

REGIONAL DEVELOPMENT AND FISCAL POLICY
IN MARITIME CANADA

by

Peter Irwin Kent Fletcher

Thesis

submitted in partial fulfillment of the
requirements for the degree of
Bachelor of Arts
with Honours

Acadia University

April, 1987

© Copyright by Author 1987

This thesis by Peter Irwin Kent Fletcher
is accepted in its present form by the
Faculty of Economics
as satisfying the thesis requirements for the degree of
Bachelor of Arts with Honours.

Approved by the Thesis Supervisor

J. Ralph Winter Date April 6, 1987
Prof. J. R. Winter

Approved by the Head of the Department

R. A. French Date April 6, 1987
Dr. R. A. French

Approved by the Honours Committee

P. Smith Date 28 April, 1987

I Peter Irwin Kent Fletcher hereby grant permission to the Head Librarian at Acadia University to provide copies of this thesis, on request, on a non-profit basis.

Peter Irwin Kent Fletcher

J. Ralph Water

April 6, 1987

ACKNOWLEDGEMENTS

I would like to acknowledge and thank my family, friends and academic supervisor all of whose support and advice greatly contributed to the completion of this thesis.

TABLE OF CONTENTS

<u>Subject</u>	<u>Page</u>
Abstract	ix
Introduction	1
Chapter 1 History of Federal Government Policies for the Development of Maritime Provinces	2
Chapter 2 Federal Programs for the Development of the Maritime Provinces	16
Chapter 3 Theories of Regional Economic Development	30
Chapter 4 Macro Economic Assessment of Federal Policies	39
Chapter 5 Micro Economic Assessment of Federal Policies	48
Chapter 6 Summary and Conclusions	62
Bibliography	66

LIST OF TABLES AND FIGURES

	<u>Page</u>
<u>Table 1.1</u>	
Population of Canada and the Maritimes, (1861-1981)	7
<u>Table 1.2</u>	
Regional Distribution and Displacement of the Labour Force, by Selected Years	10
<u>Table 1.3</u>	
Distribution and Displacement of Total GVA, in 1935-39 prices, by Province, Selected years.	11
<u>Table 2.1</u>	
Federal ARDA Expenditures and Allotments by Province	18
<u>Table 2.2</u>	
Distribution of ADB Funds by Purpose and Province, Cumulated to December 31, 1967	20
<u>Table 2.3</u>	
ADIA Payments, by Province, By Fiscal Years 1965/66 to 1973/74	22
<u>Table 2.4</u>	
Cape Breton Development Corporation Net Operating Loss For Coal Division and Net Operating Cost For	

Development Division, in Current Dollars, March 1967 to 1986	24
<u>Table 4.1</u>	
Average Annual Growth Rates of Components of Personal Income, (Millions of Current Dollars) 1962-1983	40
<u>Table 4.2</u>	
Percentage Components of Personal Income, (in Millions of Current Dollars), 3 Year Average	41
<u>Table 4.3</u>	
Components of Federal Revenue and Expenditure, Within the Provinces	43
<u>Table 4.4</u>	
Federal Revenue Expenditure Balance, (in Millions of Dollars), Deflated, 1971 Base Year	44
<u>Table 4.5</u>	
Net Exports, (in Millions of Dollars), Deflated, 1971 Base Year	46
<u>Table 5.1</u>	
Per Capita Income by Province, Relative to the National Average, (Canada=100), 1961-1983	49
<u>Table 5.2</u>	
Average Male Income by Occupation in Nova Scotia as a Percentage of Canadian Average, 1961-1981	50
<u>Table 5.3</u>	
Average Male Income by Occupation in New Brunswick as a Percentage of Canadian Average, 1961-1981	51

<u>Table 5.4</u>	
Average Female Income in Nova Scotia as a Percentage of Canadian Average, Census Years 1961-1981	53
<u>Table 5.5</u>	
Average Female Income in New Brunswick as a Percentage of Canadian Average, Census Years 1961-1981	54
<u>Table 5.6</u>	
Mean/Median Ratio of Census Incomes, Nova Scotia Males	55
<u>Table 5.7</u>	
Mean/Median Ratio of Census Incomes, New Brunswick Males	56
<u>Table 5.8</u>	
Percentage Change in Industry Share of Labour Force For the Period 1961 to 1981	58
<u>Table 5.9</u>	
Percentage Increase in Mean Incomes Standardized by Percentage Change in Canadian Mean Income, 1961-1981, by County	60
<u>Figure 1.1</u>	
Maritime Population as a Percentage of Canada, 1861-1981, Logarithmic Scale	8

ABSTRACT

The following is a study of federal regional development policies and programs as they pertain to the Maritime Provinces.

In Chapter One the economic trends and events that led up to the problem of regional disparity in Maritime Canada are briefly described.

Chapter Two deals with recent federal initiatives that have aimed at economic development of the region. A description of the relevant programs is given, describing their differing approaches, aims, and procedures.

Chapter Three deals with the newer aspects of the theory of economic development. The techniques of measurement are discussed as well as the consequences of government intervention.

Chapters Four and Five deal with macro and micro economic assessments of federal development policy. A set of selected economic indicators is analyzed in an attempt to discover the effects of federal fiscal transfers in the Maritimes Provinces.

A summary of the conclusions is given in Chapter 6.

INTRODUCTION

Federal regional development policy has been considered an important asset for alleviating Maritime economic disparity. Throughout its history the federal government has spent large sums of money on various programs and policies which have taken many approaches to the problem.

Some of these programs such as DEVCO and others have experienced heavy losses and as a result are very controversial in nature. Other valiant proposals have been made in past, years yet few have proven successful enough for continuation.

Nonetheless regional development policy continues to be an important issue in the Maritimes simply because disparity is obviously the most pressing economic issue. The public wants development policy to translate directly into higher incomes and more jobs, thus the federal government may be inclined to take the wrong approach too often to satisfy the need for long term economic growth.

Although there has been much criticism based on casual empiricism of the various policies, very little analysis has been done of a systematic nature. This study is intended to provide some evidence bearing on the effects of federal government policies in the Maritime Provinces.

CHAPTER 1
HISTORY OF FEDERAL GOVERNMENT POLICIES
FOR THE ECONOMIC DEVELOPMENT OF THE MARITIME PROVINCES

During the years preceding Confederation the Maritime Provinces enjoyed a period of rapid economic growth. This growth was derived from the stimulus of the shipping services of the Maritime merchant fleet, caused by the repeal of England's Navigation Acts removing all restrictions on colonial shipping.¹ At the same time the American Civil War served to increase the demand for Maritime fish and agricultural products.

Through Confederation the Maritime Provinces hoped to achieve the benefits of economic unity that they had failed to obtain from the attempt at a Maritime union. Confederating an area as large as this would require strong transportation links with Quebec and Ontario, for which railroad construction was thought to be the key. New markets for the Maritime Provinces would then be opened up for their products such as fish, fish oil, and coal. It was because of this that the Maritime Provinces had the completion of the Intercolonial Railway included in the terms of Confederation. Assuming that Nova Scotia coal would be the basis of rapid industrialization, Sir Leonard Tilley and Sir Charles Tupper expected the Maritimes to become the manufacturing centre of the new nation.

What Tupper called the 'geographical advantages' and 'geological attributes' of Nova Scotia appeared to imply that in the new federation it would play a role comparable to that of Great Britain in world trade, or that of the New England states in the American union. The manufacturers and mechanics of Saint John believed that they would manufacture for the 'granary' of Canada, just as New England for the wheat producing western states, and Tilley found in Pittsburg a forecast of the industrial future of Saint John.²

In geographical terms, the main attribute of the Maritime Provinces was their location next to the sea. Both Nova Scotia and New Brunswick had ports that were well established. The fisheries dominated the economic life of Nova Scotia and although New Brunswick could not match Nova Scotia in fish it prospered from the ship building and timber industries. Prince Edward Island, which as a whole was more favorably endowed for agriculture, had become a farming province so that oats, barley, potatoes and other agricultural products made up the majority of its exports.³ The Maritimes with its ice free ports of Saint John and Halifax hoped to monopolize the through traffic of the Atlantic seaboard.⁴ The Intercolonial Railway was completed in 1876 and some of the implications were startling for the Maritime Provinces.

Improved transportation appears to have been more successful in the opening of Maritime markets to Central Canada than the opening of Central Canadian markets to the Maritimes.⁵

This may have been due to the fact that the Intercolonial Railway was constructed at approximately the same time as the canal system from Toronto to the St. Lawrence was completed.⁶

Over the period 1879-1887, Canada adopted a highly protectionist tariff policy, ironically instituted by Tilley from New Brunswick as Minister of Finance. It was thought that the tariff policy would stimulate a variety of manufacturing plants in the Maritimes catering mainly to the regional markets.⁷ Nova Scotia coal and steel industries gained substantially through the tariff imposition and, as a result, they were in a competitive position in the Central Canadian markets.

During the 1880's and 1890's industrialization moved ahead in Central Canada, yet immigrants from Europe seemed less attracted to Canada than to the United States. This was discouraging for the growing economies of Quebec and Ontario which still had much room for expansion. In contrast however, their economic growth was much greater than that of the Maritime Provinces, mainly because the latter had failed to restructure their economies in the face of technological changes. The move of ocean shipping away from wood and sail to that of steel and steam severely hurt the shipbuilding and transportation business. To add to the problem, federal grants to provincial governments were small and were not increased to assist them to cope with the crisis. Also, Britain's trade with Canada declined relative to the United States and this decline affected the Maritime region markedly, as its growth was linked to Britain's economy because of the previous high level of through traffic to the interior.⁸

By the end of the century the West was experiencing the wheat boom and tariffs protected the new Central Canadian manufacturing growth. The Maritimes gained very little from either of the above mentioned developments. On the whole, the forces which bound the Maritimes to the continental interior failed to induce an expansion sufficient to offset the changes which had destroyed their dependence on the sea and weakened their relations with foreign markets.⁹

The First World War assisted Canadian economic growth, for example defence based metal-working industries flourished in Central Canada. Though the situation of the Maritime Provinces was greatly improved, their economic structure experienced very little change by the end of the war. In contrast, the war laid the foundations on which the new durable consumer good industries of central Canada, predominantly Ontario, were to expand. The fact was that economic stimulus was now coming from a new direction, the south. Investments from the United States came in two main areas. One was to develop the resource industries, especially pulp and paper, and base metals to supply the United States market. The other was to establish branch plants for products such as automobiles and consumer durables which were located mainly in Southern Ontario.

