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ECONOMIC DEVELOPMENT PROSPECTS IN ATLANTIC REGION

One of a series of reports
on development prospects
in the provinces, territories,
and regions of Canada
prepared by *Canada*
the Department of Regional Economic Expansion



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ECONOMIC DEVELOPMENT PROSPECTS
IN THE ATLANTIC REGION

PREFACE

This paper examines economic prospects and regional development issues in Canada's four eastern provinces. The report is one of a series of staff papers prepared by the federal Department of Regional Economic Expansion as a contribution to the formulation of regional and national economic development policy in Canada.

The diversity and specificity of conditions within the Atlantic Region does not allow the detailed examination of local economic circumstances and prospects in this paper. The more comprehensive analysis of prospects within the region is presented separately in provincial reports.

This Atlantic Region review focuses upon the highlights and common themes that are emerging in the region. The report includes an assessment of economic performance, and a review of sectoral performances. The major issues and opportunities common to the four provinces, or having an impact on the four provinces are discussed in the light of future potential, and implications in the formulation of development policies are drawn out.

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1. OVERVIEW

For several decades the Atlantic Region has been known for its slow growth and its continuous out-migration. Since the early 1970s, however, this situation has changed as the regional growth rates in output and employment have matched the Canadian rates in spite of the higher national performance resulting from the western oil boom. Moreover, the migration trends have been reversed and the region has had a net in-migration of some 30 000 since 1971, reflected in a very rapidly increasing labour force. This explains to some extent the high unemployment rates in the region. Nevertheless, the Atlantic Region remains characterized by serious disparities which have not been eradicated.

While in many respects the recent economic performance enjoyed by the Atlantic Region was good, there remain major concerns in some sectors. Investment performance, particularly in the manufacturing sector, has been seriously lagging. The forestry sector is also a cause for concern, as the quality and quantity of the resource is endangered.

For the 1980s, a number of sectors with significant growth potential are emerging and are reflected in a new optimism in the region. The 200-mile extended fisheries jurisdiction could lead, if supported by appropriate policies, to considerable gains for the region, both in terms of output and related employment. Ocean industries could also generate permanent high-technology development and result in considerable employment potential. A number of other opportunities have been identified, from Multilateral Trade Negotiations (MTN) related developments to resource-oriented prospects.

Nevertheless, many of these opportunities may go undeveloped if they are not supported by a favourable policy environment in which, among other things, adequate investment funds are made available. The fiscal capacities of the four Atlantic provinces are alarmingly low, leaving little room for economic development investments after current expenditure requirements are met.

As a result, while the prospects for development in the Atlantic Region are good, they are not expected to result, in the medium term, in sufficient growth to absorb both the unemployed and the growing labour force. Consequently, the high unemployment rates currently experienced are expected to persist into the foreseeable future.

2. ECONOMIC PERFORMANCE

2.1 Resource Endowment

The Atlantic Region, consisting of Newfoundland, Nova Scotia, Prince Edward Island and New Brunswick, has a relatively small land mass of 53.9 million hectares, of which Labrador accounts for nearly 55 per cent. In all, the region's area accounts for 5.4 per cent of the Canadian land mass.

In terms of human resources, the Atlantic Region has a population of 2.2 million, accounting for 9.5 per cent of the country's total population. The quality of this population, in terms of education and skills, has improved over the last few decades so that new entrants to the labour force are of the same high quality as elsewhere in Canada. The school retention rates are now roughly equal to those of Canada, and the universities and technical schools are providing increasing numbers of highly skilled people.

The natural resources of the region are also, in relative terms, considerable, as demonstrated by the high percentage of economic activity concentrated in the primary and resource processing sectors.

With the designation of the 200-mile limit off the Canadian coast, and the recent price increases, the fisheries have gained importance in terms of available resource. In 1978, over 58 per cent in value of all Canadian fish landings accrued to the Atlantic Region, and thus represented a considerable wealth for the regional economy. With the expected recuperation of the resource, and more domestic quotas becoming available, the potential exists for additional developments in employment and value-added in the Atlantic Region fishing and fish processing sectors.

In terms of the leading minerals in Canada, the Atlantic Region holds over 45 per cent of the zinc reserves, and had over 50 per cent of the Canadian iron ore production in 1976. Other minerals of importance for the region are lead and silver, in which New Brunswick had some 40 per cent of the Canadian known reserves. Potash and uranium also hold potential; potash is now being developed and active prospecting is being carried out for uranium. Overall, the Atlantic Region has a higher mineral production per capita than any other region in Canada.

Hydro-electricity production is higher on a per capita basis than any other region of the country, and potential for further development still exists, particularly in Labrador. It should, however, be noted that the currently developed Churchill power is largely consumed outside the region.

There is no oil and gas production as yet in the Atlantic Region. Offshore exploration has been increased in 1979 off the Atlantic coast, and the chances are considered 50/50 of discovering 699 billion litres of oil and 1.12 trillion cubic metres of gas under the Labrador-East Newfoundland Shelf and the Scotia Shelf. The recent gas discoveries in the Sable Island area, as well as oil off the Newfoundland coast and accelerated drilling activity, are most encouraging.

Accessible timber per capita again indicates that the Atlantic Region is surpassed only by British Columbia and Alberta. The output, on a per capita basis, is higher only in British Columbia. However, as a result of budworm infestation and poor resource management, the quality and quantity of the Atlantic Region forest resource are under strain.

Arable land for agricultural use is considerable in relative terms, especially in Prince Edward Island. Both Nova Scotia and New Brunswick land resources have potential for further development.

2.2 General Indicators

2.2.1 The Economic Performance

By most measures, the economic performance of the Atlantic Region has been significant over the 1971-78 period. In the first seven years of the 1970s, the overall growth of the region surpassed the total growth of the previous decade. Had it not been for the spectacular growth of the Western Region, mainly caused by the oil boom, the Atlantic Region would have registered the highest growth rates in the country.

During the 1971-77 period, the gross domestic product of the region increased by 120 per cent, only marginally less than for Canada as a whole, and higher than Quebec and Ontario. In census value-added in goods-producing industries the maritime provinces surpassed the Canadian growth performance, in the case of New Brunswick, by over 20 percentage points. The value of manufacturing shipments for the Atlantic Region grew by 230 per cent in the 1971-78 period compared to 160 per cent for Canada. The growth of earned income per capita for the 1971-77 period was marginally better than for Canada, while the growth in personal income per capita outperformed the Canadian rate by nine percentage points.

Overall, the Atlantic Region's growth performance kept pace with the national average growth rates, even though these in turn surpassed those of most other western nations during the 1970s.

