

**Study of the service sector  
in Atlantic Canada:  
Department of Regional  
Economic Expansion**

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STUDY OF THE  
SERVICE SECTOR OF ATLANTIC CANADA,  
DEPARTMENT OF REGIONAL ECONOMIC EXPANSION

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## EXECUTIVE SUMMARY

The service sector in Canada, and particularly in the Atlantic region, plays a major role in the performance of the economy. As a contributor to economic growth and to emerging economic opportunities, it is as important as the primary and manufacturing sectors. Although problems of slow growth or regional economic disparities traditionally have been attributed to deficiencies in the primary or secondary sector, there seems no prima facie reason for not giving equal weight to the service sector. In fact, economic projections indicate that, during the 1970s, it will be the principal generator of new employment opportunities. In terms of relative significance, the service sector plays a larger role in the economy of the Atlantic region than it does in the country as a whole.

In view of these considerations, it is appropriate to analyse the composition and the role of the service sector in the Atlantic region. Although there have been numerous studies on aspects of the service sector (see the list of references following this chapter), no attempt has been made to place these components in the context of the whole sector. Also, the interrelationships among components of the service sector and between it and other sectors have not been clearly defined.

This study was conceived as a broad description of the components of the service sector in the Atlantic Provinces and of the role they play in the provincial economies. This broad description (Phase I) is intended to provide a contextual framework within which detailed studies of each component can be carried out. It also provides a basis for identifying existing barriers to growth or deficiencies in performance and for recommending ways to remedy such shortcomings.

In carrying out the study, extensive use was made of existing statistical sources from federal, provincial, and other bodies. The tables presented in each of the following chapters and the appendices to the report are the foundation upon which a strong case is built for including the service sector in developmental efforts. The data point to problems and shortcomings, as well as to opportunities for growth. To complement the statistical evidence, more than 250 interviews were conducted with numerous individuals in the federal, provincial, and municipal governments, as well as in industry. In addition, 55 firms provided data by completing study questionnaires.

#### COMPONENTS OF THE SERVICE SECTOR

The definition of the service sector utilized in this study reflects a market orientation, as opposed to a production bias; that is, the sector is viewed through the eyes of individual and corporate consumers of services resident in the Atlantic region. The components focused upon include:

1. Business services
2. Transportation
3. Distribution of goods (wholesale and retail)
4. Financial services, insurance, and real estate
5. Residential and commercial construction
6. Tourism and recreation
7. Government services
8. Education

Each of these components is made up of a variety of industries. The study describes the various aspects of each of these segments for the

Atlantic Provinces. The strengths and weaknesses of each part of the service sector are thus viewed in the context of the sector in the Atlantic region relative to the rest of Canada.

The major objective of the study is to identify interrelationships among components of the service sector and between them and other industries in the economic system. The industries in the service sector are inter-related in the same way that different manufacturing industries are interconnected within the manufacturing sector. Thus, intervention in the service sector must be broadly based and must take into account the impact of policy implementation throughout the sector and the economy.

The description of each of the components presents the existing state of the component and its economic significance in each of the Atlantic Provinces. In many cases, it is clear that the state of development in the service sector has a direct effect on the potential for initiating development in the primary and manufacturing sectors.

Distribution occupies a major position in the economic fabric of the Atlantic Provinces, and its development directly affects Transportation. Major developmental opportunities exist in both these areas. Such opportunities, if acted upon, will facilitate the processing of resource-based products and the expansion of manufacturing, and also can serve as a basis for the export of services from the region.

Business and financial services also have a potentially broad and beneficial impact on the future evolution of the Atlantic region economy. Currently, the business services, financial services, insurance, and real estate industries are characterized by a net import of such services. Thus, the jobs associated with such services are created outside the region. Perhaps of greater concern is the detrimental effect on the recognition of economic

opportunities caused by the under-representation of such firms in the region. The lack of venture capital firms, and of head offices of banks and insurance companies results in a reduced demand for such business services as data processing, consulting, research, and development. The absence in the business community of insurance, banking, and business services tends to mitigate against the location of other head offices in the Atlantic region. Also, the availability of risk capital and the degree of entrepreneurial impetus that is found in the Atlantic Provinces are significantly less than those in other regions of Canada. Although the present situation is not buoyant, significant opportunities exist and, if acted upon, can provide for substantial economic improvement in the Atlantic Provinces.

The service sector should not be examined only in terms of the benefit it can provide to other sectors of the economy, or in terms of the job opportunities that may result from stimulating its growth. One of the major factors associated with existing regional economic disparities is the out-migration of residents from the Atlantic Provinces. This trend has a detrimental effect on the economic vitality of the region and may ultimately incur substantial social costs in the other parts of Canada to which many migrate. It is therefore important to recognize that, in stimulating the development of opportunities in the service sector, one also may increase the desire of residents of the Atlantic Provinces to stay in the region and may even encourage in-migration from other parts of Canada.

The tourism and recreation industries, residential and commercial construction, and government services not only provide employment for many people, but also are major contributors to the quality of life in the community. Thus, the service sector offers the potential both to contribute to the economic base of the region by creating new economic opportunities, and

to upgrade the quality of life for residents of the Atlantic Provinces. In view of this potential and of the fact that service industries are closely interrelated with primary and manufacturing industries, the service sector must be assigned a focal role in resolving the problem of regional economic disparities.

#### THE SERVICE SECTOR AND REGIONAL ECONOMIC DISPARITIES

The service sector, like the primary and manufacturing sectors, cannot by itself provide for rapid growth of the economy of the Atlantic region. Accordingly, development planners must incorporate the service sector and its components into broad, intersectorial programs oriented to reducing regional economic disparities. This is particularly important when one realizes that the difficulties that currently exist in several components of the service sector contribute to such disparities.

The service needs of corporate and individual consumers in the Atlantic region should receive first consideration in development planning; and concurrently, the potential for exporting services should be taken into account.

While it has not been our prime purpose to identify a strategy for incorporating the service sector into a specific developmental plan, we have made a number of recommendations in this regard. It is suggested that, on the basis of our description of the service sector and our recommendations, additional studies should be initiated, undertaking an in-depth examination of specific opportunities in each of the Atlantic Provinces. The studies should focus on developing a concrete strategy for formulating programs designed to stimulate growth in the service sector through the use of the linkages that relate the service industries to other industries in the Atlantic region.

## CONCLUSION

The service sector in the Atlantic region is a very important segment of the economy. The components of the service sector are inter-related and must be viewed in terms of their linkages, first, with other components of the service sector; and second, with other industries in the primary and manufacturing sectors.

The service sector exhibits certain deficiencies, which, if overcome, will directly result in the growth of specific industries and indirectly give impetus to the realization of economic opportunities in other industries. Accordingly, it is recommended that Phase II of the study of the service sector in the Atlantic Provinces should be initiated, with a view to incorporating the service sector into developmental plans for the region.

1. Further studies should focus on business services, particularly those relating to data processing capabilities and servicing the needs of
  - (a) oil refineries
  - (b) offshore oil and gas exploration
2. Transportation and distribution activities and the potential to serve
  - (a) firms in Atlantic Canada
  - (b) importers and exporters located outside the region (including central Canada, the United States, Europe, and Asia).
3. Financial services and insurance, and means for expanding operations of the industries in the Atlantic region

4. Development of tourism and recreation in a planned and coordinated manner
5. Upgrading or educational programs and opportunities

The opportunities and barriers that exist in the service sector are complex, but the potential benefits are great. Any efforts that are initiated towards the removal of regional economic disparities must include the service sector as a primary target for development.

## CHAPTER I - INTRODUCTION

### Purpose of the Study

Traditionally, the service or tertiary sector of the economy has been cast in a minor role as a generator of economic growth. Economists, statisticians, and businessmen have focused their attention on primary and secondary (manufacturing) industries, and the service sector has been considered important only to the extent that it supports these industries and meets the needs of consumers. As a logical extension of this point of view, problems of "slow growth" or regional economic disparities have been attributed entirely to deficiencies in the primary and secondary sectors.

In fact, the service sector in Canada, and particularly in Atlantic Canada, is of major importance to the performance of the economy; and as a contributor or potential contributor to economic growth, it has equal ranking with the other two sectors. It provides a larger share of the Gross National Product than do the primary and secondary sectors combined, and service industries account for well over 50% of Canadian employment. This proportion shows signs of increasing. During the 1960's, for example, the rate of growth of employment in service industries was three and a half times that in manufacturing (see Table 1.1).

TABLE 1.1 - EMPLOYMENT IN SERVICE AND MANUFACTURING INDUSTRIES;  
CANADA, 1960-1970

<u>Year</u>	<u>Service Industries</u>	<u>Manufacturing Industries</u>
1961	100.0	100.0
1962	99.7	103.4
1963	106.1	106.1
1964	114.7	111.1
1965	125.8	117.2
1966	139.1	123.5
1967	153.4	123.2
1968	157.8	122.1
1969	171.8	125.2
1970	178.5	122.8

Source: Canadian Statistical Review

In the latter half of this period, employment in manufacturing became stable, but employment opportunities in service industries continued to grow steadily. Projections of current trends indicate that the growth rate of the service sector, in terms of jobs and output, will exceed the average growth to be experienced by the economy as a whole. The Economic Council of Canada has forecast that employment increases in the 1970's will occur only in the service sector.<sup>1</sup>

1. Economic Council of Canada, Ninth Annual Review: The Years to 1980 (Ottawa: Queen's Printer, 1972), p. 64. On basis of shifts in employment between 1960 and 1970, it is predicted that employment may increase in public administration, finance and insurance, and community and business service personnel.

In terms of relative significance, the service sector plays a larger role in the economy of each of the four Atlantic Provinces than it does in the economy of Canada. Discussion of economic disparities between the Atlantic region and the rest of Canada, however, have continued to focus on primary and secondary industries, as have proposals for remedial measures. In part, this results from lack of information about the service sector and its components. There has been no systematic collection of statistical data on this sector; and although a number of studies have examined separate service industries, no attempt has been made to relate these industries to each other or to industries in the primary and secondary sectors.

The purpose of the present study<sup>2</sup> is to identify the industries that constitute the service sector in the Atlantic Provinces and to indicate their relative contribution to the economy of each province. The study draws together any pertinent data that are available and points out the areas where services are currently imported or where a shortage of supply exists. The broad description contained in this report provides a basis for selecting for further detailed study of those industries in the service sector that exhibit potential for development or import substitution, and serves as a contextual framework for such studies.

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2. See the Terms of Reference for this project, included as Appendix 1 to this report.

## Study Approach and Methodology

In this study, service industries are considered to fall within eight main categories:

1. Business services
2. Transportation
3. Distribution of goods (wholesale and retail)
4. Financial services, insurance and real estate
5. Residential and commercial construction
6. Tourism and recreation
7. Government services
8. Education

The first four components are purchased primarily by business and government, and the last three by individuals; construction services are purchased by all three groups. All eight components are important to the health of the economy. Growth in the business sector directly increases economic opportunities; and in the non-business sector, it provides employment opportunities and enhances the quality of life in the community. The latter contribution is particularly significant in the context of the Atlantic Provinces, where migration of the population to other parts of Canada and the United States has long been a matter of serious concern.

This study examines service industries in each of the eight categories in terms of their mutual interrelationships or linkages, their current status, their impact on industrial development, and their

potential for growth. Specifically, the following questions are asked in each case:

1. In what ways does each component relate to other parts of the service sector?
2. How active are the industries within each component in each province and in the Atlantic region?
3. How does the service sector affect other sectors of the economy?
4. Are there certain circumstances where government intervention (federal or provincial) is justified?

In answering these questions and constructing a broad description of the service sector, extensive use has been made of existing statistical data gathered by the federal and provincial governments and by other organizations.<sup>3</sup> To complement these data, over 250 interviews were conducted with individuals in the federal, provincial, and municipal governments and in industry, and questionnaires were completed by an additional 55 firms.

The next chapter of this report is addressed to the first question, concerning the actual and potential linkages among the eight components of the service sector. This discussion provides a theoretical basis for the subsequent description (in Chapter 3) of the service sector within the context of the Atlantic region economy, and for the analysis of each component (contained in chapters 4 to 11 inclusive). For each group of service industries, recommendations are made, based on the assumption that the service sector can play a major role in overcoming regional economic

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3. See the list of references appended to this report

disparities. Chapter 12 draws together the conclusions of the study and recommends a course of action to be taken from this point in planning for the economic development of the Atlantic Provinces.

CHAPTER 2 - THE ECONOMIC ROLE OF THE SERVICE SECTOR

Economic Growth and Regional Disparities

Many individuals who are concerned with the problem of stimulating economic growth believe that intervention in the service sector does not reach the heart of the issue. Instead, they give priority to manufacturing industries, agri-business, and agrarian reform; and they develop projects that are designed to stimulate the production of goods, with the expectation that this will lead to growth in the service sector.

The validity of this approach has been strongly challenged, and evaluations of developmental projects based upon it have not been favourable. The rate of success, in an international context, in achieving growth through industrialization is variable at best. Indeed, the list of failures is so impressive that it has led to a fundamental review of growth theories and methods. Now an increasing number of studies and programs<sup>1</sup> are giving the service sector (or several of its components) the highest priority as a means of achieving economic growth. It is not the purpose of this report to suggest that the service sector is more or less important than other sectors in attaining this objective. Rather, our intention is to provide a basis for including the service sector, or some of its components, as an integral part of any program designed to accelerate the rate of economic growth and to reduce regional economic disparities.

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<sup>1</sup> For example, C.C. Slater et al, have considered the distribution system as the "leading wedge" for achieving rapid economic growth in northeastern Brazil. See Market Processes in the Recife Area of Northeast Brazil (East Lansing, Mich.: Latin American Studies Center, Michigan State University, 1969).

The rationale for including the service sector in a program for economic growth is based on two assumptions: first, that regional economic disparities can be substantially reduced through the creation of new economic opportunities; and second, that regional disparities, and the remedies for them, cannot be viewed strictly in terms of economic conditions.

The Atlantic Provinces contain about 10% of the population of Canada, but they produce and consume only 7% of the Gross National Product. It is reasonable to interpret this as an economic problem (resulting from a lack of business and employment opportunities) for which there is an economic solution (creation of such opportunities). We have already indicated the relative importance of the service sector to the economies of the Atlantic Provinces. In view of the projected rate of growth of this sector for at least the next decade, the service industries promise to be a major source of new job opportunities in the foreseeable future. Through government intervention, this potential for growth can be even further increased. Thus, it seems both logical and essential for government to encourage the development of the service sector, particularly in the Atlantic Provinces.

Some problems associated with regional economic disparities, however, are not amenable to purely economic solutions. For example, one of the major problems in the Atlantic region is the increasing migration of the population, primarily to other provinces. This trend has a detrimental effect on the economic vitality of the region, and it is far from certain that either the individuals themselves or the cities and provinces to which they move are economically better off in the long run. It may be supposed that the reason for the trend is a lack of employment opportunities in the Atlantic region. Certainly, this is a factor; but an equally important influence is the fact that the residents of the region perceive a discrepancy between the quality

of life available to them and that enjoyed by Canadians in other provinces. It is evident that the creation of economic opportunities will not in itself be sufficient to offset or reverse the flow of migration out of the Atlantic Provinces. Measures must also be adopted that are designed specifically to meet the socio-cultural needs of the population (that is, to improve the quality of life).

The service sector is capable of encompassing this dual objective. As indicated in Figure 1, five components of the sector (business services; transportation; distribution of goods; financial services; insurance and real estate; and residential and commercial construction) can be considered primary targets for the creation of new economic opportunities, and four (residential and commercial construction, tourism and recreation, government services, and education) contribute directly to the quality of life in the community. Through the stimulation of growth in this sector, economic disparities can be reduced and the Atlantic region can become an attractive locale both for its residents and for individuals in other provinces and countries.

#### COMPONENTS OF THE SERVICE SECTOR AND THEIR INTERRELATIONSHIPS

Figure 2 illustrates some of the interrelationships that exist among the eight components of the service sector. It is important to be aware of these links among service industries, because stimulation of one component or a lag in another can have a far-reaching effect throughout the sector.

Components of the service sector also are linked to the primary and manufacturing sectors (see Figure 3). Almost all primary and

FIGURE I - CONTEXTUAL FRAMEWORK FOR THE SERVICE SECTOR

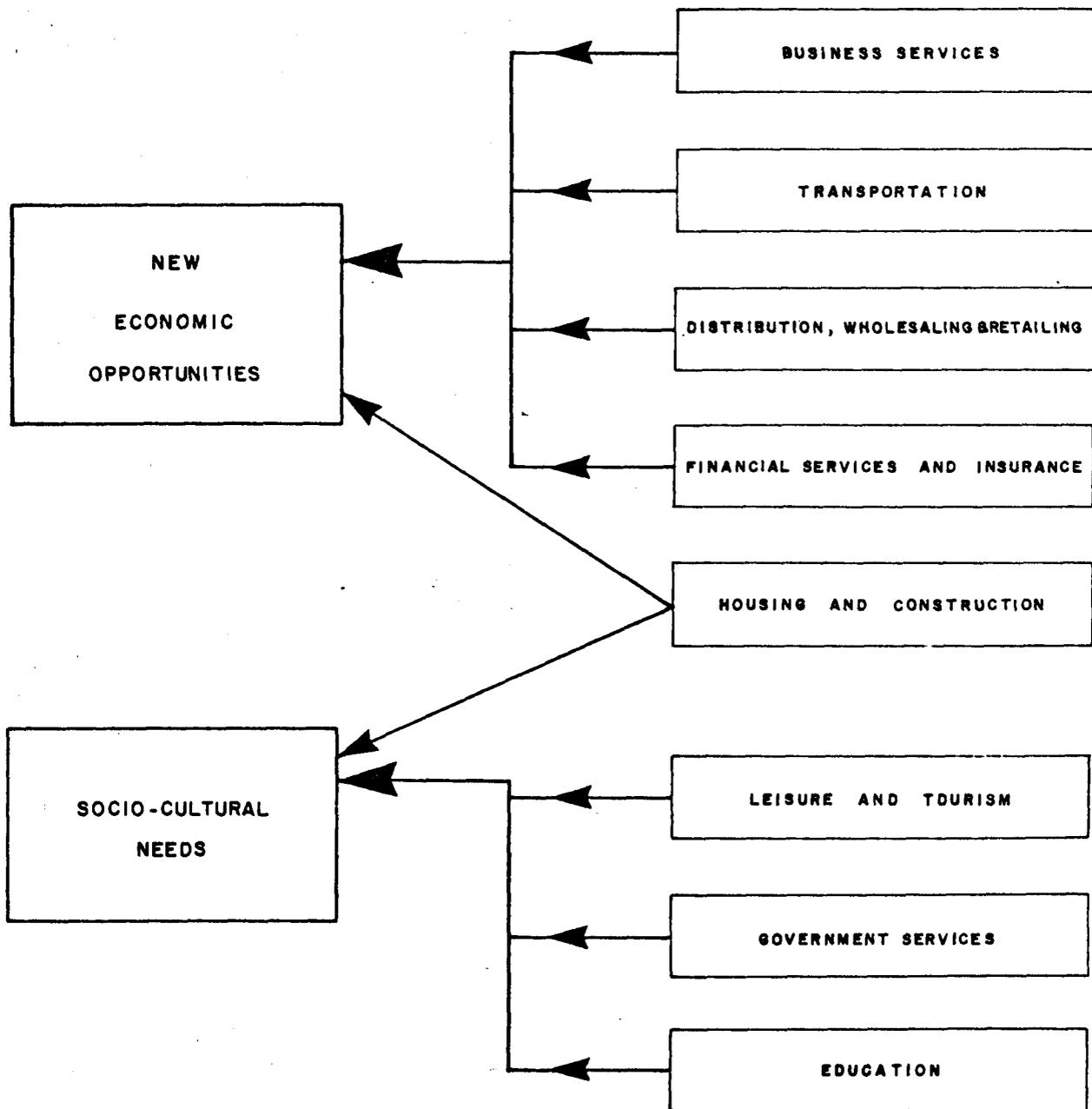


FIGURE 2 - LINKAGES BETWEEN COMPONENTS OF THE SERVICE SECTOR

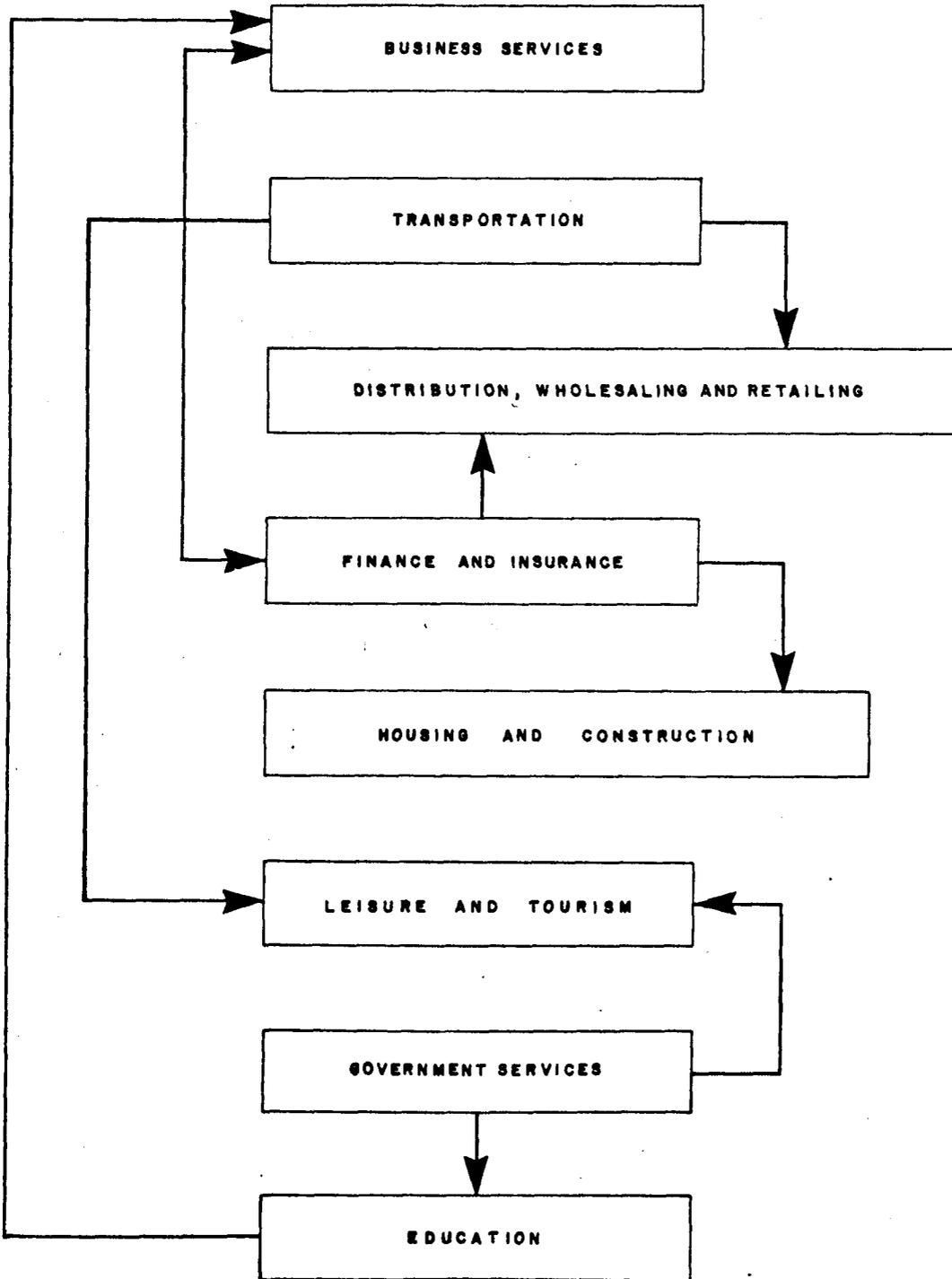
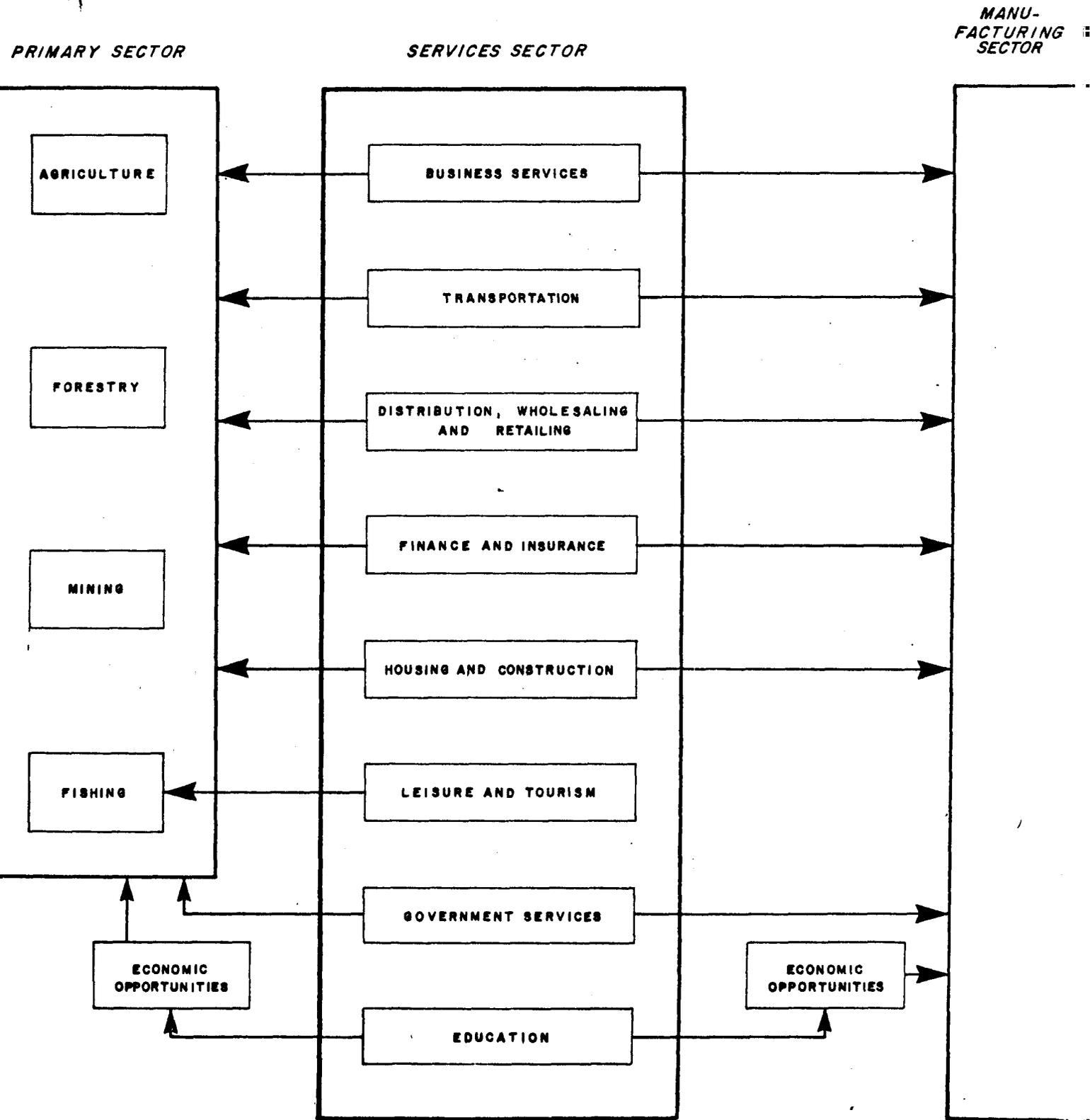


FIGURE 3 - LINKAGES BETWEEN THE SERVICE , PRIMARY AND MANUFACTURING SECTORS



manufacturing industries rely on several components of the service sector; thus, their ability to produce and grow, and their success in doing so, are closely related to the availability of specific services. The only service industry that is not directly linked to either of the other two sectors is education; but its relationship through the creation of economic opportunities is very important to both primary and secondary industries. (For example, the absence of a strong educational component in the economic community may necessitate the importation of skilled and specialized personnel to staff these enterprises.)

In the pages that follow, each component of the service sector is examined in terms of its economic impact within the sector and in relation to primary and manufacturing industries. This discussion provides the foundation for the subsequent detailed description of the various service industries in the four Atlantic Provinces.

### Business Services

Business services include a wide range of professional activities, such as accounting, legal services, consulting, engineering, research and development, and architectural planning and design. These enterprises tend to be small and are staffed by highly specialized individuals. Although they do not provide many jobs directly, their impact on clients and on the business community at large is considered very important; for they facilitate business growth and increase the efficiency and productivity of existing firms. Moreover, the contribution of entrepreneurs is essential to the development of a vital economic community, and entrepreneurship is greatly enhanced and encouraged by the presence of a diversity of business services.

The contribution of the business services component is illustrated by the dilemma that is common to many underdeveloped countries, where such services are lacking. Here a vicious circle exists. The productivity of primary and manufacturing industries is low, because the firms cannot afford to apply new technology and purchase new equipment; labour productivity is low, because the local people lack appropriate training, a nutritious diet, and access to medical services; wages are low, because productivity is low; and the domestic market is small, because the purchasing power of consumers is limited. The cycle is self-supporting, interlocking, and reinforcing. Traditionally economic planners have tried to disrupt the pattern by providing technology and equipment, but they have been only moderately successful. The missing factor in such underdeveloped economies is entrepreneurship, which requires access to business services in order to convert economic potential into reality.

The economy of a low-income region is not, of course, comparable in all respects to that of an underdeveloped country; but some similarities do exist. Planners often diagnose the malady in terms of a need to upgrade technology and encourage investment in industrial plant and equipment. While these elements are essential to a thriving economy, the availability of business services represents a more basic need for enterprises operating under existing conditions.

In addition to its supportive role vis-à-vis other industries, the business services component makes a significant contribution to the economy in its own right, providing a substantial number of high quality, high technology job opportunities.

In view of the broad impact of business services on the economy, in low-income regions where this component is weak or immature, it may be feasible to encourage its growth directly through the provision of subsidies or tax incentives.

### Transportation

Transportation industries also are a critical ingredient in stimulating economic activity. They provide producers with access to raw materials and other supplies, as well as access to markets both within and outside the region. In this respect, the three important features of transportation services are their cost, their range, and their reliability.

Cost is particularly important to primary and manufacturing industries. These enterprises rely on transportation for obtaining their materials and distributing their products, and excessive costs at either end of the production process can effectively destroy their competitive position in the marketplace.