During the war years the old Intercolonial Railway was merged with the larger Canadian National Railway, with its substantial annual losses. Inflation during these years was high and freight rates were adjusted upward to the same

level as Quebec and Ontario, making access to interior markets for Maritime producers increasingly more expensive. The situation was a major factor in the emergence of the 'Maritime Rights' movement in the 1920's. Ottawa sought to meet these demands by setting up a Royal Commission on Maritime Claims. The report which followed was strongly sympathetic to claims of the Maritime Provinces and resulted in the Maritime Freight Rates Act of 1927. Subsidies of 20 percent were to be granted to traffic moving westward out of the territory. The reduction however was not to apply to traffic moving into the Maritime Provinces.

The federal freight subsidy was to give Maritime industry greater access to Canadian markets. In addition coal movements were to be permanently subsidized to ensure that Maritime coal was competitive with U.S. coal in the markets of Quebec and Ontario.¹⁰

A Statistical Overview of Development

In order to demonstrate the economic development of the Maritime Provinces relative to the rest of Canada, a statistical overview is helpful. This section deals with the major economic trends in Canada between 1861 and 1961 along with some commentary.

Table 1.1 presents the growth rate and trends in the distribution of population for the Maritime Provinces and Canada. By distribution of population we are referring to the split of population between urban and rural areas.

Table 1.1

Population of Canada and The Maritime Provinces
1861-1981 (Census Years)

	Canada			The Maritime Provinces					
	Total	Growth Rate	% Urban	% Rural	Total	% of Canada	Growth Rate	% Urban	% Rural
1861	3,229,633	1.2	--	--	533,332	16.50	--	--	--
1871	3,689,257	1.5	19.6	80.4	663,761	17.90	1.7	--	--
1881	4,324,810	1.1	25.6	74.4	767,415	17.70	1.4	--	--
1891	4,833,239	1.0	31.8	68.2	870,696	18.00	0.1	--	--
1901	5,371,315	2.6	37.5	62.5	880,737	16.40	0.3	28.1	71.9
1911	7,206,643	1.8	45.5	54.5	893,953	12.40	1.0	37.8	62.2
1921	8,787,949	1.5	49.5	50.5	937,955	10.67	1.7	43.3	56.7
1931	10,376,786	1.0	53.6	46.4	1,009,103	9.70	0.0	45.2	54.8
1941	11,506,655	1.8	54.4	45.6	1,130,410	9.82	1.3	46.2	53.8
1951	14,009,429	1.3	56.7	43.3	1,256,710	8.97	0.9	55.3	44.7
1961	18,238,247	1.2	60.6	39.4	1,439,642	7.89	1.4	56.6	43.4
1971	20,014,880	1.1	73.4	26.4	1,481,362	7.40	1.0	53.4	46.4
1981	24,343,180	1.2	75.7	24.3	1,666,350	6.84	1.1	51.8	48.2

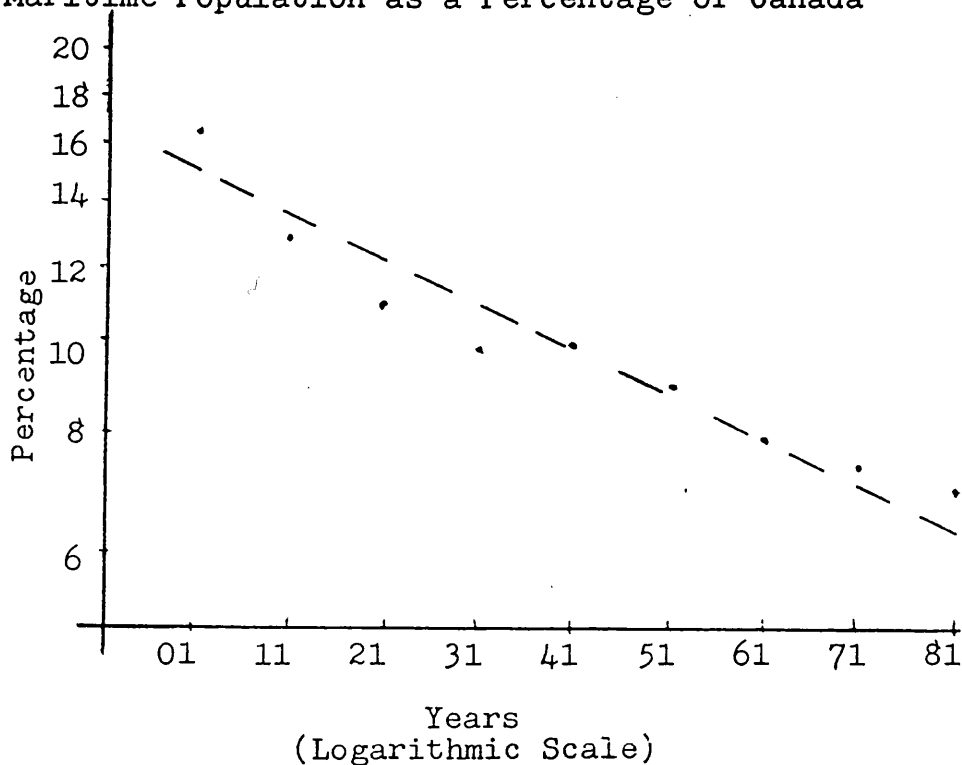
Note: The definition of an urban area includes all cities and towns with a population density of at least 100 persons per square mile and all incorporated fringes. All other areas were classified as rural.

Source: Census of Canada, Population Characteristics, Selected Years.

However the actual percentage for the former has been consistently lower than the national levels. This is disappointing since the urban/rural split of population is significant in measuring economic prosperity.¹¹ Figure 1.1 shows that Maritime population as a percentage of Canada has decreased at almost a constant rate after 1901.

Figure 1.1

Maritime Population as a Percentage of Canada



Surprisingly the percentage of urban population in the Maritimes has increased more rapidly than that for the nation as a whole up to 1951. However we should also note that after 1961 the degree of urbanization in the Maritimes has declined while it has continued to grow for Canada. We find that there is a coefficient of correlation of .81

indicating a high degree of positive association between the urbanization of the Maritime population and that of Canada.

Table 1.1 also shows that growth rates in population for the Maritimes have been characteristically lower than the national average. The insignificant growth in the 1931 census year reflects the impact of the Depression which caused the greatest difference in growth rates.

Commencing with the 1891 census we see that the Maritime Provinces' share of total population declined steadily except for the 1931-1941 period. This corresponds closely to the reduction in the share of total labour force during the same period, the difference resulting because of variations in participation rates. This data along with displacement rates are shown in Table 1.2. The meaning of displacement is the amount of interregional redistribution that is necessary to restore the distribution existing in the initial period. For example, in the period 1891-1911 some 39.9% of the labour force would have to had been reshuffled in order to restore the distribution to its level at the beginning of the period. Table 1.2 shows that prior to 1891 Quebec and Ontario were well established as concentrated areas of economic activity. After the 1891 census period economic activity increased substantially in the western provinces, mostly due to the wheat boom which occurred at this time. Figures for displacement rates show us that The Maritimes consistently experienced a negative interregional redistribution in labour force in all the periods examined.

Table 1.2

Regional Distribution and Displacement of the Labour Force, by Selected Years,
1891-1956

	Distribution (%)				Displacement (%)				
	1891	1911	1929	1956	1891- 1911	1911- 1929	1929- 1956	1891- 1956	1911- 1956
Maritime Canada	19.7	12.0	9.1	7.9	-6.7	-2.9	-1.2	-10.8	-5.2
Central Canada	73.6	60.4	60.9	65.5	-13.2	+0.5	+4.5	-8.2	+5.0
Western Canada	4.7	20.0	21.8	18.2	+15.4	+1.8	-3.7	+13.5	-1.9
British Columbia	3.0	7.6	8.2	8.4	+4.6	+0.6	+0.2	+5.4	+0.8
Total %	100.0	100.0	100.0	100.0					
Absolute Total					39.9	5.8	9.6	37.9	12.9

Source: Alan G. Green, Regional Aspects of Canada's Economic Growth
University of Toronto Press, Toronto, 1971, p. 38

Table 1.3

Distribution and Displacement of Total GVA in 1935-9 Prices,
by Province, Selected Years,
1890-1956

	Distribution (%)			Displacement (%)				
	1891	1911	1929	1956	1891-1911	1911-1929	1929-1956	1891-1956
Maritime Canada	16.1	10.1	6.2	6.0	-6.0	-3.9	-0.1	-9.0
Central Canada	75.6	64.6	65.3	65.1	-11.0	+0.9	-0.2	-10.5
Western Canada	5.0	17.2	19.6	18.3	+13.2	+2.4	-1.3	+13.3
British Columbia	3.3	8.1	8.9	10.6	+4.8	+0.8	+1.7	+7.3
Total %	100.0	100.0	100.0	100.0				
Absolute Total				35.0	8.0	3.3	40.1	7.1

Source: Alan G. Green, Regional Aspects of Canada's Economic Growth
University of Toronto Press, Toronto, 1971, p. 31

Similarly in Table 1.3 are Gross Value Added (GVA) data of distribution and displacement for the same regional areas. By looking at both Tables 1.1 and 1.3 we see that between 1891 and 1961 the Maritime Provinces' share of total population decreased from 18.0 percent to only 7.89 percent, and its share of GVA decreased from 16.1 percent in 1890 to just 6.1 percent in percent in 1956.