2.2.2 Disparity Measurements

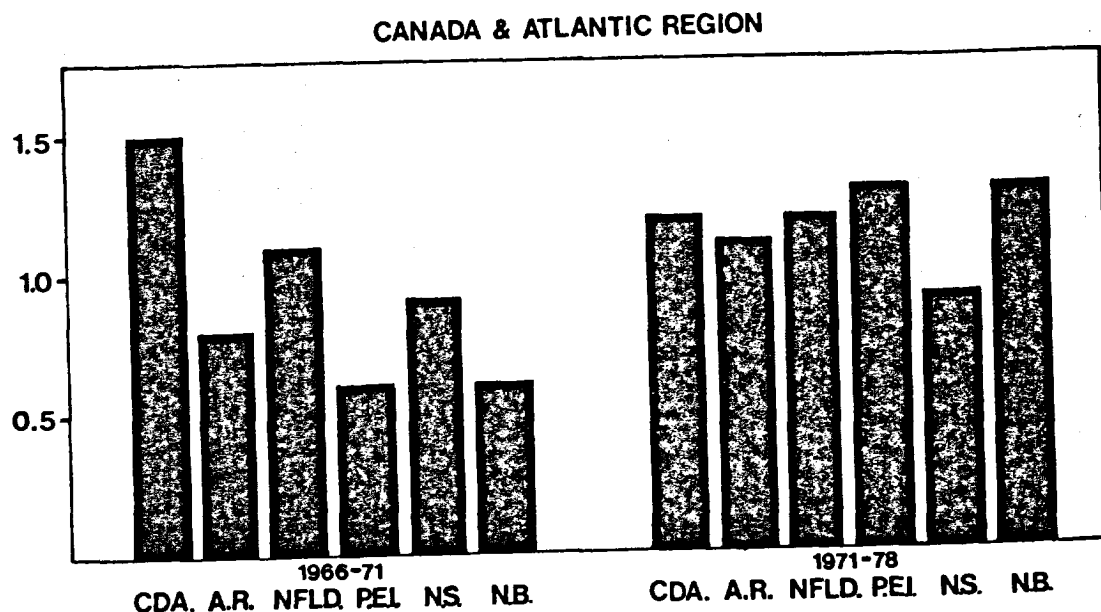
Within an environment of relatively strong economic performance, however, serious economic disparities between the region and the rest of Canada persist. These disparities are usually quantified by comparing some indicator of well-being for a given region against the Canadian average. If the regional value is lower, a disparity exists which is measurable by the given indicator. Over time, the reduction of the disparity requires that the regional growth be faster than the growth of the country. This is indeed a difficult task when the country itself is growing at a rapid rate.

Disparities in the Atlantic Region, whether in terms of income, employment, unemployment, or regional production are still considerable. While the disparity has been reduced somewhat over the last seven years, it nevertheless remains unacceptably large. Selected indicators of the disparity are shown in the table on the following page.

2.2.3 Demographic Trends

By 1978, the Atlantic Region had a population of 2 227 100 people, having increased by 8.3 per cent since 1971. During the same period, Canada's population grew by 8.9 per cent. Figure 1 shows that while the Canadian population grew much faster in the 1966-71 period, the regional population growth nearly matched the national one after 1971. Within the Atlantic Region, New Brunswick and Prince Edward Island increased their population in annual growth rates at a faster pace than Canada did, at 1.3 per cent, Newfoundland had the same as Canada at 1.2 per cent while Nova Scotia lagged at 0.9 per cent.

Figure 1
POPULATION ANNUAL GROWTH



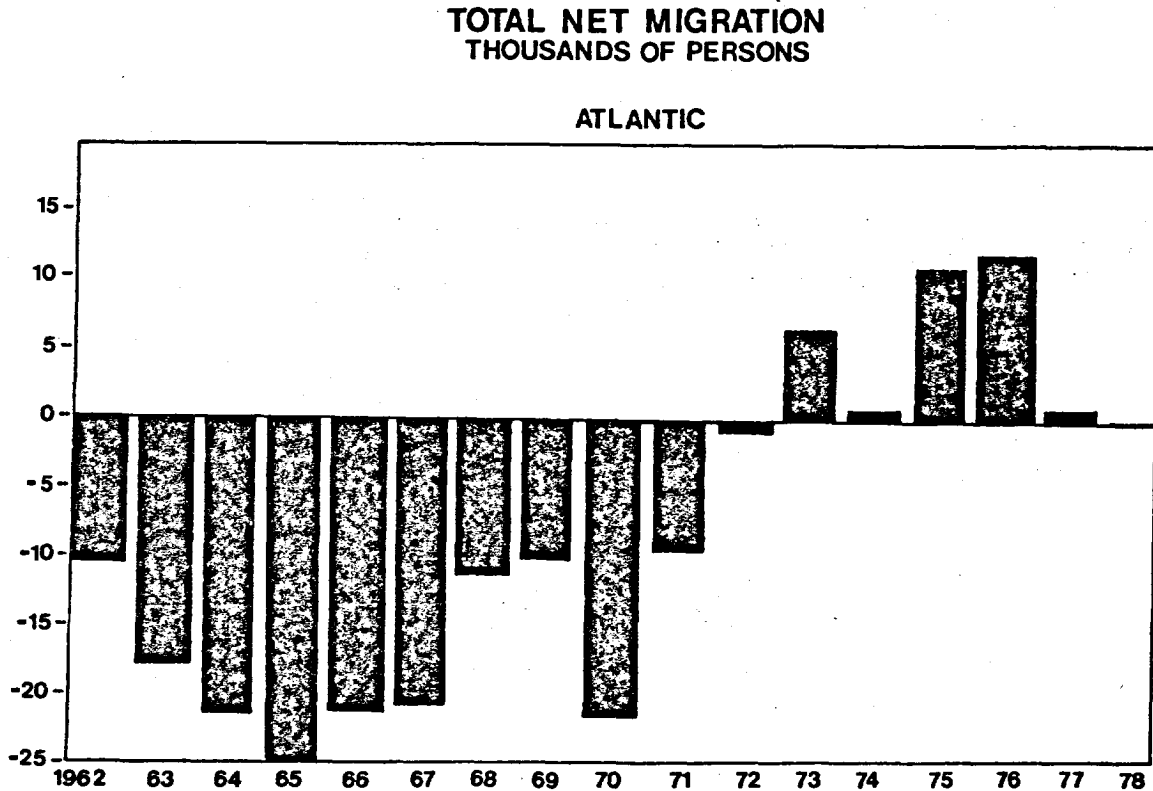
SELECTED ECONOMIC INDICATORS

	Personal Income Per Capita		Earned Income Per Capita		Unemployment Rate		Employment Ratio	
	Prov. as <u>1971</u>	% of Canada <u>1977</u>	Prov. as <u>1971</u>	% of Canada <u>1977</u>	<u>1971</u>	<u>1978</u>	<u>1971</u>	<u>1978</u>
Canada	100.0	100.0	100.0	100.0	6.2	8.4	54.5	57.4
Atlantic Region	71.6	74.4	66.6	67.0	7.1	12.5	46.3	48.0
Nfld.	63.8	68.0	55.0	55.6	8.4	16.4	41.2	43.2
P.E.I.	63.2	67.1	56.7	59.2	7.3	9.9	50.4	52.1
N.S.	77.5	79.4	74.3	74.9	7.0	10.6	48.5	50.4
N.B.	72.3	74.9	68.2	68.0	6.1	12.6	46.8	48.1
Quebec	88.7	93.1	87.9	90.1	7.3	10.9	51.9	53.2
Ontario	117.0	109.4	119.1	112.5	5.4	7.2	57.6	60.7
Prairie Region	92.7	98.4	92.1	99.9	5.2	5.2	56.9	61.9
Man.	94.1	93.1	93.7	93.9	5.7	6.5	56.0	59.0
Sask.	80.3	92.1	78.8	90.9	3.5	4.9	53.4	58.9
Alta.	99.0	104.4	98.6	107.7	5.7	4.7	59.5	65.0
British Columbia	109.0	110.1	109.5	111.5	7.2	8.3	54.1	57.4

Sources: Based on National Income and Expenditure Accounts 1963-77, Statistics Canada, Catalogue No. 13-201

Migration has been the dominant factor in the rapid population growth of the Atlantic Region. From a net out-migration of 170 000 in the 1961-71 period, the Atlantic Region experienced a net in-migration of 30 000 in the 1971-77 period as shown in Figure 2. The three maritime provinces completely reversed their migration pattern, while Newfoundland reduced to a considerable extent its out-migration.