Similarly, these industries depend on access to a wide market in order to operate profitably on a large scale. Size is an important factor in the success of their operations because in both the primary and secondary sectors, technological developments have tended to favour the large firm or plant over the smaller enterprise.

As well as providing suitable access, the transportation network should operate efficiently and reliably, so that industries can maintain production schedules and satisfy market (industrial or consumer) requirements.

The transportation network provides a two-way service: it serves enterprises within the region itself; and by interconnecting with other networks, it may serve industries and individuals in other regions and other countries. Thus, as well as creating jobs within the region (in transportation-related industries) and facilitating the operations of primary and manufacturing industries, the transportation component may contribute to the growth of industries outside the region and may improve the nation's balance of payments position by stimulating export services.

#### Distribution of Goods (Wholesale and Retail)

This component has a major impact on primary and manufacturing industries through its role in translating consumer demands into orders for production. It is also closely related to the transportation component.

The most significant feature of this component in terms of its economic effect is its organization. A young or underdeveloped economy is characterized by a large number of small, independent distributors. Typically, as the economy grows and diversifies, the number of distribution enterprises serving the consumer market decreases and the component as a whole becomes more integrated. Corporate retail chains and larger retail units emerge, and wholesaling and retailing activities tend to be closely coordinated and integrated. The trend towards increasing concentration of retail and wholesale operations affects employment in these industries (sometimes negatively), and it discourages small and independent enterprises from entering the marketplace, since the larger, established firms occupy a very strong competitive position.

The growth of the wholesaling and retailing industries, however, may also have a positive economic effect in reducing regional disparities. The increase in the efficiency of distribution that is associated with the emergence of large corporate distributors results in an increase in consumer purchasing power. Part of this purchasing power is diverted to other service industries, such as recreation, thereby stimulating the growth of employment opportunities in other components of the sector. Thus, the development of a more efficient distribution system may lead to an increased demand for services provided by local entrepreneurs.

#### Financial Services, Insurance, and Real Estate

The three components discussed so far focus on entrepreneurship and marketing services. An essential factor in performing both functions is the availability of investment capital. A major source of such capital would be the finance and insurance industries.

The location of head offices of finance and insurance companies appears to have a significant effect on the availability of investment funds. In regions where there are few head offices, such as the Atlantic Provinces, there tends to be a relative scarcity of investment capital. The problem is intensified by the fact that venture capital firms, whose services are oriented to the needs of small businessmen and entrepreneurs, tend to locate near the head offices of the larger finance and insurance companies.

This pattern affects employment opportunities in the region. Head offices often employ large numbers of local people, and they also create a demand for a variety of business services.

## Residential and Commercial Construction

This component occupies a central position in the economy, because it has a major impact on the rate of investment. Economists view the rate of investment as a prime indicator of the rate of economic growth, and the two main forms of investment are those undertaken by individuals in purchasing homes and those made by businessmen in acquiring commercial space and related equipment.

The direct effect of an increase in the rate of investment is the expansion of the construction industry to meet the market demand. This has an immediate impact on employment (the industry is highly labour intensive) and on the primary and manufacturing sectors (which must provide materials and equipment).

There are two additional, long-term benefits resulting from growth of the construction component. First, by increasing the supply of residential housing, the industry meets a major consumer need. The availability of adequate shelter is essential in both attracting people to a region and retaining its current residents. The provision of housing therefore affects the availability of labour and the development of specific localities within the region.

Second, the availability of commercial space tends to attract business and industrial enterprise. Commercial space is necessary to meet the changing needs of the economic community; and while availability of such space alone may not induce an industry to locate in a particular area, it is a fact that once facilities have been built, an incentive exists to find a use for them. The use of commercial space translates directly into new job opportunities and expansion of the economic base of the region.

Thus, residential and commercial construction has a broad effect on economic activity and may be an important component in reducing regional economic disparities.

### Tourism and Recreation

Although the tourism and recreation industries are by no means a new component of the economy, it is only recently that their potential for generating economic opportunities has been recognized. With the increasing affluence of consumers in North America, Europe, and Japan, the markets for these industries have rapidly grown and diversified.

Economic growth in tourism and recreation has a significant impact on the economy of a region and its residents. If the tourist industries are encouraged to expand, the region will increasingly cater to the needs and preferences of individuals living outside the area. In a sense, this may be considered an export of services out of the region. The effect of such expansion will be the creation of many job opportunities for residents. If the recreation industries are stimulated, the focus of activity will be turned to the needs of the residents of the region, and again job opportunities will be increased.

To a considerable degree, however, the two types of industry are directed to a single market; thus, the development of tourism supports the development of recreation industries, and vice versa. It is important to note that planning for the growth of this component of the service sector is as necessary as market research in the primary and manufacturing sectors.

One of the major benefits resulting from an active tourism and recreation component is the improvement of the quality of life for residents

of the region. The opportunity to enjoy recreation activities can make the prospect of living in the area more attractive than it otherwise would be; and the effect may be to persuade more people to move to the region and to dissuade its current residents from moving away.

#### Government Services

During the 1960s and 1970s, expenditures by federal, provincial, and municipal governments have increased at a higher rate than the rate of growth of the Canadian economy. Associated with this increase is the transfer of a greater proportion of expenditures from the federal to the provincial and municipal governments and from wealthier to poorer Canadians. The provision of government services also has expanded, both directly and through Crown Corporations and government agencies.

An immediate effect of this growth in the public sector is an increase in employment opportunities. Also, some of the government purchasing power has been used to redirect economic activity into those regions which have formerly been at an economic disadvantage. The demand for goods and services in these regions can be expected to grow rapidly as a result of this policy; also, the increased purchasing power of some government bodies may be used to induce specific industries to locate in a particular region or to encourage the expansion of existing enterprises. The relocation of government organizations themselves also may serve as a spur to development, and coordination of government services within a single region can create a greater economic impact than the existence of several disparate bodies.

## Education

As indicated in the preceding discussion, many opportunities exist or may be created in the various component industries of the service sector. If a given economic region is to take full advantage of these opportunities, it must look to the training and education of its population. A skilled labour force must be developed within the region to occupy new and more numerous positions in business and industry, and this means that the educational labour force also must be expanded.

Like the other components of the service sector, education has both a direct and an indirect impact on the economy. In an immediate sense, it creates job opportunities; and indirectly, it opens up a wide range of potential benefits, not the least of which is the enhancement of the quality of life for the residents of the region.

## CONCLUSION

Components of the service sector can play a central role in accelerating economic growth and reducing economic disparities. Through their interrelationships with each other and through their impact on the primary and secondary sectors, they can significantly affect all areas of the economy. First, they are essential to the successful operation of primary and secondary industries. Second, they facilitate entrepreneurship and convert economic potential into reality. Third, and perhaps most important, in their own right they make a significant contribution to regional economic opportunities and can serve to reduce economic disparities. Again, it should be emphasized that the service sector encompasses both economic and socio-cultural needs, the two main concerns of economic planning.

This perspective of the service sector provides a context for our description of the sector as a unit and in terms of each of its components in the present economy of the four Atlantic Provinces.

The discussion will emphasize the links that exist between the service sector and other industries and among the eight components, and it will indicate the probable impact of programs designed to stimulate economic growth in any given group of service industries.

### CHAPTER 3 - THE SERVICE SECTOR IN THE ATLANTIC CONTEXT

It is important to begin our discussion of the service sector in the Atlantic region with a brief description of the context within which it operates. This chapter identifies the relationship of service industries with enterprises in other sectors of the Atlantic economy, and suggests how changes in these other industries can and do affect the service sector. Current trends of economic growth are examined, particularly in terms of their potential impact on service industries. The sector is described, first, in the broad regional context and then in the context of each of the four provinces.

The material in this chapter is based on a questionnaire survey of selected firms in the Atlantic Provinces, on interviews with business personnel in the region, and on federal and provincial statistical sources.<sup>1</sup>

#### INTERRELATIONSHIPS WITH OTHER INDUSTRIES

The service sector appears to be linked closely to manufacturing industries. According to our survey, more than half of the service firms in the Atlantic region attribute over 70% of their volume to manufacturing enterprises, and only 15% report that they do less than 50% of their business with these industries. This suggests that the economic health of the service sector is highly dependent upon the state of the manufacturing sector. It is therefore appropriate to describe the present status of manufacturing in the Atlantic region and to indicate future growth trends.

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1. See Appendix 3 for details of methodology used in this part of the study.

The Manufacturing Sector: Present Status and Trends

Manufacturing industries in the Atlantic region are predominantly resource-based. In both the Canadian and the Atlantic region economies these industries have experienced a decline over the past half-century in terms of their relative contribution to the economy and the proportion of the labour force that they employ relative to employment in other industries. At the same time, technology input has become an increasingly important component of manufacturing processes, and linkages among specialized manufacturing enterprises have grown stronger and more numerous. Consequently, the manufacturing sector has tended to become more and more urbanized: first, because of the need for proximity among complementary and interdependent manufacturing concerns; and second, because a technologically skilled work force is often available in urban areas. The trend towards urbanization is particularly significant for the Atlantic Provinces, where there are few major urban centres.<sup>2</sup>

Despite the relative decline in manufacturing activity in the Atlantic region, the structure of the manufacturing sector has not changed significantly in the past decade. Intervention in the form of subsidies and economic incentives has not altered this structure, although it has undoubtedly accelerated the growth of certain industries within the sector. In other words, the manufacturing sector remains primarily resource-based. This characteristic is not likely to be changed in the near future, given the natural resources of the Atlantic region and the rapidly increasing world demand for such commodities as fish, lumber, pulp, and base materials.

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2. There are six major centres in the four provinces; Dartmouth, Halifax and Sydney in Nova Scotia; Moncton and Saint John in New Brunswick; and St. John's in Newfoundland.

Manufacturing industries require a large pool of skilled labour. New industries will not be encouraged to locate in the Atlantic region, then, unless the present skills of the labour force are substantially upgraded. Also, the expansion of existing enterprises may be inhibited by the necessity to import the required labour force from other regions.

These circumstances will condition the growth of the manufacturing sector in the Atlantic region; but there are other factors, unique to each province, that must be taken into account in assessing the growth potential of these industries - and, therefore, the growth potential of specific components of the service sector.

In Newfoundland and Labrador, manufacturing is heavily resource-based. There are few signs that this situation will change, but a new dimension may be added through the exploitation of new oil and gas resources. Newfoundland seems relatively ill prepared to meet the service needs that would be generated by economic expansion in this area.

The economy of Prince Edward Island is primarily based on agriculture and service industries, and no basic changes in the manufacturing sector are predicted.

New Brunswick can look forward to a major impetus to growth through the development of the Saint John metal working complex. This is designed to bring about the simultaneous development of a group of interdependent manufacturing firms in the metropolitan area of Saint John. Although the project will create tremendous growth for Saint John itself and the immediately surrounding communities, it is not expected to have a major effect on the economic structure of the province.

In Nova Scotia, the principal development that will affect the current economic structure is the discovery of oil and/or gas in substantial quantities off the coast of Nova Scotia or on the Grand Banks. The probability of such a discovery is very high. The effect of this development would be to bring to Nova Scotia an oil or gas boom similar to that experienced by Calgary from the Leduc oilfield discovery. The main impact on manufacturing would be felt in the Halifax-Dartmouth area. The extent of the impact on the economic structure of the economy would depend on the size and nature of the discovery, as well as on its proximity to Nova Scotia shores.

There are undoubtedly other marginal trends at work to reshape the economic structure of the Atlantic Provinces; but the ones cited above are the most significant and the most critical in terms of growth of the service sector.

#### The Role of Industrial Parks in Economic Growth

The expansion of resource-based manufacturing industries depends, first, upon access to raw materials and, second, upon the availability of serviced land adjacent to major urban areas. It is therefore important to trace the pattern of growth of industrial parks in the Atlantic region as it relates to regional industrialization.

Industrial parks are a relatively recent addition to economic planning. They are designed to operate as a satellite to the main urban area, providing participants with industrial services, ready access to transportation, and other locational advantages that are reflected in economies of scale or economies of proximity. Clearly the development of such areas has a significant impact on several components of the service sector.

Most of the industrial parks in the Atlantic region are provincially or municipally sponsored. Their development appears to have coincided with the implementation of decentralization and regional economic expansion programs initiated by the federal and provincial authorities. Two forces have operated in this context: first, local authorities were forced to respond to the requirements of manufacturers who were attracted to locate in the area through incentive programs launched by the Department of Regional Economic Expansion; and second, the Department stimulated local efforts to make industrial space available by providing grants for the installation of utilities such as water, road, and sewage facilities.

Predictably, in the development of these industrial parks, the large urban centres in the Atlantic region have had a great advantage over smaller communities:

1. They can provide greater financial resources for the development and operation of industrial parks;
2. They can provide a larger pool of labour and generally a higher level of skills than available in the smaller communities;
3. They can offer a higher level and a wider range of social and community amenities, such as housing, health and education, and recreation facilities, than could the smaller communities. This is an important advantage in view of the fact that skilled workers with substantial incomes (who are typically employed by manufacturing industries) require access to personal services and leisure goods. The effect is cyclical: skilled workers

are attracted to urban centres where these goods are readily available; and technologically oriented manufacturers are attracted to the area because it provides access to a pool of skilled labour;

4. Large urban centres are better equipped than small communities to obtain and take advantage of timely market information in industrial strategy. Industrial intelligence is more highly developed among large promoters; and industries looking for locational opportunities are not likely to become aware of small industrial park developments through their normal channels of information.

The trend towards larger urban centres is evident from a review of the progress made by various industrial parks in the Atlantic region. Those considered active are the parks that have attracted at least one new firm every year. Judged by this standard, 40% of the listed industrial parks in the region can be considered totally inactive, and only 10% can claim to be active - all of them located in major urban centres.

The significance of industrial park development for the service industries is demonstrated by the following statistics:

Up to 80% of the firms located in industrial parks are not manufacturers (except in the Moncton industrial park, where 70% are manufacturers). In areas such as Charlottetown and Fredericton, 90% of the firms are retail or wholesale distributors; in the well-developed complex of industrial parks in Dartmouth, among 85 participant firms, only 7 are manufacturers.

Although the participant firms vary widely in terms of their output and their supply requirements, some common characteristics can be identified that are related to their decision to locate in industrial parks in the region:

1. Much of the business consists of warehousing. The location in the region of warehouses for finished products imported from overseas has become increasingly attractive for two reasons: first, transportation rates on import items are higher for delivery to a point of entry in central Canada; second, the tremendous growth in consumption of imported goods has increased the flow of such goods into the country and thereby increased the need for warehousing and distribution space. In addition, increasing volumes of trade between the island provinces of Prince Edward Island and Newfoundland and the mainland, have created a need for larger warehousing and distribution facilities.
2. Some firms have located in urban centres because the size of the adjacent markets and trade areas justifies the construction of additional facilities. Most of the products of these firms are consumed within the immediate region.
3. Some firms have located in industrial parks in the Atlantic region in response to specific federal, provincial, or municipal incentives that were not available elsewhere. To these firms, locating in

the region means a reduction in initial fixed costs in return for acceptance of a higher level of operating costs resulting from distance from markets.

In conclusion, the development of industrial parks does not in itself generate a significant economic thrust because they are not the sole determinant in an industry's location decision. They offer, at best, some but not all, the necessary ingredients required by industry. In addition, industrial parks in the Atlantic region are facing serious competition from other regions that are seeking to attract job-creating manufacturing enterprises. It is a cold fact that most of the incentives offered in the Atlantic region are available in other regions much closer to the main product markets.

As a further complication, because most manufacturing in the Atlantic region is resource-based, enterprises must locate close to the source of their raw materials, or relatively close to points of access to such materials. Thus, the participants in industrial parks are likely to be outsiders moving into the Atlantic region, or local resource-based industries that are attempting to integrate their production with consumer needs. In either case, the industrial park tends to play a passive role.

Finally, despite the generally high cost of providing serviced industrial space in the Atlantic region, high quality space is available in all the major urban centres under very attractive terms. This fact, combined with the provision of financial packages by provincial development authorities, has made it very difficult to alter the pattern of industrial park development.

GENERAL CHARACTERISTICS OF THE SERVICE SECTOR

Against this description of the economic environment in which the service sector operates, we can now examine some general characteristics of the sector in the Atlantic region. The first considerations are the factors of demand and supply.

As we have seen, the demand for services in the region is closely linked to the state of the manufacturing sector. Manufacturers assign a relatively small proportion (about 6%) of their total costs to the purchase of services; therefore, availability and quality are more important factors than price in the selection of services.

Our survey indicated that service firms are not optimistic about future increases in the demand for services. Only 18% expect that demand will expand by more than 10% annually; the vast majority expect a 5% growth rate; and 15% expect less than 5% growth per year. Their pessimism appears to be justified by the growth trends we noted earlier in our discussion of the manufacturing sector.

Most service firms based in the Atlantic region do their business only in the region. They are therefore highly competitive with each other. A small number of firms in the survey (15%) claim that their strongest competition comes from outside the Atlantic Provinces, but few are concerned about infringement on their market by firms based in other countries.

The factors of supply that are essential to the functioning of service enterprises include labour, capital, technological innovation, and entrepreneurship. The major problem faced by the service industries, like the manufacturing industries, is the shortage of highly skilled workers in the region. Once staff is obtained, however, it is likely to remain with

the firm, rather than change jobs frequently. Although several federal manpower training programs have been established in the Atlantic region, it appears that the individuals who have undergone such training tend to be relocated outside the region.

According to our survey, it seems that almost one-quarter of the service enterprises in the Atlantic region find it difficult to obtain financing<sup>3</sup>. Some industries by their very nature are not very attractive for capital investment; some enterprises (such as personal consulting services) do not require any sizable fixed assets; and others have fixed assets that are so specialized (for example, laboratory equipment) that they are not acceptable as security. In both cases, lenders are eliminated who require fixed assets as prime security against a loan, and other types of lenders are not encouraged to invest. The major financial requirements of service industries other than transportation and utilities is working capital, and this is the hardest to find.

With regard to technological innovation and entrepreneurship, many people involved in the service sector in the Atlantic region seem to feel that there is a lack of initiative among residents of the province, despite the existence of opportunities for development. One of the main deficiencies that has been noted is the lack of administrative knowledge and capability of those in business in the region.

In general, three main characteristics of the service sector in the Atlantic region can be identified:

1. As elsewhere in Canada, barriers to entry exist in some fields, such as rail transport, utilities, and banking (the barriers take the form of prohibitive

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3. Financial services are discussed in detail in Chapter 7 of this report.

legislation and problems of capitalization). In transportation in particular, however, serious deficiencies in the services provided are widely acknowledged.

2. Most service industries, except storage and warehousing, can be operated at a distance from the market they serve. Thus, efforts to encourage the development of service industries in the Atlantic region, as a means of creating employment, may in fact result in the development or expansion of firms based outside the area, which could service the region through a local representative.
3. As in other parts of Canada, most of the service industries in the Atlantic region operate from an urban base. It can, therefore, be assumed that increased activity in the service sector will contribute to the trend towards urbanization.
4. The technological content of the service sector is increasing. This is particularly true for communications, utilities, and transportation, where technological progress is aimed at reducing the number of jobs required for a given level of output. Thus, unless output grows at a faster rate than technological progress, employment opportunities in these areas will decline.

## SERVICE INDUSTRIES IN EACH PROVINCE

Some peculiarities in the structure and operation of the service sector exist for each of the provinces in the Atlantic region. The discussion that follows describes specific problems and opportunities found in each provincial economy, and provides a basis for some general recommendations for change and improvement.

### Newfoundland and Labrador

Newfoundland and Labrador are geographically remote, and access is difficult. The service sector in this province is the least developed in the Atlantic region. A small industrial park exists in the St. John's area, and a larger one is located at Corner Brook. Clearly, most of the economic development to take place in the future will be in the resource-based industries. Only a small amount of integration is expected to occur.

The major problem in the service sector lies in the poor quality of the transportation system. Although a great deal of effort has been put into the construction of the Trans Canada Highway, roads other than this vital link are still below standard, making road transport both inefficient and costly. In addition, the rail and ferry service to the mainland is a constant source of complaint. The Newfoundland-Labrador railway system is built on a narrow-gauge track, and this means that all shipments have to be unloaded and reloaded from each car upon arrival from Port-aux-Basques. If the Newfoundland railway were converted to standard gauge, the rail-ferry system could operate more efficiently. The ferry service itself is considered to be deficient, mainly because it is underserved, but also because scheduling is not geared to meet major needs.

The ability to remedy these problems rests with government. A cost-benefit analysis of converting the railway system and improving the ferry service should be conducted and appropriate action taken.

An important part of Newfoundland's development is based on oil refineries. There are four reasons for the location of these industries in the province:

1. Availability of deep-water harbours to accommodate supertankers drawing over 100 feet;
2. The high demand for fuel along the northeastern seaboard;
3. The province's willingness to co-invest with private industrialists in refining projects;
4. Expectations of major oil and gas discoveries off-shore or in the Gulf of St. Lawrence.

Newfoundland does not appear to be well prepared to handle the additional demand for services created by oil and gas exploration, and there is no clear-cut strategy for adjusting to the impact of major discovery on the Grand Banks or in Labrador. The province should review its potential in this area in order to benefit fully from what could be its largest development.

The availability of labour, capital, and entrepreneurship also is a problem in Newfoundland. Most of the labour force is unskilled, and consequently the province has serious problems of unemployment and under-employment. Capital is generally concentrated in the hands of a few businessmen, and financial intermediaries tend to adopt an extremely conservative

attitude. This situation should be remedied by the planned creation of a Newfoundland Government Crown Development Agency, which will provide both loans and equity financing specifically geared to the needs of small business and service firms.

#### Prince Edward Island

Prince Edward Island, the smallest of the Atlantic Provinces, has a heavy agricultural and rural base with very little manufacturing. The manufacturing activity that does exist produces primarily for local consumption. Serviced industrial space is available in the small urban centres of Charlottetown and Summerside, but most of it is used for warehousing.

Because of the transportation costs that are incurred in moving goods between the island and the mainland, and because of the province's population, the industrial potential of Prince Edward Island is very limited. Thus, most of the business and other services that are presently available have little prospect for major expansion. Tourism and recreation and personal services are two areas, however, where growth may be achieved.

There appears to be an adequate supply of labour to meet the needs of existing service industries, as well as adequate access to capital. In general, it can be concluded that the level of services presently available to enterprises located on the island and to those wishing to locate there is sufficient to meet their needs.

#### New Brunswick

This province is characterized by the presence of large, resource-based manufacturers located adjacent to major urban centres. Principal activity is in pulp and paper, and movements towards integrated manufacturing

operations have been partially successful.<sup>4</sup>

The success of an integration process apparently depends upon the establishment of interdependent relationships among primary, secondary, and service concerns within a small geographical radius. Comprehensive planning is essential to ensure simultaneous development of all three sectors. Development by way of a total complex (such as the metal working complex planned for St. John's) rather than through ad hoc initiatives to independent manufacturers has the additional advantage of reducing existing locational disadvantages.

The major problem for the service industries in New Brunswick is that there are too many urban centres in the province, relative to its size and needs. Consequently, services tend to be duplicated in Fredericton, Moncton, and Saint John, and there is heavy intraprovincial competition among these firms.

A number of industrial parks have been developed, providing ample space for future expansion and well-serviced facilities. The main attractions to industry are the availability of labour and access to substantial provincial subsidies. In Moncton, as noted earlier, there is a predominance of manufacturing industries; but in Saint John and Fredericton, most of the industrial space is taken up by warehousing.

The main potential for growth in New Brunswick lies in the development of transportation links (by road and by water) with the United States. Government authorities must establish the necessary infrastructure for transportation across the border, however, before the private sector can step in and activate economic growth in this direction.

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4. The notable exception is the highly successful McCain Food enterprise, which has grown to international proportions from a New Brunswick base.

## Nova Scotia

The economic growth of Nova Scotia resembles that of New Brunswick, particularly in its emphasis on resource-based manufacturing (in pulp and paper, coal, and gypsum). As in Newfoundland, there is a current trend towards oil refining, based on the same advantages that the area offers and the same hopes for expansion through a major off-shore discovery. Although at present all the major oil concerns in the province are engaged in exploration, they have already made an impact on the service sector and on other industries, such as the shipyard industry.

In the service sector, off-shore drilling has stimulated growth in transportation and research and development. A study conducted by the Department of Development of the Province of Nova Scotia estimates that there are about 300 firms in the province which are suitable to provide services to the oil and gas industry during the exploration stage. These firms are expected to be able to absorb an expansion in activity without experiencing undue pressure, but no estimate has been made of their capacity to adjust to the impact of a major discovery.

A problem of major concern in this area of development is the availability of local personnel with the skills required by this highly specialized industry. Initially, the industry imported services from other parts of Canada and the United States. If Nova Scotia is to take full advantage of the potential that exists in this area, a strategy should be developed that permits local service industries to take over gradually, once the necessary skills have been developed by local technicians and professionals.

The second major factor in Nova Scotia's economic development is the presence of a highly efficient container port in Halifax. This appears

to increase the importance of the area as a warehousing and distribution point, as is evidenced by the predominance of these services in the industrial parks in Halifax-Dartmouth. The development of complementary transportation links between Nova Scotia and the markets of central Canada can enhance the province's role as an economical point of entry for imported goods. Services and industrial space outside Halifax are readily available, and access to investment capital is made possible through generous provincial and federal programs. The largest problems faced by service industries are a lack of male skilled and semi-skilled workers and the degree of entrepreneurship that exists in certain industries.

Entrepreneurship is an amorphous quality that sometimes grows with opportunities. Of all the Atlantic Provinces, Nova Scotia offers the greatest opportunities for expansion of service sector and for industrial development. Warehousing facilities and transportation appear to be the service areas that are most severely deficient. An incentive to develop warehousing could be instigated with a dual purpose: first, to improve existing conditions; and second, to encourage secondary industries through the creation of break-bulk warehousing system or the creation of a free port.

The concept of a free port involves the importation of goods in a semi-finished form, their unloading, and their assembly, for shipment to other destinations. The advantage of the system is that the goods are not subject to excise taxes at point of entry; instead, once they are shipped out, they are subject to the tariffs of their destination. This appears to be an attractive alternative for servicing the North American market with imported goods.

The main impact of a free port would be felt in the manufacturing and transportation industries, and this could become a vital catalyst for

the development of the province. Unless some innovation such as this is implemented, Nova Scotia will likely experience slow growth in manufacturing and services (other than those related to the oil refining industry), and its industrial parks will continue to provide prime space for warehousing only.

Nova Scotia has not only the broadest, but also the deepest service base of all the Atlantic Provinces, primarily as a result of its excellent university and research facilities. These services are currently funded by the provincial government and by private interests. If current efforts are continued and extended, Halifax may become the centre of a research of peripheral industries, in much the same manner as research in Boston and Cambridge, Massachusetts, contributed to the growth of the electronics industry in the area.

#### CONCLUSION

A large pool of labour is available in the four Atlantic Provinces. The type of labour available varies somewhat from area to area; but in general, skilled male workers are considered to be the hardest to find and unskilled female workers are readily available.

Most of the firms that have established themselves in industrial parks in the Atlantic Provinces over the past few years have set up warehousing and distributing facilities. Few manufacturers have located in these areas, and those that have do not appear to be related in terms of output or common interests.

Because of preferential freight rates on most imported goods going to central Canada via the Atlantic ports of entry, and because of the availability of efficient trans-shipment facilities in Halifax, there is an in-

centive for accelerating the flow-through of materials to manufacturing centres located outside the region. Consequently the industrial parks in the Atlantic region, and particularly those of Halifax and Dartmouth, will likely become increasingly important as warehousing points rather than manufacturing points.

Manufacturing in the Atlantic region is primarily resource-based, with very little vertical integration among enterprises. Most resource-based industries locate at or near their supply of raw materials. The majority of the well-serviced industrial parks are located in urban centres and do not at present offer a particularly attractive locational alternative to existing industry. The attraction of manufacturing concerns to these areas will therefore have to be generated from other sources and other areas.

The most problematic service in the Atlantic Provinces is transportation. In all provinces, criticisms are voiced concerning the quality of service, the lack of alternative methods, the lack of certain transport routes, the lack of competition in rail transport, the poor physical quality of network and rolling stock, the unnecessary delays in shipping, and the cost structure of freight rates.

Also in more specific terms:

1. The narrow-gauge railroad system in Newfoundland creates a bottleneck;
2. The ferry system from Newfoundland to the mainland is felt to be inadequate;
3. There is a lack of feeder sea lines to the northeastern seaboard of the United States;
4. There are no major highways to the northeastern seaboard of the United States on the Canadian side of the border.

Second to transportation, warehousing is the most deficient service in terms of the lack of space available and the poor quality of the existing warehouses at importing points of entry.

The development of oil and gas exploration on the continental shelf off the coast of Nova Scotia, as well as off the northeast coast of Newfoundland and Labrador, contains the greatest potential for substantial growth in the service sector. Exploration and oil field development (if the latter case arises in the future) will create the need for a multitude of ancillary, high-skilled, specialized services. Nova Scotia appears to be ready to rise to this opportunity. The non-availability of these local services will necessitate the importation of skilled manpower and services from foreign sources (such as the United States, the United Kingdom, Holland and Norway), as well as from other parts of Canada.

Skilled personnel are considered to be a rare commodity in specialized services, especially machinists and special maintenance personnel (for example, aircraft technicians). The turnover rate is considered to be low however, and most skilled workers retain their jobs once hired in the Atlantic region.

The cost of servicing land is a problem in all provinces, but this is particularly so in Newfoundland and Nova Scotia, where the rocky terrain contributes to rising costs. Thus, housing is more expensive in these provinces than it is, on the average, in other Canadian urban centres. In the eventuality of rapid economic growth, housing will likely become the most serious bottleneck among all services.