We can compare these figures to the distribution of labour in the west. In 1891 the west had 7.7 percent of the labour force and in 1956 the west's labour force had increased to 26.6 percent of Canada's total. Over the same period, the west's share of GVA increased from 8.3 percent to 28.9 percent.

From the late 1930s to the mid 1960s, Canada's approach to curing regional disparities at the provincial level was through intergovernmental fiscal arrangements. The regional problem was viewed as a problem of unequal capacity of provincial governments to provide services to their citizens due to their unequal tax bases. With the recommendations of the Rowell-Sirois Commission the federal government introduced fiscal transfers to enable the poorer provinces to maintain a standard of public services similar to the national average. 12

While the Commission considered that these payments should enable the poorer provinces to provide better services without the need for high taxation, it also stressed that the transfers be completely unconditional.

If a province chooses to provide inferior services and impose lower taxation it is free to do so, or it may provide better than the average if its people are willing to be taxed accordingly, or it may for example, starve its roads and improve its education, or starve its education and improve its roads.¹³

The Rowell-Sirois Commission's rationale was quite distinct from previous efforts of the federal government. While it did not use the term, the Commission advanced the concept known today as "horizontal fiscal equity". This means that the burden and benefits of provincial services should be comparable for all Canadians in similar circumstances, no matter where they live in the country.¹⁴

This policy seemed far advanced from that of the tariff policy imposed by the federal government at the time of Confederation. The Commission went as far as to say that previous federal policies drastically altered the economic development of the country and that of each region within the country. Confederation was viewed as a contractual arrangement under which the country agreed to share benefits as well as economic costs of such a union.¹⁵

The federal government undertook an equalization policy in 1957. They did this through the Tax Rental Agreement whereby the federal government exercised its power to levy personal and corporate taxes as well as succession duties, all of which were previously provincial sources of revenue.

Under the previous regime the 'have-not' provinces of the Maritimes were not benefiting and the system was in fact helping to perpetuate fiscal disparities that already

existed. To make up for this, a special provision was made for the Atlantic Provinces; the 'Atlantic Provinces Adjustment Grants' which were an extended form of equalization payments.¹⁶

In addition to these transfers the federal government made conditional grants to the provinces for various purposes, such as hospital insurance, road construction, education and numerous resource projects.¹⁷ These will be examined in detail in the next chapter along with other programs that the federal government has more recently developed.

END NOTES

1. W.Y. Smith, Federal policies and the Economic Growth of the Atlantic Provinces, (Sackville: Unpublished Speech, 1976.) p. 2
2. D.G. Creighton, British North America at Confederation. (Ottawa: Queen's Printer, 1968.) p. 47
3. D.G. Creighton, Ibid, p. 25
4. D.G. Creighton, Ibid, p. 59
5. W.Y. Smith, Ibid, p. 3
6. Economic Council of Canada, Living Together, A Study of Regional Disparities. (Ottawa: Supply and Services Canada, 1977.) p. 6
7. W.Y. Smith, Ibid, p. 3
8. W.Y. Smith, Ibid, p. 5
9. The Rowell-Sirois Commission, Report of the Royal Commission on Dominion-Provincial Relations, Book 1. (Ottawa: King's Printer, 1940.) pp. 39-46
10. W.A. Mackintosh, The Economic Background of Dominion Provincial Relations. (Toronto: McClelland and Stewart Limited, 1957.) p. 103

11. D.J. Savoie, Regional Economic Development. Canada's Search For Solutions, (Toronto: University of Toronto Press, 1986.) pp. 140-141
12. N.H. Lithwick , Regional Economic Policy, The Canadian Experience. (Toronto: McGraw Hill Ryerson Limited, 1978.) p. 217
13. The Rowell-Sirois Commission, Report of the Royal Commission on Dominion-Provincial Relations, Book II, Recommendations. (Ottawa: King's Printer, 1947.) p. 84
14. Economic Council of Canada, Financing Confederation, Today and Tomorrow. (Ottawa: Minister of Supply and Services, 1982.) p. 12
15. The Rowell-Sirois Commission, Ibid, pp. 78-79.
16. Economic Council of Canada, Ibid, p. 13.
17. N.H. Lithwick, Ibid, p. 217.

CHAPTER 2
FEDERAL PROGRAMS FOR THE DEVELOPMENT OF THE
MARITIME PROVINCES

From the 1960's to the present federal policy for regional development has been of a much more aggressive nature than previously. For the most part it has attempted to focus on direct action to resolve economic disparity within the provinces. Some studies which investigated various regional problems, such as the Report of the Special Committee of the Senate on Land Use, focused on rural poverty and stressed the need for a national policy on land use.¹ One of its recommendations was that a Federal-Provincial Rural Program be developed to deal with the areas of greatest need. This in turn led to the formation of ARDA, the first of many special programs intended for the economic development of the Atlantic Region.²

The Agricultural Rehabilitation and Development Act, (ARDA)

Established in 1961, the original purpose of ARDA was solely to help farmers. However, as the program developed the federal government realized that the development of whole rural areas should be included and thus ARDA would become a program of regional development.³

In 1967 the Act that created ARDA was amended, changing

the program's name to the Agricultural and Rural Development Agency, also known as ARDA II. The agency now had a broader field in which to incorporate both rural and urban development. The creation of employment and the improvement of income levels were their main concerns.⁴

Funds were divided among the ten provinces according to the size of the rural population and farm output. As seen in Table 2.1 the three Maritime Provinces combined received 4.8% of actual government expenditures. Overall the expenditures of the ARDA program fell considerably short of what was originally intended, largely because the provinces were unable to or reluctant to initiate the shareable projects as they were called upon to do under the agreement.⁵

It would seem that research into development opportunities and innovations had dealt with agriculture first. Little attention was given to research into what would be appropriate for the individual provinces.⁶ Confusion as to what ARDA's prime goals were also made the program less effective. Objectives were uncertain at the federal level with officials and politicians having conflicting views as to what path ARDA should take.⁷

The Atlantic Development Board, (ADB)

The Atlantic Development Board, created in 1963, was to be the first federal agency specifically set up to deal with the regional disparities of Atlantic Canada. Its principal function was not one of funding but rather to set up a plan

Table 2.1
Federal ARDA Expenditures
and Allotments
by Province

	1962-65 Agreement, Actual Expenditures		1965-70 Agreement, Allotment of Funds	
	(\$ million)	(%)	(\$ million)	(%)
P.E.I.	0.2	1.0	3.9	2.9
Nova Scotia	0.4	1.8	9.0	7.2
New Brunswick	0.5	2.0	8.4	6.7
Newfoundland	0.6	2.5	6.9	5.5
Quebec	9.9	41.2	28.3	22.7
Ontario	0.8	3.5	25.3	20.2
Manitoba	2.7	11.2	9.1	7.3
Saskatchewan	5.9	24.7	14.3	11.5
Alberta	1.5	6.1	11.5	9.2
British Columbia	1.5	6.0	8.7	6.9

Source: Economic Council of Canada. Fifth annual Review, The Challenge of Growth and Change. September, 1968. p. 172

for economic development in cooperation with the Economic Council of Canada.

After several years as solely an advisory body the ADB was provided with funding for programs and projects that were considered as likely to contribute to growth. Large expenditures on infrastructure development were made.⁸ Table 2.2 shows the distribution of funds to the Maritime Provinces.

As a result of this funding responsibility given to ADB, attention was directed to examination and financing of specific projects, and the advisory and planning aspect, which was its original objective, became secondary.⁹

It is unfortunate that the ADB spent the bulk of its funds on large scale social overhead capital type projects (highways, power projects, power interties, and industrial parks), rather than on directly productive activities secured to the intermediate establishment of new industrial activities. Generally speaking large capital projects lack easily visible or quantifiable success criteria and therefore pose little danger to the development authority. The ADB showed the safe course to take, investing the bulk of funds in social overhead capital, rather than direct job creating activity.¹⁰

The ADB was terminated in 1969 with the establishment of the Department of Regional Economic Expansion.

Area Development Agency, (ADA)

The Area Development Agency was established through legislation passed in 1963 by the federal government. It was designed to increase economic activity in designated geographic areas characterized by heavy and chronic unemployment. This was to be the first federal agency

Table 2.2

Distribution of ADB Funds
By Purpose and Province
Cumulated to December 31, 1967

	P.E.I. (thousands of dollars)	N.S.	N.B.	% of spending
Electric Power Development	4,300	12,113	20,000	48.4
Water Development for Resource Processing Industries	1,322	3,835	1,195	8.4
Industrial Parks & other Aid for Industries	150	10,039	3,587	18.3
Trunk Roads & Highways	1,000	3,000	3,000	9.3
Development Research	-	4,400	3,058	9.9
Miscellaneous	1,275	2,904	-	5.7
Total	8,047	36,291	30,840	
% Distribution	7.0	31.6	27.0	

Note: The ADB was also implemented in Newfoundland thus our distribution of funds are not complete.

Source: Economic Council of Canada. Fifth annual Review, The Challenge of Growth and Change. September, 1968. p. 174

specially designed to aid depressed areas across the country.