Figure 2



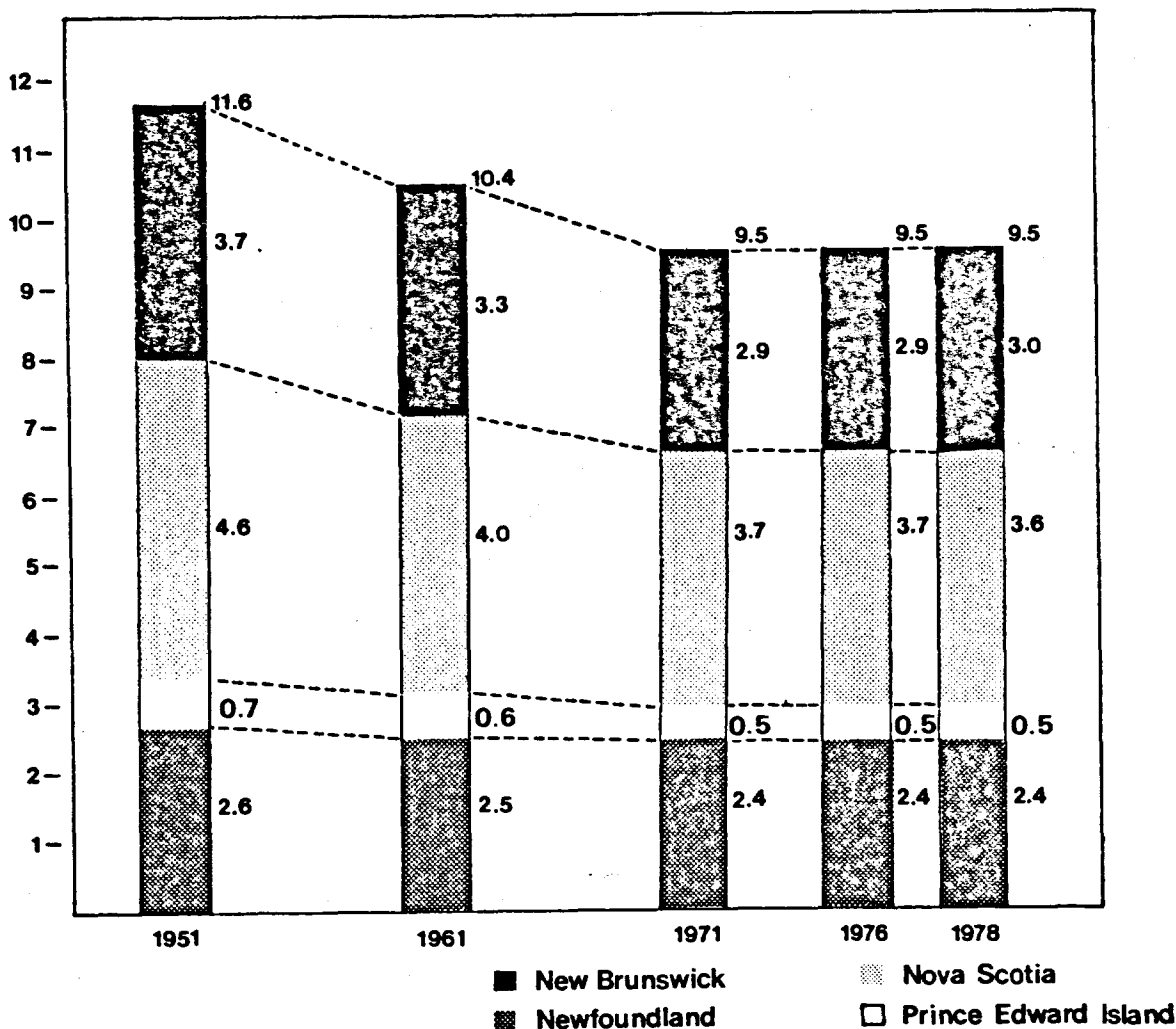
While no single factor can explain this reversal, the relative prosperity of the region and its high level of employment creation undoubtedly had a considerable impact. The increased level of unemployment insurance benefits and the factors associated with high housing and other living costs in central Canada undoubtedly had some influence as well.

While it is not possible to predict future migration patterns, it is not expected that the region will revert to its 1961-71 out-migration trend. It may be, however, that the level of in-migration will moderate in the medium term. The net effects of the in-migration are diverse; on the one hand, the process tends to swell the labour force ranks, which tends to push up unemployment, while on the other hand, the migration flow is a job creator in itself because of the higher level of consumption and housing expenditures it creates.

In terms of population share, the Atlantic Region decreased from 11.6 per cent of Canada's population in 1951 to 9.5 per cent in 1971. However, in the last seven years, the population shares have remained constant, as shown by Figure 3.

Figure 3

**POPULATION SHARES
PERCENTAGE OF CANADA**



2.3 Labour Market

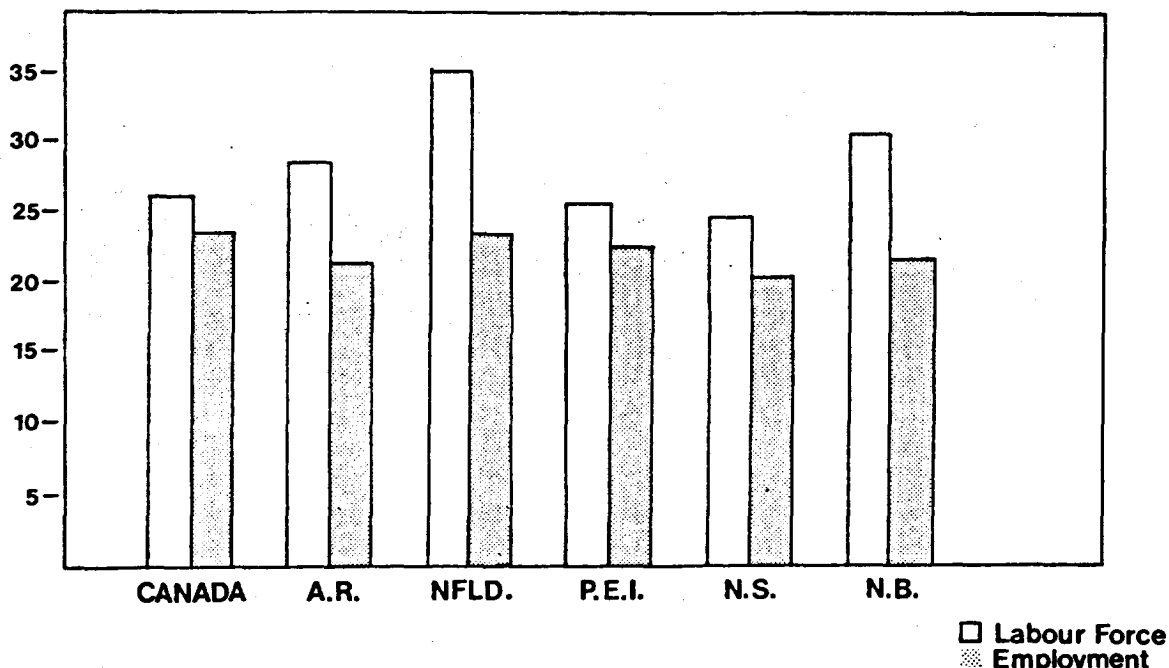
As a direct result of the rapidly increasing population and increased labour force participation rates (especially for females), the Atlantic Region labour force grew more rapidly than that of Canada in the 1971-78 period, as shown in Figure 4. Newfoundland increased its labour force by close to 35 per cent between 1971-78, and caused largely by a participation rate increase of some 6.7 percentage points. New Brunswick followed with a 30 per cent labour force increase (three times the growth rate registered in the previous decade) due to in-migration, and a 5.2 per cent increase in the participation rate. Nova Scotia and Prince Edward Island lagged the national labour force growth rate mainly because of slower participation rate increases.