*The highest quality of serviced industrial land should be made available on a continued basis in order to maintain the Atlantic Provinces on a competitive level with other areas currently competing for the presence of manufacturers. Provincial, federal and municipal subsidies must be made available to provide the infrastructure necessary for high-quality, serviced industrial lots. The Federal Government should strongly consider greater assistance to qualified municipal industrial parks projects in the Atlantic region.*

*A concerted effort should be initiated for the development of an industrial park complex around one of the following possibilities:*

- (a) the development of a freeport industrial park area*
- (b) the development of a break-bulk terminal specially conceived industrial warehousing area providing participants with attractive incentives and facilities to do some manufacturing and assembling before further shipment to all points in North America*
- (c) the development of a specialized, limited purpose, petrochemical complex;*

*A review should be undertaken of freight rates which appear to encourage a flow of goods through the Atlantic Provinces and which act to retard the initiation of manufacturing activity in the Atlantic Provinces.*

In order to encourage response from the service sector to the potential boom in off-shore oil and gas in the Atlantic region, it is recommended that:

*A study should be made of past experience in similar developments in Louisiana, Scotland, and Norway.*

*Where feasible, legal steps should be undertaken to guarantee that services to the oil and gas industry will be provided from local sources.*

*Specific incentives should be provided to the service sector in order to develop the skills required to handle the expected increase in demand. These incentives could be provided by way of grants to service firms for training of local workers either regionally or in the countries of expertise. Specific grants could also be extended to exploration companies for the hiring of local manpower and for training on the job.*

*The training of the unskilled labour force should be encouraged, not by increasing present training programs outside industry or by increasing trade school facilities, but by providing specific incentives for manufacturing and service industries to compensate for the hiring of graduates of training programs or trade schools.*

*The Federal Government should review its assistance program to municipalities and builders in the Atlantic Provinces.*

CHAPTER 4 - BUSINESS SERVICES

It is interesting that, at a time when most parts of our economy are being examined in depth, one of the few areas to escape detailed study is the group of industries known as business services - the very group that is providing a major portion of the research and consulting. Only a few scattered and aggregate statistics are available relating to business services. Some reviews and studies have been undertaken by vested interest groups, such as professional associations, but their objective has been to gain protection against various types of competition. One of the main reasons for this lack of attention is that business services comprise a rather small part of the broader service sector, which, in spite of its size, also has received relatively little attention. Small as it is, however, the business services component has an important impact on the growth of any developing region.

Because of the relative lack of statistics in this area, the discussion here is general and descriptive. It aims at identifying and describing those business services which show potential for growth and/or import substitution. It also attempts to indicate the (as yet unquantifiable) impact of this component on the development of the Atlantic region. The description is based primarily on interviews with suppliers of business services in the Atlantic Provinces and in Central Canada, their private sector and government clients, and the associations to which the suppliers belong.

The term business services refers to a wide range of economic activities which have as their focus the provision of services to both business and government. It includes, in its broadest sense, much of the

advertising industry, credit agencies, and groups and individuals who offer professional services, such as accountants, lawyers, engineers, auditors, economists, management consultants, designers, actuaries, adjusters, appraisers, and custom brokers. Because of the extent and variety of these enterprises, our discussion centres on selected professional services to business and government in five main areas - building construction, heavy construction, municipal and environmental construction, management consulting, and transportation and urban planning.

The five areas considered here were selected for three reasons:

1. They have an important impact on the economy of the Atlantic Provinces.
2. Firms providing the services are affected by a high level of import competition.
3. Services are provided on a project basis rather than on a retainer basis. This system has direct implications for the stability, the element of risk, and the growth and development experienced by these firms.

Firms providing related professional services, such as accounting and legal services, were not included because they are relatively well established in the Atlantic Provinces, they are not seriously affected by import competition, and they will continue to grow at a rate corresponding very closely to the rate of expansion of other business activity in the region.

#### DESCRIPTION OF SERVICES

Here we will outline briefly the services performed by professional firms in each of the five areas listed above.

### Building Construction

This large and complex segment encompasses the design and construction of residential buildings, industrial buildings, institutional buildings, and other structures, such as passenger terminals and airplane hangars. A large number of private consulting firms are available to provide the expertise of architects, structural engineers, mechanical engineers, electrical engineers, and other specialists. By far the majority of the engineering consulting firms are small (between one and fifteen professionals), and they usually work in conjunction with architectural firms. A few larger firms may have both architects and engineers on staff.

For most projects, the client retains an architectural firm to handle the design and construction of his building on the basis of a negotiated fee calculated as a percentage of the cost of construction. Under this arrangement, the architect provides feasibility studies, preliminary designs, final working (construction) drawings, and supervision of construction. While maintaining overall responsibility for the project, the architect typically sub-contracts to other consultants the structural, mechanical, electrical, and other specialized aspects of the project. These specialists are paid by the architect, usually on the basis of a fixed percentage of the construction cost of their area of specialization.

### Heavy Construction

This segment relates to six major industries: power, forest products, mining and metallurgy, marine, oil and gas, and heavy manufacturing and materials handling. It requires highly specialized skills and involves very large multi-faceted projects. A few large firms provide most of the consulting services in this sector. Services are often provided on an

all-inclusive package basis, encompassing feasibility studies, planning and design, supervision of construction, procurement, and project management.

#### Municipal and Environmental Construction

This area includes the design and construction of water supply systems, sewage systems, and industrial work systems. Services rendered include engineering feasibility, development of preliminary designs, and the management of construction.

#### Management Consulting

This segment includes management and organizational studies, finance and control, computer applications, personnel services, executive search, and market research.

#### Transportation and Urban Planning

Clients in this area are concerned with planning and traffic studies; the design and construction of roads, highways, and expressways, bridges and tunnels, subways, railroads, and airports; and town and regional planning and landscape architecture. Services relate to policy, planning and feasibility, detailed design, and supervision of construction.

#### SCOPE OF ACTIVITIES

The scope of business services in the five areas considered here has important implications for the economy of the Atlantic Provinces. Tables 4.1, 4.2 and 4.3 summarize the billings, employment, and growth for each segment, and indicate the degree to which services are important in each case.

TABLE 4.1 - BILLINGS FOR PROFESSIONAL SERVICES, 1972

SEGMENT	Canada	Atl. Prov.		Imported to Atl. Prov.		Done in Atl. Prov.	
	\$ (millions)	\$ (millions)	%	\$ (millions)	%	\$ (millions)	%
Building construction	238	21	9	7.5	35	13.5	65
Heavy construction	104	16	15	12.5	80	3.5	20
Municipal and environmental construction	27	2	7	.7	35	1.4	65
Management consulting	38	1.5	4	1.0	60	.5	40
Transportation and planning	41	5	11	2.5	50	2.5	50
TOTAL	448	45.5		24.2		21.4	
PERCENTAGE OF TOTAL			10		53		47

TABLE 4.2 - EMPLOYMENT IN PROFESSIONAL SERVICES, 1972

SEGMENT	Canada		Atlantic Provinces		Estimated Resident in Atlantic Prov.	
	Professional	Support	Professional	Support	Professional	Support
Building construction	2,900	6,300	261	570	200	400
Heavy construction	1,995	4,560	300	685	75	150
Municipal and environmental construction	430	1,070	30	75	30	60
Management consulting	1,335	450	53	18	25	10
Transportation and planning	780	1,790	86	197	50	100
<b>TOTAL</b>	<b>7,440</b>	<b>14,170</b>	<b>730</b>	<b>1,545</b>	<b>380</b>	<b>720</b>

TABLE 4.3 - GROWTH IN PROFESSIONAL SERVICES, CANADA, 1963 - 1971

SEGMENT	Real growth rates (1963 - 1971) % per Annum
Building construction	4.1
Heavy construction	9.2
Municipal and environmental construction	6.9
Management consulting	15.0
Transportation and planning	7.0
AVERAGE	6.5

### Building Construction

Building construction is the largest of the five areas. It is estimated that billings for Canada in 1972 were close to \$240 million and that work was provided for 2,900 professional architects, engineers, and planners and 6,300 support staff. Approximately 9% of this building was done in the Atlantic Provinces.

Over 90% of the clients across Canada are local builders and developers in the housing and commercial sectors. In each region, consulting firms specialize in one or a few building types. Although there are a few very large architectural and engineering consulting firms in this segment, most are small and tend to work within their own region. In the Atlantic Provinces, approximately 100 firms perform this type of service. As a proportion of total construction billings, consultants' billings in the Atlantic Provinces in 1972 were about \$21 million.

A considerable proportion of this work (an estimated 35% <sup>1</sup>) is imported to the Atlantic Provinces. Typically, outside consultants from Montreal, Toronto, and New England are used on larger projects. These consultants may work out of a small regional office, or they may deal directly with the client from their head office. Clients using these "imported" services include both major Atlantic investors and investors outside the region.

### Heavy Construction

It is estimated that in 1972 the total Canadian billings for consultants to the heavy construction industry was \$104 million. Ah

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1. This estimate is based on interviews conducted within and outside the Atlantic Provinces.

additional \$42 million were billed outside the country. About 6,555 people were employed in this industry, of whom 1,995 were engineers and other professionals. The Atlantic Provinces account for approximately 15% of total domestic consultants' billings. This relatively high proportion results from the region's substantial activity in power and marine construction.

As noted earlier, construction and repair work in heavy industry is usually large scale and requires a multi-faceted project management approach. The professional services market in each of the major industry areas (power, forestry, mining and metallurgy, marine, oil and gas, and heavy industry) is therefore dominated by a few large firms; the majority are national firms, and they undertake a considerable amount of international work. It is not surprising, then, to find that 80% of heavy construction consulting is imported to the Atlantic region. Although most of the outside firms have offices in the Atlantic Provinces, they have relatively few resident staff, and the bulk of the work is handled through out-of-region facilities. Some of the work is sub-contracted to local firms, but the value of all work done in the region amounts to only \$3.5 million of the \$16 million in total billings.

#### Municipal and Environmental Construction

In 1972, municipal and environmental construction accounted for \$27 million in billings in Canada and employed 430 professionals and 1,070 support staff. The growth of this segment is closely related to the construction of housing in urban areas. Approximately 7% of the Canadian market or just under \$2 million in consulting fees are accounted for by the

Atlantic Provinces. Because of the degree of specialization required, provision of services in this area is concentrated in the hands of a few relatively large firms. Unlike the heavy construction industry, however, several Atlantic region firms specialize in this area. They employ an average staff of 80 persons, and they have offices in Nova Scotia, Prince Edward Island, and Newfoundland.

Municipal governments comprise the main client group. But despite the existence of appropriate expertise in the region and the fact that local government is the largest client, approximately 35% of consulting services is imported to the Atlantic region.

#### Management Consulting

The management consulting industry accounted for \$38 million in billings across Canada in 1972 and employed 1,785 people, of whom approximately 1,335 were professionals. Only 4% of this work is done for clients in the Atlantic Provinces, and a high proportion of that - about 60% to 70% - is for government. Five of the major national firms have offices in Halifax, and there are 15 to 20 smaller firms and independent consultants in the major urban areas of the Atlantic region. About 50% of the work is done by professionals residing outside the region.

Management consulting is the fastest growing of the five industry areas. Over the past decade, billings in Canada have been growing at a rate of about 15% per annum.

#### Transportation and Urban Planning

This segment accounted for approximately \$41 million of Canadian billings in 1972 and provided 2,570 jobs, of which 780 were in the

professional category. The market for these services is relatively concentrated, with a few large specialist firms accounting for the bulk of the work. While a few engineering consulting firms and several small planning consulting firms in the Atlantic Provinces undertake some work in this area, the major projects rely on consultants residing outside the region (usually in Montreal, Toronto, and New England). Approximately 14% of the transportation work and 5% of the planning work is done for clients in the Atlantic Provinces. This represents billings of just over \$5 million, but it is estimated that more than 50% of these billings leave the region.

#### Growth in Demand for Professional Services

Growth rates in each of the five industry areas vary widely, although overall growth in Canada has been a steady 6.5% per annum since 1963 (see Table 3.3). This compares favourably with the 5.4% growth rate in Gross National Product. Of the various segments, management consulting has grown most rapidly at an average rate of 15%; and the building and transportation segments have been the slowest, with growth rates of less than 5%.

The prospects for growth in the next ten to fifteen years differ for each area. They depend to a considerable degree on the amount of construction activity in the economy. Construction has been growing at a real rate of 5% annually, and the Economic Council of Canada projects a 4.4% growth in residential construction and 7.8% growth in non-residential construction over the next ten years.<sup>2</sup> This should lead to an overall growth in demand of about 7% in professional services. Faster than average

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2. Economic Council of Canada, op. cit.

growth can be expected in municipal and environmental construction, building construction, and management consulting

### ECONOMIC IMPACT

Before discussing the market characteristics and prospects of the business service industries, it is useful to consider, in general terms, the impact of these industries on the Atlantic economy.

If the impact of the business services component is analyzed along traditional lines, it is not impressive. It contributes to employment by providing a few thousand jobs in the Atlantic Provinces. As its industries develop over the next ten years, taking into account some import substitution, as many as 500 to 1,000 more jobs may be created. Although this is not insignificant in the context of the Atlantic economy, it is by no means spectacular.

Business service industries, however, create a number of side effects which make them far more important to the Atlantic economy than their size would indicate:

1. They provide a pool of talent which has a very important impact on the productivity of other industries.
2. They act as a catalyst to opportunity recognition and risk taking.
3. They have an impact on management attitudes.
4. They reinforce the desire for highly trained individuals to maintain residence in the Atlantic region.

### Pool of Talent and Productivity

The consulting industry allows government and business to share a pool of talent which could be maintained in-house only at a very high

cost. The availability of this pool of talent has a direct effect on the productivity of various enterprises, because it allows the use of expertise on an "as needed" basis.

Theoretically, the differential cost of importing these services as opposed to using local services is not very high. For many medium-sized and small companies, however, the lack of immediate access to these services is enough to dissuade them from using them at all. Since consultants of all kinds are used to focus directly on investment decisions or questions of productivity, the availability of competent regional consulting industries appears to affect productivity very significantly.

The same pool of talent which provides consultation and expertise in critical areas also serves as a source of potential employees in business and government. The flow of personnel into and out of the consulting industries brings many talented individuals to the region, and these industries give them a training that makes them particularly valuable to business and government.

#### Opportunity Recognition and Risk Taking

One of the major barriers to economic development in the Atlantic Provinces is the lack of entrepreneurs who are skilled in opportunity recognition and oriented towards risk taking. This is as true for very small ventures (such as an innovation in existing production processes) as it is for every large investment in new industries.

Although the professional service industries themselves are slow to innovate and expand, they serve as a catalyst to opportunity recognition and risk taking. They have a large vested interest in change and growth.

Many firms are committed to the promotion of new investments or changes which will lead to higher productivity. To a large extent, a business services component suffering from over-capacity attempts to create a market for itself by recognizing opportunities and convincing other people to take risks. Since these industries also help to analyze the degree of risk, they act to make risk taking a more rational and systematic process.

#### Impact on Attitudes

More generally, the business service industries affect the attitudes of decision makers throughout the region. Their promotional efforts tend to be mini-training sessions for the prospective buyer. They afford an easy and natural contact among businessmen within and outside the region. They also facilitate the flow of ideas and information from one company or agency to others.

#### Reducing Emigration

Even more generally, the fact that these industries make it possible for several hundred professionals to live in the region and for them to maintain a relatively wide range of personal contacts has an effect on the region's culture and self-image. The business services component provides an incentive for people trained in the Atlantic Provinces to remain there because the members of the consulting industries are evidence of the fact that competent, talented individuals can work and live successfully in the region.

## MARKET ANALYSIS

In this section, we will examine in greater depth the characteristics of the Atlantic region market for business services. We will identify the factors that influence supply, the factors that influence client decisions, and the present and potential impact of these services on the Atlantic economy.

### Supply

This study has resulted in a number of central findings related to the supply of business services in the Atlantic region. These findings are summarized below; a discussion of their implications follows.

1. Firms in the Atlantic Provinces tend to be smaller, less diverse, and less specialized than those in other parts of Canada.
2. There is severe import competition from central Canadian and New England firms directly, through Atlantic branch offices, and through "mail drop" or front operations.
3. Many clients allege that the services provided by Atlantic firms are less effective than those provided by outside firms.
4. The productivity of Atlantic firms is lower than the average for Canada.
5. The promotional efforts of Atlantic firms tend to be less effective than those of outside firms.
6. Halifax firms service the other Atlantic Provinces in only a minor way.
7. The risk-taking and opportunity-recognition functions in Atlantic firms are lower and growth and development of firms are slower than the average for Canada.

8. Atlantic firms have difficulty in locating, attracting, and keeping skilled staff.
9. Atlantic firms are seeking the assistance of government professional associations in gaining protection from outside groups and in developing the industry.

#### Import Competition and Concentration of Service

The Atlantic business service industries suffer seriously from competition imported mainly from Montreal, Toronto, and New England. The reasons for the import pattern are many and interrelated. In the business service industries, both the market and the personnel are most abundant in the major urban centres. As a result, the firms near such centres are larger, more stable, more highly specialized, more diverse, and more highly qualified. The promotion, management, and risk-taking functions within firms near large urban centres tend to be more competent and aggressive. In an industry where specialized experience and management capabilities for multi-faceted and large projects are often very important, it is to be expected that Montreal and Toronto firms would have a major involvement in other regional markets, notably in the Atlantic Provinces.

There are approximately 400 professional engineers, architects, management consultants, and planners working in consulting or architectural firms and resident in the Atlantic Provinces. The firms that employ these professionals employ an additional 700 to 750 persons as support staff. Slightly over half of these people are in Nova Scotia and most of the remainder are in New Brunswick, although Newfoundland has several architectural firms and engineering consultants that operate in municipal and environmental construction and in building construction.

In 1972, the Association of Professional Engineers of Nova Scotia (APENS) included 68 consulting engineers in its published list of members. Of these, about 10 are offices of major national firms, whose organizational complexity ranges from a post-office box to a full-time establishment of up to 30 people. Another 10 to 20 are smaller firms with head offices in other provinces (in a few cases, other Atlantic Provinces); the Nova Scotia operation of these firms tends to be quite small. The remaining Nova Scotia-based firms vary in size from single individuals to a full-time staff of 80 people. Most firms employ between 2 and 20 full-time staff. The ratio of professional staff to support staff is about 1:2.

Most of the Nova Scotia-based firms specialize in one or more aspects of building construction and/or municipal and environmental construction. A few do heavy industry work in the marine and power fields; but as noted earlier, most of the heavy industry work is handled through national based firms elsewhere. Similarly, with a few exceptions, transportation and planning projects are handled by national companies. Several of the national companies employ a full-time staff of up to 30 people, but most of the work is done outside the area.

Between 40% and 50% of the total billings to Nova Scotia clients are for services performed outside the province. In the other Atlantic Provinces, a much higher percentage of total billings, about 60% to 65%, are from outside the clients' province. Of the firms resident in New Brunswick, Newfoundland, and Prince Edward Island, a much higher percentage are offices of large and medium-sized national firms. Domestic firms tend to be even smaller than those in Nova Scotia.

### Halifax as a Service Centre

To a limited extent, Halifax is a service centre for the Atlantic region. It is estimated that between 10% and 15% of the billings of Halifax-based firms accrue from New Brunswick, Prince Edward Island, and Newfoundland. The major sources of business services in these provinces, however, are Toronto and Montreal, rather than Halifax. The main reason for this is the special qualifications of the central Canadian firms (such as experience, size, diversity, and quality), but there are other reasons. For example, there are the ties of tradition; and there is the practical consideration that air access from Montreal and Toronto to most Atlantic centres is at least as easy, if not easier, than access from Halifax. The most important reason, however, is that the majority of Halifax-based firms have not developed and promoted their services in the other Atlantic Provinces.

As the Atlantic market grows, it will be possible for Halifax to establish itself more firmly as a service centre for at least some of the work now being done out of Toronto and Montreal. For example, the management consulting, transportation and planning, building construction, and municipal and environmental construction industries and the marine, oil and gas, and forestry groups within the heavy construction industry could be developed if the Halifax-based firms consciously and aggressively directed themselves to a larger portion of the Atlantic market. It is highly unlikely, however, that significant growth will occur if Atlantic-based firms do not abandon their present local or provincial perspective and approach the entire Atlantic region as their primary marketplace.

### Quality of Service

While it is impossible to assess directly the quality of service provided by Atlantic firms, many clients in the Atlantic region appear to feel that the quality is low. They suggest that work tends to take longer and that designs are more expensive to build. It has also been suggested that Atlantic firms are slow to adopt new technological and organizational innovations.

In 1971, the Nova Scotia Association of Architects (NSAA) formed an investigating committee on the use of architectural firms outside Nova Scotia for work within the province. The committee interviewed a number of government and private clients who used outside architects. These persons indicated that a long-standing relationship with their architects and access to specialized experience were both important factors in the decision to purchase services outside the province. Many clients also suggested that the quality of design and the architects' ability to grasp the overall concept of the clients' needs led them to outside consultants. Others pointed out that the Nova Scotia architects were unable or unwilling to organize themselves so as to be able to work with the high pressure and speculative demands of new forms of developer-builder organization.

Similar comments have been made of engineering consultants in the Atlantic Provinces. Their designs and specifications are often more expensive than they need to be, and their productivity for a given fee often seems to be less than that of a central Canadian or New England firm.

### Promotion

The promotional effort of a consulting firm consists of maintaining an intelligence network; making direct approaches to potential clients;

engaging in a certain amount of non-fee work in order to establish the client relationship; and, usually, presenting a proposal or tender which outlines the approach to the work, costs, and other details. Some aspects of this process, related to the direct approach of clients, contravenes the regulations set by the Canadian Association of Management Consultants (CAMC) and the Royal Architectural Institute of Canada (RAIC); but by and large, such practices are winked at by members of these associations.

The resources and experience required to mount an effective promotional effort have changed somewhat over the last several years. Although the old-boy network is still quite important in the Atlantic Provinces, it has become increasingly necessary for firms to be more aggressive in seeking out work and to devote non-fee time to developing opportunities. Many Atlantic region firms are too small to use their resources for this process. Others simply do not have the necessary skills.

In the report of the Nova Scotia Architects Association on the use of architects outside the province, Professor Biscaps has suggested that Nova Scotia architects have been excluded from many recent projects and from other large-scale projects because they have not been able to work to very tight deadlines and have not been willing to work on "speculative" ventures. One Nova Scotia government employee mentioned that he had on one occasion asked the Association of Professional Engineers of Nova Scotia to have consulting engineer firms contact him in order to obtain tender specifications on several millions of dollars of consulting work. He stated that he had to call several times and that several weeks elapsed before enough Nova Scotia firms had responded.

### Innovation and Development

Traditionally, the professional services firms have not been risk takers. They do very little of their own research work, and they are generally reluctant to expand without an almost guaranteed market for their extra capacity. In other words, it is the client who pays for innovation and development. When a firm manages to get a contract that puts severe pressure on its existing capacity, it hires more people. When the contract is over, it endeavours to find enough work for its expanded capacity; but if this is not forthcoming in a "reasonable" length of time (anywhere from 2 weeks to 8 or 9 months), its excess capacity will be trimmed. Similarly, a firm's technical capacity is usually extended by working on new types of projects for clients or by hiring new people with different technical capacities to work on projects.

This conservatism in innovation and development is true of most small firms that do not have the resources to experiment with serious risks or the stability and courage to take them. The majority of Atlantic region consultants fall into this category.

A particularly good example of their attitude is found in the oil and gas industry now developing off Nova Scotia's coast. There is every likelihood that the industry will grow to be very important in the Atlantic economy and that many different types of professional skills, particularly engineering skills, will be required on a consulting basis. The capacity to meet this need does not currently exist within the Atlantic region. Several persons interviewed suggested that the Nova Scotia consulting industry would not expand their services unless they first had firm contracts that would allow them to hire people with appropriate skills from outside the region. It is unlikely, however, that they will receive these contracts unless they

can first exhibit that they already have the necessary skills. It appears, then, that most of the engineering work in the oil and gas industry will be purchased outside the region for a number of years before local firms are able to obtain a significant portion of that market.

It is also illustrative of this conservative tendency that several of the professional groups are asking for favourable consideration because they are located domestically or for more formal protectionist measures. A recent brief by member firms of the Nova Scotia Association of Consulting Engineers (NSACE) to the Nova Scotia government was very direct in stating that its members required protection from outside competition. The NSAA, in a somewhat more subtle way, has been suggesting the same thing.

#### Productivity

Productivity is another factor that affects development of the Atlantic region business service industries. Productivity may be measured according to the billings per professional staff and the billings per total staff of a professional service firm. We were unable to obtain exact figures for these billings, but several people interviewed suggested that the productivity (and hence profitability and stability) of central Canadian firms was higher than that of firms in the Atlantic Provinces. This opinion is borne out by the fact that the number of people estimated to work in this industry in the Atlantic Provinces is a higher percentage of the Canadian total than is the region's proportion of the total Canadian billings.

#### Demand

The demand for business services in the Atlantic Provinces varies

for different types of service. Some, such as municipal and environmental construction, are done almost entirely for government at the municipal level. In 1971, management consultants in Canada did 40% of their work for government and 60% for private concerns. In the Atlantic Provinces, closer to 70% of management consulting was done for government. Other services, such as building construction and some of the heavy construction industries, are oriented almost entirely towards private sector clients. The percentage breakdown of all consulting clients in the Atlantic region is about 65% government (all levels) and 35% private sector.

The business service industries are subject to the same kinds of problems as any industry in a developing region. Most of the prospective clients in the area face the same issues of smaller market, lower productivity, lower management skills, and aversion to risk taking. Many of the consultants interviewed stated that clients in the Atlantic Provinces do not understand the consulting industry and do not know how to select and make the best use of consultants. As a result, the client's expectations are often unrealistic, and he is often disappointed with the work the consultants do. This has been one of the major factors leading to the development of the bad image which plagues the consulting industry in the Atlantic Provinces. This problem, together with the old standard attitude, "If it's from the Atlantic Provinces, it can't be very good", gives Atlantic clients a strong tendency to look beyond regional facilities for professional and technical assistance. In a very real way, the image is self-sustaining.

#### Government Sector

The three levels of government may affect the demand for professional services in a number of important ways:

1. Through general policies concerning levels of expenditure
2. Through specific policies relating to the use of consultants
3. Through import policy and practice
4. Through "make or buy" policies
5. Through direct competition

We will discuss each of these in turn.

#### General Policies Concerning Expenditure Levels

It is obvious that the expenditure policies of federal agencies, such as the Department of Regional Economic Expansion and the Nova Scotia Department of Public Works, have a direct influence on the level of and fluctuation in construction activity and thereby affect the demand for business services. We will not dwell on this point, since these policies have broad implications for other areas of the economy as well; also, their impact has been studied in detail elsewhere.

#### Specific Policies Relating to Use of Consultants

While few, if any, of the governments and government agencies in the Atlantic Provinces have an explicit policy establishing the desirable level of dependence on outside expertise, they all have an implicit "attitude" towards consultants. This attitude may vary among departments within the government, or it may be more or less uniform throughout the government; but in either case, it is based on a fundamental trust of consultants and a belief in their usefulness or on a lack of such trust and belief. In the Atlantic Provinces, there is a generally negative attitude towards the use of consultants. The fact is accepted that the government often has no choice but to use consultants (because it does not have the manpower or the expertise to do the job on its own); but the hiring of

consultants often takes place in an atmosphere of skepticism and pessimism - two elements which tend to reduce the consultant's effectiveness.

Some governments, such as the Nova Scotia Government, have prescribed procedures for the selection of a consultant, but most have only an implicit and generally negative attitude towards the use of consultants.

#### Importation Policy and Practice

The "buy locally if possible" policy applies to business services as it does to most industries in the Atlantic Provinces; but it is less effective for them than for almost any other industry in the region. Because business service industries provide a basically intangible product, even in the more technical areas, it is very difficult to compare the capabilities of one firm with those of another. Moreover, since the relatively small expenditure on consultants may have very large financial implications once their designs or recommendations are implemented, there is a tendency to "play it safe" and hire the consultants who have the most experience in a given field and show the most interest through an aggressive promotional effort. When these considerations are combined with the fact that government personnel generally do not consider the business service industries to be worth developing in their own right, it is not surprising that much government work escapes the region.

In most cases, there is very good reason for the various levels of government to import services, since the skills or experience required often are not available within the region. But because local firms are bypassed completely and because these firms rely on their clients to pay for, the development of new areas of expertise, the effect of government practice is to retard even further the development of their capacity to do more specialized work.

"Make or Buy" Policies

Most government agencies in the Atlantic Provinces believe that reliance on in-house capacity is preferable to the use of consultants as long as the volume of work justifies the maintenance of specialized in-house staff. Predictably, consultants often claim that more extensive use of outside professionals strengthens their industry and makes it a more economical alternative. Their arguments are based on the premise that greater flexibility and higher levels of specialized skills result when the consulting industry is used essentially as a mechanism for the sharing of professional services by government and business.

The question of whether the maintenance of in-house staff or the use of outside consultants is more efficient can be answered only in relation to specific cases. In fact, the question of the relative efficiency of the two options probably relates as much to the competencies and preferences of the management involved as to the actual "make or buy" decision.

In any event, there is a tendency for government to develop its own in-house capacity wherever it can justify the investment, and often the decision is not subject to a rigorous cost-benefit analysis. This directly affects the development of the industry. For example, the Nova Scotia Water Resources Commission is now seriously considering the development of its own in-house capacity, because it has had difficulty in its dealings with consultants and it hopes to improve its own effectiveness by developing a greater in-house capacity. This move will seriously affect the prospects of a number of Nova Scotia-based firms which over the years have supplied specific types of expertise to the Commission. When their future volume of business is threatened in this way, it is highly unlikely that these firms will seek to expand. But on the other side of the coin, the loss of a

portion of their market will create an immediate incentive for those firms to find new markets for their excess capacity. Thus, the development of in-house staff may in fact stimulate the development of the domestic service industries.

#### Direct Competition

A number of consulting firms have claimed that the government competes with them directly, providing services at a subsidized rate to clients who would otherwise rely on the private business service industries. In its recent brief to the Nova Scotia government, the Nova Scotia Association of Consulting Engineers states that the following government branches and bodies provide direct competition:

1. Maritime Resource Management Services
2. Technical Unit, Nova Scotia Department of Development
3. Environmental Protection Services, the Federal Department of the Environment
4. Nova Scotia Water Resources Commission
5. Community Planning Division, Nova Scotia Department of Municipal Affairs
6. Industrial Engineering Division, Nova Scotia Research Foundation
7. Management Engineering Service

In fact, the degree of real competition provided by these agencies is probably very slight. Most government services are provided to private or other government clients that would not otherwise use professional services. In the long run, these government activities might actually serve to develop

a clientele which is strong enough to purchase services from private firms. For example, the Management Engineering Service (MES) has provided overview management advice to small companies in Nova Scotia, but it has not cut into a market that has been served by private management consultants. In fact, the consulting firm that has undertaken much of the work on contract to the MES has increased the size of its permanent staff establishment from one person three years ago to five or six full-time staff at the present time. At least part of that growth has been the result of development of a clientele through the MES program.

#### Private Sector

The major private sector market for business services in the Atlantic Provinces is the building and heavy construction industries. While a few of the major developers have some in-house capacity, most construction work in the Atlantic region requires architects, consulting engineers, and outside project management assistance. The management consulting market for industry is relatively small.