Tax incentives were the main instrument of ADA's economic development plan. These incentives took many forms ranging from full tax exemptions to substantial equipment write offs.¹¹

In 1965 ADA was given a broader scope and turned into the Area Development Incentives Act. This program provided a clearer definition of what areas were eligible for benefits and replaced the tax incentives with a cash grant system.¹²

Shown in Table 2.3 are the ADIA payments by fiscal year. Over its duration ADIA spent in excess of \$200 million on manufacturing and processing industries, of which 21.2% was spent in Maritime Canada.

One problem with ADIA's policies was that larger centers in the Maritimes such as Saint John and Halifax did not qualify for any benefit. This may have been due to the required levels of unemployment that were imposed in order to receive benefits. Thus large sums of money were spent on the development of infrastructure projects and the subsidization of industries in rural areas rather than using the more populated promising locations elsewhere.¹³

DEVCO

In 1967, under recommendations of a commissioned report, the federal government established the Cape Breton Development Corporation. At the time the world market for coal had been declining and Cape Breton coal mines faced

Table 2.3

ADIA Payments
by Province
By Fiscal Year 1965/66 to 1973/74
(%)

	65/66	66/67	67/68	68/69	69/70	70/71	71/72	72/73	73/74	65/66- 73/74
P.E.I.	-	-	0.09	0.7	0.8	0.6	0.5	0.4	0.009	0.6
N.S.	13.6	5.8	2.00	8.1	10.6	7.8	28.8	27.1	40.26	18.5
N.B.	14.2	54.5	3.2	10.1	10.4	22.5	19.7	19.0	23.8	2.1
Nfld.	-	0.7	0.65	12.0	4.4	4.1	0.4	1.1	4.8	3.8
Quebec	9.5	10.4	39.0	21.9	23.8	29.7	20.4	25.8	13.5	31.0
Ontario	18.8	10.3	34.9	21.4	18.7	13.6	12.4	9.8	5.2	18.0
Manitoba	2.7	4.2	17.2	10.4	9.1	6.7	2.8	2.5	0.9	7.5
Sask.	-	9.2	1.1	12.4	2.8	3.9	2.0	2.1	0.7	4.1
Alberta	-	-	0.4	0.008	15.1	4.7	0.2	0.1	0.2	5.0
B.C.	41.1	4.9	1.6	2.7	4.0	6.3	12.7	12.3	14.8	9.2
Total (\$millions)	.751	.999	14.736	25.616	54.479	47.386	63.101	24.290	14.333	213.02

Source: Department of Regional Economic Expansion. Annual Reports, Ottawa: Ministry of Supply and Services. selected years.

closure. Due to this, DEVCO was recommended by the Donald report to promote industrial development in Cape Breton in order to provide employment for the labour force as the coal mines were phased out over time.¹⁴

DEVCO immediately acquired the coal mines in Cape Breton and a plan for industrial development was issued. Under its coal division steps were introduced to reduce employment and ensure productivity in the mines. These steps included early retirement benefits for workers and 'compassionate' retirement for younger employees that were thought unfit to work. Under the industrial development division the corporation had two main objectives. They were to make use of all resources on the island and to attract secondary industry to provide new employment.¹⁵

The type of incentives used were grants, loans, loan guarantees, and equity financing. Initially there were twenty five to thirty new plants brought to Cape Breton.¹⁶ However, by the end of 1971 the seven companies that had been attracted to the area had closed and DEVCO had lost \$8 million.¹⁷ With this past performance DEVCO acquired a new president in 1971 and DREE henceforth required that it submit plans of operations and strategy for both divisions of the corporation.

As shown in Table 2.4 losses for the corporation were large, with the coal division experiencing especially heavy losses in the period 1973-1975. The cost of maintaining jobs in Cape Breton has been high for the federal government;

Table 2.4

Cape Breton Development Corporation Net Operating Loss For
Coal Division and Net Operating Cost For Development
Division, in Current Dollars, March 1967 to 1986

	Coal Division	Development Division
1967	55,108.00	10,414.99
1968	17,100,169.00	1,195,353.00
1969	21,935,092.00	4,828,873.00
1970	25,778,377.00	3,782,328.00
1971	28,830,059.00	2,090,261.00
1972	32,594,705.00	2,852,327.00
1973	31,459,028.00	3,809,819.00
1974	29,058,222.00	4,042,089.00
1975	29,018,620.00	5,220,236.00
1976	13,995,909.00	4,883,021.00
1977	28,305,756.00	6,126,848.00
1978	11,459,526.00	8,493,038.00
1979	12,563,739.00	6,455,419.00
1980	18,260,488.00	7,042,970.00
1981	10,545,236.00	7,200,156.00
1982	22,328,383.00	11,064,051.00
1983	46,518,516.00	8,218,732.00
1984	49,622,754.00	11,873,357.00
1985	21,135,998.00	11,406,643.00
1986	47,426,653.00	6,516,903.00

Source: The Cape Breton Development Corporation. Annual Report. selected years.

most of these losses are covered by federal grants while the remainder are written off as long term debt.

The Department of Regional Economic Expansion,

The Department of Regional Economic Expansion was established by an Act of Parliament in 1969 with the goal to ensure that economic growth was more widely experienced across the whole of Canada and that unemployment levels in slow growth regions be brought in line with the rest of the country.¹⁸

DREE served as a governing department for the various programs which had accumulated over the years. It absorbed ADA, ADB, ARDA, and several other equalization programs. The Atlantic Development Board actually was transformed into the Atlantic Development Council. The main difference being that the ADC could not recommend how money was spent in their region, but still was considered by the federal government as an advisory agency.¹⁹

A new program for "special areas" was introduced and was largely based on the ARDA concept. It concentrated on areas of high unemployment and relatively slow economic growth. In the Maritime Provinces, Saint John, Moncton, and the Halifax-Dartmouth area were selected as special areas.

These special area agreements sponsored a great variety of projects: highways, water and sewage systems, industrial parks, tourist attractions, servicing of industrial land, and schools. The federal government covered 50 per cent of the cost of certain projects plus a loan for part or all of the remainder.²⁰

Another program, the Regional Development Incentives Act was

introduced under DREE in 1969. Designated areas were selected in consultation with each province and grants were provided for firms setting up or expanding in the specified areas.

In 1972, DREE undertook a major review of the past performance of its operations. It concluded that individual regions had different problems and opportunities and thus each deserved individual treatment. As a result of this finding DREE's mandate was broadened and now focused on national as opposed to regional development.²¹

The General Development Agreements, (GDA)

The General Development Agreements were between federal and provincial governments in the support of particular development opportunities. These agreements were not restricted to specific areas and thus could be used for any type of development activity.²² They included a joint funding approach between the province and the federal government. Major expenditures were on infrastructure and natural resource development.

It should be noted that Prince Edward Island does not have GDA's. Instead the development opportunities are carried out under the P.E.I. Comprehensive Development Plan. This was signed in 1969 and still remains active today.²³ Activities under this plan range from resource to infrastructure development. Funding is a cost shared agreement under DREE.

MSRED and DRIE

In 1983, through an Act of Parliament, DREE was dismantled and two new departments were formed. The Ministry of State for Economic and Regional Development (MSRED) was created as well as The Department for Regional Industrial Expansion (DRIE).

General Development Agreements were to be replaced as they expired with a new set of agreements. These would be designed in collaboration with respective provinces and their private sector. MSRED was designed to coordinate regional development initiatives and have decentralized power that was greater than its predecessor DREE.

DRIE was in fact the result of an amalgamation of DREE and The Department of Industry, Trade and Commerce. The level of funding available was to depend on the degree of disparity. In the Maritimes funding is categorized by using counties as classifications.

In this chapter we have looked at the programs instituted by the federal government for the economic development of The Maritime Provinces. The following chapter will look at recent theory on this kind of government intervention and its application to Maritime inequality.

END NOTES

1. N.H. Lithwick, Regional Economic Policy: The Canadian Experience. (Toronto: McGraw Hill Ryerson Limited, 1978.) p. 230
2. N.H. Lithwick, *Ibid*, p. 219

3. N.H. Lithwick, *Ibid*, p. 219
4. T.N. Brewis, Regional Economic Policies in Canada. (Toronto: The MacMillan Company of Canada, 1969.) p. 106
5. Economic Council of Canada. Fifth Annual Review; The Challenge of Growth and Change. (Ottawa: Queen's Printer, 1968.) p. 170
6. L.J. Walinsky, Evaluation of Economic Research Relating to the Atlantic Region. A report to the Atlantic Provinces Research Board. 1967
7. R.I. McAllister, Some Federal Programs in the Context of Regional Development. (Halifax: Dalhousie University, 1972.) p. 4-7
8. N.H. Lithwick, *Ibid*, p. 221
9. N.H. Lithwick, *Ibid*, p. 221
10. Interview, R.K. Fletcher, Nova Scotia Department of Development.
11. T.N. Brewis, *Ibid*, p. 149
12. T.N. Brewis, *Ibid*, p. 149
13. R.I. MacAllister, *Ibid*, pp. 1-3
14. A. Tupper, G.B. Doern, Public Corporations and Public Policy in Canada. (Montreal: The Institute for Research on Public Policy, 1981.) p. 365
15. A. Tupper, G.B. Doern, *Ibid*, p. 372
16. A. Tupper, G.B. Doern, *Ibid*, p. 373
17. M. Gordon, Government in Business. (Montreal: C.D. Howe, Institute of Montreal, 1981.) p. 165
18. The Economic Council of Canada, Living Together, A Study of Regional Disparities. (Ottawa: Minister of Supply and Services, 1977.) p. 147
19. D.J. Savoie, Regional Economic Development, Canada's Search for Solutions. (Toronto: University of Toronto Press 1986.) pp. 34-35
20. D.J. Savoie, *Ibid*, p. 38
21. R.I. MacAllister, *Ibid*, p. 12

22. D.J. Savoie, *Ibid*, p. 48

23. The Economic Council of Canada, DREE Development Agreements. (Ottawa: Ministry of Supply and Services, 1981.)
p. 217

CHAPTER 3
THEORIES OF REGIONAL ECONOMIC DEVELOPMENT

We have seen in the last chapter that a substantial amount of money has been spent by the federal government towards alleviating regional economic disparity. There have also been a number of assessments of these programs and their real impact on the problem. One of the most thorough and most recent studies has been that of Donald J. Savoie in his book, Regional Economic Development, Canada's Search For Solutions.¹ Although his book is concerned with the development of all regions in Canada, Savoie gives special attention to the economic development of his native Atlantic Canada.