In employment creation, again as shown in Figure 4, the Atlantic economy performed well in the 1971-78 period, except for 1975 and 1976 when the international recession had its biggest impact. In fact, employment in the region grew by 20.8 per cent in the period, some 90 per cent of the national rate, in spite of the record growth of the Western Region which kept the national rate at a high level.

Figure 4

LABOUR FORCE & EMPLOYMENT GROWTH 1971-78

ATLANTIC PROVINCES



While the employment growth rate in the region was quite spectacular in spite of the recession, it was nevertheless lower than the labour force growth, and consequently unemployment increased dramatically (by 125 per cent) over the 1971-78 period. The two provinces with the highest growth in their labour force, Newfoundland and New Brunswick, also registered the largest increase in unemployment. While Canada's unemployment rate increased by, 2.2 percentage points in the 1971-78 period, Newfoundland's increased by 8 percentage points, and New Brunswick's by 6.5. The Nova Scotia and Prince Edward Island increases were more moderate at 3.6 and 2.6 percentage points, respectively.

Future prospects in the labour market are difficult to ascertain given the unknown behaviour of migration patterns. Assuming no major changes in these, it is expected that higher than normal unemployment rates will persist for the next few years in the region, although a slow decrease in the unemployment rate has already begun.

2.4 Investment Climate

While investment in the Atlantic Region grew by 82 per cent in the 1971-78 period, the growth rate was significantly below the Canadian average. Investment in the region represented 97 per cent of the Canadian average on a per capita basis in 1971, but had decreased to 72 per cent by 1978.

It appears, however, that the decline may have been arrested, given the 12.6 per cent increase recorded in 1978, compared to a 7.8 per cent increase for Canada, and given the forecast growth of 16.2 per cent in 1979, again, compared to Canada's forecast growth of 12.3 per cent. Moreover, a number of large projects may begin over the next few years, creating a sustained growth in investment. However, it is most unlikely that the growth will be able to keep pace with the tremendous investment boom expected in the Western Region, and as a result, while the performance may be good on its own, it may again show a deterioration compared to that of Canada as a whole.

By sector, manufacturing investment had the worst performance over the seven-year period, showing a decrease of 41 per cent in current dollars, due in part to the higher than average level achieved in 1971. During the same period, Canada had an increase of 108 per cent. While the other sectors all showed increases over the seven-year period in the Atlantic Region, only in the "institutions and government departments" and in the "trade, finance and commercial services" did the Atlantic out-perform the Canadian average.

By province, New Brunswick's total investment out-performed both the regional and national growth over the 1971-78 period, while Prince Edward Island and Nova Scotia surpassed the regional growth though they lagged behind Canada's

growth. Newfoundland's weak growth rate of 15 per cent in investment for the period is mostly a result of the very high level already attained in 1971.

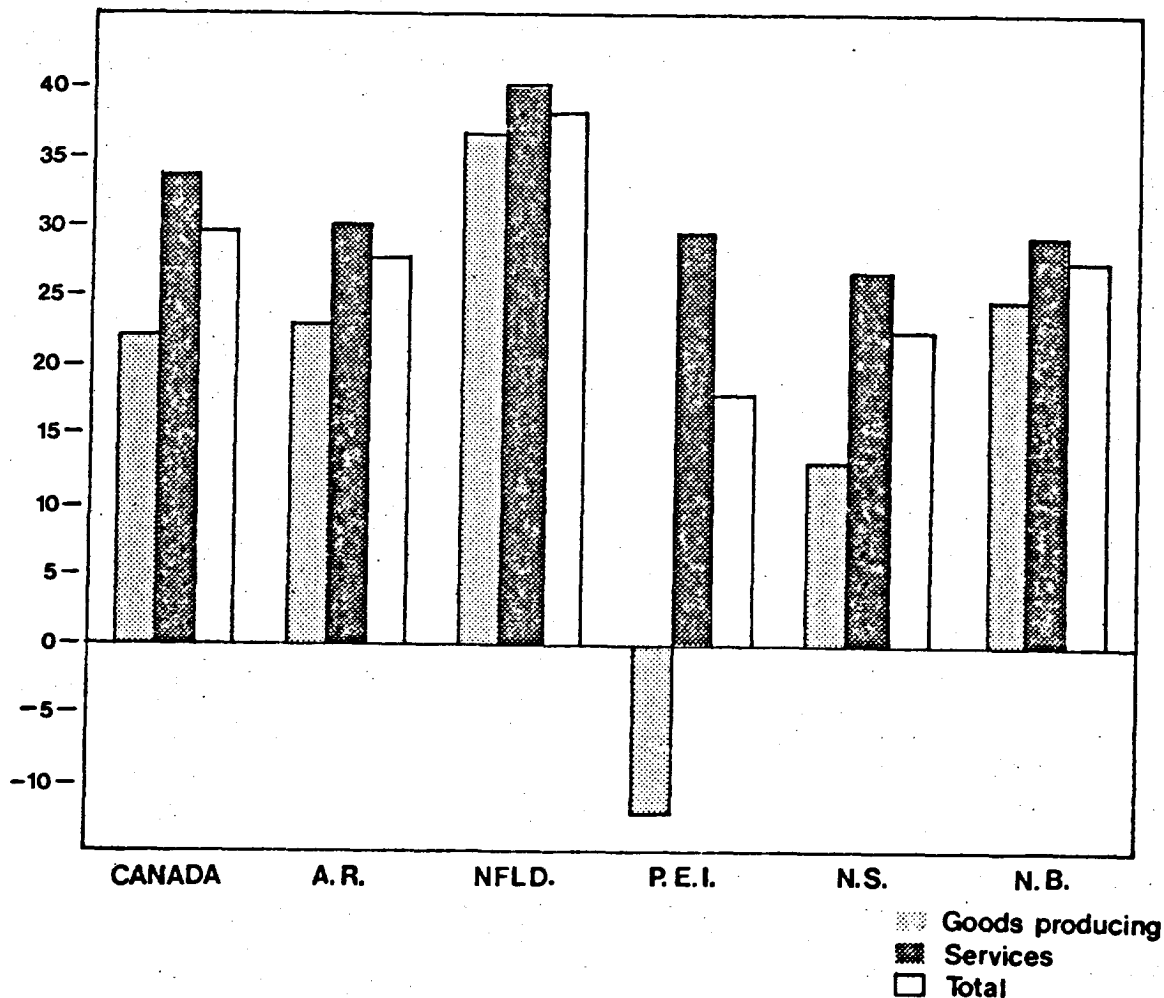
The 1979 investment forecast indicates a 16.2 per cent growth, led by primary industries and construction, institutions and government departments, and manufacturing. By province, Newfoundland is expected to dominate the growth with a 35.3 per cent increase (although this forecast may be overly optimistic), while the maritime provinces will lag at growth rates ranging from 9.6 to 11.6 per cent.

2.5 Growth in Output

In the 1971-77 period, output in the Atlantic Region, as measured by real domestic product, marginally lagged the national output in terms of growth. However, the goods-producing sector matched the national growth, while the lag occurred in the service sector, as shown in Figure 5.

Figure 5
GROWTH IN REAL DOMESTIC PRODUCT
PERCENTAGE GROWTH IN THE 1971-77 PERIOD

CANADA AND ATLANTIC PROVINCES



By province, Newfoundland's performance surpassed both the Atlantic and the Canadian growth rate. The Prince Edward Island goods-producing sector had a dismal performance, registering a decrease in real terms, while Nova Scotia seriously lagged in this sector. New Brunswick's performance in the goods-producing sector surpassed the Canadian growth over the 1971-77 period.

2.6 Sectoral Performance

2.6.1 Agriculture

The restructuring of the agricultural sector observed during previous decades was again evident during the 1970s and, all in all, farmers enhanced their situation. Total real output (1971 dollars) was estimated at \$91 million in 1978, up from about \$77 million in 1971 and \$80 million in 1961. These aggregate figures, however, conceal significant changes within the industry.