There is a marked tendency for the private sector to import services to the Atlantic region for major projects. Aside from the consideration that resident consultants may lack the purely technical skills that are required, certain management skills also are needed, and private builders are strongly inclined to obtain these outside the region. As we suggested earlier, private builders generally feel that, even on smaller projects, the designs of Atlantic-based firms cost more to build and that the Atlantic-based firms cannot provide the level of service that is required.

There are other reasons for importing these services. Some local investors have long-standing relationships with architects or engineers outside the region; and in many cases, the investors themselves are non-residents and prefer to hire professional services at their own doorstep rather than in the Atlantic region.

Whatever the reasons for the importation of services, this practice makes the regional capabilities and capacities a rather long, drawn-out process. It comes back to the old question: "How do you get experience if no one will hire you if you have no experience?"

#### SUMMARY OF MARKET ANALYSIS

Without belabouring the circumstances which contribute to the fact that the Atlantic Provinces are less wealthy than the Canadian average, a few general observations are useful. The vicious circle described earlier has a direct impact on professional services. A relatively small domestic market, as well as relative "remoteness" from other markets and from many raw materials, have contributed to a very slow rate of industrial growth. The development of the infra-structure has lagged, reinforcing the slow growth pattern. The lack of industrialization means that management is relatively underskilled, partly because it is not developed within the region and partly because, through lower productivity, the region cannot afford to attract and keep good management. The lack of highly skilled and aggressive managers in turn contributes to lower productivity and slower growth.

Although this description is oversimplified, the pattern exists and has been recognized for some time. The point that must be understood with regard to the business service industries is that a very similar process is at work in this component of the service sector. Even though the services

provided are highly sophisticated, the business service industries in the Atlantic region are underdeveloped as compared with those in other parts of Canada. Their productivity is not as high, and they do not innovate and expand as rapidly as their counterparts in other regions. The reasons for this and the possible remedies are as complex, interrelated, and circular as for any of the primary and secondary industries in the region. In some ways, however, the predicament of this component is somewhat worse, because as a small, highly skilled segment of the service sector it has barely been recognized as an industry in its own right, and as one that must be developed along with the infra-structure and the primary and secondary sectors.

It is perhaps a symptom of the general underdeveloped state that the business service industries in the Atlantic region are seriously affected by myth and emotion. The industries, their clients, and the civil servants that have an indirect impact on them are all strongly influenced by preconditioned attitudes about themselves and others within or using the industry. Throughout our interviews, it was evident that many decisions were being made on the basis of oversimplified and overgeneralized views. People outside the industry often consider that consultants charge exorbitant fees and that much of their service is not worthwhile. Those within the industry feel that many of their clients are not competent. They also feel that they could provide most of the services now being supplied by out-of-region consultants.

To a certain extent, these feelings have some validity; but the overgeneralization, bordering on prejudice, on both sides inhibits the effectiveness and growth of the professional service industries. It is these myths and emotions that have so far made it very difficult for

professional services to be considered by government, by industry, and by the general public as a group of industries in need of and worthy of development.

The need to support and upgrade the management and technical abilities of both government and industry has been recognized for decades. There are dozens of programs which aim at training better managers or providing subsidized or free advice on any one of a number of fronts. Government departments such as Manpower and Immigration, Industry, Trade, and Commerce, and Regional Economic Expansion have programs of this kind. Beyond management and technical strength, there is a recognized need for the development of opportunity recognition and risk-taking within the region. Programs aimed at this goal supply advice, subsidies, guaranteed loans, and other forms of assistance.

The implications of these needs for the development of the business service industries are threefold:

1. The Atlantic professional service industries require the same development of management, technical skills, and entrepreneurship needed by most other industries.
2. The professional service industries are unique in that their development has a direct impact on the development of management, technical skills, and entrepreneurship in other industries and within government in the Atlantic region.
3. Both of the above considerations should be taken into account in devising an integrated plan for development of the business service industries.

## PROSPECTS FOR THE PROFESSIONAL SERVICE INDUSTRIES

In the early part of this report, we discussed briefly the growth rates and prospects for growth of business services in each of the five areas. In aggregate, the market could more than double by 1985. At present, approximately half of those services are imported to the region. The growth of total demand for services and the proportion done domestically will depend on a number of factors:

1. Development of capacity within the region
2. Evolution of client capacities and attitudes
3. The recognition of expertise as an infra-structure item
4. The degree of industrial protection provided
5. Export potential
6. Integrated government support of the development of  
business service industries

Each is discussed below.

### Development of Capacity Within the Region

There is no doubt that in the next several years the business services component in the Atlantic Provinces must accelerate its development in terms of scope and quality. At the present time, most of these industries are not competitive with firms operating outside the region. As in other industries, development will depend upon a number of factors, but management will be the critical one. Management will have to do considerable medium- and long-range planning, in order to anticipate and meet future demand; for example, it should be taking steps to obtain part of the market that will be created by the emerging oil and gas industry. Also, management will have to be willing to take some risks in hiring new staff

with various skills, so that Atlantic firms can expand into the market now being served by outside firms. Perhaps most importantly, Atlantic region firms will have to modernize their operating styles, so that they can complement new forces of business organization in the construction industry.

There are signs that this change is, to some extent, already in progress. The Nova Scotia Architects Association and the Nova Scotia Association of Consulting Engineers are reviewing their respective industries, and the need for change has been recognized. Currently there is also a general atmosphere of business confidence (and a growing Atlantic self-confidence), which contributes to risk taking.

Assuming that management in the business service industries is capable of evolution, that evolution must be encouraged, and other conditions must be present in order for the industry to achieve significant import substitutions.

#### Evolution of Client Capacities and Attitudes

In many instances, Atlantic clients are correct in perceiving that Atlantic region firms are not as competent as outside consultants. But part of the Atlantic region market is lost to outsiders where domestic firms are fully competent. In order for the business services component to grow, a stronger mutual respect and trust must develop between the industry and its clients. Clients will have to learn to manage consultants more effectively; and in so doing, they will also come to have more realistic expectations of consulting engagements.

Clients will also have to come to recognize the longer-term benefits of having strong domestic business service industries, and they will have

to contribute to their development. This is particularly true of government clients; but even private clients will have much to gain if they are able to develop, over a period of a few years, working relationships with one or several domestic firms. If those firms are encouraged by their clients to adopt new operating formats and new technical capacities, over a reasonable period of time, they will be able to do so.

#### Role of Expertise in the Infra-Structure

There are a number of agencies at all levels of government that are directly concerned with economic and social development. It has long been recognized that one of the many critical elements in any kind of development is the stock of highly trained technical and management manpower operating in the area in question. At the present time, there are a number of government programs which provide subsidized expertise to assist in the development of business concerns. While these programs might, in the short term, compete very marginally with business service industries, in the long run they should develop a new set of clients which will be better able to afford and manage the services that these industries offer. These programs also have the side benefit of training personnel or bringing experienced personnel to the region, so that there is a pool of expertise that will, at least in part, find its way into the business service industries.

Several of the existing programs to support development of expertise have made use of private sector consultants, directly benefiting the business services component. Where business services are underdeveloped because their prospective clients are underdeveloped, the use of government programs and subsidies to develop both groups should be encouraged.

## Protection

Wherever import competition is serious, domestic industries tend to look for protection. In the Atlantic region, consulting engineers and architects, as well as management consultants, have looked to government for preferential treatment and/or protection. A recent brief presented to the Nova Scotia Government by the Nova Scotia Association of Consulting Engineers has suggested, among other things, that only Nova Scotia-based firms be allowed to be prime contractors within the province. The brief cites the example of Alberta, which already has a somewhat protectionist policy in this area. We feel that a few reservations should be expressed regarding protection. To a large extent, it will be import competition which forces the Atlantic region industry to develop. New techniques, new forms of expertise, and new management approaches will have to be adopted to meet the more sophisticated approaches of central Canadian and New England firms.

The NSACE has pointed out that two major Halifax projects awarded to central Canadian architectural firms have had very beneficial effects on the attitudes of architects and major investors in the area. The designs for these two projects were much more radical than anything built in Halifax up to that time. Because these more radical designs were put forward by major central Canadian firms, it has become acceptable for Halifax firms to depart from traditionally conservative design. Similarly, the services provided by various engineering and management firms have led many Atlantic clients to expect a better quality of service, and this expectation will have to be met by local firms.

Protectionism and favouritism, if applied too strongly, rather than helping to develop industry, allow it to relax into mediocrity. In

industries such as business services, which have a very wide impact, such measures would have serious detrimental effects on the economy in general.

### Export Potential

Canada exported more than \$50 million in professional services in 1972; over 80% of this was in the heavy construction industry. Atlantic Canada held an insignificant part of that market. Export activity is concentrated among very large multi-faceted firms with specialized experience in one particular heavy industry. It is not likely that the Atlantic Provinces will be able to develop capacity for gaining markets outside Canada in the next 5 years. By the early 1980's, however, the Atlantic region may be able to enter the international market in a serious way, if it can develop expertise in the oil and gas industry, in marine construction and possibly in the power and forestry industries.

The main factors that might make this possible are the deteriorating living conditions in many urban centres in North America and the increasing tendency for professionals, particularly in the consulting field, to commute hundreds or thousands of miles to work on various projects for short periods of time. If the Atlantic region consciously tried to attract a large number of talented professionals, by the early 1980's it might be in a position to export much of this talent to other parts of Canada and other countries.

### Integrated Support for the Industries' Development

It is clear that given enough time, perhaps measured in decades, the business service industries will develop to the point where they can meet the bulk of the region's needs. This development could be accelerated

significantly, however, with an integrated governmental program focused upon the business services component.

There are a number of steps that all levels of government can take to promote this development:

*Business services should be recognized as industries in their own right which require development.*

*Mechanisms should be developed to assist various departments in the selection and management of consultants. The Committee now operating in Nova Scotia which reviews and approves the choice of all consultants can be considered such a mechanism.*

*Explicit "make or buy" policies should be set to guide both government departments and the business service industries. Setting these policies will require study of the use of outside manpower resources and of the relative merits of the in-house and consultant approaches. This study should dispel some of the mythology that surrounds this question in the Atlantic Provinces. If the study takes the perspective of the long-term economic well-being of the region, it is likely that government will shift away from the implicit "make" policy that is currently prevalent throughout the Atlantic Provinces.*

*Explicit policies should be set favouring the involvement of regional firms in most projects, even where they do not have all the necessary skills, so that they may work with outside consultants and thereby, in the long run, develop new skills.*

*Within government, more active information systems should be developed to assist regional firms in promoting their services.*

*Regional firms should be used, where possible, to provide subsidized services to those sectors of the economy which cannot afford but need professional services in order to accelerate their own development.*

*Assistance should be offered to Atlantic-based service firms similar to the assistance now available to firms in the primary and secondary sectors - for example, guaranteed loans for expansion and development and subsidized training programs for management and staff.*

*At the provincial and interprovincial levels, regionally based industry should be promoted. This suggests that each province should consider firms in other Atlantic Provinces along with those from central Canada and New England, once it has determined that it must look beyond its own boundaries.*

*Programs should be developed to assist Atlantic firms in promoting their services, primarily through helping them to teach prospective clients how the industry can be used as a management tool in obtaining higher productivity.*

## CHAPTER 5 - TRANSPORTATION

The transportation industry is generally regarded as a supporter of other forms of economic activity, rather than as a stimulus to such activity. It is pulled along by growth in other industries, and transportation services expand and contract according to the demands placed upon them. The opposite view is that transportation somehow determines the realization of economic opportunities.

Both theories are partially valid, but also both are misleading. While transportation clearly supports industrial enterprise, it can at the same time actively influence the rate of industrial growth in all three sectors of the economy. Similarly, transportation contributes to the development of economic potential, but it is only one of a number of services that are necessary if that potential is to be fully realized. It should also be recognized that the transportation industry is closely linked both to primary and secondary industries and to the distribution, business services, and tourism and recreation components of the service sector.

The transportation industry in the Atlantic Provinces can be considered in three distinct but interrelated contexts:

1. Transportation within and between each of the provinces;
2. Transportation linking the Atlantic region with other parts of North America;
3. Transportation services related to needs outside the region.

Improvements in the internal transportation system can strengthen the economy of each of the Atlantic Provinces by stimulating growth in distribution industries and thereby encouraging urban development. At the same time,

the export of transportation services through the development of port facilities and other modes of transport can reinforce the role of the Atlantic region as a gateway to Canadian and international markets.

The impact of transportation on distribution services is discussed in detail in Chapter 6 of this report. In this chapter, we will focus on the gateway concept and consider how some of the natural assets of the Atlantic region can be utilized to permit the export of transportation services and to create a broader base for the economic development of the region.

#### TRANSPORTATION INDUSTRY IN THE CANADIAN ECONOMY

Transportation and the industries related to it are of major importance in the Canadian economy. Their size and growth can be attributed primarily to the geographic dispersion of the Canadian market and the country's very significant import and export activities.<sup>1</sup> Tables 5.1 and 5.2 summarize the expansion of the transportation industry in the 1948-1970 period and its projected growth (after discounting the effects of inflation) to 1980. The real growth rate for the 1970s is expected to be 65% to 70%. The impact of the industry on employment is summarized in Table 5.3. Employment in transportation is projected to increase by 111,000 (or 20%) during the 1970s.

The contribution of the transportation industry also can be measured in terms of value added to the economy through the export of services. Tables 5.4, 5.5, and 5.6 summarize value added and industry output statistics for both transportation and storage industries.

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1. On a per capita basis, Canada is the second largest trading nation in the world.

TABLE 5.1 TRANSPORTATION (Real Domestic Product),

CANADA, 1948-1970 AND PROJECTED TO 1980

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<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	2,013
1949	2,016
1950	2,086
1951	2,283
1952	2,411
1953	2,442
1954	2,384
1955	2,706
1956	3,018
1957	3,028
1958	2,924
1959	3,160
1960	3,253
1961	3,465
1962	3,605
1963	3,851
1964	4,166
1965	4,421
1966	4,779
1967	5,034
1968	5,305
1969	5,501
1970	5,745
1971	6,162
1972	6,590
1973	7,049
1974	7,308
1975	7,599
1976	8,081
1977	8,587
1978	9,008
1979	9,378
1980	9,814

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SOURCE: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution

TABLE 5.2 TRANSPORTATION STORAGE (Real Domestic Product),

CANADA, 1948-1970 AND PROJECTED TO 1980

---

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	1,579
1949	1,549
1950	1,582
1951	1,737
1952	1,838
1953	1,848
1954	1,752
1955	2,016
1956	2,264
1957	2,229
1958	2,101
1959	2,294
1960	2,339
1961	2,507
1962	2,583
1963	2,786
1964	3,044
1965	3,237
1966	3,518
1967	3,680
1968	3,880
1969	4,070
1970	4,338
1971	4,431
1972	4,740
1973	5,079
1974	5,265
1975	5,473
1976	5,821
1977	6,184
1978	6,481
1979	6,741
1980	7,055

---

SOURCE: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution

TABLE 5.3 EMPLOYMENT IN TRANSPORTATION, CANADA,  
1948-1970 AND PROJECTED TO 1980

---

<u>YEAR</u>	<u>THOUSANDS</u>
1948	414
1949	411
1950	426
1951	447
1952	472
1953	474
1954	446
1955	459
1956	493
1957	496
1958	490
1959	509
1960	504
1961	492
1962	513
1963	521
1964	522
1965	540
1966	542
1967	580
1968	582
1969	599
1970	613
1971	624
1972	646
1973	669
1974	683
1975	689
1976	698
1977	709
1978	717
1979	721
1980	724

---

SOURCE: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution

TABLE 5.4 VALUE ADDED IN TRANSPORTATION, CANADA,  
1950-1970 AND PROJECTED TO 1980

---

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1950	1,102
1951	1,104
1952	1,244
1953	1,385
1954	1,440
1955	1,602
1956	1,811
1957	1,934
1958	2,010
1959	2,024
1960	1,961
1961	2,029
1962	2,110
1963	2,203
1964	2,418
1965	2,634
1966	2,807
1967	2,835
1968	2,934
1969	3,042
1970	3,088
1971	3,256
1972	3,460
1973	3,741
1974	3,935
1975	4,113
1976	4,293
1977	4,515
1978	4,744
1979	4,940
1980	5,123

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SOURCE: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution

TABLE 5.5 VALUE ADDED IN TRANSPORTATION AND STORAGE, CANADA,  
1950-1970 AND PROJECTED TO 1980

---

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1950	1,724
1951	1,764
1952	1,922
1953	1,981
1954	1,936
1955	2,085
1956	2,250
1957	2,301
1958	2,309
1959	2,380
1960	2,441
1961	2,507
1962	2,660
1963	2,790
1964	3,014
1965	3,203
1966	3,404
1967	3,570
1968	3,664
1969	3,814
1970	3,996
1971	4,197
1972	4,537
1973	4,877
1974	5,054
1975	5,248
1976	5,581
1977	5,928
1978	6,209
1979	6,453
1980	6,750

---

SOURCE: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution

TABLE 5.6 INDUSTRY OUTPUT, TRANSPORTATION AND STORAGE, CANADA,  
1950-1970 AND PROJECTED TO 1980

---

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1950	2,397
1951	2,453
1952	2,672
1953	2,754
1954	2,693
1955	2,899
1956	3,129
1957	3,200
1958	3,211
1959	3,309
1960	3,395
1961	3,486
1962	3,698
1963	3,880
1964	4,191
1965	4,454
1966	4,733
1967	4,964
1968	5,096
1969	5,303
1970	5,557
1971	5,837
1972	6,309
1973	6,782
1974	7,028
1975	7,298
1976	7,760
1977	8,243
1978	8,634
1979	8,973
1980	9,386

---

SOURCE: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution

These statistics give a general impression of the significance of the transportation industry in the Canadian economy. As we will demonstrate in the pages that follow, its impact on the economy of the Atlantic region is of similar magnitude and its potential for growth is even greater.

#### TRANSPORTATION INDUSTRY IN THE ATLANTIC REGION ECONOMY

The transportation system in the Atlantic region has strongly influenced the character and development of the economy of each of the Atlantic Provinces. Essentially it has mitigated against the evolution of an integrated Atlantic market and has contributed to the isolation of the business community of the region from the large and expanding markets of North America.

Existing railways were initially built far from the Canada-United States border for strategic and defence reasons; and to compensate for the resultant diseconomies, a program of subsidization was subsequently introduced. The dependence of the industry on such subsidies has interfered with the development of an economically rational approach to rate setting. Another significant feature of the system is the fact that the two island economies must rely on water and air transport for the shipment of goods and services.

As a result of the geography of the region and the dispersion of the population in each of the provinces, several urban centres in the Atlantic Provinces have developed an economic base that depends heavily on transportation and transportation-related industries. This is indicated, for example, by labour force distribution data for Moncton, Halifax, and Saint John, as shown in Table 5.7. This table also reveals that a higher proportion of the labour force is employed in transportation in the Atlantic region than in the Canadian economy.

TABLE 5.7 - EMPLOYMENT IN TRANSPORTATION AND WHOLESALING AS PERCENTAGE OF LABOUR FORCE, ATLANTIC PROVINCES AND CANADA, 1961

	<u>Moncton</u>	<u>Halifax</u>	<u>Saint John</u>	<u>Atlantic Provinces</u>	<u>Canada</u>
Transportation	15.6	6.5	9.9	8.2	5.9
Wholesale Trade (including storage)	8.4	5.7	8.8	4.3	4.8
Total	<u>24.0</u>	<u>12.2</u>	<u>18.7</u>	<u>12.5</u>	<u>10.7</u>
Number employed	5,454	8,888	6,245		

SOURCE: Study of the Physical Distribution Industry in the Moncton Area, Census of Canada, 1961, p. 23.

The potential for development of the transportation industry in the Atlantic Provinces is substantial, and the benefits can be experienced throughout the region. The rationale for developing the gateway concept for the Atlantic Provinces rests on the geographic location of ports, air terminals, railway links, and the impact of changing technology. The region has very real geographic assets which are only now beginning to be exploited. For example:

1. Halifax is the closest North American port to Europe and lies on the so-called great circle route. It also has a major container terminal which can serve intercoastal needs.
2. Gander lies on the great circle air route linking the mid-western United States and Europe. It is very conveniently located for interlining and maximizing air freight load capabilities.
3. Come By Chance, Canso, and Saint John are major deep-water ports and are well located for servicing markets in Canada and the United States with shipments of raw materials and

crude oil.

4. Railroad communications between Moncton, Halifax, and Saint John and a variety of North American markets are fast, convenient and increasingly economical.

Around each of these, significant opportunities exist for the expansion of transportation in the Atlantic Provinces, as well as the development of manufacturing, primary product processing, and other service industries. Among these opportunities are the following:

1. The Halifax and Saint John container terminals can stimulate the relocation of numerous transport-related services, such as freight forwarding, insurance brokerage, foreign exchange dealing, and road transport. Associated with intercoastal container traffic is the probable emergence and expansion in the region of distribution, warehousing, storage, and assembly facilities. The vast extent of this development is evidenced by the activity generated in other entrepôt communities such as Rotterdam, Singapore, and Shannon. Halifax can similarly make available alternative modes of transportation (air, rail, and truck) and offer hybrid services (such as rail-and-water or air-and-rail) to importers and exporters.
2. Deep-water ports facilitate the import and export of large volumes of bulk commodities, such as iron ore, grain, petroleum, lumber, and gypsum. Also, processing is possible at the port site as evidenced by the construction and expansion of oil refineries in the Atlantic region. Other

industrial opportunities may arise from the massive expansion of oil refining capacities, based on the availability of so-called Atlantic off-shore crude oil and Arctic crude oil shipped via the Manhattan route.

3. Gander, Newfoundland, handles about one-half the North Atlantic air passenger and air freight business. In recent years, more traffic is taking advantage of the terminal facilities, thereby creating employment opportunities. Many economic benefits could accrue to air freight operators if the air terminal were converted to an interlining operation. Such an operation would take some of the pressure off the terminal in New York and would also permit the creation of an additional 5 tons of air freight capacity per plane, resulting from a reduction in the amount of fuel that had to be carried. The market served would be the industrial heart of Canada and the United States.
4. The increasing flow of trans-Atlantic freight and the increasing use of containers are contributing to the feasibility of moving more freight through container terminals in the Atlantic region. The economic advantages of rail-and-water combinations can open large new markets for transport services and facilities located in the Atlantic Provinces. Increased rail traffic also can benefit the Canadian National Railway operations based in Moncton.

In conclusion, although the economic significance of transportation and transport-related activities is great in Canada, it is potentially greater in the Atlantic region. There is a strong possibility that the export of transport-related services from the area can be substantially expanded. Development efforts designed to reduce regional economic disparities must build upon the natural advantages of the Atlantic Provinces. Such programs can have an important positive effect on specific locations in the area; and the indirect benefits associated with transportation can reinforce these advantages and result in a broader economic gain for the region as a whole. We now turn to a discussion of some of the generalized benefits associated with transportation in the economy of the Atlantic Provinces.

#### BENEFITS OF GROWTH IN THE TRANSPORTATION INDUSTRY

In the light of the foregoing comments about the anticipated expansion of opportunities in transportation and transport-related industries, it is important to consider the present performance of the transportation system in the Atlantic region. Table 5.8 presents some statistical data on freight moving by truck. It appears that during the 1960s, the trucking industry in the Atlantic region grew rapidly and expanded its proportion of employment in the economy. The Atlantic region, however, is still a net importer of trucking services. While the number of firms increased in the Atlantic region, it decreased in Canada. Hence, the average size of trucking firms operating in the Atlantic Provinces diminished significantly. This probably implies a lower degree of productivity and higher costs resulting from an inability to realize the potential economies of scale that exist in the industry.

TABLE 5.8

SELECTED STATISTICS FOR MOTOR CARRIERS - FREIGHT (COMMON AND CONTRACT)  
CANADA AND THE ATLANTIC PROVINCES, 1961, 1966, and 1969

	Atlantic Prov.			Canada			Atlantic Prov. as % of Canada		
	1961	1966	1969	1961	1966	1969	1961	1966	1969
<b>Classes 1 and 2</b>									
No. of reporting firms	15	28	44	501	788	902	2.99	3.55	4.88
No. of employees	479	872	1,623	29,487	41,395	50,432	1.62	2.11	3.22
Operating revenues (\$000)									
Total	4,877	12,126	30,353	371,458	656,770	952,508	1.31	1.85	3.19
Per firm	325	433	690	741	833	1,056	43.86	51.98	65.34
Per employee	10	14	19	13	16	19	76.92	87.50	100.00
Average size of firm(\$000)	205	242	356	432	531	643	47.45	45.57	55.37
<b>Classes 3 and 4</b>									
No. of reporting firms	94	112	210	4,538	3,419	2,975	2.07	3.28	7.06
No. of employees	283	245	294	4,543	4,411	3,638	6.23	5.55	8.08
Operating revenues (\$000)									
Total	2,919	3,287	5,342	72,089	75,217	76,623	4.05	4.37	6.97
Per firm	31	29	25	16	22	26	193.75	131.82	96.15
Per employee	10	13	18	16	17	21	62.50	76.47	85.71
Average size of firm(\$000)	23	19	19	11	15	18	209.09	126.67	105.56
<b>Total - all classes</b>									
No. of reporting firms	109	140	254	5,039	4,207	3,877	2.16	3.33	6.55
No. of employees	762	1,117	1,917	34,030	45,806	54,070	2.24	2.44	3.55
Operating revenues (\$000)									
Total	7,796	15,413	35,695	443,547	731,987	1,029,131	1.76	2.11	3.47
Per firm	72	110	141	88	174	265	81.82	63.22	53.21
Per employee	10	14	19	13	16	19	76.92	87.50	100.00
Average size of firm	48	64	77	53	112	163	90.57	57.14	47.24

Source: Statistics Canada, 53-222, 53-223.

Class	Gross annual operating revenues
1	\$500,000 or more
2	\$100,000 to \$499,999
3	\$20,000 to \$99,999

*The trucking industry in Atlantic Canada should be examined in the light of its structure. The potential for amalgamation or for encouraging more firms should be explored as a means of increasing the health of the industry and its ability to grow more rapidly.*

In the case of railroad services, during the 1960s the amount of freight carried increased very substantially, from 31 million tons to 49 million tons (see Table 5.9). While this might indicate substantial growth for the Atlantic region, on closer examination one finds that most of the increase occurred in Newfoundland. The commodity carried was iron ore. Also, during the 1960s, an imbalance developed between the volume of freight loaded and unloaded, further discounting the economic benefit derived from rapid growth in freight carried by railroads. An offsetting positive factor which is disclosed by the data in Table 5.10 is an increase in the movement by rail of manufactured goods originating in the Atlantic region. In 1961, manufactured goods originating in the region accounted for 3.5 million tons; by 1969, this figure had risen to 5.3 million tons. Thus, rail services may have helped manufacturers in the Atlantic Provinces to serve a wider market. It is interesting to note that the deficit in loading versus unloading for manufactured goods fell from 471,000 tons to 312,000 tons between 1961 and 1969.

Although the potential for freight handling through Atlantic ports seems very great for the 1970s, the performance during the 1960s showed a substantial decline. Despite an increase during the 1960s of 35% in the total shipping tonnage loaded and unloaded in Canadian ports, in each of the Atlantic Provinces shipping loadings actually decreased, and unloadings increased only in Nova Scotia and New Brunswick. This suggests that if the movement of freight

TABLE 5.9

## RAILWAYS, REVENUE FREIGHT CARRIED BY RAILWAYS, ATLANTIC PROVINCES, 1961, 1966, AND 1969

	(000's TONS)													
	Newfoundland			Prince Edward Island			Nova Scotia			New Brunswick			Atl. Prov.	
	1961	1966	1969	1961	1966	1969	1961	1966	1969	1961	1966	1969	1961	1969
<b>Loadings:</b>														
<b>Carload Freight</b>														
Crops	7	2	5	198	239	304	78	105	86	212	275	285	495	680
Livestock	6	5	5	18	9	5	32	27	29	21	19	18	77	57
Mine Products	313	12,922	13,273	2	-	-	8,174	9,261	7,865	975	1,242	1,143	9,464	22,281
Forest Products	500	613	535	17	13	7	278	413	468	781	1,140	1,451	1,576	2,461
Manufacturers & Misc.	657	725	751	77	69	37	1,188	1,719	2,129	1,609	2,089	2,426	3,531	5,343
Total	1,482	14,268	14,570	311	330	354	9,749	11,524	10,576	3,597	4,766	5,324	15,139	30,824
Less than Carload Freight	73	39	6	3	2	-	56	50	6	82	67	7	214	19
Total Loadings	1,554	14,307	14,577	314	332	354	9,806	11,574	10,582	3,679	4,833	5,331	15,353	30,844
<b>Unloadings:</b>														
<b>Carload Freight</b>														
Crops	64	75	86	28	41	31	614	799	570	911	1,249	938	1,617	1,625
Livestock	25	32	36	7	4	3	55	54	45	50	35	38	137	122
Mine Products	446	503	371	123	160	86	7,058	7,762	6,611	1,166	1,531	1,270	8,792	8,338
Forest Products	544	675	593	14	9	7	283	433	482	395	729	955	1,236	2,037
Manufacturers & Misc.	744	1,240	1,382	254	301	240	1,493	1,868	1,809	1,511	1,959	2,224	4,002	5,655
Total	1,822	2,526	2,468	425	514	368	9,503	10,916	9,517	4,031	5,503	5,425	15,781	17,778
Less than Carload Freight	92	63	17	14	9	1	64	67	8	68	69	7	238	33
Total Unloadings	1,914	2,588	2,486	440	522	369	9,567	10,982	9,525	4,099	5,571	5,432	16,020	17,812

Source: Statistics Canada, 52-205.