Of past and present federal government programs there have been two kinds of approaches or strategies followed. The first as described by Savoie is the growth pole approach used by DREE in the earlier years. This consisted of selecting specific areas for economic development within each region. This policy was discarded after only a few years and Savoie is critical of this decision claiming that federal expectations were simply too high.² The alternative strategy is that of cost share programs. They have been so many and so different that Savoie states that no conceivable theory could possibly cover all of them.³

Although Savoie argues throughout his review that federal initiatives have been ineffective in many respects, he does insist that they are necessary within the political reality of Canada. They are contrasted to the natural economic course of change that theoretically would see necessary adjustments to alleviate regional disparities occur over time. However, this would be both slow and inefficient when considering the protective actions that would be taken by the provincial governments. Savoie states that this policy would not survive in Canada, since politicians today are not willing to wait for unfettered markets to make slow adjustments.⁴

Method and measurement is a key issue in accurate evaluation of development programs. Regional economic development has traditionally used two figures as indicators of effectiveness. These are unemployment rates and per capita incomes within the regions. Income per capita in the Maritimes has consistently been lower than the national average and this has been accompanied by higher unemployment levels. Savoie argues that we should in fact be looking further than these interrelated figures to indicators that give a clearer indication of any overall improvement that has been due to these programs for development.⁵

Federal transfer payments have been able to lessen the gap in per capita income over the years, yet there has been little progress in earned income and unemployment rates. Indicators such as public service levels and other quality

of life indicators suggest disparities that are lower than shown by traditional measurements.⁶ Simultaneously, the western economic boom of the 1970s has contributed greatly in making disparity levels more apparent in Maritime Canada.

Regional disparity may exist for reasons that are inherent in the regions themselves. The disbursement of natural resources across Canada has been comparatively harder on the Maritimes in terms of both total resource base per capita and total resource levels. As a result of this, regional shares of value added figures for the Maritimes have experienced a steady decline. Savoie points out that only one exception exists and that is in the fisheries.

Human resources are also necessary in explaining some of the disparity that exists. Savoie correctly notes that it is the regional labour force that is important and not total regional population. Participation rates will influence potential productivity as well as the dependency ratio, (i.e. those not in the labour force) facing a region.

Urbanization is considered by Savoie as an important factor in influencing regional economic growth. This is mainly due to the fact that the service industries are the fastest growing sector of the economy and originate in urban areas. The Maritime Provinces have the weakest urban structure of any region in Canada. With 50 percent import transportation subsidies for most manufacturing items, Maritime manufacturers have developed little strength in industries that are not resource based or close to local

markets.⁷ The economic growth and prosperity of the urban areas of Halifax, Saint John, and Moncton can hardly be compared to those of Toronto, Hamilton or Windsor.

From the arguments provided by Savoie we can see that assessment of regional development initiatives is not a simple matter. There are a variety of indicators to choose from and their interpretation can take many forms. When Savoie concluded that government intervention is necessary in Canadian regional development, he was in fact entering an area in which many economists still have substantive disagreements.

Perhaps Deepak Lal stated the question most succinctly in his recent book The Poverty of Development Economics,⁸ by indicating there are two lines of thought regarding the matter. There are those who believe central planning should supplant the workings of the market mechanism, and those who take the orthodox approach that it should only supplement the mechanism.⁹

Although The Poverty of Development Economics deals mainly with developmental theories for countries, its concepts can be applied to regions within Canada. It is analogous to a system of fixed exchange rates. According to Lal modern development economics has evolved around a set of beliefs and principles that he refers to as the Dirigiste Dogma¹⁰. The essential elements of which are the need for government intervention in development and a belief in the invalidity of a strict liberal and economic cure for

underdeveloped areas. Lal's purpose is to question the concepts of Dirigiste Dogma and to point out possible consequences in the form and extent of government intervention.

He argues that welfare economics has had no real place in development theory and practise mainly due to its ethical considerations.¹¹ Welfare economics is concerned with two general questions, (1) the measurement of real income, and (2) the efficiency and equity of particular economic outcomes. Clearly these questions are directly related to the effect of government policy. Income distribution is the key issue here and Lal is correct in bringing this measurement into an assessment of aggregate economic welfare of any developing region.

Socially desirable distribution of income and a laissez-faire Pareto efficient equilibrium are not always the same thing. Pareto efficiency is defined as an allocation of resources such that, given existing resources and technology, no individual can be made better off without making others worse off. Lal claims that government intervention may be necessary to achieve social acceptance, even if the economy were to have perfectly competitive characteristics. However, even with government intervention truly Pareto optimal levels are a product of only Utopian states.

Two factors stand in the way of this goal, (1) the impossibility of true perfect competition, and (2) the non-

existence of universal markets for all goods in the regions. In the real world these necessary conditions severely limit the possibility of an optimum no matter how much intervention. We are even taken further away from the optimal situation when we consider that bureaucratic and market failure are always present in the system. Lal states that due to these conditions even a lump sum tax/subsidy system would fail to obtain a welfare optimum and that,

...all that can be achieved is a 'second best' optimum where the net gain from distributional gain and efficiency loss is at a maximum level.¹²

In the above case government intervention is essential if a second best optimum is to be even theoretically approached. On a practical level, the major reason for government intervention is in the development of necessary infrastructure. Certainly in the Maritimes federal policy has reflected this in the past with such policies as those of the Atlantic Development Board mentioned in the previous chapter. Although this program was comparatively short lived, the infrastructure that was developed was essential for any future economic growth.

Lal claims that planning is an important yet difficult task for any central authority due to the unpredictability of future demand and supply conditions within regions. Perfect planning requires accurate information on future resource availability, technology, as well as future tastes that in the real world are impossible to forecast accurately. Even if this was possible, it is questionable

whether planners could actually devise a plan that was functional to obtain a welfare optimum.

Attraction of industries to regions does require government intervention if it is to be successful. Lal finds that effective protectionism is an important incentive for industrial promotion and it is also a major determinant of net social gain for the host region. Policies introduced during the development stage may restrict domestic industrial growth in the long run.

This conclusion again implies that a government's role in economic development, given its form and nature, influences possible economic outcomes for the developing region. Perhaps one of Lal's most significant findings is that economic development under the Dirigiste Dogma does not necessarily imply an equal distribution of wealth in the region.

Simon Kuznets¹³ has done some work in this area of study and his findings are directly applicable to Maritime Canada. As Lal has suggested Kuznets found that the distribution of income is significantly different for individual regions of a country. In a study of Italian and American regions he found that relative income inequality is in fact wider in the lower income, less industrialized regions, and that this wider inequality is due to a higher share of upper income groups in these less developed regions.¹⁴

Kuznets suggests that the main reasons for this could be

concentration of income. This could be caused by: (1) a lower percentage of the underdeveloped population being able to invest as compared to the developed regions, (2) a weaker economic position of the lower income groups, (3) a weaker economic system of equalization of wealth in the less developed region, and (4) a greater possibility of persistent monopoly power of the wealthy few.¹⁵

Although Kuznets admits that his data may be distorted due to abnormal economic conditions during the sample period, his findings are worth noting. If we are to assume that per capita is already lower in Maritime Canada, then his conditions indicated above could only add to the problem of regional economic inequality.

In conclusion both Savoie and Kuznets have presented strong arguments for a change in conventional methods of measurement of regional disparity. Simply stated, they have found that traditional measurements of per capita income and unemployment rates are truly incomplete indicators of inequality. Lal makes strong arguments that question fundamental beliefs of economic development policy. From his points raised we are forced to ponder what consequences have arisen from government intervention and how has it affected the economy of developing regions.

In the next two chapters we shall consider aspects of the effectiveness of federal government policies for development of the Maritime Provinces. The first will be a measurement of aggregate variables in a macro economic

setting. The second will be the measurement of micro economic variables. In instances both shall we keep in mind what has been discussed in this chapter in an attempt to determine what has been the real effect of these policies for development.

END NOTES

1. D.J. Savoie, Regional Economic Development, Canada's Search For Solutions. (Toronto: University of Toronto Press, 1986.)
2. D.J. Savoie, *Ibid*, p. 135
3. D.J. Savoie, *Ibid*, pp.136
4. D.J. Savoie, *Ibid*, pp. 138
5. D.J. Savoie, *Ibid*, pp. 140
6. D.J. Savoie, *Ibid*, pp. 140-141
7. D.J. Savoie, *Ibid*, pp. 148-149
8. D. Lal, The Poverty of Development Economics. (Cambridge: Harvard University Press, 1985.)
9. D. Lal, *Ibid*, p. 3
10. D. Lal, *Ibid*, p. 4
11. D. Lal, *Ibid*, pp. 10-11
12. D. Lal, *Ibid*, p. 15
13. S. Kuznets, "Quantitative Aspects of The Economic Growth of Nations", Economic Development and Cultural Change. (Chicago: The University of Chicago Press, Vol. XI, No. 2, Part 2, 1963.)
14. S. Kuznets, *Ibid*, p. 37
15. S. Kuznets, *Ibid*, pp. 46-47

CHAPTER 4
MACRO ECONOMIC ASSESSMENT OF FEDERAL POLICIES

In order to examine macro economic development characteristics of the Maritimes, data was taken from the Provincial Economic Accounts.¹ These accounts are similar in form to the system of National Accounts. They provide yearly data on provincial gross domestic products, provincial expenditures, revenues, and incomes, as well as revenues and expenditures for all levels of government within each province. Statistics on an annual basis are available from 1962 to 1984. All data retrieved are the latest revised figures.