The dramatic decline in the number of farms observed in the previous decade tapered off, but in conformity with the trend, the size of farms continued to increase. The number of census farms decreased by 747 between 1971 and 1976. This compares to a decline of 2 741 in the previous five years. On the other hand, the average size increased from 103 to 109 hectares. The proportion of improved land area also rose from 42.8 per cent of total farm land area in 1971, to 47.2 per cent in 1976. Moreover, the capital value of farms (land and buildings) rose from an average of \$44 597 per farm to \$103 080.

The degree of mechanization also increased dramatically, with the value of machinery and equipment more than doubling during the period, from \$9 840 per farm in 1971 to \$21 887 in 1976. Mechanization was accompanied by a decline in manpower requirements. Total employment in the agricultural sector decreased from 23 000 in 1971 to 21 337 in 1976. A further decline to 17 000 was recorded in 1978.

The restructuring of the agriculture sector has led to improved revenues for farm operators. Total farm cash receipts rose from \$157.3 million in 1971 to \$359 million in 1978 in current dollar terms. Undoubtedly, farm operating costs also climbed rapidly during the period. Nevertheless, the average net farm income more than tripled from 1971 to 1976. Indeed net farm income rose from about \$3 310 per farm to \$12 080. Considering that the cost of living increased by only about 50 per cent during that period, farmers experienced a net improvement in their standard of living.

Despite the progress achieved by farm operators in the Atlantic Region, they still lag behind farmers in other parts of the country in most respects. The average size of farming units in the region is only about half the average for Canada as a whole, and the proportion of improved area is about two thirds for Canada compared to less than half in the Atlantic Region. The average capital value of farming units in Canada was \$182 630 in 1976 compared to \$103,080 in the Atlantic. The degree of mechanization is also higher in Canada generally than in the region. In 1976, the overall value of machinery and equipment was \$29 405 per farm in Canada as a whole, about 37 per cent higher than in the Atlantic Region. Partly as a result of their greater degree of mechanization, the average net farm income in 1976 was \$13 702 for Canada as a whole, compared to \$12 080 for the Atlantic Region.

2.6.2 Fishing

The fishing industry is one of the most important industries in the Atlantic Region. The abundance of fish in coastal waters has been a major factor influencing settlement patterns. To this day numerous but small settlements dotting the Atlantic coast still largely depend on the fishery for their livelihood.

The total value of fish landings in the Atlantic Region in 1978 exceeded \$300 million, the highest ever recorded, and as in the previous year, the total volume was over 900 000 metric tons. The latter, however, represents a decline from the high levels attained in the late 1960s and in 1970. It is estimated that about 30 000 persons are directly employed in the fishing industry (including part-time and occasional fishermen). The number of fishermen, however, has been decreasing steadily with the introduction of new technology. The decline is particularly noticeable among part-time and occasional fishermen.

The application of new technology and new harvesting techniques by both Canadian and foreign fishing fleets off the Atlantic coast has led to overfishing and rapidly depleting stocks, and has threatened the survival of many small communities. In response to this threat, Canada has acquired the right to control fishing activities and manage the resources up to 200 miles off its coast. It is expected that this new jurisdiction will greatly benefit the Canadian fisheries.

2.6.3 Forestry

Forestry is another important industry in the Atlantic Region. In 1976, there were 395 establishments in the logging industry, employing approximately 6 500 persons, about 13 per cent of the Canadian total in that industry. In New Brunswick

alone, there are some 3 800 persons employed in logging. In 1976, the shipments in the logging industry were valued at \$292 million, and value-added at \$125 million (in current dollars). Shipments consist mostly of pulpwood and a lesser quantity of logs and bolts. For the same year, logging paid \$77 million in wages and salaries in the region.

Moreover, it is estimated that the industry generated another 20 000 jobs in the region in the forest product industries such as pulp and paper, sawmills and other wood-using industries. Another \$200 million is paid in wages and salaries in these related industries. The combined output (value-added) of the logging and forest industries was estimated at \$618 million in 1976.

These statistics, however, conceal serious problems facing the industry. Following a long period of inadequate resource management and spruce budworm infestation, resources are endangered in many areas. Quality and quantity of wood is affected and cost of harvesting is increasing.

2.6.4 Mining

The total value of mineral production (excluding structural materials) in the Atlantic Region exceeded \$1 billion in 1978 and the mining industry employed approximately 13 000 persons. The major products were iron ore (\$505 million), zinc (\$173 million), coal (\$122 million), lead (\$64 million), silver (\$29 million), and salt (\$19 million). It should also be noted that iron ore production was down considerably in 1978 due to labour conflicts. In 1977, total iron ore production was valued at about \$742 million.

The outlook for the medium term is generally encouraging, and increased output and employment in this sector is anticipated. Some construction work on a new potash mine in Sussex, New Brunswick, has started, with production expected in the early 1980s. An expansion of the mine at the Brunswick Mining and Smelting Company in Bathurst is almost complete. Coal production in the region has been increasing as a result of a new coal-fired thermal plant in Nova Scotia, and further increases in output and employment are anticipated. Large deposits of coal under the sea near Donkin in Cape Breton have been discovered, which could eventually be brought under production. The opening of a metal mine at Gay's River in Nova Scotia will provide employment to some 200 persons. There may also be an opportunity to construct a zinc smelter at Belledune, in northeastern New Brunswick.

2.6.5 Manufacturing

The performance of the manufacturing sector in the Atlantic Region was adversely affected by the general slowdown in the mid-1970s. There are indications, however, that circumstances are now improving.

Total manufacturing shipments grew by about 230 per cent between 1971 and 1978, compared to an increase of 160 per cent for Canada as a whole. Employment rose by 17 per cent during the same period, versus 10.8 per cent for Canada. Growth in employment, however, occurred almost entirely in the last year. Indeed, the level of employment fell from 105 000 in 1974 to 97 000 in 1975, and only recovered to 110 000 in 1978. In 1971, it was estimated at 94 000. Wages and salaries increased by about 129 per cent from 1971 to 1977 compared to 103 per cent for Canada as a whole. On the other hand, real output grew by only 12.1 per cent in the region from 1970 to 1977, while Canada as a whole recorded an increase of almost 25 per cent. Moreover, investment performance in this sector during the period was sluggish.

All in all, while the manufacturing sector's share of total output during the period increased from 12.5 to 13.7 per cent, total employment fell from 15.4 to 14.6 per cent, in conformity with the national trend. While some problems still persist, circumstances should improve in the future, at least in relative terms, given the anticipated results of the Multilateral Trade Negotiations.

2.6.6 Service Sector

As in the country as a whole, the service sector is the most important in terms of both output and employment in the Atlantic Region. From 1971 to 1978, 128 000 additional jobs were created in this sector, i.e. 88 per cent of total jobs generated in the economy as a whole. As a result, the sector's share of total employment rose from about 67 per cent in 1971, to 71 per cent in 1978. The most important increases in terms of employment occurred in business, community and personal services (54 000), followed by trade (29 000), and public administration (23 000). Together, these three industries accounted for almost 83 per cent of employment growth between 1971 and 1978. Contrary to the popular belief that public administration dominates the service sector, this industry's share of total employment in the service sector was only 13 per cent in 1978.

2.6.7 Summary

The changing shares of output and employment in the Atlantic Region since 1971 are summarized in the table below.