TABLE 5.10

SHIPPING, TONNAGE OF CARGO LOADED AND UNLOADED AT CANADIAN PORTS IN INTERPROVINCIAL  
AND INTRAPROVINCIAL TRADE, BY PROVINCE, 1961, 1966, AND 1970

## LOADINGS ('000 tons)

1961	UNLOADINGS									
	NFLD.	P.E.I.	N.S.	N.B.	QUE.	ONT.	MAN.	B.C.	N.W.T.	TOTAL
NFLD.	837.1	30.9	923.6	100.6	236.3	24.2	-	-	1.2	2,153.9
P.E.I.	.1	-	324.9	144.5	18.1	6.7	-	-	-	494.2
N.S.	628.8	15.3	273.7	343.5	419.5	158.7	-	.2	-	1,839.5
N.B.	4.6	73.4	471.2	154.9	251.8	15.7	-	4.5	-	976.1
QUE.	210.6	39.3	2,199.6	379.8	6,100.9	6,370.2	10.1	15.9	1.2	15,327.8
ONT.	1.2	-	5.2	-	2,318.5	11,582.7	5.6	1.1	-	13,914.4
MAN.	-	-	-	-	.1	-	.8	-	17.9	18.8
B.C.	-	-	3.3	-	19.1	.7	-	11,638.0	-	11,661.1
N.W.T.	-	-	2.9	-	25.2	-	2.5	-	-	30.6
<b>TOTAL</b>	<b>1,682.5</b>	<b>158.8</b>	<b>4,204.3</b>	<b>1,123.3</b>	<b>9,389.6</b>	<b>18,158.9</b>	<b>19.0</b>	<b>11,659.7</b>	<b>20.3</b>	<b>46,416.5</b>
<b>1966</b>										
NFLD.	598.8	26.2	1,046.8	95.1	255.2	41.0	-	7.1	-	2,070.3
P.E.I.	12.6	-	135.4	199.3	3.6	12.9	-	-	-	363.7
N.S.	559.6	29.7	242.6	312.4	192.8	229.1	-	-	-	1,566.2
N.B.	2.8	38.6	628.8	269.0	73.7	3.2	-	-	-	1,016.1
QUE.	311.9	41.6	1,095.5	206.7	5,439.1	11,390.6	7.8	-	.8	18,494.1
ONT.	23.7	-	896.9	2.7	4,406.2	10,760.4	-	-	-	16,089.9
MAN.	-	-	-	-	.1	-	-	-	.2	.3
B.C.	-	-	-	-	8.5	-	-	21,034.7	-	21,043.2
N.W.T.	3.3	-	5.7	-	31.1	-	1.8	-	-	41.9
<b>TOTAL</b>	<b>1,512.7</b>	<b>136.0</b>	<b>4,051.9</b>	<b>1,085.2</b>	<b>10,410.3</b>	<b>22,437.2</b>	<b>9.7</b>	<b>21,041.8</b>	<b>1.0</b>	<b>60,685.9</b>
<b>1970</b>										
NFLD.	734.0	13.3	1,052.8	80.8	225.9	33.4	-	-	-	2,140.3
P.E.I.	-	.4	256.1	168.8	2.6	2.8	-	-	-	430.6
N.S.	104.7	17.8	462.4	347.2	1,229.8	157.9	-	-	-	2,319.8
N.B.	85.7	62.1	595.4	228.2	33.6	1.0	-	-	-	1,005.9
QUE.	521.9	38.3	707.8	126.1	7,345.5	10,589.7	8.0	-	.1	19,337.4
ONT.	-	-	73.6	4.5	5,754.6	13,845.1	-	-	-	19,677.8
MAN.	-	-	-	-	-	-	-	-	.1	.1
B.C.	-	-	-	-	-	-	-	18,187.4	-	18,187.4
N.W.T.	10.0	-	2.8	-	35.7	-	16.0	-	-	64.5
<b>TOTAL</b>	<b>1,456.3</b>	<b>132.0</b>	<b>3,150.8</b>	<b>955.6</b>	<b>14,627.7</b>	<b>24,629.8</b>	<b>24.0</b>	<b>18,187.4</b>	<b>.2</b>	<b>63,163.8</b>

Source: Statistics Canada, 54-204.

(both inbound and outbound) increases rapidly during the 1970s, numerous support industries may have to be induced to establish or expand activities in the Atlantic region.

*The ocean transport service industry should be thoroughly analysed. A plan for development of this sector should be formulated, based on a complete examination of the potential employment and economic benefits.*

In addition to the impact of growth in the road, rail, and water modes of transport, the effects of other events must be considered. For example, the transportation industry in the Atlantic region could be significantly affected by the new export efforts being generated by the Canadian and the United States governments.

In 1971, in an effort to stimulate exports of manufactured goods, the United States Government passed legislation providing for the establishment of Domestic International Sales Corporations (DISCs) and Foreign International Sales Corporations (FISCs). DISCs are located in the United States, and FISCs are located outside; both are subsidiaries of U.S. corporations which handle export of goods. The legislation provides for a favourable tax treatment of the profits so earned (at one-half the prevailing rate). It also permits a DISC to engage in a variety of activities that will serve to boost exports. Once the DISC program becomes firmly entrenched, exports may be routed through the Atlantic Provinces, if this arrangement is economically feasible and efficient.

*The operation of the DISC program should be reviewed to determine how Canadian transport-related enterprises can win a portion of the increase in U.S. export activities.*

The Canadian Government also has formulated policies to stimulate

exports. One major effort is expansion through the Export Development Corporation. The role of the EDC is to aid in financing and insuring Canadian exports. Many jobs (100,000 man-years, according to EDC estimates) have been created under this program.

*The impact of the EDC on the economy of Atlantic Canada should be closely analysed. A strategy should be evolved that makes it possible for firms based in the Atlantic region (particularly transport-related firms) to share in this benefit.*

#### CONCLUSION

The transportation industry is a very large and important part of the economy of Atlantic Canada. The growth of the industry during the 1960s was uneven, but major opportunities for development now exist.

Assistance may be necessary in encouraging development of the industry. Such encouragement will result in a substantial export of transport-related services from the region to other parts of Canada and to other countries.

Transportation thus can provide a major focus for a program designed to reduce regional economic disparities. The industry also has an effect on other sectors and components of the economy, as we shall demonstrate in subsequent chapters of this report.

CHAPTER 6 - DISTRIBUTION OF GOODS: WHOLESALE AND RETAIL CHANNELS

This chapter has two main concerns:

1. To explore the nature of the channels of distribution of goods in the Atlantic Provinces;
2. To review the wholesale and retail industries in terms of their volume, employment, and the number of establishments, and their implications for the manufacturing sector in each province of the Atlantic region.

This information will be used to identify gaps or needs in the existing distribution system. Recommendations will be made regarding business opportunities that could be considered a part of developmental planning in the Atlantic region.

The description of this component of the service sector is based on two types of data: personal interviews with senior management personnel in the primary, manufacturing, and transportation industries, and with government officials in such departments as agriculture, fisheries, and economic development; and statistical data provided by Statistics Canada, the Atlantic Provinces Economic Council, and government departments in the Atlantic Provinces.

THE CHANNELS OF DISTRIBUTION

The approach followed in this discussion is to establish broad product classifications and to discuss the channels of distribution pertaining to each product group. Graphs are used to illustrate the channels of distribution for goods produced and marketed in the same province. Where goods are produced in one Atlantic province and sold in another, or are produced in a province outside the Atlantic region and sold in an Atlantic province, the relevant portions of

the channels of distribution will be identified.

## The Primary Sector

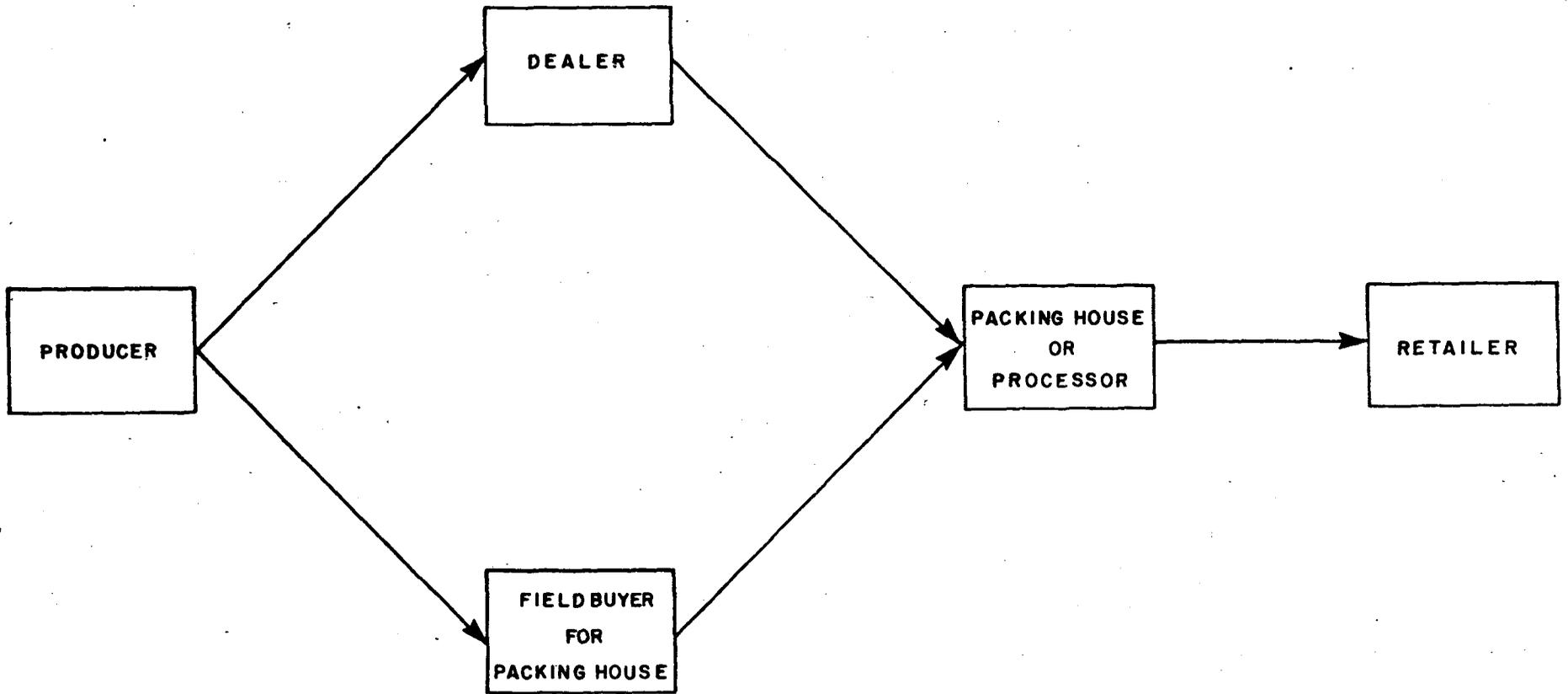
### Livestock

Figure 6.1 shows the typical channels of distribution for livestock, agricultural products (dairy products, poultry and poultry products, cattle, hogs, and sheep). Figures 6.2 and 6.3 indicate that Nova Scotia, New Brunswick, and Prince Edward Island produce some of these products (no data are available for Newfoundland) and that there is considerable intraprovincial trade. Most of Newfoundland's supplies are imported, from the Maritime Provinces and from other parts of Canada. It should be noted that large quantities of meat - beef, chicken, pork, and mutton - are imported from provinces outside the Atlantic region, as a result of deficits in local production.

The dealers or field buyers for the packing houses perform a centralized marketing function to facilitate the movement of products from the relatively small and numerous farms in the region. Live animals are bought directly from producers (particularly the smaller ones) or from auction houses. The packing houses serve a dual function: packing and wholesaling of meat products. Creameries operate in a similar manner.

Imported livestock and dairy products from a province within the Atlantic region may be distributed in one of two ways:

1. Carcasses may be shipped to the packers in the province of consumption, then processed and sold to retailers; or
2. Processed goods may be shipped directly to the retailers in the province of consumption.



**FIGURE 6-1 - CHANNELS OF DISTRIBUTION LIVESTOCK**

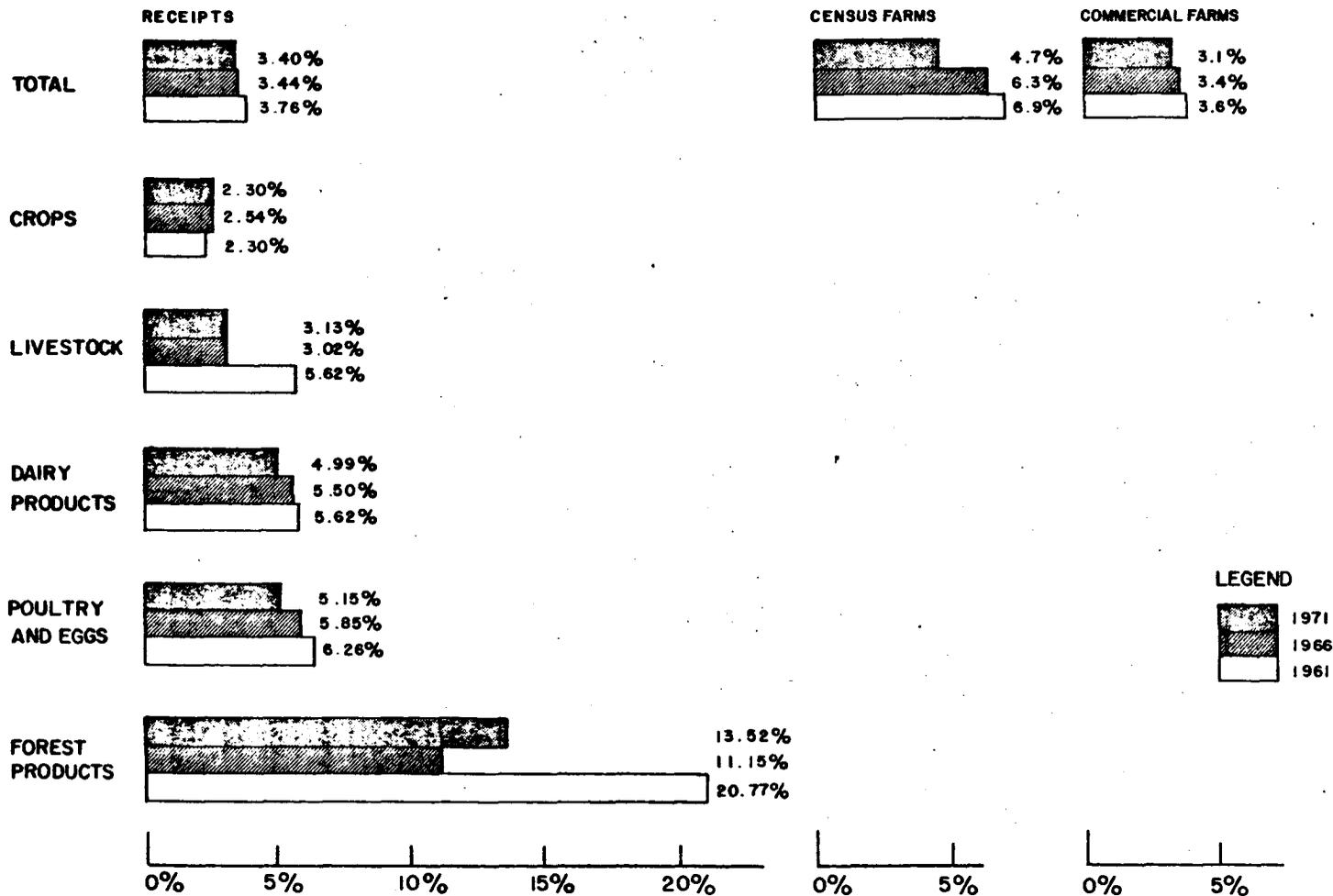
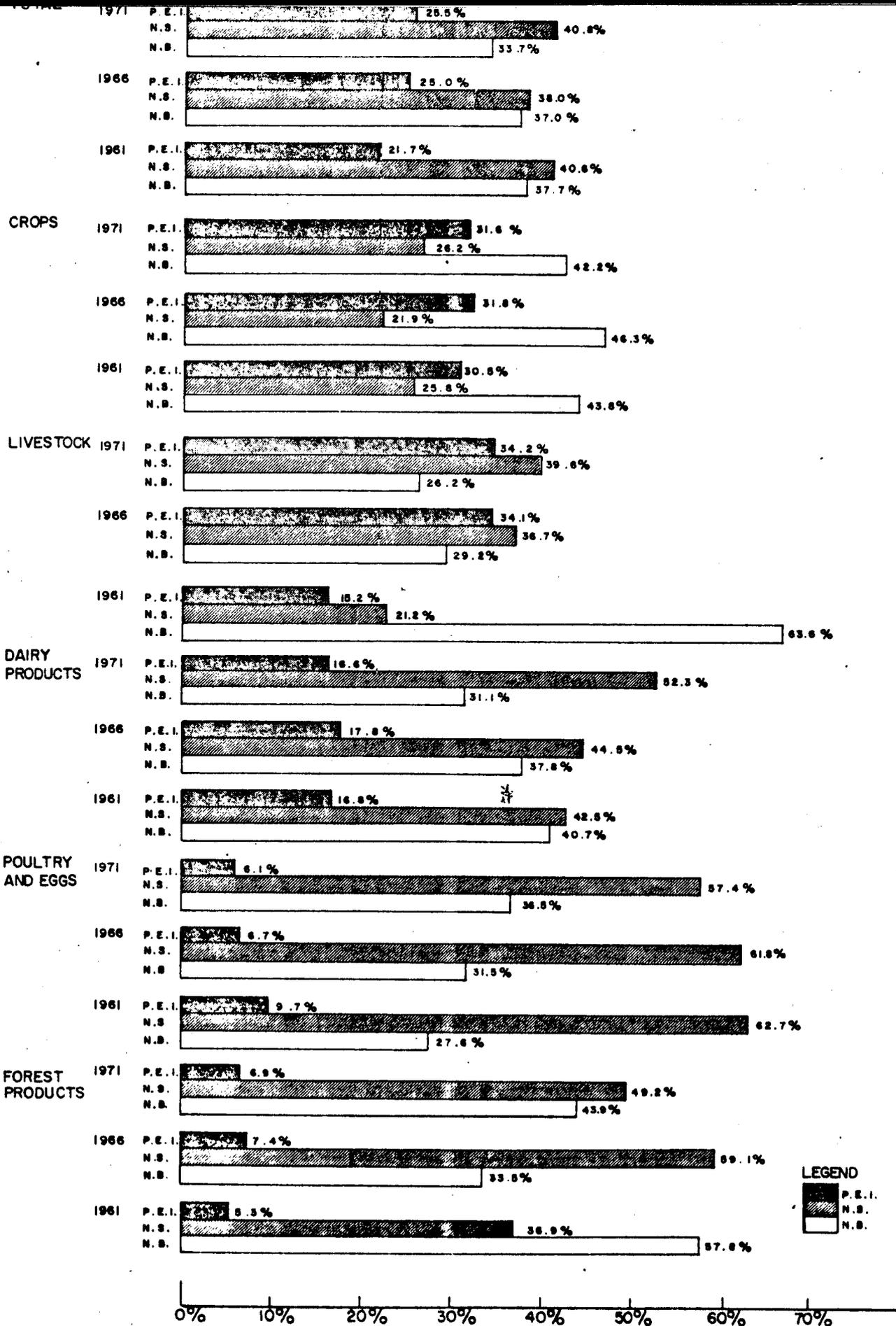


FIGURE 6.2

FARM RECEIPTS: ATLANTIC PROVINCES AS A PERCENTAGE OF CANADA  
BY PRODUCT GROUP 1961 - 1971



LEGEND  
 P.E.I.  
 N.S.  
 N.B.

FIGURE 6.3

FARM RECEIPTS: PROVINCIAL INCOME AS A PERCENTAGE OF ALL MARITIME PROVINCES, BY PRODUCT GROUP, 1961 - 1971

FARM RECEIPTS BY SELECTED PRODUCTS FOR THE MARITIME PROVINCES, 1961-1971

	1961		1966		1971	
	(\$'000)	%	(\$'000)	%	('000)	%
<b>POTATOES</b>						
P.E.I.	5,928	41.89	12,120	41.28	10,208	41.34
N.S.	529	3.74	1,168	3.98	936	3.79
N.B.	7,695	54.37	16,072	57.74	13,549	54.87
<b>TOTAL</b>	<b>14,152</b>	<b>100.00</b>	<b>29,360</b>	<b>100.00</b>	<b>24,693</b>	<b>100.00</b>
<b>FRUITS</b>						
P.E.I.	401	6.79	317	4.22	479	7.17
N.S.	4,098	69.42	5,074	67.55	4,478	67.08
N.B.	1,404	23.78	2,121	28.23	1,719	25.75
<b>TOTAL</b>	<b>5,903</b>	<b>100.00</b>	<b>7,512</b>	<b>100.00</b>	<b>6,676</b>	<b>100.00</b>
<b>VEGETABLES</b>						
P.E.I.	276	13.20	1,091	26.83	655	17.09
N.S.	1,155	55.24	1,759	43.25	1,529	39.90
N.B.	660	31.56	1,217	29.92	1,648	43.01
<b>TOTAL</b>	<b>2,091</b>	<b>100.00</b>	<b>4,067</b>	<b>100.00</b>	<b>3,832</b>	<b>100.00</b>
<b>OTHER CROPS</b>						
P.E.I.	1,126	34.77	779	19.08	2,433	29.07
N.S.	755	23.32	1,866	45.70	4,456	53.24
N.B.	1,357	41.91	1,438	33.22	1,481	17.69
<b>TOTAL</b>	<b>3,238</b>	<b>100.00</b>	<b>4,083</b>	<b>100.00</b>	<b>8,370</b>	<b>100.00</b>
<b>FOREST PRODUCTS</b>						
P.E.I.	385	5.31	311	7.43	162	6.92
N.S.	2,672	36.88	2,474	59.12	1,150	49.15
N.B.	4,189	57.81	1,400	33.45	1,028	43.93
<b>TOTAL</b>	<b>7,246</b>	<b>100.00</b>	<b>4,185</b>	<b>100.00</b>	<b>2,340</b>	<b>100.00</b>
<b>DAIRY PRODUCTS</b>						
P.E.I.	5,043	16.82	5,334	17.69	5,818	16.61
N.S.	12,747	42.51	13,421	44.52	18,386	52.49
N.B.	12,195	40.67	11,394	37.79	10,921	31.18
<b>TOTAL</b>	<b>29,985</b>	<b>100.00</b>	<b>30,149</b>	<b>100.00</b>	<b>35,125</b>	<b>100.00</b>
<b>CATTLE AND CALVES</b>						
P.E.I.	4,795	26.55	6,922	30.75	9,700	33.00
N.S.	7,562	41.87	7,626	33.87	11,603	39.48
N.B.	5,705	31.58	7,966	35.38	8,088	27.52
<b>TOTAL</b>	<b>18,062</b>	<b>100.00</b>	<b>22,514</b>	<b>100.00</b>	<b>29,391</b>	<b>100.00</b>
<b>HOGS</b>						
P.E.I.	3,907	35.48	6,699	43.29	6,537	40.74
N.S.	3,483	31.63	5,413	34.98	5,602	34.91
N.B.	3,622	32.89	3,363	21.73	3,907	24.35
<b>TOTAL</b>	<b>11,012</b>	<b>100.00</b>	<b>15,475</b>	<b>100.00</b>	<b>16,046</b>	<b>100.00</b>
<b>OTHER LIVESTOCK</b>						
P.E.I.	407	18.64	460	14.17	409	12.82
N.S.	1,263	57.86	2,096	64.55	2,040	63.93
N.B.	513	23.50	691	21.28	742	23.25
<b>TOTAL</b>	<b>2,183</b>	<b>100.00</b>	<b>3,247</b>	<b>100.00</b>	<b>3,191</b>	<b>100.00</b>
<b>POULTRY</b>						
P.E.I.	519	8.78	346	3.79	278	2.56
N.S.	3,726	63.01	5,564	61.01	6,346	58.54
N.B.	1,668	28.21	3,210	35.20	4,216	38.89
<b>TOTAL</b>	<b>5,913</b>	<b>100.00</b>	<b>9,120</b>	<b>100.00</b>	<b>10,840</b>	<b>100.00</b>
<b>EGGS</b>						
P.E.I.	1,225	10.21	1,226	8.52	1,015	9.89
N.S.	7,506	62.54	8,969	62.35	5,759	56.11
N.B.	3,270	27.25	4,191	29.13	3,490	34.00
<b>TOTAL</b>	<b>12,001</b>	<b>100.00</b>	<b>14,386</b>	<b>100.00</b>	<b>10,264</b>	<b>100.00</b>

Source: Statistics Canada, 21-001

Where the products are imported from outside the Atlantic region, they generally go to the packers, who then distribute them to retailers.

#### Field Crop and Field Crop Combinations

Potatoes are the main field crop in the Atlantic region, with Prince Edward Island and New Brunswick being the primary producers (Table 6.1).

Figure 6.4 shows the typical channel of distribution.

The general pattern is for a dealer to buy the products from producers, store them, and then ship in carloads to chain store retailers and food wholesalers, who eventually sell to the smaller independent retailers. There also appears to be a reasonable amount of direct trade from producers to independent retailers and, to a lesser extent, to chain store retailers in the producing provinces.

Brokers play an important role in the export of potatoes from the provinces of production. The broker normally has headquarters in Montreal or Toronto - the main marketplace for potatoes. He collects orders from food wholesalers and chain store purchasers, receives quotation prices from dealers, and settles the transactions. The broker then advises the dealers to ship potatoes directly to the buyers under the terms of their contract, and he assumes the risk of the deal.

Exporters of potatoes to provinces in the Atlantic region tend to use limited brokerage service. The dealer in the producing province sells directly to the chain store retailer or food wholesaler in the province of consumption.

#### Fruit and Vegetables

Nova Scotia is the major producer of fruit in the Atlantic region, and

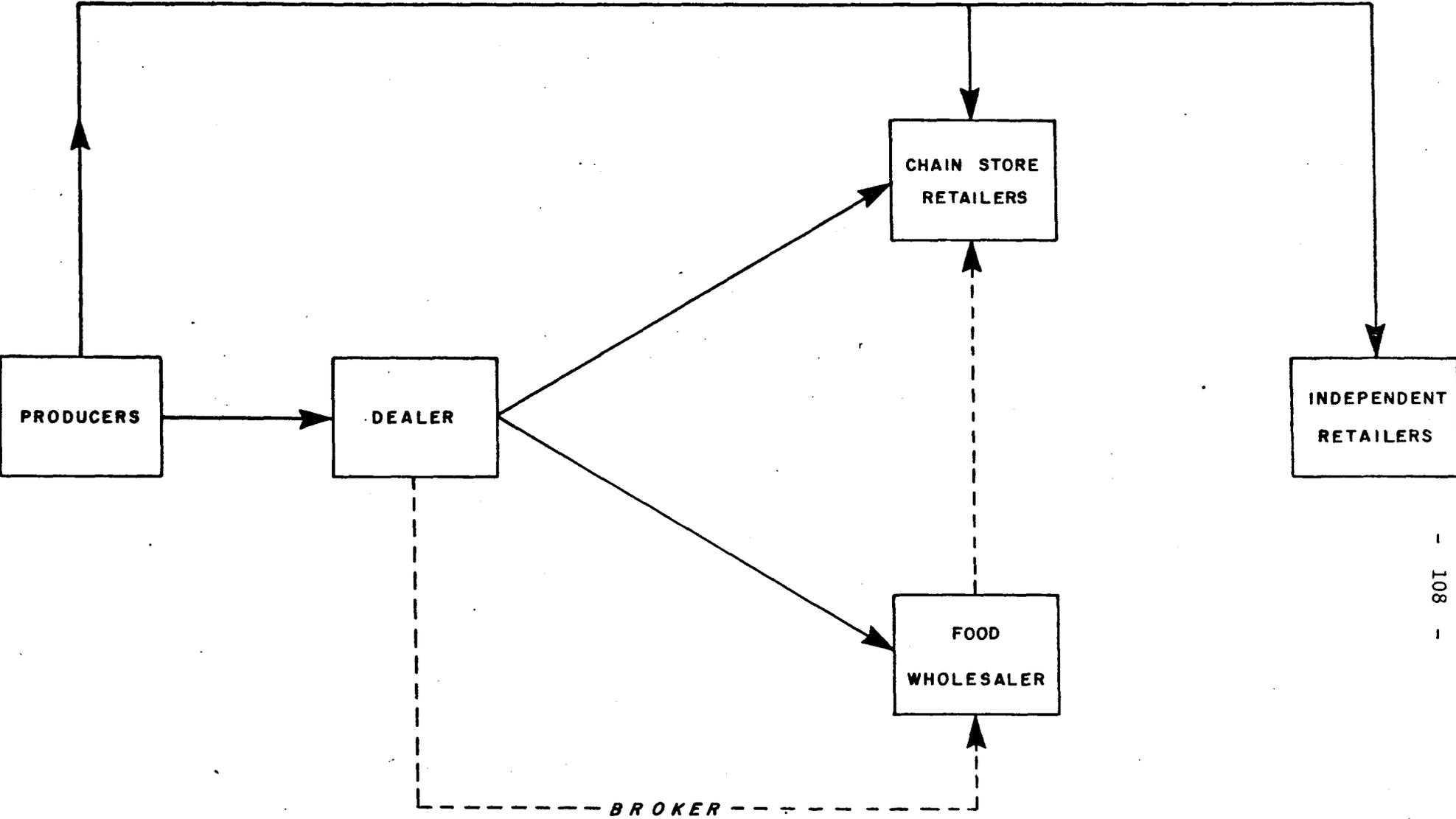


FIGURE 6-4 - CHANNELS OF DISTRIBUTION FIELD CROP

both Nova Scotia and New Brunswick produce a limited amount of vegetables. Additional supplies of fruits and vegetables are imported by all four provinces. Figure 6.5 shows the typical channel of distribution for fruit and vegetables for the intra-provincial trade.

