoundland, Quebec, Northern Ontario and the West, there were no mining frontiers to be opened in the Maritimes. Fisheries production was as badly handled in the Maritimes as it was in Newfoundland, but it was also relatively less important to the total or per capita growth rate. Thus, while margins for gains exist in any sector in any economy, it is clear that if the Maritimes was to maintain its relative well-being and stature within the country, it had to be secured in the finished goods sector.

If in the 1880 - 1910 period manufacturing output had grown at the national rate, then the real value of output in 1910 would have been \$130 million rather than \$85 million. If one also allows Maritime population to grow at the national rate, then total output per head in 1910 would have been \$384 rather than \$274. Making no allowances for inter-industry effects, total output per head would have been 77% of the national level rather than 67%. If one projects the same assumptions through the 1910 - 1939 period, the effect is to raise per capita goods production to 84% of the Canadian level as compared with the 55% which existed. The least important objection to this extrapolation is that expansion in manufacturing output would mean less output in other sectors, leaving the Maritimes with a different distribution of output but not with any major gains in total and per capita output. The Maritime economy in this period, however, was not burdened with factor supply constraints (assuming that national financial institutions were indeed national) and the likely effect of manufacturing growth at the national rate would be a regional output and income growth path which converged towards national equality. But having posited that as a reasonable prediction, was it possible for the Maritimes to achieve the Canadian rate of growth in manufacturing?

The truthful answer is that we do not know, and perhaps in the historical sense, it is unknowable. Keirstead, as we noted, argued that over most manufacturing sectors there were growing diseconomies to location in the Mari-

times for the national market. Roy George has presented arguments that the cost disadvantages are insignificant today, which does not prove that they always were. Apart from the 1880s the rate of growth of manufacturing output in the Maritimes was substantially lower in both 1880 - 1910 and 1910 - 1939, with the interwar years being those when most of the trouble was concentrated. Acheson's work indicates a far from hopeless prospect for Maritime manufacturers up to the First War, and in many industries there was real strength. Forbes' analysis of the transportation issue strongly suggests that the absorption of the Intercolonial Railway into a national system, and the resulting loss of regional control over freight rates, killed-off any hopes of maintaining or strengthening manufacturing in the interwar period. The possibility that economic decline was a reflection of local entrepreneurial lassitude has been undercut by David Frank's study of the stunning ineptitude of the distinguished external management of one major Maritime industrial complex.⁶⁹ Until much more work is done, the best conclusion is that manufacturing in the Maritimes for the national market did involve locational costs, but that it was rendered virtually impossible by national transportation policy and the absence of national incentives to overcome the disadvantages. If one accepts that a basic objective of any country is to equalize opportunities across the land, and to implement policies which ultimately turn regional diseconomies into positive advantages, then the legitimate grievance of the Maritimes is that there was no place for it in twentieth-century Canada.

The evidence is unmistakable that, despite remaining outside the Canadian economic and political union, population and output grew faster in Newfoundland than it did in the Maritimes. Does it therefore follow — and this was our second question — that Newfoundland gained from standing apart, and that development in the Maritimes was retarded by its earlier absorption? Indices of economic growth do not provide a conclusive answer. It is possible to argue, for example, that Newfoundland's growth rate would have been even higher as a Province of Canada, as a consequence of a better supply of infrastructure and a more attractive and stable climate for Canadian and foreign investment. The historical experience of the Maritimes, however, does not encourage such predictions. It is impossible to know how the Maritimes would have responded to a less open economic and political environment. The romantic hypothesis is to predict a burst of creativity, as a function of the concentration of skills and energies occasioned by real and patriotic constraints on the migration of labour and capital. The pessimist would predict stagnation at higher aggregate, but lower per capita, income.

Despite the impressive growth performance of Newfoundland during its

69 David Frank, "The Cape Breton Coal Industry and the Rise and Fall of the British Empire Steel Corporation", *Acadiensis*, VII (Autumn, 1977), pp. 3 - 34.

years of political independence, its history does not support the romantic interpretation. It is true that aggregate output grew faster in Newfoundland, and that there was some catching-up in terms of output and income per capita. But little of that is obviously attributable to the genius of the Newfoundland people operating within the constraints and incentives of their own nation state. Newfoundland's stronger growth performance mainly reflected the opening of an unexploited natural resource frontier by foreign corporations. It was principally the impact of rapid development of large newsprint mills and mines that lifted the Newfoundland economy onto a more respectable level relative to the Maritimes. This development was quite independent of whether Newfoundland was a Province of Canada or a quasi-sovereign Dominion. Indeed, the major domestically controlled sector of the economy, the fishery, was the sector which was the poorest performer and which contributed most to the financial and political collapse of 1933.

In the absence of a more creative development of domestically controlled sectors of the economy, Newfoundland in fact paid a price for its political independence. An earlier entry into Confederation would not have quickened the pace of development in foreign enclave sectors. It would not have guaranteed Newfoundlanders a higher rate of return from those resource sectors. It would not have conferred any important social welfare benefits, for these were mainly a product of the postwar years. Certainly, if the Maritimes are to be taken as a model, it would not have done anything to spark a more dynamic domestic sector. But it can be said that an earlier entry into Confederation would have relieved the country of its intolerable, externally held public debt which, in the crisis of the Depression, brought the country to its knees. Almost all of this debt had been acquired to support the railway system and to pay for the War effort. With the decline of exports during the early years of the Depression, payments of interest and principal could not be met, and the debt could not be rolled-over. Hence, the country collapsed in 1933, lost its Dominion status, suffered the ignominy of suspended democratic institutions, and as a result of these things, has harboured a sense of exploitation and vulnerability ever since.

The only demonstrably clear lesson from Newfoundland's experience is that very small countries are financially precarious. They survive only if international trade and payments systems are liberal; if they profit from international conflicts; if they avoid, relative to their size, colossal investment blunders; and if, like Iceland, they rely upon internally generated sources of growth and development. Union with a larger country provides an element of stability, and this is a benefit not to be taken lightly. It does not, however, necessarily bring improved opportunities for regional growth and development, as Maritimers well know. In terms of expectations, Maritimers might well be right to complain that Confederation generated disappointing long term results. But the Newfoundland example of externally generated growth

and domestic entrepreneurial stagnation, perhaps suggests that the political question is fundamentally uninteresting. If the Dominion of Newfoundland is accepted as the historical analogy, then at least it can be said that Confederation allowed the Maritimes to maintain a shabby dignity.