CHANGING SHARES OF OUTPUT AND EMPLOYMENT
IN THE ATLANTIC REGION

	Real Domestic Product by Sector		Employment by Industry	
	<u>1971</u>	<u>1978</u>	<u>1971</u>	<u>1978</u>
Agriculture	1.5	1.3	3.8	2.2
Fishery	1.7	1.3	((
Forestry	1.2	1.0	(6.2	(5.2
Mining	4.6	3.3	((
Manufacturing	12.5	13.7	15.4	14.6
Construction	10.9	7.2	7.7	7.1
Utilities	2.8	8.2	((
*T.C.	7.0	6.9	(11.3	(10.4
Trade	12.7	13.1	18.4	18.7
*FIRE	10.6	11.9	3.1	4.1
*CBS	20.8	19.4	26.4	28.4
Public admin.	13.7	12.7	7.7	9.3
Total	100.0	100.0	100.0	100.0

- *TC - Transportation and communications
- *FIRE - Finance, insurance and real estate
- *CBS - Community, business and personal services

As the table shows, there have been no dramatic shifts in the relative importance of individual sectors since 1971, except for "utilities" which increased its share of total output. The slight decline in the manufacturing sector's share of total employment in the region roughly parallels the national trend.

The Atlantic Region's share of total Canadian output and employment is shown in the following table. As indicated earlier, the regional growth rates have been roughly equivalent to the national averages. Thus, the region held its share of total national output at 6.2 per cent between 1971 and 1978, and its share of total employment dropped only slightly from 7.7 to 7.6 per cent, in spite of the very rapid growth of employment and output in the rest of the country over this period.

ATLANTIC REGION'S SHARE OF CANADIAN OUTPUT
AND EMPLOYMENT

	Real Domestic Product by Sector Atlantic as % of Canada		Employment by Sector Atlantic as % of Canada	
	<u>1971</u>	<u>1978</u>	<u>1971</u>	<u>1978</u>
Agriculture	2.8	2.8	4.7	3.6
Fishery	59.2	49.4	((
Forestry	9.5	8.3	(17.2	(15.1
Mining	7.3	6.9	((
Manufacturing	3.4	3.8	5.3	5.6
Construction	9.6	7.1	9.6	8.5
Utilities	6.5	16.2	((
*T.C.	4.8	4.4	(9.9	(9.2
Trade	6.8	6.7	8.5	8.1
*FIRE	5.5	5.6	5.0	5.7
*CBS	6.5	6.2	7.7	7.7
Public admin.	11.4	11.1	9.1	9.9
Total	6.2	6.2	7.7	7.6

*TC - Transportation and communications

*FIRE - Finance, insurance and real estate

*CBS - Community, business and personal services

Source: Based on Labour Force Annual Averages 1975-78,
Statistics Canada, Catalogue No. 71-529; and on Special
Tabulations on the Labour Force 1971-74, Statistics
Canada; and on Conference Board in Canada, July 1979.

3. ISSUES AND OPPORTUNITIES

3.1 Introduction

The principal development opportunities in the Atlantic Region over the medium term are either resource based or closely related to the resource industries, or are linked to the advantage of geographic location. This is not to imply that growth will not occur in other areas, but rather that the main engines of development will be based on resources or geographic advantages which place the Atlantic Region in a strong competitive position in both national and international markets.

Cautious optimism is expressed for growth in the fishery and fish processing, minerals and forest-based industries, all traditionally important sectors in the Atlantic Region. In addition, a new sector with significant growth potential, described here as "ocean industries" is emerging in the Atlantic Region. The ocean industry sector is related in the first instance to the fishery, but goes far beyond the requirements of the fishery alone. The location of the Atlantic Region, traditionally a disadvantage, has been affected by changing comparative advantages in transportation, and its proximity to the eastern Arctic.

There are at the same time a number of institutional and jurisdictional issues that face governments and the private sector, and that will affect the extent and pace of realization of the development prospects. These institutional factors are extremely complex and are outlined only briefly in the following paragraphs.

Energy in the Atlantic Region can be cast as either an opportunity or a problem. The region is faced with high energy costs as well as an uncertain supply of foreign crude oil; yet, at the same time, the prospects for the development of offshore oil and gas, and hydro power in Labrador, are more favourable now than at any time in the recent past.

Other issues touched on in this review include migration, which changed dramatically during the 1970s; provincial fiscal capacities, which have deteriorated recently and are a cause of some concern; and, the likely impact of the changing tariff and non-tariff barriers arising out of the Multilateral Trade Negotiations.

3.2 Fisheries

The most significant event of recent years in terms of the fisheries was the introduction by Canada on January 1, 1977,

of extended fisheries jurisdiction to 200 miles. This decision by the Canadian government was prompted by the critical state of fish stocks, particularly in the Atlantic Region, and the need to impose a rational scheme of conservation and management to counter over-fishing by foreign fleets.

Canada, as a major fishing nation, is now formulating appropriate strategies to obtain the benefits associated with the fisheries resource. These strategies are of particular importance to the Atlantic Region. The major problem facing the Canadian fishing industry is the adjustment required to meet new challenges arising from the extension of Canada's fisheries jurisdiction. Basically, the Canadian industry will have to produce a wider range of products of consistent quality and market them in many more countries than at present. During the period 1980-85, there will be a substantial shift occurring in Canada's most important market, the United States. In this regard, exports to the United States are predicted to decline substantially in relative terms, although in absolute terms they may increase. Exports to Canada's second most important market, the European Economic Community, are also predicted to decline in relative terms. As a result, major marketing efforts will be required in countries that have traditionally bought few or no Canadian fish products. In this regard, Japan and eastern European countries are seen as major potential markets.

There will need to be significant adjustments in the fish processing industry in order to both increase volume of output and broaden the product line of the industry for anticipated markets. These adjustments will no doubt have infrastructure impacts, private sector capital implications, and perhaps industry structure effects.

Therefore, on the assumption that required adjustments and coordination efforts will be forthcoming, opportunities exist in terms of optimizing the Canadian catch and the processing in Canada of fish products caught by Canadian and non-Canadian fishermen. Furthermore, opportunities will exist for expanding the marketing of fishery products both in terms of traditional and non-traditional species. Finally, related spin-off opportunities include shipbuilding and ship repair, the provision of fishing gear and equipment, and the servicing of the Canadian and non-Canadian fishing fleets as outlined in the section on ocean industries.

Such opportunities are realizable, provided that the required resource management, fishing, processing and marketing efforts are successfully implemented. A development strategy for the fisheries could involve some or all of the following developments, phased in over a period of 10 to 12 years.

Short-Term:

- fleet rebuilding and replacement;
- commensurate benefits for market access in exchange for fishing rights, plus joint ventures/development charters between foreign vessels/Canadian processors;
- freezer storage expansion; and
- quality enhancement (improved handling, icing).

Medium-Term:

- phase out of foreign joint ventures;
- fuller exploitation of fish stocks available in the Canadian zone;
- production of value-added products for export; and
- quality enhancement.

Long-Term:

- fuller exploitation of fish stocks to the continental margin (total of Grand Banks and Flemish Cap);
- export market expansion; and
- production of quality, value-added products.

3.3 Ocean Industries

There exists in the Atlantic Region an opportunity to create a nucleus of medium- to high-technology ocean manufacturing and service industries which would be capable of generating permanent employment and income opportunities, together with substantial increases in value-added in production and processing in the region's ocean industry sector. The potential of ocean industries, while difficult to predict accurately, appears extremely good.

Ocean industry is usually defined as those establishments which manufacture equipment or provide services for all commercial and scientific activities in the oceans. Ocean industry encompasses the following main sub-sectors: (1) the commercial fishing industry; (2) offshore oil and gas, and minerals; and (3) shipbuilding and repair. Associated with these are such related activities as defence, surveillance, and environmental research and management. In the medium term, the oil, gas and fishing industries will provide the main driving force behind all primary ocean activities, as well as the major demand for specialized equipment and services from secondary industries.