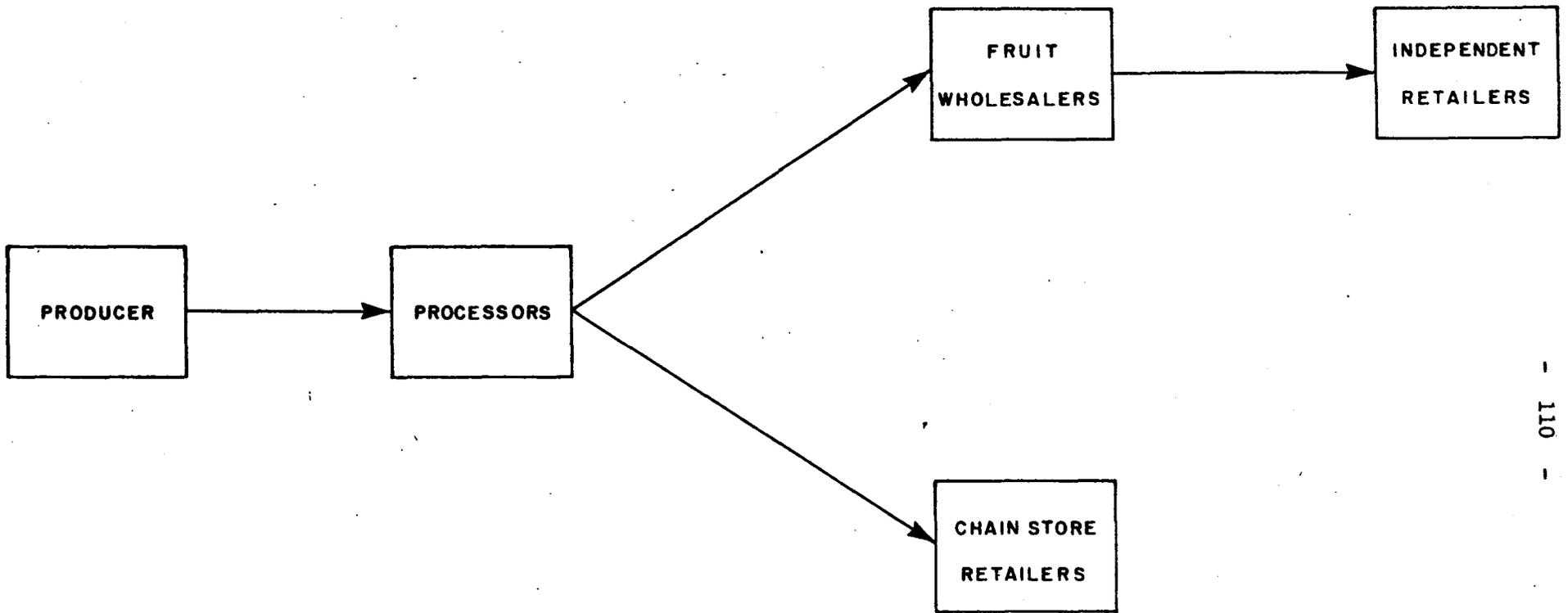
The channels of distribution are similar to those described for the livestock and dairy products with respect to intraprovincial trade. The processors tend to dominate the wholesaling function. In terms of imports to a province, however, fruits and vegetables tend to go directly to wholesalers or chain store retailers, thus bypassing the processors.

Limited amounts of fruits and vegetables are exported from the Atlantic region. Such exports generally go through the processors to chain store retailers and fruit wholesalers in non-Atlantic provinces.

### Fishing

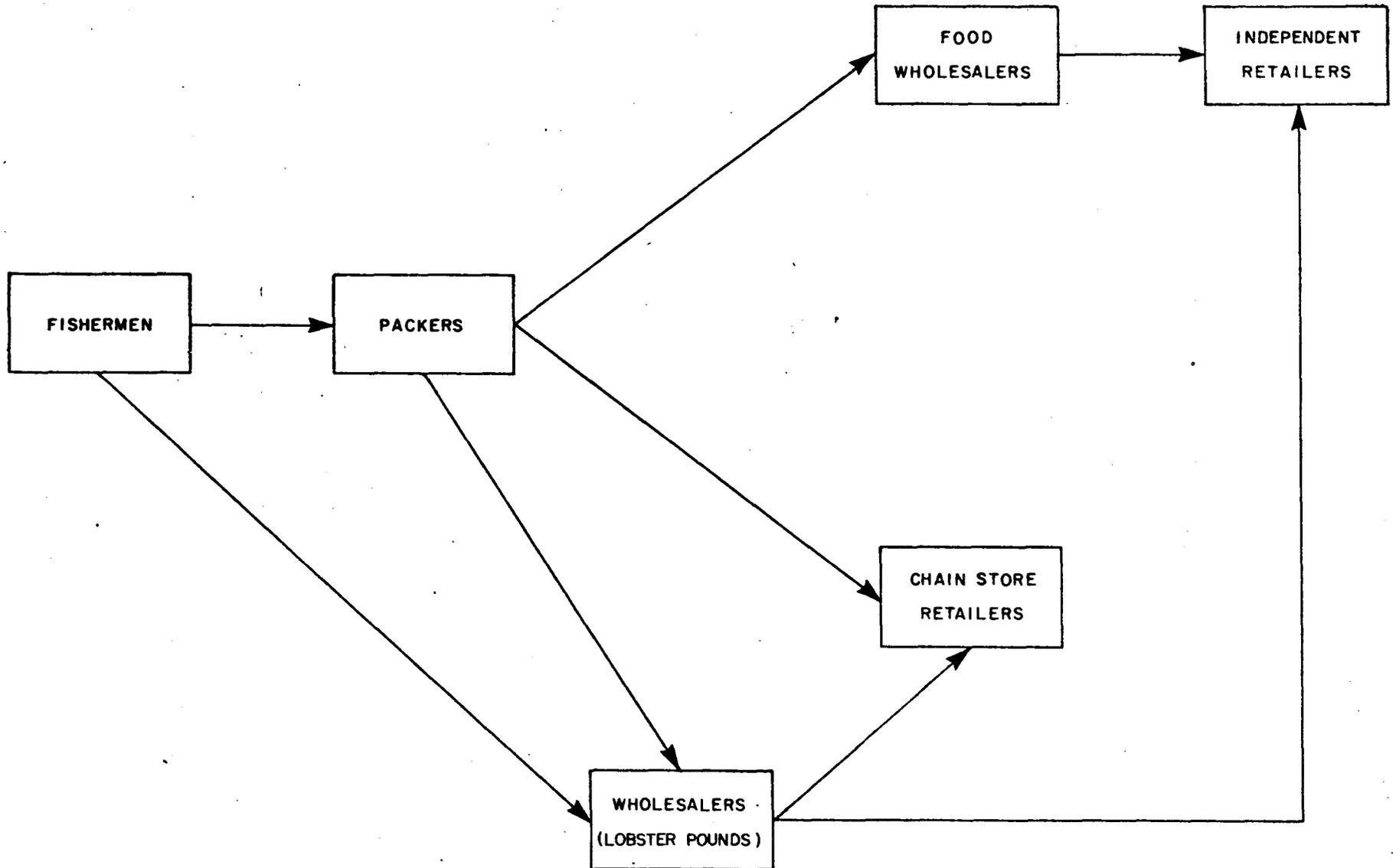
The Atlantic region is Canada's largest producer of fish, and the region is a net exporter. All four provinces are actively involved in the fishing industry and have channels of distribution for intra-provincial and interprovincial trade. These vary for different species of fish.

Figure 6.6 shows a typical channel for lobsters. The fishermen are either independents, as is the case in Nova Scotia, or are under contract with processors, as is the situation in New Brunswick and Prince Edward Island. Lobsters are sold primarily to the processors,



**FIGURE 6 - 5 - CHANNELS OF DISTRIBUTION FRUIT & VEGETABLES**

**FIGURE 6.6**  
**CHANNELS OF DISTRIBUTION: LOBSTERS**



who again control much of the wholesaling function in the province. Some portion of the catch may go to wholesalers with lobster pounds where the lobsters are kept alive for off-season or fresh sales. In inter-provincial trade, lobsters are bought directly from processors either by wholesalers or by chain store retailers in the province of consumption.

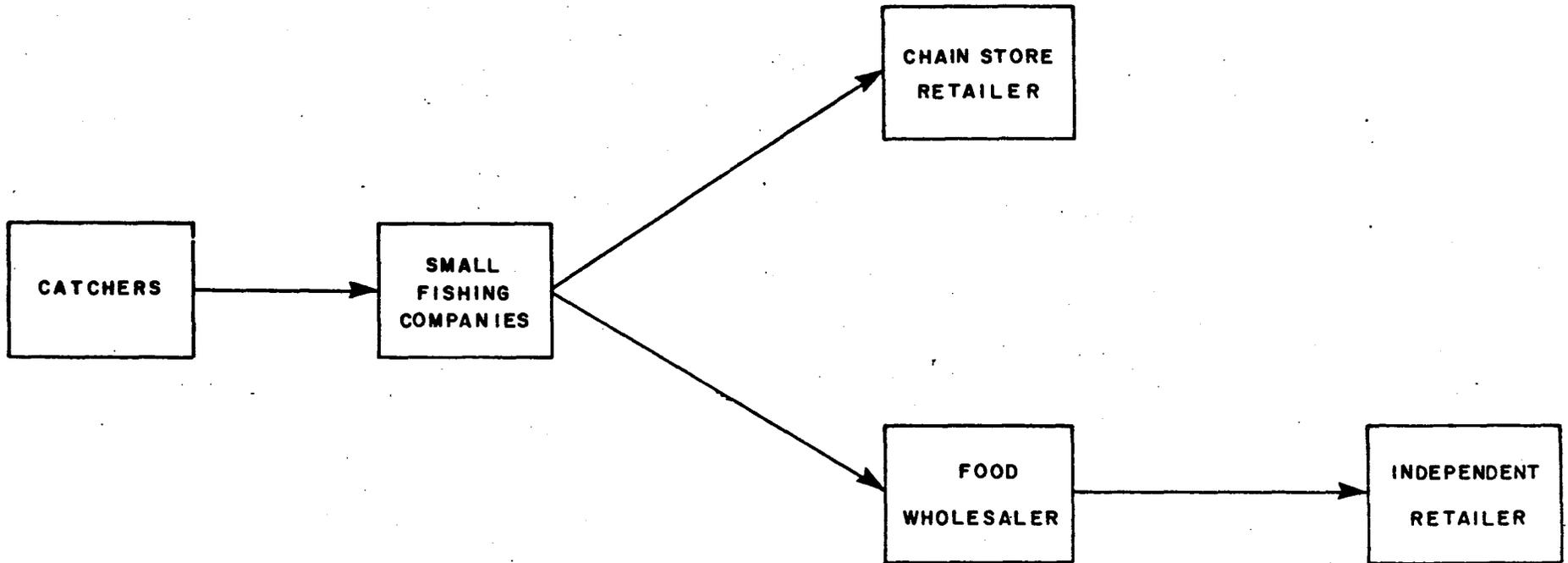
Figure 6.7 illustrates channels of distribution applicable for the distribution of such fish species as cod, herring, halibut, flounder, and sole. The fish are delivered to relatively small fish companies who perform a processing function, as well as a wholesale function. These companies own and operate their own refrigerated trucks in Nova Scotia and elsewhere in the Atlantic region. In intra-provincial trade, the small processors sell to chain store retailers or to food wholesalers, who then sell to independent retailers.

Exports of fish from the Atlantic region go through the basic channel - the small fishing companies. Also, larger establishments process and sell on a wholesale basis. The small fishing companies in Nova Scotia normally take their fresh fish to the Boston market.

### Forestry

Forestry activities are concentrated in New Brunswick and Newfoundland, with some production also in Nova Scotia (Tables 6.2 and 6.3). These provinces mainly produce pulpwood for manufacturing; New Brunswick also produces some volume of dimensioned lumber for the building trades.

Figure 6.8 shows the typical channels of distribution for forest products.



**FIGURE 6 -7 - CHANNELS OF DISTRIBUTION OTHER SPECIES OF FISH**

**TABLE 6.2**  
**PRIMARY FOREST PRODUCTION: NUMBER OF EMPLOYEES**  
**AND NUMBER OF ESTABLISHMENTS, BY PROVINCE,**  
**1966, 1968, AND 1970**

	Number of Employees			Number of Establishments		
	1966	1968	1970	1966	1968	1970
NFLD.	3,043	1,995	2,439	49	23	29
P.E.I.	-	-	-	-	-	-
N.S.	1,431	1,302	1,523	160	153	196
N.B.	4,756	3,999	3,599	218	177	209
QUE.	22,189	16,868	14,815	458	420	396
ONT.	11,110	9,225	9,567	425	391	474
MAN.	-	203	386	35	31	52
SASK.	-	449	549	22	34	55
ALTA.	-	610	747	64	51	54
B.C.	17,864	17,948	18,581	1,176	1,093	1,185
YUK. & N.W.T.	-	6	24	2	3	3
<b>CANADA: Total</b>	<b>60,393</b>	<b>52,605</b>	<b>52,230</b>	<b>2,609</b>	<b>2,376</b>	<b>2,653</b>
<b>Atlantic Provinces: Total</b>	<b>9,230</b>	<b>7,296</b>	<b>7,561</b>	<b>427</b>	<b>353</b>	<b>434</b>
<b>% of Canada</b>	<b>14.94</b>	<b>13.87</b>	<b>14.78</b>	<b>16.37</b>	<b>14.86</b>	<b>16.36</b>

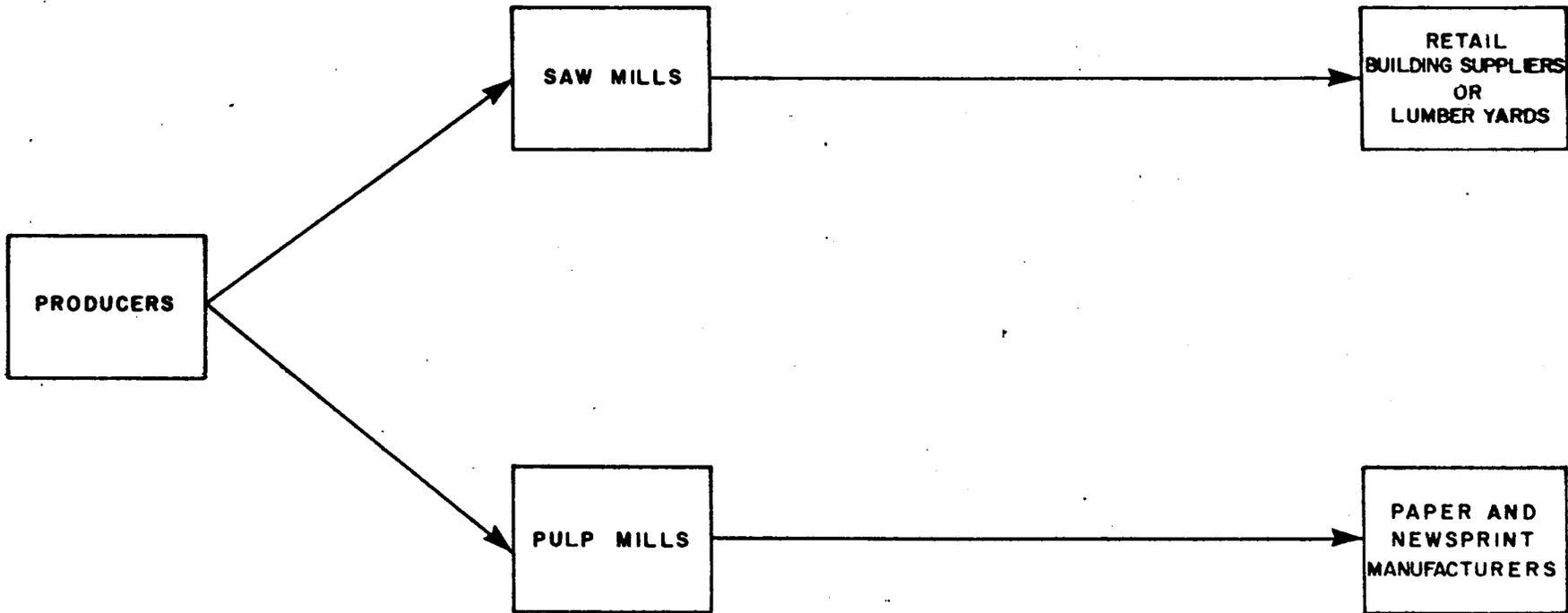
Source: Statistics Canada, 25-202.

TABLE 6.3

SHIPMENTS OF ROUNDWOOD, QUANTITY AND VALUE, BY PROVINCE,  
1968, 1969, AND 1970

	LOGS AND BOLTS			PULPWOOD ( '000 units)			OTHER ROUNDWOODS			TOTAL		
	1968	1969	1970	1968	1969	1970	1968	1969	1970	1968	1969	1970
NFLD.	1	2	5	870	721	705	-	2	-	871	725	710
P.E.I.	-	-	-	-	-	-	-	-	-	-	-	-
N.S.	105	108	83	681	694	587	6	2	1	792	804	671
N.B.	729	617	651	1,717	1,913	1,938	9	5	2	2,455	2,535	2,591
QUE.	1,589	1,687	1,316	6,659	7,209	7,384	9	25	1	8,257	8,921	8,701
ONT.	1,238	1,064	953	4,170	4,557	4,210	36	33	23	5,444	5,654	5,186
B.C.	21,304	22,117	21,895	-	-	-	80	66	75	21,384	22,183	21,970
Other Provinces	322	321	345	585	840	820	26	23	2	933	1,184	1,167
CANADA: Total	25,288	25,916	25,248	14,682	15,934	15,644	166	156	104	40,136	42,006	40,996
Atlantic Provinces Total	835	727	739	3,268	3,328	3,230	15	9	3	4,118	4,064	3,972
% of Canada	3.32	2.80	2.91	22.51	20.88	20.43	9.04	5.77	2.88	10.31	9.68	9.64
	(\$ '000)											
NFLD.	15	50	118	23,872	24,416	30,081	21	18	-	23,908	24,484	30,199
P.E.I.	-	-	-	-	-	-	-	-	-	-	-	-
N.S.	2,610	2,733	2,047	15,941	17,144	15,240	134	42	6	18,685	19,919	17,293
N.B.	15,388	13,648	15,976	50,819	56,042	57,182	420	306	271	66,627	69,996	73,429
QUE.	48,238	51,841	41,576	238,012	256,999	265,558	199	603	25	286,449	309,443	307,159
ONT.	37,660	33,932	30,557	144,471	157,710	152,878	1,609	1,485	1,047	183,740	193,127	184,482
B.C.	667,983	756,684	704,241	-	-	-	8,132	7,286	8,302	676,115	763,970	712,543
Other Provinces	6,970	7,596	8,409	15,815	21,537	22,222	541	506	43	23,326	29,639	30,674
CANADA: Total	778,864	866,484	802,924	488,930	533,848	543,161	11,056	10,246	9,694	1,278,850	1,410,578	1,355,779
Atlantic Provinces Total	18,013	16,431	18,141	90,632	97,602	102,503	575	366	277	109,220	114,399	120,921
% of Canada	2.31	1.90	2.26	18.54	18.28	18.87	5.21	3.57	2.86	8.54	8.11	8.92

Source: Statistics Canada, 25 202.



**FIGURE 6 - 8 - CHANNELS OF DISTRIBUTION FOREST PRODUCTS**

The distribution of forest products depends on the species of wood. Pulpwood is sent directly to pulpmills for processing into pulp, which is then sold to manufacturers of paper and allied products. Much of the pulp produced in the Atlantic region is exported for further processing in Ontario, Quebec, and the United States. Shipments of pulp move directly from pulpmills to manufacturers of paper products.

Hardwood and softwood species for dimensioned lumber are shipped to sawmills, where they are processed and sold directly to retail lumberyards and to brokers for export. In addition, dimensioned lumber is bought by lumberyards in the Atlantic region from sawmills located in other producing provinces, with the help of brokers located in those provinces.

### The Manufacturing Sector

The channels of distribution for manufactured products arising from the agriculture, fishing, and forestry industries have already been discussed. Here, brief mention will be made of specific manufacturing industries associated with the primary industries. In the case of other manufacturing industries, the channels of distribution appear to be direct from manufacturers to retailers.

With few exceptions, most manufactured goods are produced for local consumption. Consequently, the channels of distribution are strongly oriented to intra-provincial trade.

#### Food and Beverage Industries

In the beverage industry, liquors, beer, and wine, move from manufacturers to government-controlled retail outlets. Non-alcoholic beverages are sold by manufacturers directly to

chain store and independent retailers.

#### Textiles, Knitting, and Clothing Industries

Textiles, knitting, and clothing industries are concentrated in Nova Scotia and New Brunswick (see Table 6.4). In intraprovincial trade, the channel of distribution is basically direct from manufacturers to chain store retailers or independent retailers. In interprovincial trade, dry goods and apparel wholesalers may be used to channel the products to the independent retailers; manufacturers tend to ship directly to chain store retailers.

#### Wood Industries

Most manufacturing activity in the wood industries (sawmills, planing mills, and shingle mills; sash, door, and other millwork, and wooden boxes) takes place in New Brunswick and Nova Scotia. The distribution of dimensioned lumber was discussed previously (see Figure 6.7). Other products are generally distributed directly from manufacturers to users.

#### Furniture and Fixtures

The furniture and fixtures industry is small relative to other manufacturing activities and is located primarily in Nova Scotia and New Brunswick (see Table 6.4). The general channel of distribution is from manufacturer to retailer for both intraprovincial and interprovincial trade. The Atlantic region depends heavily on supplies from manufacturers in Quebec and Ontario.

#### Paper and Allied Industries

The paper and allied industries (pulp and papermills, asphalt roofing,

MANUFACTURING: ESTABLISHMENTS, EMPLOYEES AND VALUE OF  
SHIPMENTS IN ATLANTIC PROVINCES, BY PROVINCE, 1961, 1966, AND 1970

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	1970			1966			1961		
	Estab.	Employees	Value of Shipments (\$000)	Estab.	Employees	Value of Shipments (\$000)	Estab.	Employees	Value of Shipments (\$000)
<b>N.F.L.D.</b>									
Food and Beverage	98	6,759	106,660	94	5,720	69,920	65	4,060	40,442
Wood Industries	73	429	5,140	87	484	5,268	192	652	4,045
Printing, Publishing & Allied	25	n.a.	n.a.	25	465	4,400	29	424	3,231
Metal Fabricating	9	356	6,668	11	307	5,476	6	184	2,414
Non-metallic Mineral	11	342	7,237	11	590	9,497	13	388	5,767
Others	36	4,732	137,597	34	3,918	99,541	33	4,188	81,327
<b>TOTAL</b>	<b>252</b>	<b>12,870</b>	<b>263,302</b>	<b>262</b>	<b>11,484</b>	<b>194,102</b>	<b>338</b>	<b>9,896</b>	<b>137,224</b>
<b>TOTAL (% Atl. Prov.)</b>	<b>13.76</b>	<b>16.89</b>	<b>14.51</b>	<b>12.87</b>	<b>15.75</b>	<b>13.86</b>	<b>15.34</b>	<b>16.26</b>	<b>14.60</b>
<b>P.E.I.</b>									
Food and Beverage Industries	79	2,094	51,495	76	1,534	35,298	72	1,106	23,255
Wood Industries	28	59	852	34	60	582	51	160	788
Others	41	545	10,332	42	570	10,901	33	458	5,998
<b>TOTAL</b>	<b>148</b>	<b>2,698</b>	<b>62,679</b>	<b>152</b>	<b>2,164</b>	<b>46,781</b>	<b>156</b>	<b>1,724</b>	<b>30,041</b>
<b>TOTAL (% Atl. Prov.)</b>	<b>8.08</b>	<b>3.54</b>	<b>3.45</b>	<b>7.47</b>	<b>2.97</b>	<b>3.34</b>	<b>7.08</b>	<b>2.83</b>	<b>3.20</b>
<b>N.S.</b>									
Food and Beverage Industries	261	10,419	232,748	306	10,651	191,102	323	8,690	123,822
Rubber Industries	4	93	997	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Textile Industries	11	966	16,815	7	504	9,625	7	499	5,482
Knitting Mills	6	1,278	14,919	5	1,329	13,607	7	1,169	9,140
Clothing Industries	4	n.a.	n.a.	8	286	2,086	11	346	2,211
Wood Industries	197	2,182	28,140	252	2,482	25,628	341	2,425	21,941
Furniture & Fixture Industries	38	243	2,969	40	362	2,808	33	325	2,247
Paper and Allied Industries	13	2,850	88,213	9	2,232	51,576	5	1,449	25,963
Printing, Publishing & Allied Ind.	71	1,381	19,505	72	1,467	15,540	78	1,328	12,204
Metal Fabricating Industries (Except Machinery & Transportation Equipment Industries)	49	1,312	20,669	55	1,969	31,101	46	1,415	18,939
Machinery Industries (Except Electrical Machinery)	8	493	3,937	7	464	2,938	5	271	2,121
Transportation Equipment Industries	63	4,354	103,316	67	5,236	80,055	65	3,670	26,829
Electrical Products Industries	6	1,147	14,059	4	983	16,576	3	n.a.	n.a.
Non-Metallic Mineral Products	37	771	19,214	37	762	13,157	32	465	5,456
Chemical and Chemical Products	10	187	6,070	13	292	7,379	15	228	5,857
Miscellaneous Manufacturing Industries	31	280	3,809	39	258	3,110	20	137	1,142
Others	-	-	-	10	4,256	146,178	11	4,384	111,956
<b>TOTAL</b>	<b>819</b>	<b>31,883</b>	<b>758,000</b>	<b>931</b>	<b>33,533</b>	<b>612,466</b>	<b>1,002</b>	<b>26,801</b>	<b>375,307</b>
<b>TOTAL (% Atl. Prov.)</b>	<b>44.73</b>	<b>41.84</b>	<b>41.76</b>	<b>45.75</b>	<b>45.98</b>	<b>43.73</b>	<b>45.46</b>	<b>44.03</b>	<b>39.93</b>
<b>N.B.</b>									
Food and Beverage Industries	203	9,237	241,588	248	8,645	182,604	235	6,839	132,669
Rubber and Plastic Products Industries	4	76	1,301	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Textile Industries	8	443	4,380	13	445	5,148	11	497	3,674
Clothing Industries	3	n.a.	n.a.	5	n.a.	n.a.	4	234	704
Wood Industries	139	3,605	64,142	176	3,273	45,581	260	2,933	30,494
Furniture and Fixture Industries	20	226	3,401	21	139	1,923	20	105	739
Paper and Allied Industries	19	5,575	202,427	19	5,200	161,943	19	4,565	113,579
Printing Publishing & Allied Industries	47	950	13,431	51	1,008	10,517	51	974	8,025
Metal Fabricating Industries (Except Machinery and Transportation Equipment Industries)	40	1,499	27,437	35	1,475	21,535	30	987	12,075
Electrical Products Industries	12	2,449	29,856	15	n.a.	n.a.	8	2,755	19,890
Non-Metallic Mineral Products	6	969	21,210	5	1,014	13,427	4	n.a.	n.a.
Chemicals & Chemical Products	39	914	17,114	35	728	13,046	28	567	7,874
Miscellaneous Manufacturing Industries	17	384	20,492	16	347	13,866	7	143	5,334
	34	589	8,679	38	649	7,817	16	382	3,765
Other	21	1,835	75,669	13	2,826	69,790	15	1,462	58,038
<b>TOTAL</b>	<b>612</b>	<b>28,751</b>	<b>731,127</b>	<b>690</b>	<b>25,749</b>	<b>547,197</b>	<b>708</b>	<b>22,443</b>	<b>397,457</b>
<b>TOTAL (% Atl. Prov.)</b>	<b>33.42</b>	<b>37.73</b>	<b>40.28</b>	<b>33.91</b>	<b>35.31</b>	<b>39.07</b>	<b>32.12</b>	<b>36.87</b>	<b>42.28</b>
<b>ATL. PROV. TOTAL</b>	<b>1,831</b>	<b>76,202</b>	<b>1,815,108</b>	<b>2,035</b>	<b>72,930</b>	<b>1,400,546</b>	<b>2,204</b>	<b>60,864</b>	<b>940,029</b>

and paper box and bag products) are concentrated in New Brunswick and Nova Scotia (see Table 6.4). Pulp and paper products were discussed previously (see Figure 6.7). Asphalt roofing and paper box and bag products are generally shipped directly from manufacturers to users for both intraprovincial and interprovincial trade.

#### Metal Fabricating Industries (except Machinery and Transportation Equipment)

Metal fabricating industries (fabricated structural metal; metal stamping, pressing, and coating; wire and wire products; hardware tools; heating equipment; and machine shops) are located in New Brunswick, Nova Scotia, and, to a lesser extent, Newfoundland. Fabricated products are generally sold directly from manufacturers to users in both intraprovincial and interprovincial trade.

#### Machinery Industries

Nova Scotia has a limited amount of machinery manufacturing in such products as diesel and gasoline engines, conveyors, fish unloaders, and pumps. These products are largely for intraprovincial trade and move directly from manufacturers to users. Other machinery products (agricultural implements, commercial refrigeration and air conditioning equipment, and office and store machinery) are brought from regions outside the Atlantic Provinces. The channel of distribution is generally direct from manufacturers to retail dealers or to users.

#### Transportation Equipment Industries

The transportation equipment industry (aircraft parts, motor vehicles, truck body and trailer, motor vehicle parts and accessories, railroad rolling stock, shipbuilding and repair, and boatbuilding and repair)

is located mainly in Nova Scotia; there is a small amount of manufacturing also in New Brunswick. Motor vehicles and boats are usually shipped from manufacturers to retail dealers in intraprovincial and interprovincial trade. All other products and services are generally contractual and are shipped directly from manufacturers to clients or users.

#### Non-Metallic Mineral Products Industries

Non-metallic mineral products (clay, cement, stone, concrete, and glass) are produced in Nova Scotia, New Brunswick, and Newfoundland (see Table 6.4). These materials are required by the construction industry. Except for glass, they are not subject to much interprovincial trade because of the weight factor. Construction firms buy directly from the manufacturers.

#### Chemical and Chemical Products

Chemical and chemical products (fertilizers, plastics and synthetic resins, pharmaceuticals and medicines, paint and varnish, soap and cleaning compounds, toilet preparations, and industrial chemicals) are produced in New Brunswick and, to a lesser extent, in Nova Scotia (see Table 6.4). Most of these products are shipped from manufacturers to chain store retailers or to independent retailers via wholesalers in intraprovincial and interprovincial trade.

#### SUMMARY

Two features of the distribution system in the Atlantic region have

a major impact on local wholesalers. First, the Atlantic Provinces are involved in wholesaling activities since they sell directly to chain store retailers and, in some cases, to independent retailers. Consequently, they often bypass existing independent wholesalers.

Second, during the past decade, there has been a relative decline in the share of retail trade accounted for by independent retailers. The data presented in Table 6.5 show that chain stores are acquiring an increasing share of the total retail sales volume in Canada. Independent stores still have over 60% of the total retail trade, but the proportion of sales through chain stores has risen from 31.4% in 1961 to 38.3% in 1971. In view of the trend towards further urbanization in Canada and consequent changes in patterns of shopping, the relative expansion of the market share of chain stores can be expected to continue.

In the Atlantic region, a greater proportion of retail trade is conducted through independent stores than is the case for Canada as a whole (64.6% of regional retail trade in 1971 as compared with 61.7% for Canada), and the share of retail trade accounted for by chain stores in all provinces in the Atlantic region is less than that of the Canadian average (35.4% and 38.3% respectively). These differences result in part from the lower degree of urbanization in the Atlantic region. Since chain stores generally prefer the larger urban markets for establishment of outlets, the rural nature of the population in the Atlantic Provinces may be a limiting factor on their expansion. They are growing in importance, however, as is indicated by the increase in their market share from 28.5% in 1961 to 35.4% in 1971. This rate of growth is very close to that in Canada as a whole.