Perhaps the most commonly known form of financial transfer are those that supplement personal income. These can take many forms such as unemployment insurance benefits, welfare payments, child care allowance, and many more. In Table 4.1 we can see how these, compared to other components of personal income, have increased in Canada and the Maritimes since 1962.

As shown the various components of personal income have all risen at approximately the same rates for Canada and the Maritime Provinces. The possible exception for Nova Scotia may be spurious and only due to the choice of a base year. The slowest growth rates are shown for farm income, while

Table 4.1

Average Annual Growth Rates of
Components of Personal Income
(Millions of Current Dollars)
1962-1983

Personal income	Wages, salaries and suppl. income	Net income of farming and other income	Interest, dividends and other invest. income	Total personal transfers
10.7	10.7	7.3	13.7	13.6
<u>Canada</u>				
11.2	11.0	7.2	13.7	13.2
<u>P.E.I.</u>				
10.6	10.3	8.4	12.2	12.8
<u>Nova Scotia</u>				
10.9	10.5	7.6	13.0	13.4
<u>New Brunswick</u>				

Source: Provincial Economic Accounts, Cat.# 13-213, Selected Years, Table 10.

Table 4.2

Percentage Components of Personal Income
in Millions of Dollars
3 Year Average

	Personal income	Wages, salaries and suppl. income	Net income of farming	Interest, dividends and other invest. income	Total personal transfers
			<u>Canada</u>		
1963	100.0	68.6	14.8	7.9	8.7
1973	100.0	69.5	11.5	8.1	10.9
1983	100.0	66.6	6.5	13.2	13.7
			<u>P.E.I.</u>		
1963	100.0	55.3	20.9	5.8	18.0
1973	100.0	57.4	15.3	6.8	20.5
1983	100.0	52.2	15.8	8.2	23.8
			<u>Nova Scotia</u>		
1963	100.0	68.6	12.0	7.2	12.2
1973	100.0	68.3	8.5	7.3	15.9
1983	100.0	64.9	6.8	9.9	18.4
			<u>New Brunswick</u>		
1963	100.0	67.9	12.0	6.6	13.5
1973	100.0	67.8	8.3	6.6	17.3
1983	100.0	62.9	5.6	9.7	21.7

Source: Provincial Economic Accounts, Cat.# 13-213, Selected Years, Table 10.⁴¹

investment income and personal transfers rose at even a higher rate than personal income. The effects of these trends are demonstrated in Table 4.2 which gives a percentage breakdown of a three year average of personal income around the years 1963, 1973, and 1983. Clearly the data indicates that total current transfers are a much larger part of Maritime personal income than the national average. Over all the three-year periods Prince Edward Island has had approximately a 10% higher transfer contribution, while New Brunswick and Nova Scotia also received a contribution significantly higher than the nation as a whole. Noticeably investment income is less significant in the Maritimes and becoming relatively less so compared to Canada.

However total net fiscal transfers include more than just those to persons. Recognizing this we estimate total transfers by what we refer to as the "federal revenue expenditure balance" (FREB). Calculation of FREB is done by subtracting total federal expenditures from the total revenues collected by the federal government within each province. Thus a resulting figure that is positive represents a financial transfer to that region. As will be shown by the data these net financial transfers have always occurred in the Maritime Provinces at least since 1962 and likely for much longer. The components of federal expenditures and revenues used to calculate FREB are shown in Table 4.3.

Table 4.3

Components of Federal Revenue and Expenditure
Within the Provinces.

Revenue:

1. Federal direct taxes on persons (2)
2. Federal direct taxes on corporate and government business enterprises. (8)
3. Federal indirect taxes. (12)
4. Other current transfers from persons, federal. (16)
5. Federal investment income. (21)

Expenditures:

1. Federal current expenditures on goods and services. (42)
2. Federal transfer payments to persons. (49)
3. Canada Pension Plan (52)
4. Federal subsidies (55)
5. Federal capital assistance. (58)
6. Federal current transfers to non-residents. (61)
7. Federal interest on public debt. (64)
8. Federal current transfers to other levels of government. (69, 70)

Equation:

Federal Revenue Expenditure Balance= Revenue - Expenditure.

(Note: The above are the category headings used in Table 3. The figures in brackets are the line numbers.)

Source: Provincial Economic Accounts, Catalogue #13-213, Selected Years, Table 3.

Table 4.4
Federal Revenue Expenditure Balance
in Millions of Dollars
Deflated, 1971 Base Year

	P.E.I.	N.S.	N.B.
1962	57.2	388.3	205.7
1963	60.2	393.0	192.5
1964	65.3	385.1	231.1
1965	65.7	403.2	223.7
1966	90.7	453.9	232.4
1967	84.9	470.3	281.7
1968	78.9	508.5	268.3
1969	69.1	449.3	268.8
1970	83.6	450.9	251.8
1971	97.0	508.0	381.0
1972	107.6	482.9	334.3
1973	111.4	534.2	357.9
1974	117.3	721.4	442.8
1975	138.7	894.7	646.6
1976	141.4	912.7	647.9
1977	158.9	987.2	693.1
1978	179.5	1082.1	674.8
1979	163.7	1075.9	640.4
1980	158.1	1230.7	917.6
1981	150.1	1205.1	784.1
1982	153.5	1159.7	821.7
1983	174.4	1231.3	731.1
1984	197.8	1359.2	772.9

Average
Annual
Growth
Rate:

5.5%

5.6%

5.9%

Source: Provincial Economic Accounts, Catalogue #13-213,
Selected Years, Table 3.

In Table 4.4 calculations of FREB are shown for the Maritime Provinces. Average annual growth rates have remained approximately the same for all three provinces at just below 6%. Nova Scotia has consistently received the highest absolute amounts, relatively gaining with respect to P.E.I. but declining compared to New Brunswick.

The payment of fiscal transfers does not guarantee that real transfers will be effected. For it is possible that some at least of the former will be offset by a financial outflow. The real transfer may be estimated by the level of net exports for the individual provinces.

The reasoning for this method of valuation is that since negative net exports in the Maritime Provinces represent a net inflow of goods and services they must be paid for by at least one of two sources. The first potential source, capital inflows for which data are not available, seems unlikely since there exists no indirect evidence of such an occurrence in Maritime Canada. Actually the very nature of the Canadian banking system would likely lead to capital outflows rather than inflows from the region in the form of savings. The only other explanation of payment must be through federal fiscal transfers. Thus measurement of provincial net export levels are in fact aggregate valuations of net real transfers from the federal government.

These are given in Table 4.5 as deflated values of net exports, along with their average annual percentage growth

Table 4.5
 Net Exports
 in Millions of Dollars
 Deflated, 1971 Base Year

	P.E.I.	N.S.	N.B.
1962	91.7	406.0	262.8
1963	96.1	461.1	270.2
1964	84.6	506.8	375.9
1965	87.4	554.6	435.2
1966	107.4	612.5	411.7
1967	96.9	648.3	446.5
1968	88.4	654.7	373.3
1969	78.6	622.7	411.0
1970	89.3	694.6	396.1
1971	119.1	819.1	518.7
1972	125.3	637.1	384.8
1973	144.2	710.9	367.9
1974	159.7	928.1	645.7
1975	159.9	979.5	848.2
1976	155.1	1023.7	829.3
1977	182.9	1027.9	782.2
1978	211.3	1070.1	688.6
1979	191.9	1155.4	555.5
1980	169.2	1259.9	651.8
1981	131.5	1318.4	743.3
1982	132.9	1250.1	683.1
1983	158.2	1405.4	588.7
1984	183.1	1423.2	605.9
Average Annual Growth Rate:	3.1%	5.6%	3.7%

Source: Provincial Economic Accounts, Catalogue # 13-213,
 Selected Years, Table 3.

rates. They are obviously of the same magnitude as the FREQ values and tend to move together. This can be supported by the following correlations.

Prince Edward Island

Net Exports = 35.5992 + 0.824938*FREQ
Correlation coefficient = 0.9165

Nova Scotia

Net Exports = 186.2270 + 0.913457*FREQ
Correlation coefficient = 0.9767

New Brunswick

Net Exports = 182.5640 + 0.761998*FREQ
Correlation coefficient = 0.8806

The results of the above show high values of positive correlation between net exports and FREQ. Higher values of FREQ are associated with higher values of net exports within the province. Thus it has been found that as federal financial transfers increase so does the amount of real goods and services transferred from the rest of Canada to the Maritime Provinces. We conclude that a significant portion of the fiscal transfers lead to real transfers for the Maritime Provinces.

END NOTES

1. Provincial Economic Accounts. (Ottawa: The Ministry of Supply and Services.), selected issues.

CHAPTER 5
MICRO ECONOMIC ASSESSMENT OF FEDERAL POLICIES

In this chapter the micro economic effects of federal regional development policies will be assessed for Maritime Canada. The source of most of the data examined in this chapter is from the Canadian census for the years 1961, 1971, and 1981. Due to the inability to obtain comparative data consistently for Prince Edward Island, because of its relatively small size, in some instances this province will not be included in the analysis.

Income Change

Per capita income has traditionally been a measure of economic development. It follows then that any study of regional development should use this measure as a comparison to the nation as a whole.

Table 5.1 shows per capita income by province as a percentage of Canada. Over the years these percentages have been steadily rising, yet they still have remained consistently below the national level. In order to gain a more thorough understanding of this disparity the analysis must move away from aggregate data and deal with a breakdown of the provincial economies.