The Canadian commercial fisheries offers the Atlantic Region, in the short to medium term, the largest identifiable

economic benefit, due to Canada's declaration of the 200-mile limit. This provides Canada with the opportunity to significantly increase the total catch of the Canadian fishery, leading to possible fleet expansion. There are also opportunities for exploitation of non-traditional species. Canada's wetfish offshore fisheries cannot enter the business of harvesting the abundant supplies of roundnose grenadier, mackerel, squid, capelin, butterfish, herring, and so on, without freezer facilities. Foreign nations have the technology and equipment to harvest non-traditional species of fish. A transfer of technology and improvements to suit Atlantic industry needs could result in benefits to the fisheries. Furthermore, the development and manufacture of a variety of vessel deck gear, over-the-side catching gear, specialty equipment and accessories for aquaculture and mariculture, and increasingly sophisticated devices required for locating and identifying fish stocks, are all potential development opportunities for the Atlantic ocean industry sector. In terms of specialty vessels and component gear, the fisheries offer Canadian ocean industry firms a share of a substantial domestic market which could run to \$150 to \$200 million per year. The export potential is unclear, but undoubtedly offers considerable opportunity to enterprising Canadian firms.

The oil and gas exploration off the Atlantic coast offers potentially huge, but unfortunately as yet not entirely documentable, benefits to the Atlantic provinces. According to latest estimates by the federal Department of Energy, Mines and Resources, the chances are considered 50/50 of discovering 397 billion litres of oil and 0.7 billion cubic metres of gas under the Labrador-East Newfoundland Shelf and 309 billion litres of oil and 0.4 billion cubic metres of gas under the Scotia Shelf. Various forecasts by the federal Department of Industry, Trade and Commerce estimate that exploration and production activities could lead to the creation of some 20 000 to 30 000 direct (and as many as 150 000 indirect) jobs by 1988 through the investment of as much as \$11 billion. Every effort must be made to ensure that as many benefits as possible accrue to Canada and the Atlantic provinces in terms of the Canadian share of this investment and the related substantial employment growth.

The investment associated with the exploration for oil and gas off the Atlantic coast can provide the market for technical and development skills. Exploration companies have traditional sources of supplies and services world-wide which can be both positive and negative to Atlantic Canada. Canadian companies warrant access to these markets, based on activities in Canadian waters which can lead to future world-wide sales.

Anticipated needs, primarily for new vessels for offshore oil and gas activity and the fishing industry over the longer term, total billions of dollars. Strategically located viable shipbuilding and ship repair centres would be able to access this potential. A particular reliance on domestic orders and locational advantages for ship repairs would enhance the opportunities for these yards. The repair and construction of vessels providing surveillance, safety and defence, and vessels used for the transport of Canadian resources and the harvesting of the fisheries, assigned to Canadian yards for construction, refit or repair in an equitable manner, would provide additional strength for this sector.

In the longer term, opportunities are predicted to exist in such ocean-industry-related areas as onshore oil/gas base locations for likely offshore developments; production systems for offshore oil/gas, pipelines to shore, and general support systems; Arctic-class vessels such as ice breakers, tankers, and service ships; and gear, instruments, dredging/reclaiming devices, for offshore mining.

The successful development of the extensive and diverse ocean potential requires close cooperation between government participants, community interests and the various elements of the private sector, in order to derive maximum benefits from opportunities that the ocean is seen to offer. The effects of increased shipbuilding, fish processing, and petroleum on the economy of the Atlantic provinces could be enormous.

3.4 Transportation

Efficient, available and economical transportation is a key element in the operation and development of a modern economy. For the Atlantic Region economy, with its reliance on resource based industries which are typically transportation-sensitive, and with its heavy dependency on markets in other parts of Canada and the world, transportation has remained an important issue for public policy over the years. In an Atlantic Region context, transportation is a particularly complex field because the transportation system is itself well-developed and complex; transportation has a complicated regulatory environment and government subsidies may have distorted economic allocation and utilization decisions on the part of users and providers of transportation services.

During the past 20 years, significant improvements have been made to the transportation system in the region. There has been a massive upgrading of the highway and road system serving the region. With a few exceptions, most areas of the region are now served by all-weather roads providing linkages with regional centres and other regions. The development of the deepwater

terminal at Canso, as well as the expanding container facilities at Halifax and Saint John, improve shipping access for the region. The rapid and significant development of the region's trucking industry in response to regulatory and subsidy programs, and the improved road system have no doubt improved service in the region. There are important developments under way in terms of improved and varied rail freight services which will be beneficial to industry in the region. A reasonably comprehensive regional air service exists today, with modern air terminal facilities in place or planned.

Despite the significant improvements in transportation, opportunities remain to improve transportation systems and services and thereby encourage economic development. These opportunities relate to the changing circumstances of the Atlantic economy and innovation in transportation itself. The following examples suggest a number of transportation improvements which could stimulate economic development in the region.

Completion of the regional highway grid, with particular emphasis on the Trans-Canada Highway both in Newfoundland and New Brunswick, would improve transportation, as would the building of roads to resources in Labrador and other resource areas. On the water infrastructure side, improved and expanded container facilities could add to the economic advantage of the region as a whole, as might the construction and expansion of selected ports, particularly in Labrador, Cape Breton and along coastal New Brunswick. Improved air transportation infrastructure could enhance the economic vibrancy of the region, particularly in the area of small and developmental airports, as well as in the case of some of the larger ones. The rail mode may require assistance to supplement railway company efforts in Atlantic Canada, in providing equipment and cars to move specialized products such as potatoes, perishables and wood products throughout the region, standardizing way structures such as in Newfoundland, or providing new infrastructure in significant resource areas such as Labrador.

3.5 Energy

The cost of energy is expected to increase dramatically through the 1980s, and there is a high probability that supplies of crude oil from foreign sources may become increasingly unreliable. These problems are national in nature, but of particular importance for the Atlantic Region due to high dependency on fossil fuels for energy generation. The Atlantic Region depends on oil for over 90 per cent of its energy requirements for private industry, transportation, home heating

and public utilities. This contrasts with Ontario, where oil-derived energy accounts for only 48 per cent.

It is a matter of strategic importance for the Atlantic Region to acquire alternative sources of energy during the 1980s. As the cost of energy rises, a number of alternatives, become more economically feasible. Major investment decisions will be required as a strategy is adopted to obtain secure energy sources at competitive prices. These strategies may include remote-area hydro-electric generation such as on the Lower Churchill River in Labrador, discovery and development of offshore oil and gas, Arctic gas, and coal and coke development. Some of these projects, tentatively proposed, could involve several billion dollars in investment. Projects of this scale can provide significant employment opportunities to the region during their construction and, depending on the nature of the source, sizeable ongoing employment.

The energy question for the Atlantic Region is perhaps the most critical single issue facing the region. The development prospects for the economy of the region will, in large measure, be influenced in fundamental ways as choices are made between alternatives during the 1980s.

3.6 Minerals

The contribution of the mineral sector to the economy of the Atlantic Region has increased during the 1970s, and will continue to increase over the medium term. Newfoundland is and will remain the major mineral producer in the region due to its iron ore production, but its share of regional production will decrease as the mineral sectors of New Brunswick and Nova Scotia grow proportionately faster. Although further processing of metallic minerals in the Atlantic Region remains a likely possibility, growth of the mineral sector in the medium term will be mainly through increased production of raw materials resulting from increasingly aggressive mineral exploration activity.

The value of the Atlantic Provinces' mineral production as a per cent of Canada's total has decreased from about 8.6 per cent in 1971, to about 7.3 per cent in 1976. If fuels are excluded, however, to provide a more reasonable measure for comparison, the contribution by the Atlantic provinces has actually increased from about 12.5 per cent in 1971 to about 15 per cent in 1976.