The combined factors of the wholesaling function of the processors and the relative growth of chain stores have an adverse effect on independent

TABLE 6.5

RETAIL TRADE: SALES BY CHAIN AND INDEPENDENT STORES,  
ATLANTIC PROVINCES AND CANADA, 1961, 1966, AND 1971

	1961 (\$'000)			1966 (\$'000)			1971 (\$'000)		
	CHAIN STORES	INDEPENDENT STORES	ALL STORES	CHAIN STORES	INDEPENDENT STORES	ALL STORES	CHAIN STORES	INDEPENDENT STORES	ALL STORES
Nfld.	72	214	285	108	297	406	174	359	533
P.E.I.	17	62	79	21	86	108	39	102	141
N.S.	170	410	580	239	514	753	370	653	1,023
N.B.	134	302	436	194	401	595	313	522	835
ATL. PROV.	393	988	1,380	562	1,298	1,862	896	1,636	2,532
CANADA	5,046	11,027	16,073	7,490	15,197	22,686	11,734	18,912	30,646
ATL. PROV. (% CAN.)	7.79	8.96	8.59	7.50	8.54	8.21	7.64	8.65	8.26

	1961 (%)			1966 (%)			1971 (%)		
	CHAIN STORES	INDEPENDENT STORES	ALL STORES	CHAIN STORES	INDEPENDENT STORES	ALL STORES	CHAIN STORES	INDEPENDENT STORES	ALL STORES
Nfld.	25.3%	74.7%	100.0	26.6%	73.4%	100.0	32.6%	67.4%	100.0
P.E.I.	21.5	78.5	100.0	19.4	80.6	100.0	27.7	72.3	100.0
N.S.	29.3	70.7	100.0	31.7	68.3	100.0	36.2	63.8	100.0
N.B.	30.7	69.3	100.0	32.6	67.4	100.0	37.5	62.5	100.0
ATL. PROV.	28.5	71.5	100.0	30.2	69.8	100.0	35.4	64.6	100.0
CANADA	31.4	68.6	100.0	33.0	67.0	100.0	38.3	61.7	100.0

Source: Statistics Canada, 63-005, 63-513, 63-514.

wholesalers in the Atlantic Provinces. Available data<sup>1</sup> show that between 1961 and 1966 the total number of wholesalers in the Atlantic region declined from 2,258 to 1,995, while for Canada there was a modest increase from 30,855 to 30,900. A significant decline in the number of wholesale establishments in the Atlantic region was observed for petroleum and petroleum products (419 to 136), groceries and food specialties (205 to 147), hardware (75 to 44), farm supplies (89 to 40), and coal and coke (12 to 5) between 1961 and 1966. Over the same period, there were relatively large increases in the number of wholesale establishments in machinery equipment and supplies (250 to 337), automotive supplies (103 to 140), and waste material (46 to 81). The number of wholesale establishments for the majority of the other industrial sectors remained relatively constant or declined slightly.

There are relatively few wholesale establishments for the handling of amusement and sporting goods; automotive, electrical, and farm supplies; machinery equipment and supplies; petroleum and petroleum products; and plumbing, refrigeration, and heating equipment and supplies. These areas could be considered to have potential for expansion. The number of wholesalers in grocery and food specialties, and farm and tobacco products is high in the Atlantic region relative to the Canadian average.

#### ECONOMIC SIGNIFICANCE OF RETAIL AND WHOLESALE INDUSTRIES

As well as facilitating the buying and selling of goods, the retail and wholesale industries provide numerous jobs in each product area. Table 6.6

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1. Statistics Canada: 63-521, 72-008, 97-511, 97-627.

TABLE 6.6

ESTIMATES OF EMPLOYEES BY SELECTED INDUSTRIES ATLANTIC PROVINCES AND CANADA,  
1961 AND 1971

	NFLD.		P.E.I.		N.S.		N.B.		ATL. PROV.		CAN.	
	Number (000)	%										
<u>1961</u>												
Forestry	5.0	6.68	-		2.9	-1.84	7.1	5.73	15.0	4.02	68.4	1.46
Mines, Quarries, etc.	3.3	4.41	-		8.1	5.14	1.4	1.12	12.8	3.43	106.7	2.27
Manufacturing	9.8	13.10	1.7	9.82	26.9	17.07	21.4	17.27	59.8	16.04	1,302.1	27.81
Construction	6.1	8.15	1.3	7.51	10.1	6.41	6.7	5.40	24.2	6.49	291.5	6.22
Transportation, etc.	12.1	16.17	2.6	15.02	22.4	14.22	22.0	17.75	59.1	15.85	571.1	12.19
Trade	12.7	16.99	3.7	21.38	25.1	15.93	20.7	16.70	62.2	16.68	743.0	15.87
Finance, Insurance, etc.	1.1	1.47	.5	2.89	4.5	2.85	3.5	2.82	9.6	2.57	194.8	4.16
Non-Commercial	14.8	19.78	4.3	24.85	30.0	19.04	24.7	19.93	73.8	19.79	690.7	14.75
Commercial	2.9	3.87	.9	5.20	10.0	6.34	6.7	5.40	20.5	5.49	374.5	7.99
Public Adm. & Defence	6.5	8.68	2.0	11.56	17.5	11.11	9.8	7.90	35.8	9.60	331.7	7.08
<b>Total</b>	<b>74.3</b>	<b>100.00</b>	<b>17.0</b>	<b>98.23</b>	<b>157.5</b>	<b>100.00</b>	<b>124.0</b>		<b>372.8</b>	<b>100.00</b>	<b>4,674.5</b>	<b>100.00</b>
<b>% ATL. PROV.</b>	<b>20.1</b>		<b>4.6</b>		<b>42.2</b>		<b>33.2</b>		<b>100.0</b>			
<u>1971</u>												
Forestry	2.2	2.15	.1	.44	2.6	1.28	5.4	3.38	10.3	2.11	62.6	.94
Mines, Quarries, etc.	5.9	5.76	-		5.5	2.71	2.4	1.50	13.8	2.83	128.3	1.93
Manufacturing	12.6	12.31	2.6	11.45	32.0	15.81	28.5	17.84	75.7	15.53	1,667.5	25.10
Construction	7.6	7.42	1.6	7.04	14.8	7.31	10.3	6.44	34.3	7.04	372.6	5.60
Transportation, etc.	14.6	14.27	3.1	13.65	20.9	10.33	22.8	14.27	61.4	12.60	671.1	10.10
Trade	18.2	17.79	4.5	19.82	34.9	17.25	27.7	17.34	85.3	17.50	1,095.2	16.48
Finance, Insurance, etc.	2.3	2.24	.6	2.64	7.3	3.60	4.7	2.94	14.9	3.05	306.7	4.61
Non-Commercial	21.6	21.11	5.7	25.11	45.4	22.44	33.1	20.72	105.8	21.71	1,170.6	17.62
Commercial	8.7	8.50	2.0	8.81	17.2	8.50	12.2	7.63	40.1	8.23	719.2	10.82
Public Adm. & Defence	8.6	8.40	2.6	11.45	21.7	10.72	12.7	7.95	45.6	9.35	449.5	6.76
<b>Total</b>	<b>102.3</b>	<b>100.00</b>	<b>22.7</b>	<b>100.00</b>	<b>202.3</b>	<b>100.00</b>	<b>159.7</b>	<b>100.00</b>	<b>487.2</b>	<b>100.00</b>	<b>6,643.3</b>	<b>100.00</b>
<b>% ATL. PROV.</b>	<b>21.0</b>		<b>4.7</b>		<b>41.5</b>		<b>32.8</b>		<b>100.0</b>			

Source: Statistics Canada, 72-508.

shows that all the industries listed, wholesale and retail trade is the second largest employer (next to non-commercial services). The proportion of employees in the industry in the Atlantic Provinces is relatively greater than the average for Canada; and between 1961 and 1971, the actual number of persons employed in trade increased by 23,000.

Clearly, the distribution industries are highly significant now in terms of their economic contribution and their potential for generating economic opportunities. To identify exactly where this potential lies, we will examine some of the weaknesses of the existing distribution system.

#### WEAKNESSES OF THE EXISTING SYSTEM

Our discussion is based on criticisms expressed by the members of industrial firms who were interviewed in the course of this study. Major criticisms centred around the lack of warehousing, the relatively small market and poor transportation facilities in the Atlantic region.

#### Warehousing

Representatives of national firms trading in the Atlantic region have criticized the lack of warehousing facilities suitable to their needs. Warehouses have been described as outdated and not structurally satisfactory for efficient operations and the handling of volume storage.

Warehousing statistics for the Atlantic region and other provinces in Canada are presented in Table 6.7. The available storage space in the Atlantic region expressed as a percentage of that for Canada showed a dramatic decrease between 1961 and 1970. General merchandise storage capacity fell from 3.62% in 1961 to 1.57% in 1971, that for refrigerated goods declined from 7.19% to 4.91%, and total available space declined from 4.95%

TABLE 6.7

WAREHOUSING: STORAGE SPACE AND AVERAGE  
OCCUPANCY RATES, BY PROVINCE, 1961, 1966, AND 1970

	STORAGE SPACE ('000 cu.ft.)								
	General Merchandise			Refrigerated Goods			1961	1966	1970
	1961	1966	1970	1961	1966	1970			
CAN.	53,919	78,878	163,529	32,059	40,241	46,644	85,978	119,119	210,173
ATL. PROV.	1,949	2,130	2,557	2,305	2,139	2,289	4,254	4,269	4,846
QUE.	11,051	17,928	45,328	7,679	10,293	10,885	18,730	28,221	56,213
ONT.	16,443	30,946	54,033	11,551	14,428	22,898	27,994	45,374	78,869
MAN.	6,390	7,749	10,858	3,923	4,483	4,465	10,313	12,232	15,323
SASK.	905	1,464	1,649	730	616	496	1,635	2,080	2,145
ALTA.	873	4,396	7,389	1,494	2,105	1,567	2,367	6,501	8,956
B.C.	16,308	14,264	41,715	4,376	6,178	4,045	20,684	20,442	45,760
ATL. PROV. (%CAN.)	3.62	2.70	1.57	7.19	5.32	4.91	4.95	3.58	2.31

	AVERAGE OCCUPANCY (%)								
	1961			1966			1970		
	1961	1966	1970	1961	1966	1970	1961	1966	1970
CAN.	73.4	80.7	76.3	71.1	73.4	74.6	72.5	78.2	75.9
ATL. PROV.	69.6	56.9	53.6	72.7	70.0	71.3	71.3	63.5	62.0
QUE.	77.4	78.4	81.6	76.6	76.6	76.5	77.1	77.7	80.6
ONT.	74.5	86.5	83.5	72.7	77.9	71.6	73.8	83.8	78.0
MAN.	82.3	85.2	76.7	74.0	66.0	84.7	79.1	78.2	79.0
SASK.	81.0	65.5	51.5	73.2	67.7	53.7	77.5	66.2	52.0
ALTA.	71.8	67.0	89.0	75.8	53.0	70.3	74.3	62.5	85.7
B.C.	66.1	78.0	61.2	51.8	71.3	81.9	63.1	76.0	63.0
ATL. PROV. (% CAN.AV.)	94.83	70.51	70.25	102.25	95.37	95.58	98.3	81.2	81.7

Source: Statistics Canada, 63-212.

to 2.31%.

Storage space for general merchandise in the Atlantic region rose from 1,949 thousand cubic feet in 1961 to 2,557 thousand cubic feet in 1970 (an average annual growth rate of 3.5%); space for refrigerated goods fell from 2,305 to 2,289 thousand cubic feet (an average annual rate of .07%); and total capacity increased from 4,254 to 4,846 thousand cubic feet (an average annual rate of 1.54%). The corresponding average annual rates of growth for Canada were 22.6%, 5.5% and 16.0% respectively.

New warehousing construction in the Atlantic region has not kept pace with the rest of Canada. Existing storage capacity therefore has a high proportion of relatively older structures which lack modern facilities. It is not surprising, then, to find that in spite of the available warehouse storage capacity (as reflected in the relatively low occupancy rates), complaints are made about the lack of warehousing in the Atlantic region.

The operating revenue per establishment for warehousing in the Atlantic region, as shown in Table 6.8, was consistently the lowest of any region between 1961 and 1970. Other factors held constant, these data suggest that on average the warehouses in the Atlantic region are smaller than those elsewhere in Canada. Revenues per employee are the second lowest in the country, indicating warehousing activities in the Atlantic region have a relatively higher labour content.

### Market

There is some feeling among distributors resident in the Atlantic region that many national firms regard the region as a residual market and treat it and its participants accordingly. These firms are observed to be using warehouses in Ontario and Quebec from which they make small shipments

TABLE 6.8

WAREHOUSING: ESTABLISHMENTS, EMPLOYEES, AND  
OPERATING REVENUES, BY PROVINCE, 1961, 1966, AND 1970

	NUMBER OF ESTAB.			NUMBER OF EMPLOYEES			OPERATING REVENUES (\$T)		
	1961	1966	1970	1961	1966	1970	1961	1966	1970
CAN.	118	145	135	3,560	4,625	4,647	31,434	51,373	72,794
ATL. PROV.	13	14	14	234	152	182	1,600	1,346	1,743
QUE.	29	32	29	638	783	745	5,039	7,669	11,029
ONT.	38	52	53	614	900	912	6,478	12,720	19,562
MAN.	8	11	9	398	456	450	3,572	3,555	5,765
SASK.	8	6	6	140	169	127	1,026	1,389	934
ALTA.	7	9	7	151	276	272	1,536	3,011	3,533
B.C.	15	21	17	1,385	1,889	1,959	12,183	21,683	30,228
ATL. PROV. (% CAN.)	12.04	9.66	10.37	6.58	3.29	3.92	5.09	2.62	2.40

## AVERAGE OPERATING REVENUE (\$000)

	PER ESTAB.			PER EMPLOYEE			PER CUBIC FEET		
	1961	1966	1970	1961	1966	1970	1961	1966	1970
CAN.	291.0	354.3	539.1	8.8	11.1	15.7	.37	.43	.35
ATL. PROV.	123.1	96.1	124.5	6.8	8.9	9.6	.38	.32	.36
QUE.	265.2	239.7	380.4	7.9	9.8	14.8	.27	.27	.20
ONT.	170.5	244.6	396.1	10.6	14.1	21.4	.23	.28	.25
MAN.	446.5	323.2	640.6	9.0	7.8	12.8	.35	.29	.38
SASK.	128.3	231.5	155.7	7.3	8.2	7.4	.63	.67	.44
ALTA.	219.4	334.6	504.7	10.2	10.9	13.0	.65	.46	.39
B.C.	812.2	1,032.5	1,788.1	8.8	11.5	15.4	.59	1.06	.66

Source: Statistics Canada, 63-212. Averages were computed.

to the Atlantic region if and when they please, and if supplies are available after the main markets have been served outside the Atlantic Provinces. Many of these firms have not been faced by competition. If they were, they could be forced to establish regional distribution centres and warehousing facilities.

#### Transportation

Most items destined for the Atlantic region are shipped f.o.b. loading points in central Canada. Given time delays in the transportation system, local distributors have a high in-transit inventory cost. Many of them tie up considerable working capital in above-normal inventory levels to avoid stock shortages.

#### Other Criticisms

Information gathered from some firms in Montreal suggests that there is a lack of middlemen in the Atlantic region. Consequently, these firms are not able to promote their products there. The firms claim that there may be a lack of entrepreneurship and/or risk capital in the Atlantic region. Because of the apparent shortage of middlemen, some distributors in the Atlantic region handle competing lines.

#### CONCLUSION

On the basis of the preceding discussion, we can make recommendations. There appears to be a need for warehousing and storage facilities for general merchandising, commodities requiring freezer space, and commodities requiring chiller storage. In addition, there seems to be some need for special purpose warehousing and storage facilities. Facilities should be constructed at

key distribution centres to link with the transportation services, and they should permit the making and breaking of bulk shipments to service the relatively smaller market in the Atlantic region.

*The potential for establishing modern, efficient, and adequate capacity warehousing and storage facilities should be investigated at key distribution points in the Atlantic region.*

There appears to be a need for a formal, well-organized, and properly managed Centralized Marketing System in several areas of the agriculture, fishing, forestry, and manufacturing industries. Such a system could effect economies by securing large orders and filling them with supplies from the large number of relatively small establishments operating in the Atlantic region. The Centralized Marketing System also could buy in bulk on behalf of the establishments which, for the most part, buy independently and in smaller orders.

*The feasibility of a Centralized Marketing Organization should be examined for a variety of industries in the primary sector.*

In the fishing industry, present tendency is for the small fishing companies to focus on wholesale trade with the Boston market. An auction market for fish in the Halifax area could revive and broaden the market for fish in this area.

*An auction market for fish should be considered for Metropolitan Halifax.*

It has been alleged that it would be cheaper to export fish from the Atlantic region by air than by road and rail if return cargoes were carried - such as supplies or fruits and vegetables, which are imported by the region. If a system (such as the Centralized Marketing System) could

be organized to secure large orders for the local wholesalers and retailers, increased quantities of fruits and vegetables could serve as return cargo. Chiller storage would have to be provided at airports participating in this service. Once established, the availability of these facilities would serve as an incentive for distributors to use this mode of transport.

*The feasibility of shipping fish, fruits, and vegetables by air should be carefully studied.*

CHAPTER 7 - FINANCIAL SERVICES, INSURANCE AND REAL ESTATE

The financial services, insurance and real estate industries directly provide numerous jobs and contribute substantially to the increase in Canada's Gross National Product. They also act as a direct stimulus to other forms of investment, either by individuals (in homes and consumer durables) or by business (for expansion or additions to buildings and equipment). This stimulus has a general effect on the level of economic activity of the Atlantic region and each of the provinces. Of a more specific effect is the impact of specialized firms providing venture capital. Venture capital is necessary for the realization of opportunities and for the stimulation of entrepreneurial activity. Accordingly, it is important to survey the availability of financial and insurance services in the Atlantic Provinces and to point out some of the economic implications of the current situation.

The existence in the region of finance and insurance companies also affects the choice of a head office location by other industries. Atlantic Canada already has many large enterprises; and others may be attracted to the region, particularly by its assets in transportation services. These enterprises may consider locating head office and administrative functions in the region; but an important factor in their decision will be ease of access to financial and insurance services. Thus, the development of these services is essential to growth in other industries. The relationships between head office and administrative activities and the financial and insurance industries appear to go beyond the availability of investment funds. Other important considerations include the existence of an executive business community, availability of skilled personnel, and access to specialized business

services, such as computer hardware and software.

In this chapter, we will describe the significance of financial services, insurance and real estate in the Atlantic region economy and indicate their forecasted growth to 1980. Then we will present a more detailed description of the venture capital industry, with specific reference to the Industrial Development Bank. On the basis of this discussion, we will make several recommendations and explore some of their implications.

#### ECONOMIC SIGNIFICANCE OF FINANCIAL SERVICES, INSURANCE, AND REAL ESTATE

The financial services, insurance, and real estate industries have a major impact on all industries in the economy; and they make a direct contribution of their own account by providing jobs and by generating value added in the economy.

In Table 7.1 data are provided on the employment in financial service industries throughout Canada. Projections indicate that employment in this field may increase by 50% in Canada during the 1970s.

The Atlantic region is sadly deficient in financial services. Toronto and Montreal account for about 45% of the employment in these industries; Halifax accounts for less than 1½%<sup>1</sup>. There are very few head offices of major banks or insurance companies in the Atlantic Provinces. If the region is to share in the projected rapid increase in employment, large firms must regionalize many of their activities or major new companies must commence operations.

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1. See report of the Nova Scotia Task Group on the Service Industries (January 4, 1973), p. 60.

TABLE 7.1 EMPLOYMENT IN FINANCE, CANADA,  
1948-1970 AND PROJECTED TO 1980

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<u>YEAR</u>	<u>THOUSANDS</u>
1948	140
1949	144
1950	142
1951	155
1952	162
1953	165
1954	170
1955	179
1956	193
1957	206
1958	211
1959	216
1960	226
1961	239
1962	248
1963	254
1964	264
1965	280
1966	302
1967	312
1968	326
1969	332
1970	340
1971	356
1972	377
1973	396
1974	408
1975	422
1976	442
1977	464
1978	483
1979	499
1980	518

---

SOURCE: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution

Rapid economic growth in terms of the "value-added" produced by enterprises in the finance, insurance, and real estate industries is forecast for the 1970s. Table 7.2 indicates that output during the decade may increase by 70% (discounting the effect of inflation). If the trend which is projected for Canada also holds true for the Atlantic Provinces, it is even more important that firms providing these services be encouraged to locate in the region. The expansion of the industry could provide a valuable stimulus to growth in other industries and other sectors of the economy.

Table 7.3 provides data on the value added for finance alone. When these statistics are read in conjunction with those given in Tables 7.1 and 7.2, the contribution to the Canadian economy is quickly seen. In 1970, for example, 340,000 employees produced services valued at about \$3,453 million; total output of finance, insurance and real estate combined was \$6,834 million. No employment data are available for insurance and real estate; but if productivity is comparable for all three industries, employment in 1970 would have been about 680 thousand, to 1.1 million in 1980. These estimates (though admittedly crude) underscore the employment-generating potential of the sector.

Toronto and Montreal currently benefit the most in terms of employment opportunities associated with the sector. They also gain from the fact that head office activities of other industrial enterprises tend to be located in the area. The presence of the head offices of a variety of firms and the strength of the finance, insurance, and real estate industries account for the high income levels that exist in these cities. This also has a beneficial effect on the region.

As we mentioned earlier, the availability of venture capital and loans to small businessmen is very important in reducing regional economic disparities. We will now turn our attention to an examination of the current

TABLE 7.2 INDUSTRY OUTPUT IN FINANCE, INSURANCE,  
AND REAL ESTATE, CANADA,  

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1950-1970 AND PROJECTED TO 1980

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<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1950	2,524
1951	2,572
1952	2,801
1953	3,045
1954	3,137
1955	3,454
1956	3,654
1957	3,722
1958	3,929
1959	4,102
1960	4,195
1961	4,284
1962	4,492
1963	4,733
1964	5,090
1965	5,372
1966	5,639
1967	5,921
1968	6,257
1969	6,616
1970	6,834
1971	7,221
1972	7,856
1973	8,375
1974	8,643
1975	8,973
1976	9,531
1977	10,120
1978	10,608
1979	11,019
1980	11,486

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SOURCE: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution

TABLE 7.3 FINANCE (Real Domestic Product), CANADA,

1948-1970 AND PROJECTED TO 1980

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<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	1,366
1949	1,449
1950	1,504
1951	1,628
1952	1,678
1953	1,724
1954	1,796
1955	1,844
1956	1,899
1957	2,045
1958	2,054
1959	2,105
1960	2,180
1961	2,210
1962	2,384
1963	2,535
1964	2,659
1965	2,832
1966	2,963
1967	3,139
1968	3,227
1969	3,358
1970	3,453
1971	3,689
1972	4,008
1973	4,267
1974	4,396
1975	4,557
1976	4,835
1977	5,129
1978	5,370
1979	5,573
1980	5,804

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SOURCE: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution

venture capital situation and existing alternatives in the Atlantic Provinces.

#### VENTURE CAPITAL IN THE ATLANTIC REGION

Venture capital is a specialized segment of the banking and insurance industries which has received very little attention in the past. Although the industry in Canada is very small, its real importance is substantial.

Venture capital is defined as the provision of debt or equity capital for the growth of small business prior to its becoming a public company. Venture capital firms thus provide investment funds and often management services to fledgling enterprises; in effect, they help to convert ideas into operating businesses. In addition to private firms, the provincial and federal governments throughout Canada provide venture capital under various Acts and through established incentive programs.

A recent study on venture capital in Canada<sup>2</sup> surveyed representatives of the industry and other businessmen, and a number of interesting conclusions emerged. The stated geographic preferences of venture capital companies indicate a strong desire to invest in the regions where their offices are located; and a survey of the firms making use of venture funds suggests a tendency of the industry to ignore enterprises based in the Atlantic region. In 1972 there were 54 venture capital firms in Canada, and these were distributed as follows:

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2. R.M.Knight and R.D.Oliver, Venture Capital in Canada - A Survey (Ottawa: Department of Industry, Trade and Commerce, May 1973)

6 in British Columbia; 3 in Alberta; 27 in Ontario; 17 in Quebec; and 1 - the Industrial Development Bank - with offices in all the provinces.

Another interesting finding of the survey is that venture capital firms are increasingly interested in joint ventures involving some of their competitors. Thus, in encouraging the development of the industry in the Atlantic region, one must think in terms of attracting more than one firm to a particular city.

This survey indicates that the private sector is not well organized to provide capital and management services to small firms in the Atlantic Provinces, and that there are substantial barriers to the establishment of the venture capital industry in Atlantic Canada. Perhaps the greatest problem relates to the need for funds by small businessmen. It is significant that these entrepreneurs are generally unaware of existing government assistance programs.

Against this background, it is instructive to examine the performance of the Industrial Development Bank.

#### The Industrial Development Bank

The Industrial Development Bank (IDB) is a subsidiary of the Bank of Canada. It provides loans, particularly to smaller enterprises, and also assists in upgrading the managerial skills of small businessmen. It is a major source of venture capital to existing firms wishing to expand, modernize, and diversify. The Bank has grown rapidly during the 1960s and 1970s. The number of loans increased from 2,168 in 1967 to 5,889 in 1972. The value of loans also has increased, from \$113 million in 1967 to \$262 million in 1972, and the average loan has diminished in size from \$52,000 to \$45,000

over this period; about half of the loans granted are for less than \$25,000. According to these figures, the needs of relatively small enterprises do not appear to have been sacrificed in the course of the Bank's expansion.

Enterprises in the Atlantic Provinces have clearly benefited from the growth of the IDB, as is indicated in Table 7.4. In 1967, about 7% of the total number of loans were extended in the Atlantic region; by 1972, the proportion had risen to about 9%. This indicates a much more rapid growth in the number of loans extended for the Atlantic Provinces (an increase of 270% over the period) than for Canada as a whole (an increase of 180%). The most rapid rates of increase occurred in Newfoundland and Prince Edward Island. In terms of the value of loans, the Atlantic Provinces received about 5.5% of the Canadian total in 1967; by 1972, this had increased to 6.4%. Thus, along with the rapid increase in the number of loans, there has been a reduction in the average value of loans extended in the Atlantic region.

Another important development that is revealed in Table 7.4 is the strong increase in the IDB's loan activities in Nova Scotia. The number of loans and the value of loans increased very rapidly between 1968 and 1969. Much of this growth is directly attributable to the opening of another IDB branch office in Sydney, Nova Scotia. Thus, it appears that the Industrial Development Bank, like other venture capital firms, tends to stimulate business in those geographic regions in which it is located. IDB offices are located in Halifax (regional office), St. John's, Sydney, Saint John, Moncton, and Charlottetown.

Additional locations for IDB branch offices may similarly increase the availability of loans to small enterprises, as has been the case in the past. In view of the relative shortage of venture capital in the Atlantic Provinces, it is recommended that

TABLE 7.4 INDUSTRIAL DEVELOPMENT BANK LOANS  
THE ATLANTIC PROVINCES AND CANADA,  
1967-1972

A. Number of Loans

Province	<u>Year</u>					
	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
Newfoundland	31	31	38	81	87	149
Prince Edward Island	8	17	16	34	33	46
Nova Scotia	45	44	92	116	136	186
New Brunswick	60	63	120	85	112	142
Sub Total	<u>144</u>	<u>155</u>	<u>266</u>	<u>316</u>	<u>368</u>	<u>523</u>
Canadian Total	2,168	2,515	2,988	3,584	4,449	5,889

B. Amount of Loans

	(\$000)					
Newfoundland	1,092	1,315	1,290	2,563	2,563	4,892
Prince Edward Island	515	355	447	804	1,378	1,276
Nova Scotia	1,516	1,565	3,692	3,750	3,996	5,686
New Brunswick	3,084	2,124	5,119	3,521	3,488	5,039
Sub Total	<u>6,207</u>	<u>5,359</u>	<u>10,548</u>	<u>10,638</u>	<u>11,425</u>	<u>16,893</u>
Canadian Total	113,132	120,253	153,440	164,628	195,980	262,310

SOURCE: Industrial Development Bank, Annual Report, 1972.

*Encouragement should be provided to the Industrial Development Bank to create more offices to serve the dispersed business community of the Atlantic region. The Bank's promotional efforts should continue and, as far as possible, should focus on the needs of the management of small firms (including seminars and pamphlets on a variety of subjects) which are special to the region and/or provinces.*

### Developmental Opportunities

While it is to be hoped that existing finance and insurance firms will increasingly regionalize their activities, more direct action may be initiated in Atlantic Canada. In order to participate directly in the anticipated growth of these industries, the governments of Nova Scotia, New Brunswick and Newfoundland may create crown corporations providing general and/or automobile insurance. Currently, three other Canadian provinces (Manitoba, Saskatchewan, and British Columbia) have such corporations, and the benefits within the provinces are substantial.

In each of the provinces, the revenue derived from automobile insurance alone would be \$20 million to \$30 million annually. Within the region, the premiums would total about \$90 million. This premium income is a source of investment funds (approximately half would be available for investment). The experience of the Manitoba Auto Insurance Corporation is worthy of mention: in the first year of operation insurance rates have been reduced by 15% and an operating profit of \$2.2 million has been generated (most of it realized through the investment of premium income).

Establishment of these insurance corporations would result directly in the creation of numerous jobs for their administration and operation. Significant other benefits also may be realized. Insurance premiums may fall, thereby increasing the real income and economic well-being of consumers in the

region. By increasing the amount of cash received by the provincial government and its associated agencies and corporations, the Province also increases its borrowing capacity. Thus, the financing of long-term developmental projects may be more readily achieved. Also, the funds invested by the insurance corporation may be made available to investors in the province, thereby helping them to realize potential economic opportunities.

Another side benefit which may result is the expansion of the local market for business and consulting services. The market for computer services and part-time and full-time office personnel also will expand; and as firms become established to cater to the market, other firms in the private sector may be encouraged to decentralize head office functions or to relocate their head office activities in the Atlantic region.

Another offshoot of an automobile insurance corporation is the possible evolution of an automobile scrappage firm as a subsidiary of the insurance enterprise (this has occurred in Saskatchewan and is planned in Manitoba). When wrecked cars are not worth repairing, they can be broken down for secondhand parts, and the remainder of the hulk can be shredded and recycled in a steel plant. The car hulk thus is economically utilized, eyesores are avoided, and a profit can be earned by the scrappage firm (in Saskatchewan, the business generates additional jobs and a substantial operating profit). The distribution of secondhand parts also reduces the cost of automobile repairs; this represents a direct gain to consumers and provides for further reductions in insurance premiums.