In studying the Maritime economy by sectors we shall be able to observe individual industrial characteristics and

Table 5.1
Per Capita Income by Province
Relative to the National Average
(Canada = 100)
1961-1983

	P.E.I.	N.S.	N.B.
1961	58.8	77.5	67.8
1966	60.1	74.8	68.9
1971	63.7	77.4	72.2
1976	68.6	78.8	75.6
1980	71.0	79.1	71.1
1983	74.3	80.4	74.2

Source: Coffey, W., Polese, M., Still Living Together, (Montreal: The Institute for Research on Public Policy, 1987.) p. 20

assess their contribution to regional disparity. Incomes will be compared to Canada by looking at a sample of average incomes by occupation from all three sectors of the economy.

In Tables 5.2 and 5.3 average male incomes are given as a percentage of the national average for each occupation. Nova Scotia shows average incomes that are below the national average with only one exception, "physicians" for the 1961 census. The majority of occupations in New Brunswick have also been below national average incomes, with two exceptions, lawyers and physicians, as compared to Nova Scotia. Some occupations have shown consistently higher average incomes in one province than the other, e.g. miners in Nova Scotia and pulp and paper workers in New Brunswick. In both provinces those that have shown the closest parity to Canada are the professional occupations

Table 5.2

Average Male Income by Occupation in Nova Scotia
as a Percentage of Canadian Average
Census Years 1961-1981

	1961	1971	1981
<u>Occupations</u>			
Farmers and Farm Workers	86.3	89.5	76.8
Miners and Related Workers	69.8	79.7	78.9
Pulp and Paper Workers	87.6	79.9	93.5
Secondary School Teachers	78.9	83.9	89.8
Lawyers	81.6	81.4	75.7
Physicians	107.2	97.1	97.6
Nurses	88.1	77.5	n/a
Medical and Dental Technicians	84.9	86.9	86.7
Social Workers	93.8	94.4	84.5
Book Keepers	87.0	84.1	90.9
Machinists	81.2	91.2	86.2
Construction Labourers	76.0	55.6	68.7
Carpenters	83.2	81.6	75.5
Bus Drivers	62.3	68.5	63.7

Source: Census of Canada, Population Characteristics,
Catalogue #94-539, Vol. 3, Part 3, 1961, Catalogue #94-
765/6, Part 6, Bulletin 3-6-8, 1971, Catalogue #92-930, Vol.
1, 1981.

Table 5.3

Average Male Income by Occupation in New Brunswick
as a Percentage of Canadian Average
Census Years 1961-1981

	1961	1971	1981
<u>Occupations</u>			
Farmers and Farm Workers	85.4	84.9	64.2
Miners and Related Workers	54.9	72.5	74.3
Pulp and Paper Workers	90.1	94.0	97.6
Secondary School Teachers	71.7	74.4	83.9
Lawyers	107.2	81.4	88.1
Physicians	122.8	98.1	105.6
Nurses	92.3	80.1	n/a
Medical and Dental Technicians	96.6	n/a	n/a
Social Workers	92.8	101.7	97.9
Book Keepers	87.1	89.7	100.3
Machinists	82.7	84.5	95.8
Construction Labourers	70.9	61.0	69.3
Carpenters	78.7	74.2	67.6
Bus Drivers	61.9	67.5	65.1

Source: Census of Canada, Population Characteristics,
Catalogue #94-539, Vol. 3, Part 3, 1961, Catalogue #94-
765/6, Part 6, Bulletin 3-6-8, 1971, Catalogue #92-930, Vol.
1, 1981.

and other highly organized occupations.

Can the same be said of female average incomes? Unfortunately, due to the lower rates of participation of women in the primary and secondary sectors, consistent data were available only for tertiary sector occupations. Tables 5.4 and 5.5 give average female incomes as a percentage of the national average for four occupations in Nova Scotia and New Brunswick. As was the case with males data for both provinces show average incomes that have been consistently lower than the national average with no exceptions for either province. We also can see that these occupations in New Brunswick initially had incomes lower than those in Nova Scotia, yet have risen close to parity by the 1981 Census.

However we should note that average incomes do not give any indication as to the shape of income distributions. Levels of mean income can be heavily influenced by a small number of excessively higher or lower incomes. By not having knowledge of the variance of these distributions there is no precise way of assessing changes in income inequality over time.

However, in order to estimate the inequality of incomes for Nova Scotia and New Brunswick, some insight can be gained by using mean/median ratios. These ratios are an indication of the dispersion of distributions, and are given by occupations for Nova Scotia and New Brunswick in Tables 5.6 and 5.7.

In both provinces just less than half of the sampled

Table 5.4

Average Female Income in Nova Scotia as a Percentage of
Canadian Average
Census Years 1961-1981

	1961	1971	1981
<u>Occupations</u>			
Secondary School Teachers	83.1	94.7	95.1
Social Workers	78.3	94.8	86.9
Medical and Dental Technicians	92.9	89.5	96.3
Nurses	92.4	86.1	83.2

Source: Census of Canada, Population Characteristics,
Catalogue #94-539, Vol. 3, Part 3, 1961, Catalogue #94-
765/6, Part 6, Bulletin 3-6-8, 1971, Catalogue #92-930, Vol.
1, 1981.

Table 5.5

Average Female Income in New Brunswick as a Percentage of
Canadian Average
Census Years 1961-1981

	1961	1971	1981
<u>Occupations</u>			
Secondary School Teachers	73.4	79.7	90.2
Social Workers	73.8	76.3	89.3
Medical and Dental Technicians	92.5	84.6	92.3
Nurses	92.9	79.2	76.4

Source: Census of Canada, Population Characteristics,
Catalogue #94-539, Vol. 3, Part 3, 1961, Catalogue #94-
765/6, Part 6, Bulletin 3-6-8, 1971, Catalogue # 92-930,
Vol. 1, 1981.

Table 5.6

Mean/Median Ratio of Census Incomes
Nova Scotia Males

	1971	1981
<u>Occupations</u>		
Farmers and Farm Workers	135.2	178.3
Miners and Related Workers	99.2	98.9
Pulp and Paper Workers	104.7	94.6
Secondary School Teachers	99.3	91.8
Lawyers	129.7	113.0
Physicians	112.3	n/a
Nurses	114.2	n/a
Medical and Dental Technicians	98.2	98.4
Social Workers	96.3	97.6
Book Keepers	97.2	93.4
Machinists	97.9	92.3
Construction Labourers	n/a	105.9
Carpenters	102.4	107.4
Bus Drivers	107.8	101.4

Source: Census of Canada, Population Characteristics,
Catalogue #94-539, Vol. 3, Part 3, 1961, Catalogue #94-
765/6, Part 6, Bulletin 3-6-8, 1971, Catalogue #92-930, Vol.
1, 1981.

Table 5.7

Mean/Median Ratio of Census Incomes
New Brunswick Males

	1971	1981
<u>Occupations</u>		
Farmers and Farm Workers	138.8	138.7
Miners and Related Workers	99.1	101.4
Pulp and Paper Workers	94.0	89.6
Secondary School Teachers	97.3	93.1
Lawyers	127.2	122.4
Physicians	n/a	n/a
Nurses	97.8	n/a
Medical and Dental Technicians	n/a	n/a
Social Workers	113.3	87.8
Book Keepers	99.6	92.1
Machinists	90.7	90.8
Construction Labourers	110.7	122.1
Carpenters	103.8	114.9
Bus Drivers	106.3	99.9

Source: Census of Canada, Population Characteristics,
Catalogue #94-539, Vol. 3, Part 3, 1961, Catalogue #94-
765/6, Part 6, Bulletin 3-6-8, 1971, Catalogue #92-930, Vol.
1, 1981.

occupations have a income distribution that is positively skewed, (i.e. skewed to the right). What this means is that the majority of workers in those occupations earn less than the provincial average. Thus in cases where an occupation has average income below the national average, the majority of these workers earn less than the provincial average as well. An example of this is for farmers, where in the Maritimes the majority have earned less than both the national and the provincial averages. In both provinces the majority of these occupations have experienced an increase in this ratio, meaning that these income distributions have become increasingly positively skewed.

Industrial Change

Lal indicated in his book The Poverty of Development Economics¹ that government intervention may alter a region's industrial structure. In order to see how federal policies have affected this we shall compare changes in it to those for Canada as a whole. Changes in industrial structure shall be examined by measuring the percentage change in labour force share of each industry between 1961 and 1981. For example, from Table 5.8 the share of the total P.E.I. labour force for the construction industry was 6.49% and 7.97% in 1961 and 1981 respectively. Therefore the percentage change in this industrial share of labour force was a 22.8% increase.

From Table 5.8 it is apparent that industrial growth across Canada has occurred mainly in the service industries,

Table 5.8

Percentage Change in Industry Share of Labour Force
For the Period 1961 to 1981

	Canada	P.E.I.	N.S.	N.B.
<u>Industry</u>				
Agricultural, Food Processing	-45.1	-45.4	-23.1	-26.8
Forestry, forestry products	-27.6	4.2	-27.9	-30.6
Fish and fish products	10.7	5.63	11.8	4.9
Other manufacturing	-13.0	34.2	8.88	4.4
Construction	-26.9	22.8	-11.7	19.9
Transportation, Communication and other utilities	-12.0	-32.3	-30.1	-23.4
Education and related services	61.1	82.6	74.5	43.3
Health and welfare services	56.0	70.8	70.7	44.4
Services to business management	171.9	220.7	230.7	238.8
Public Adminis- tration	3.1	27.4	-21.8	-0.5
Finance, insurance and real estate	60.0	78.5	83.6	68.2
Wholesale, retail trade	10.7	5.6	11.8	4.9
All other industries	0.7	119.2	-28.2	-2.5

Source: Census of Canada, Labour Force Characteristics, Vol. 3, Part 2, Catalogue #94-518, 1961, and Population Characteristics, Vol. 1, 1981, Catalogue #92-921.

while agriculture has had the largest percentage decline. Traditional Maritime industries such as agriculture and forestry have declined with the exception of P.E.I. which has shown a small increase. Prince Edward Island also shows a substantially larger percentage increase in the Provinces.