Recent events such as the devaluation of the Canadian dollar and the improved world demand for metals have had a positive effect on the mineral industry in the Atlantic Region. In New Brunswick the major opportunities are in base metals development, primarily in northeastern New Brunswick. Other

opportunities in New Brunswick include the development of several potash prospects. Uranium discoveries near Fredericton have led to considerable prospecting activity.

Increased coal production for more coal-fired electrical generation is an opportunity in Nova Scotia. Interesting amounts of lead, zinc, copper and uranium have also been discovered, and this is encouraging a high level of exploration activity.

In Newfoundland, there are no new mines under development and none definitely planned. However, the high level of exploration activity being experienced there leads to optimism concerning the future expansion of production capacity. Higher metal prices have heightened interest in several deposits now considered sub-economic or marginal. These include several copper deposits and a tungsten deposit.

3.7 Forest-Based Industries

The forest-based industries are an important source of employment in the Atlantic Region. These industries, which include logging, sawing, planing, pulp and paper and other wood industries, contribute 26 000 direct jobs, and account for some 4 per cent of total employment in the region. Value-added in the forest industries amounted to \$618 million in 1976, representing approximately 6 per cent of regional domestic product.

Although the devaluation of the Canadian dollar has provided some stimulus, the pulp and paper industry in the Atlantic Region has been hard hit in the recent past by the general economic slowdown and competition from new mills in the United States. In general, plants and equipment in the pulp and paper mills of the Atlantic Region tend to be in need of modernization, in order to improve productivity and reduce pollution. Facing strong competition, investments are required to overcome these problems. The situation in sawmills and planing mills is rapidly deteriorating. Low productivity and high costs affect the competitive position of the region.

Ultimately, these industries depend on the forests. In the Atlantic Region the forests have been deteriorating for decades. Resource management shortcomings, coupled with serious budworm infestation, have contributed to a reduction in volumes of harvestable timber, quality deterioration and low profitability on the part of many companies.

To protect employment and rehabilitate the forest industry will require aggressive and comprehensive action by government and industry. A number of important initiatives have been mounted in the 1970s, and through these, significant

progress in forestry management and rationalization of many of the industries will be achieved.

3.8 Fiscal Capacity

Since 1973 there has been a significant shift in the relative fiscal circumstances of the provinces. The resource boom in the west has resulted in a fairly dramatic realignment in the relative yield of sources of general tax and non-tax revenues of provincial governments. The following table outlines the way each province's index of fiscal capacity has changed between 1972-73 and 1978-79. This index shows, relative to the all-province average, how much revenue per capita a province would generate if it applied national average tax rates.

INDICES OF FISCAL CAPACITY

	<u>1972-73</u>	<u>1978-79</u>
Newfoundland	60.5	57.5
Prince Edward Island	58.9	51.9
Nova Scotia	71.3	62.1
New Brunswick	70.3	61.3
Quebec	83.8	76.4
Ontario	110.9	90.1
Manitoba	87.4	73.9
Saskatchewan	79.5	99.8
Alberta	137.6	255.5
British Columbia	122.0	117.5

Source: Department of Finance

The level of provincial debt per person is an additional reflection of fiscal circumstances. On the basis of the following table, Newfoundland's debt per capita, which more than doubled between 1971 and 1976, is by far the highest in the country. Nova Scotia and Prince Edward Island are also significantly higher than other provinces.

PROVINCIAL DEBT PER CAPITA
1971 and 1976

	<u>1971</u>	<u>1976</u>
	\$	\$
Newfoundland	1 288	2 944
Prince Edward Island	1 147	1 705
Nova Scotia	1 345	1 951
New Brunswick	918	1 463
Quebec	539	1 190
Ontario	729	1 517
Manitoba	753	1 593
Saskatchewan	801	1 219
Alberta	747	1 175
British Columbia	249	548

SOURCE: Statistics Canada, Provincial Government Finance

In summary, major changes in the relative financial and economic positions of the provinces have taken place in recent years. These changes have had a major impact on the Atlantic provinces in terms of their financial capacities to meet the demands related to economic development.

3.9 Migration

During the period from 1961 to 1971, it is estimated that the Atlantic provinces lost some 170 000 persons through migration. As a result, population in the Atlantic Region grew by only 8.4 per cent during that period, less than half the national increase of 18.3 per cent. Since 1971, a reversal in the traditional net out-migration pattern has occurred and consequently population grew by 8.3 per cent from 1971 to 1978, only slightly below the Canadian growth.

This sudden reversal in the net out-migration pattern raises several questions as to the identification of migrants and the reasons for moving. Some are undoubtedly return migrants who have found new opportunities at home. Others may have lost their jobs in central Canada and, with the portability of UIC benefits, find it cheaper to return home to wait out an improvement in the job market. It is also possible that inflation (i.e. high cost of housing in large urban centres) may be driving people from the most expensive areas of the country to the least expensive areas.

The Economic Council of Canada maintains that migrants are usually young - 25 to 34 years of age - and better educated. Second, an examination of migration data suggests that the reversal in net migration flow is due to both an increase in in-migration and a decrease in out-migration. Third, economic activity during the first part of this decade to the onset of the

recession in 1974 was buoyant. Employment opportunities were generated at a faster pace than previously experienced in the region. Undoubtedly, these circumstances have favoured in-migration and made the stay option more attractive. In contrast, the labour market in the region has not been able to entirely absorb the increased demand for employment brought about by the increase in population through net in-migration since the onset of the recession in 1974. Therefore, this has partially contributed to an increase in the unemployment rate for Atlantic Canada since that year. Fourth, the importance of transfer payments as a source of income has grown considerably since the beginning of the decade, due largely to a more generous unemployment insurance scheme. The additional income provided by these changes, by supplementing wages and salaries earned through seasonal employment, probably serves as a disincentive to move in order to secure employment.

3.10 The Multilateral Trade Negotiations

Generally, Canadian and foreign tariffs mainly apply to manufactured goods and are higher as the degree of processing increases. Since the Atlantic Region is primarily a producer and exporter of primary products and an importer of manufactured products, any lowering of tariffs, especially tariffs on manufactured products, will provide benefits to the Atlantic Region.

The Atlantic Region, under the present tariff structure, is a captive market for manufactured products from central Canada. A reduction in tariffs will allow the Atlantic Region to buy from the lowest cost suppliers and this should have the effect of increasing the competitiveness of Atlantic Region industry. In addition, the lowering of foreign tariffs will allow for more value-added or further processing to take place in the region before products are exported. Foreign tariffs on finished goods hinder further processing in the region. Last, the lower foreign tariffs should allow goods from the region to enter new markets.

4. CONCLUSIONS

The Atlantic Region has exciting development prospects. Its resource base is being enhanced by the 200-mile extended fisheries jurisdiction, its mineral potential is considerable, and the offshore gas discoveries are encouraging and leading into a new ocean industries sector. Its human resources are gaining in quality as a result of more younger people coming into the labour market with marketable skills. The region's infrastructure, thanks to the efforts of the last decade, is now at an acceptable level in most respects.

Given reasonable international economic prospects, the identified opportunities in the region should result in a continuation of the good economic performance of the last decade. However, many of the identified opportunities can only be exploited to their maximum over the longer term. Fish stocks need to recoup, and gas finds need to be of an economic size to be commercially viable.

While a relatively good economic performance can thus be expected, the existing disparities are also expected to persist into the foreseeable future with only modest improvement. The level of utilization of the labour force is such that a good economic performance is required to keep the disparities from widening.

The bringing into fruition of many of the development opportunities in the Atlantic Region will be influenced by a wide range of policies, and will require a coordinated federal-provincial approach as well as strong participation by the private sector.