It is interesting to note that service industries such as finance, insurance and real estate, and services to business management, have grown at a substantially faster rate for all Maritime Provinces than for Canada during the period 1961 to 1981. Other service industries in P.E.I. and New Brunswick such as education, health, and finance have also grown at faster rates than the national average.

Geographical Distribution

The economic characteristics examined thus far have been concerned with provincial and national aggregates. Sub-regional and provincial differences are also present in Canada and this is especially true in the case of the Maritimes². Can anything be said regarding sub-regional disparities?

Table 5.9 shows standardized percentage increases in per capita incomes for counties in the Maritimes. The standardized percentage increases are derived by dividing the data by the percentage change in national income which thus takes into account any effects of inflation.

As a general pattern over the past twenty years, counties that contain the larger cities have experienced lower percentage increases than the predominantly rural

Table 5.9

Percentage Increase in Mean Incomes Standardized
by Percentage Change in Canadian Mean Income, 1961-1981
by County

P.E.I.		Nova Scotia		New Brunswick	
Kings	1.51	Annapolis	1.17	Albert	1.08
Prince	1.16	Antigonish	1.16	Carleton	1.17
Queens	0.73	Cape Breton	0.84	Charlotte	1.25
		Colchester	1.08	Gloucestor	1.33
		Cumberland	1.08	Kent	1.56
		Digby	1.31	Kings	1.31
		Guysborough	1.31	Madawaska	1.02
		Halifax	0.98	North'land	1.08
		Hants	1.17	Queens	1.11
		Inverness	1.45	Restigouche	1.02
		Kings	0.90	Saint John	1.01
		Lunenburg	1.36	Sunbury	0.91
		Pictou	1.12	Victoria	1.04
		Queens	1.01	Westmorland	0.91
		Richmond	1.18	York	1.10
		Shelburne	1.46		
		Victoria	1.15		
		Yarmouth	1.23		

Source: Census of Canada, Labour Force Characteristics, Vol.3, Part 3, Catalogue #94-535,1961, and Provincial Series, Vol. 3, Part 3, 1981, Catalogue # 94-535.

counties. This seems appropriate when we consider that counties in the more rural areas of the Maritimes such as Kent now experiences the fourth lowest income levels in the country, while New Brunswick and Nova Scotian counties that possess larger cities are experiencing higher incomes than even the Canadian average.³

END NOTES

1. D. Lal, The Poverty of Developmental Economics. (Cambridge: Harvard University Press, 1985.) p. 82
2. D.J. Savoie, Regional Economic Development, Canada's Search For Solutions. (Toronto: University of Toronto Press 1986.) p. 110
3. D.J. Savoie, *Ibid*, p. 112

CHAPTER 6
SUMMARY AND CONCLUSIONS

During the years immediately before Confederation the Maritime Provinces were experiencing a period of relatively low prosperity compared to the rest of Canada. By joining Confederation the Maritimes had hoped to expand markets through strong transportation links with Central Canada. However, this result was not to be achieved.

Instead of markets being opened up for the Maritimes, the reverse occurred. Central Canada grew economically stronger through transport links, and increased their trade with the United States. The Maritimes failed to keep up with the industrial expansion, and soon found themselves with their traditional industries experiencing sharp declines in demand. The result was significantly lower per capita earned income in this region.

From the late 1930s to the early 1960s Canada's approach to cure this was primarily through intergovernmental fiscal arrangements. However, these agreements proved ineffective, and in the early 1960s the federal government took a different approach to solve the problem.

This new approach taken by the federal government, which is still followed today, was of a much more aggressive nature than the previous general fiscal arrangements.

Numerous federal programs and policies for development were more precisely targeted and, in an eclectic manner, reflected many theories of development. Each separate program could claim a different name, perspective, and objective. Yet despite the substantial influx of money made available by the federal government, income disparity between Canada and the Maritimes still exists today. Nonetheless these fiscal transfers must have had some discernible impact.

The methods of measuring what effect federal development intervention has had on the Maritimes are many. It is realized that economic development has been narrowly defined. Indicators such as the percentage urban/rural split of population suggest that economic development has actually decreased. Since the more aggressive approach of federal development policies were initiated in the early 1960s the rural percentage of Maritime population has actually increased from 43.4% to 48.2%.

In the Maritime Provinces it is well known that transfers have consistently accounted for a larger proportion of aggregate personal income than for the nation. It is also true that since 1961 the average annual rate of increase in personal transfers has been the same for this region and Canada as a whole.

With the calculation of the "federal revenue expenditure balance" we have measured the aggregate of overall financial transfers to each province. It has been

shown for Maritime provinces that these levels have a high positive correlation to the levels of real goods and services transferred, as measured by net exports. That is, higher fiscal transfers have been associated with higher real transfers to the Maritime Provinces.

In a micro economic assessment of federal regional policy we examined three characteristics of economic development. These were changes in occupational incomes, industrial structure and geographical distribution of per capita incomes.

Average income by occupation have been lower than the national average with the exception of professional and highly organized occupations. The latter groups have tended to maintain or even improve this relative position over time. Many of these same occupations possess positively skewed income distributions, thus indicating inequalities internal to the region. In view of this it seems that federal policies since the 1960s have done little to alleviate the problem of income disparity that is present in Maritime Canada.

Industrial change in the Maritimes has been similar to that of Canada over the past twenty years in that the largest growth has been in the service sector. However service industries such as finance, insurance and real estate, and services to business management have grown at a much faster rate than the rest of Canada. Traditional industries of the Maritimes such as agriculture and forestry

have unfortunately declined at a similar rate as the rest of Canada.

Sub-regional disparity also exists within Maritime Canada. Counties that possess larger cities have per capita income that in some cases is above the national level, while the predominantly rural counties can show the lowest levels in Canada. Perhaps this fact indicates where these federal development policies have been concentrating, and also explain the rising rural percentage of population.

To this day the federal government is still devising agencies in the name of regional disparity yet the approach is similar to those of the recent past. If under the current system of development economic parity is possible, then this may be at the cost of dependence at least in the short run.

BIBLIOGRAPHY

Books

1. Brewis, T.N., Regional Economic Policies in Canada. Toronto: The MacMillan Company of Canada, 1969.
2. Coffey, W.J., Polese, M., Still Living Together: Recent Trends and Future Directions in Canadian Regional Development. Montreal: The Institute for Research on Public Policy, 1987.
3. Creighton, D.G., British North America at Confederation. Ottawa: Queen's Printer, 1968.
4. Economic Council of Canada, Living Together, A Study of Regional Disparities. Ottawa: Minister of Supply and Services, 1977.
5. Economic Council of Canada, Financing Confederation, Today and Tomorrow. Ottawa: Minister of Supply and Services, 1982.
6. Gordon, M., Government in Business. Montreal: C.D. Howe, Institute of Montreal, 1981.
7. Green, A.G., Regional Aspects of Canada's Economic Growth. Toronto: University of Toronto Press, 1971.
8. Lal, D., The Poverty of Development Economics. Cambridge: Harvard University Press, 1985.
9. Lithwick, N.H. Regional Economic Policy, The Canadian Experience. Toronto: McGraw Hill Ryerson Limited, 1978.
10. Mackintosh, W.A., The Economic Background of Dominion Provincial Relations. Toronto: McClelland and Stewart Limited, 1957.
11. McAllister R.I., Some Federal Programs in the Context of Regional Development. Halifax: Dalhousie University, 1972.
12. Savoie, D.J., Regional Economic Development. Canada's Search For Solutions. Toronto: University of Toronto Press, 1986.
13. Tupper, A., Doern, G.B., Public Corporations and Public Policy in Canada. Montreal: The Institute for Research on

Public Policy, 1981

Journals

1. Kuznets, S., "Quantitative Aspects of The Economic Growth of Nations", Economic Development and Cultural Change. Chicago: The University of Chicago Press, Vol. XI, No. 2, Part 2, 1963.

Documents and Reports

1. Census of Canada, Labour Force Characteristics. Ottawa: The Ministry of Supply and Services. selected issues.
2. Census of Canada, Population Characteristics. Ottawa: The Ministry of Supply and Services. selected issues.
3. Economic Council of Canada, DREE Development Agreements. Ottawa: Ministry of Supply and Services, 1981.
4. Economic Council of Canada. Fifth Annual Review; The Challenge of Growth and Change. Ottawa: Ministry of Supply and Services, 1968.
5. Department of Regional Economic Expansion. Annual Reports. Ottawa: Queen's Printer, selected years.
6. National Accounts. Provincial Economic Accounts. Ottawa: The Ministry of Supply and Services. selected issues.
7. Regulations for Honours Theses. Honours Committee, Acadia University, 1986.
8. The Rowell-Sirois Commission, Report of the Royal Commission on Dominion-Provincial Relations, Book 1. Ottawa: King's Printer, 1940.
9. The Rowell-Sirois Commission, Report of the Royal Commission on Dominion-Provincial Relations, Book II, Recommendations. Ottawa: King's Printer, 1947.
10. Walinsky, L.J. Evaluation of Economic Research Relating to the Atlantic Region. A report to the Atlantic Provinces Research Board., 1967.

Speeches and Interviews

1. Interview, Fletcher, R.K., Nova Scotia Department of Development., 1986.
2. Smith, W.Y., Federal policies and the Economic Growth of

the Atlantic Provinces, Sackville: Unpublished Speech, 1976.