In the field of banking and finance, the establishment of crown corporations to serve as credit unions may marginally augment the number of

people employed in the industry. There would appear to be few other direct advantages, however, and the indirect benefit of keeping the money in the province might also tend to be of minor consequence.

Each of the provinces in the Atlantic region may attempt to strengthen its capacity to provide venture capital and associated management expertise to small businessmen. The resources to support an active program may be provided both by the province and through existing federal programs. The major service provided beyond the expansion of programs and services would be the education of the small businessman in the use of available assistance.

#### CONCLUSION

The finance, insurance, and real estate industries are of major consequence in the Canadian economy. Their projected rate of growth of output and employment is substantial. In the Atlantic region, however, most of these services are imported from other parts of Canada, and these industries are relatively underdeveloped.

Of greater consequence than the question of employment are the following circumstances:

1. The availability of investment funds is limited;
2. The development of head office and administrative activities by other enterprises is limited, as a result of the lack of required services, trained personnel, and an "appropriate" business community;
3. The operation of the venture capital industry is limited.

In trying to cope with these problems, which contribute to and

reflect regional economic disparities, several options are worth exploring:

1. Insurance and finance-related enterprises may regionalize their operations;
2. The growth of business services and other support services required by insurance, finance, and head office activities may be stimulated;
3. Automobile and/or general insurance companies may be organized as provincial crown corporations;
4. Branch offices and managerial upgrading activities of the Industrial Development Bank may be extended;
5. The operations of credit unions may be strengthened in terms of membership and investment of funds.

The Department of Regional Economic Expansion, through its administration of the Incentive Act, has tried indirectly to redress some of the deficiencies associated with weakness in this component of the service sector. It appears that direct action in terms of stimulating the growth of these industries will contribute substantially to efforts to reduce regional economic disparities.

CHAPTER 8 - RESIDENTIAL AND COMMERCIAL CONSTRUCTION

The building construction industry has two major components:

1. Residential construction (housing)
2. Commercial construction (for business, government, and social institutions)

Thus, it is relevant to the two major concerns of economic planning: the satisfaction of consumer needs and the provision of new economic opportunities. The industry also is highly labour intensive, and it is linked directly and in many ways with other sectors of the economy.

One of the most important characteristics of the construction industry is that it is very sensitive to the actions of government and government agencies. For example, municipal governments determine the suitability of specific areas for a variety of commercial, industrial, and residential purposes. Provincial and federal government departments establish building standards and labour regulations. Central Mortgage and Housing Corporation, the Bank of Canada, and chartered banks control the availability of mortgage funds and the prevailing interest rate on personal and business loans. All levels of government also stimulate the demand for additional plant, subsidized housing, and other construction projects. Thus, the industry is directly subject to a variety of external influences that affect its output both nationally and provincially.

It is for these reasons that the industry should be viewed in the context of the service sector and that its potential for reducing economic disparities should be examined. Our discussion will adopt a regional focus, with some emphasis on specific provincial conditions.

## DEMAND FOR HOUSING

Residents of all provinces in Canada require shelter in the form of houses or apartment buildings. The demand for construction services in housing in any given province is affected by two main factors:

1. The number of households in the province
2. The province's rate of urbanization

Table 8.1 presents data on the growth in the number of households in Canada. Between 1949 and 1980, one finds a doubling in the number of households. The projected increase in households during the 1970s is about 25%. The demand for housing over this period, however, has more than doubled. Table 8.2 indicates that the number of housing starts almost trebled between 1950 and 1970, and an increase of 50% is projected between 1970 and 1980. Thus, the number of housing starts is increasing at about double the rate of growth in the number of households. The additional demand for housing is affected by increases in consumer incomes and in their standard of living and by the rate of urbanization in the economy. Given these factors, the demand for housing in the Atlantic region appears to be adversely affected by the following conditions:

1. A lower than average per capita income in the region
2. Low rates of population increase and growth in family formation
3. A relatively slow increase in the rate of urbanization in each of the Atlantic Provinces

Despite the inhibiting effect of these three conditions, residential and commercial construction is still a major industry and a major source of employment in the Atlantic Provinces.

TABLE 8.1 TOTAL NUMBER OF HOUSEHOLDS, CANADA,  
1949-1970 AND PROJECTED TO 1980

---

<u>YEAR</u>	<u>MILLIONS</u>
1949	3,436
1950	3,515
1951	3,601
1952	3,743
1953	3,840
1954	3,934
1955	4,016
1956	4,112
1957	4,235
1958	4,325
1959	4,411
1960	4,490
1961	4,564
1962	4,637
1963	4,714
1964	4,800
1965	4,898
1966	5,019
1967	5,150
1968	5,277
1969	5,401
1970	5,525
1971	5,648
1972	5,775
1973	5,906
1974	6,040
1975	6,178
1976	6,320
1977	6,465
1978	6,613
1979	6,764
1980	6,916

---

SOURCE: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution

TABLE 8.2 TOTAL HOUSING STARTS, CANADA,  
1950-1970 AND PROJECTED TO 1980

---

<u>YEAR</u>	<u>THOUSANDS</u>
1950	96
1951	76
1952	96
1953	117
1954	132
1955	155
1956	137
1957	131
1958	175
1959	152
1960	114
1961	126
1962	130
1963	148
1964	165
1965	166
1966	134
1967	164
1968	196
1969	210
1970	190
1971	238
1972	274
1973	260
1974	238
1975	238
1976	246
1977	258
1978	268
1979	272
1980	272

---

SOURCE: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution

Before we examine the employment situation, it is important to consider other industries affected by construction. The obvious ones are suppliers, producers of building products, skilled trades, and industries based on the community infra-structure (including roads, sewers, schools, and electricity). The industries that are often overlooked, however, are those that provide services oriented to the operation of households. Table 8.3 presents consumer expenditures on household operation services. A very rapid growth rate in the demand for such services is indicated. During the 1970s alone, the demand is projected to increase by about 165%. It appears that increasing affluence leads people to acquire goods, improve houses, and hire others to undertake maintenance and repairs. Because the industries providing household operation services are highly labour intensive, the very rapid increase in demand will create many new jobs - an estimated employment increase of 200,000 throughout Canada by 1980. It is useful to calculate the extent to which the Atlantic Provinces may share in this growth in demand for services and in related employment.

Because of their lower average per capita income, the Atlantic Provinces currently consume fewer household services than other provinces in Canada. Existing industries providing these services are therefore relatively underdeveloped. If regional economic disparities were reduced between the Atlantic region and the rest of Canada, this industry could develop very rapidly, and over 20,000 new job opportunities could be created in the region during the 1970s.

TABLE 8.3 CONSUMER EXPENDITURES ON HOUSEHOLD OPERATION SERVICES,  
CANADA, 1948-1970 AND PROJECTED TO 1980

---

<u>YEAR</u>	<u>MILLIONS OF CURRENT DOLLARS</u>
1948	164
1949	187
1950	192
1951	227
1952	256
1953	277
1954	288
1955	309
1956	333
1957	352
1958	378
1959	411
1960	427
1961	451
1962	457
1963	472
1964	521
1965	579
1966	617
1967	675
1968	700
1969	749
1970	804
1971	926
1972	1,072
1973	1,224
1974	1,347
1975	1,447
1976	1,573
1977	1,722
1978	1,868
1979	2,004
1980	2,156

---

SOURCE: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution

### DEMAND FOR COMMERCIAL CONSTRUCTION

The second major component of the construction industry is non-residential or commercial building construction. Table 8.4 summarizes the economic output of this industry. During the 1970s, output is expected to increase by 70% (discounting any inflationary effects). When these data are compared with those for residential construction (see Table 8.5), it appears that both industries exhibit a similar rate of increase; but in terms of absolute size, the commercial construction industry is about 20% larger.

As is the case for residential construction, government plays a substantial role in the scope and development of commercial construction. The nature of its impact, however, is much different in this case, in view of the fact that many non-residential buildings are constructed for the federal, provincial and municipal governments and their agencies. The potential exists for the three levels of government to use their combined purchasing power to create a specific effect in the development of the industry.

### ECONOMIC IMPACT OF RESIDENTIAL AND COMMERCIAL CONSTRUCTION

During the 1970s, the combined output of the residential and commercial construction industries is expected to rise from about \$4.8 billion to \$8.1 billion (see tables 8.4 and 8.5). This major expenditure will benefit all sectors of the economy: the primary and manufacturing sectors will supply construction materials, and the service sector will provide much of the skilled labour required. If demand in the industry rises, more work will be provided to many people.

TABLE 8.4 INDUSTRY OUTPUT, COMMERCIAL CONSTRUCTION,  
CANADA, 1950-1970 AND PROJECTED TO 1980

---

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1950	888
1951	1,001
1952	1,051
1953	1,191
1954	1,205
1955	1,242
1956	1,490
1957	1,671
1958	1,593
1959	1,724
1960	1,755
1961	1,791
1962	1,879
1963	1,933
1964	2,135
1965	2,482
1966	2,780
1967	2,649
1968	2,556
1969	2,531
1970	2,664
1971	2,642
1972	2,611
1973	3,001
1974	3,370
1975	3,622
1976	3,741
1977	3,873
1978	4,041
1979	4,212
1980	4,383

---

SOURCE: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution

TABLE 8.5 INDUSTRY OUTPUT, RESIDENTIAL CONSTRUCTION,  
CANADA, 1950-1970 AND PROJECTED TO 1980

---

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1950	1,015
1951	772
1952	862
1953	1,129
1954	1,283
1955	1,590
1956	1,601
1957	1,424
1958	1,787
1959	1,829
1960	1,509
1961	1,497
1962	1,551
1963	1,600
1964	1,859
1965	1,956
1966	1,821
1967	1,853
1968	2,103
1969	2,161
1970	2,197
1971	2,406
1972	2,884
1973	3,027
1974	2,919
1975	2,925
1976	3,062
1977	3,264
1978	3,455
1979	3,590
1980	3,680

---

SOURCE: Canadian Disaggregated Interdepartmental Econometric  
Model (CANDIDE) September Solution

TABLE 8.6 CONSTRUCTION ACTIVITY AS A  
PROPORTION OF CAPITAL EXPENDITURES  
ATLANTIC PROVINCES, 1961, 1966, AND 1971

<u>Province</u>	<u>1961</u>	<u>1966</u>	<u>1971</u>
Newfoundland	29.87	23.38	36.15
Prince Edward Island	6.20	4.74	3.80
Nova Scotia	36.23	34.29	33.85
New Brunswick	27.70	32.59	

As is evident from Table 8.6, the proportion of capital expenditures devoted to construction is very substantial for all the Atlantic Provinces except Prince Edward Island. Over the period, however, this proportion has declined for three of the provinces; in Newfoundland, there has been a considerable increase.

The relative amount of construction carried out in the Atlantic region as compared with the rest of Canada differs for various types of construction. Table 8.7 indicates some of the differences:

1. The proportion of expenditures on residential construction lagged behind the Canadian average throughout the 1961-1971 period.
2. Commercial construction also lagged behind the national average.
3. Investment in marine and road construction exceeded the national average but narrowed over the decade.

These differences reflect some aspects of regional economic disparities. As a result of emigration from the region, residential and commercial construction lags behind the average for the rest of Canada.

TABLE 8.7

CONSTRUCTION WORK PERFORMED BY PRINCIPAL TYPE OF CONSTRUCTION,  
ATLANTIC PROVINCES AND CANADA, 1961, 1966, AND 1971

Type of Construction	1961		1966		1971	
	ATL.PROV.	CANADA	ATL.PROV.	CANADA	ATL.PROV.	CANADA
Total Construction	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Building Construction	58.9	58.3	53.6	59.6	51.1	57.1
Residence	24.4	28.3	21.0	26.1	26.2	30.5
Commercial	6.9	10.0	7.8	10.8	5.2	8.3
Industrial	10.1	5.5	7.9	7.9	10.8	6.4
Institution	10.9	10.1	12.6	11.3	7.5	9.1
Other	6.6	4.4	4.3	3.5	1.4	2.9
Total Engineering Construction	41.1	41.7	46.4	40.4	48.9	42.9
Marine	5.1	1.9	4.1	1.1	1.9	0.1
Road and highway	17.0	11.4	17.6	10.9	13.6	8.8
Oil and Gas	1.8	7.5	.3	5.9	5.5	4.3
Other	17.2	20.9	24.4	22.5	27.9	29.7

SOURCE: Statistics Canada

Because of geographic factors, investment in roads and marine facilities tend to absorb relatively scarce capital resources.

In spite of these factors, the industry has experienced substantial growth, though this varies for each province. Table 8.8 shows the nature of such variation in growth rate for new construction.

During the 1960s, new construction in the Atlantic region grew more rapidly than it did in Canada as a whole. New construction appears to have grown fastest in Newfoundland and New Brunswick; in part, this results from the relatively low amount of activity in the base period (1961). In Newfoundland, most activity occurred in institutional, road and highway, and oil and gas construction. In New Brunswick, the main source of rapid growth was residential construction. The above average growth rate indicated for the entire region is attributable to the growth in investment in large refineries. It should be noted that this industry does not directly create many jobs (about one job for every \$500,000 to \$1,000,000 of invested capital). In contrast, investment in roads and highways creates many jobs in road construction and maintenance and helps to bolster the tourism and recreation industries.

Thus, when we look at construction activity in the Atlantic region, we find that the industry is large and rapidly growing, and that the growth rates compare favourably with the Canadian average. But the important consideration in terms of long-term economic benefit is the proportion of construction activity initiated by the various sectors of the economy. Table 8.9 gives data on this question.

The most rapid growth in capital expenditures (including construction and equipment) has been in manufacturing industries and utilities,

TABLE 8.8

INDICES FOR NEW CONSTRUCTION, BASE 1961,  
ATLANTIC PROVINCES AND CANADA, 1971

	NFLD.	P.E.I.	N.S.	N.B.	ATL.PROV.	CAN.
<u>TOTAL VALUE</u>						
1961	100.00	100.00	100.00	100.00	100.00	100.00
1971	357.81	244.11	239.60	270.81	285.70	248.27
Av. Annual (%)	25.78	14.41	13.88	17.08	18.57	14.83
<u>BUILDING CONSTRUCTION</u>						
<u>Residential</u>						
1961	100.00	100.00	100.00	100.00	100.00	100.00
1971	245.74	770.97	218.76	324.30	264.78	250.29
Av. Annual (%)	14.57	67.10	11.88	22.43	16.48	15.03
<u>Commercial</u>						
1961	100.00	100.00	100.00	100.00	100.00	100.00
1971	108.02	244.08	206.08	212.07	184.53	186.16
Av. Annual (%)	.81	14.41	10.61	11.21	8.45	8.62
<u>Industrial</u>						
1961	100.00	100.00	100.00	100.00	100.00	100.00
1971	229.16	358.05	338.57	793.45	290.58	286.47
Av. Annual (%)	12.92	25.81	23.86	69.35	19.06	18.65
<u>Institutional</u>						
1961	100.00	100.00	100.00	100.00	100.00	100.00
1971	352.16	205.85	105.15	188.39	179.55	201.46
Av. Annual (%)	25.22	10.59	.52	8.84	7.96	10.15
<u>Others</u>						
1961	100.00	100.00	100.00	100.00	100.00	100.00
1971	86.36	58.24	45.88	118.32	69.50	173.73
Av. Annual (%)	- 1.36	- 4.18	- 5.41	1.83	- 3.05	7.37
<u>ENGINEERING CONSTRUCTION</u>						
<u>Marine</u>						
1961	100.00	100.00	100.00	100.00	100.00	100.00
1971	68.26	73.65	134.30	87.57	94.67	153.24
Av. Annual (%)	- 3.17	- 2.64	3.43	- 1.24	.53	5.32
<u>Road, Highway, etc.</u>						
1961	100.00	100.00	100.00	100.00	100.00	100.00
1971	388.02	84.62	277.18	228.28	277.12	186.32
Av. Annual (%)	28.80	- 1.54	17.72	12.83	17.71	8.63
<u>Gas &amp; Oil</u>						
1961	100.00	100.00	100.00	100.00	100.00	100.00
1971	1,324.27	96.08	1,234.27	134.19	800.37	125.84
Av. Annual (%)	122.43	.39	113.43	3.42	80.04	2.58
<u>Others</u>						
1961	100.00	100.00	100.00	100.00	100.00	100.00
1971	704.81	339.68	459.77	380.79	517.56	397.79
Av. Annual (%)	60.48	23.97	35.98	28.08	41.76	29.78

TABLE 8.9

INDICES FOR CAPITAL EXPENDITURES ON CONSTRUCTION, BASE 1961,  
BY SECTOR, ATLANTIC PROVINCES, 1971

<b>Primary Industry Construction</b>					
1961	100.00	100.00	100.00	100.00	100.00
1971	202.69	130.00	282.49	213.87	215.67
Av. Annual (%)	10.27	3.00	18.25	11.39	11.57
<b>Manufacturing</b>					
1961	100.00	100.00	100.00	100.00	100.00
1971	500.52	84.21	448.53	600.46	491.65
Av. Annual (%)	40.05	- 1.58	34.85	50.05	39.17
<b>Utilities</b>					
1961	100.00	100.00	100.00	100.00	100.00
1971	788.89	134.78	311.79	221.70	401.33
Av. Annual (%)	68.89	3.48	21.18	12.17	30.13
<b>Trade, Finance, and Commercial Construction</b>					
1961	100.00	100.00	100.00	100.00	100.00
1971	215.79	61.36	170.93	226.74	187.73
Av. Annual (%)	11.58	- 3.86	7.09	12.67	8.77
<b>Housing, Institutional, and Government Construction</b>					
1961	100.00	100.00	100.00	100.00	100.00
1971	314.14	241.18	221.57	239.28	250.27
Av. Annual (%)	21.41	14.12	12.16	13.93	15.03

Source: STATISTICS CANADA

particularly in Newfoundland and Nova Scotia. Expenditures in manufacturing have grown rapidly in New Brunswick also. In this sector, capital expenditures are required to upgrade industrial capacity and/or to modernize manufacturing plants. Utilities have had to expand their capacity in order to meet the needs of industry. The data presented in Table 8.9 reflects, in part, the efforts of the Federal Government to encourage industrialization in the Atlantic Provinces. What they do not reveal, however, is the fact that while the capital expenditures in manufacturing have increased rapidly, employment opportunities have not expanded at the same rate. The reason for this is that the amount of capital expenditure required to create a job in manufacturing has increased since 1961.

Employment in construction is directly affected by the level of activity. Table 8.10 presents the number of job opportunities created in the industry from 1948-1970 and projected to 1980. Employment is expected to increase by 111,000 (23%) during the 1970s throughout Canada. Table 8.11 indicates that the rapid growth of the industry (see Tables 8.8 and 8.9) has resulted in an increase in the proportion of the labour force that is employed in construction.

While the jobs created in the construction industry have had a beneficial effect on the economy of the Atlantic region, intersectoral and interindustrial links have not yet emerged. The persistence of disproportionately high rates of unemployment (generally double the Canadian average) along with a high rate of growth in construction, particularly in manufacturing industries, might tend to defy economic wisdom - that is, high rates of investment in industry would be expected to reduce economic disparities. As we mentioned earlier in this report, however, the availability and use of

TABLE 8.10 EMPLOYMENT IN CONSTRUCTION, CANADA,  
1948-1970 AND PROJECTED TO 1980

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<u>YEAR</u>	<u>THOUSANDS</u>
1948	267
1949	295
1950	308
1951	324
1952	314
1953	322
1954	311
1955	342
1956	382
1957	406
1958	397
1959	413
1960	387
1961	377
1962	393
1963	406
1964	409
1965	463
1966	499
1967	475
1968	470
1969	482
1970	471
1971	475
1972	484
1973	502
1974	516
1975	529
1976	540
1977	552
1978	565
1979	575
1980	582

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SOURCE: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution

TABLE 8.11

PERCENTAGE OF EMPLOYED LABOUR FORCE IN CONSTRUCTION,  
CANADA AND THE ATLANTIC PROVINCES,  
1961 AND 1971

	1961	1971
CANADA	4.8	4.6
ATLANTIC PROVINCES	4.8	5.5

Source: Construction in Canada, Statistics Canada, Cat. 64-201,  
various years.

business services is a critical factor in sustaining industrial enterprise in the region. Large investment in utilities, oil refineries, or industrial plants often requires the importation of machinery and skilled technicians to design and establish the facility, and perhaps even to operate it. Also, many of the industries are capital intensive and create very few permanent jobs, even though investment may be very substantial. Thus, even though investment is growing rapidly and temporary construction jobs are created, long-term economic benefits have not been realized in the Atlantic region.

As we indicated in Chapter 2, the components of the service sector are interrelated. The potential exists to encourage the development and growth of some components (such as business services, finance, and insurance), thus providing for the opportunity of growth in other industries in the economy. In the case of residential and commercial construction, construction activity has increased rapidly, but the full beneficial effects have not been experienced by the economies of the Atlantic Provinces, in large part because of deficiencies elsewhere in the service sector.

### CONCLUSION

The residential and commercial construction is a very large industry in terms of output and employment generated. The industry exhibits some special characteristics:

1. Growth in the industry has a broad impact throughout the economy.
2. Government plays both a direct and an indirect role in the development of the industry.

The intersectoral and interindustrial linkages associated with expansion of the construction industry are all-pervasive. Expansion in construction creates a demand for labour, building materials, and manufactured products. The industry in Atlantic Canada currently provides about 60,000 jobs and should provide another 15,000 to 18,000 jobs during the 1970s if the current rate of growth continues. Residential construction also gives rise to an increased demand for household services. In addition to these direct effects, the number of housing starts reflects availability of shelter and the extent of urbanization in the region. In commercial construction, increases in activity are indicative of the growth of the economy.

Policies and practices at all three levels of government have a direct impact on the level of construction activity. The Federal Government affects the availability of mortgage funds, can redirect some expansion of the economy into economically depressed regions, and can decentralize some of its activities to other parts of Canada. The provincial and municipal governments also contribute to the demand for residential and commercial construction.

In general, we can conclude that the residential and commercial construction industries are necessary to help convert economic opportunities into reality. The rapid increase in activity between 1961 and 1971 was greater in the Atlantic region than in the rest of Canada. Many of the potential benefits that exist have not been realized because of leakages in other parts of the economy. To block such leakages, it is recommended that:

*The federal, provincial, and municipal governments should use their influence to encourage growth in those service industries which are peripheral to residential and commercial construction activities.*

*Planning for affecting the demand for residential and commercial construction should be phased into programs for reducing economic disparities between the Atlantic region and the rest of Canada. Specifically, the industry should be thought of in terms of adding to the economic base of the provincial economies and meeting consumer needs for shelter.*

In converting these recommendations into programs which coincide with other development initiatives, the relative importance of the construction industry in each of the provincial economies must be kept in mind.

CHAPTER 9 - TOURISM AND RECREATION

Tourism has often been regarded as a resource-based industry, but the full implications of this perspective have not been examined to date. The relevance of tourism to resources must be perceived within the context of renewable, as opposed to non-renewable, resources. In this context, Canada's tourist industry appears to have followed the exploitive resource-depleting approach typical of the resource-extractive sectors of the economy. Thus, a park of natural beauty, representing an opportunity to "commune with nature", is literally stripped of its original attraction by the provision of tent and trailer campgrounds; and entire sections of the park develop into little more than mobile suburban barbecues. Similarly, a quiet lake admirably suited to canoeing and fishing is despoiled by the incursion of large numbers of power boats. Among winter recreation activities, snowmobiling is currently being blamed for damage to rural and wilderness areas.

These examples of resource depletion relate directly to the phenomenon of human mobility by mechanical means. Increased mobility is, of course, a most striking characteristic of twentieth-century industrial society, and it represents a key factor in the breakthrough to a so-called post-industrial society. Canada is in the mainstream of international mobility, and it typifies the mobility represented by the shift from rural to urban living. Also, Canadians are among the most widely travelled of people. This propensity to visit anywhere does not appear to be strongly dependent on age or economic status. Our youth can be found hitchhiking

from Moosejaw to Medicine Hat, from Vienna to Zurich, and from Cheyenne to San Francisco; but at the same time, the poor today have opportunities for subsidized travel from points across Canada to conferences in Toronto or Ottawa. The more affluent, of all ages, can be found in Acapulco, Lisbon, and Bali.

In a more personal sense, the vast majority of the population have automobiles at their command and, indeed, consider them basic to their lifestyle. A significant number of people feel that it is essential to have, in addition, a snowmobile, a trailer or camper, a powerboat, and/or a bicycle (stationary or mobile). An increasing number own aircraft. The impact on tourism of this desire to acquire transportation has been matched only by the expansion of air travel.

This general mobility has had a tremendous impact on business, industry, and education. The snowmobile industry is a phenomenon of the past ten years. Development of and modifications to trailers, campers, and mobile homes are endemic to Canada. The provision of hotels, motels, lodges, campsites (public and private), and other forms of tourist accommodation has expanded in recent years at a rapidly increasing rate. Outdoor education has been transformed from the offering of informal programs by school and social agencies to its inclusion as an integral part of the formal educational system.

There is yet another important aspect of the mobility phenomenon. Mobility in and of itself has always been viewed as a recreational activity, and this tendency is growing. Walking, running, jumping, horseback riding, rowing, sailing, canoeing, cycling, automobile driving, and flying, all have recreational devotees. To a significant extent, this trend is stimulated by communications, particularly by advertising through the media. Canadians are exhorted through radio, television, the newspapers, magazines, public

address systems, booklets, pamphlets, brochures, direct mailings, and personal contact to go, come, see, travel, visit, drive, fly, ride. Much of the appeal is to the tourist trade, hotels, motels, resorts, golf courses, and exotic lands and experiences. Supplementary consumer goods are constantly associated with tourism - liquor, cigarettes, soft drinks, campers, trailers, station wagons, boats, and luggage; and yet another appeal is to activities - theatre, cinema, symphony, jazz, sports events, and pageants. These are the tourist "products" competing for the attention - and the dollars - of our mobile population.

There is an additional attraction which is increasingly falling within the venue of the huckster - natural resources. The beautiful forest, the sylvan lake, the white sand beach, the dramatic waterfall, and the panoramic view are all features that the tourist industry can sell. The irony in this case is that the very fact of attracting hordes of visitors can destroy the fundamental attraction of natural features. With appropriate controls, however, these can become renewable or self-renewing resources.

Another aspect of tourism which has perhaps been more rationally promoted in older cultures than in North America is the cultural milieu, the output of man's social, religious, and cultural achievements. Visits are made to London, Paris, or Rome, not simply because of nostalgic ties with the past, nor for the theatres, art galleries, and monuments; the appeal lies in the combination of these factors with many other, more subtle features and qualities. It is interesting that the focus of this form of tourism is the city-man's supreme achievement of organized socialization and cultural expression.

Yet the city is more than this. It is a community made up of many communities, and it has an identity of its own. It has its own history, tradition, aura, or, one might say, personality. The community of today is a functional community. The city is the locus of the functionally oriented cosmopolitan citizen. The rural area or small town in contrast, is more likely to be location oriented.

The deliberate promotion of tourism has a direct impact on the nature and form of community. The village of Banff, formerly inaccessible except by train, has become a different community since the Trans-Canada Highway inundated it with the travelling public. Louisbourg was a different community before its fortress was restored and promoted as a tourist attraction. The lives of the local people are drastically altered along many dimensions when an area is deliberately designated and promoted for tourism. Some criteria are required whereby judgements can be made as to whether such changes indeed represent a positive contribution to the quality of life.

In this respect, it seems essential in evaluating the impact of tourism to identify the source of promotional initiatives. Does the community request a tourism promotion program, or is it thrust upon it? Do improved or increased facilities and accommodation emerge from local initiative and capital investment, or are the entire program and investment imported from outside the community or region? Who benefits from any significant economic gains based on tourism? There is no doubt that tourism can be of tremendous benefit and at the same time a veritable disaster for local recreation interests. The quiet fishing spot can become a bird watcher's paradise or a maelstrom of churning outboards - to the delight of some and the despair of others. The small, locally owned lunch counter can be put out of business in short order by the establishment of a national chain restaurant. There

are many other examples like this.

Any evaluation of the impact of tourism on an area must acknowledge four basic categories of concern. The first of these has to do with the present state, the aspirations, and the sensitivities of people living in any community where tourist promotion is planned. A different approach to development of an area may be called for if initiators are indigenous rather than exogenous. Tourism inevitably changes a community. This fact must be openly acknowledged, for a sense of community is a delicate thing, responsive to much lesser shocks than a sudden influx of strangers.

Second, there must be concern for the economic impact on a community which is the target or locus for tourist development. An initial concern must be the effect on local enterprises: will they be enhanced or quite literally destroyed? Also, changes in employment patterns must be of concern. Will tourism create a large new body of seasonal workers, employed for two or three months and on unemployment insurance or public assistance for the rest of the year? How labour intensive are any new enterprises that may be contemplated? If relief of unemployment is the goal of promoting the tourist industry, these factors must be given primary consideration.

Third, since the ecology of a region is in essence a non-renewable resource, what might be the consequences to a viable ecology of activities resulting from tourism? Will they threaten it? Could the costs of maintaining a viable ecology be such that, on balance, any profits from tourism would be negated?

Fourth, what are the implications of the tourist industry for the municipal tax base? There is no doubt that tourism has a dramatic influence on local recreation patterns. Local playgrounds are financed by municipal taxes, but in a tourist area they may in fact be predominately serving the

children of Canada or North America. The municipal tax base will hardly be adequate to subsidize such a cosmopolitan group.

In essence, it seems apparent that any real concern for people will manifest itself in joint planning. This should involve all levels of government and private business, both local and otherwise. Economic viability does not necessarily have to be the primary determinant of programs and action. Concern for people as expressed in community and community-based activities and concern for the natural environment must each be given equal weighting.

#### DIMENSIONS OF CURRENT DEMAND AND PROJECTED TRENDS

Much has been written regarding the explosive growth of leisure time and leisure activity stemming from increases in population, income, mobility, urbanization, and a decreasing work week, work year, and work life. Kahn and Weiner in their book The Year 2000 predict a typical time use pattern on a yearly basis for a worker in the year 2000.

#### A leisure-oriented post-industrial society

(Approximately 1,100 working hours per year)

7.5 working hours/day

4.0 working days/week

39.0 working weeks/year

10.0 legal holidays

3.0 day weekends

13.0 weeks/year vacation\*

\*(or 147.0 working days and 218.0 days off/year).

Following their pattern predications one step further, this is

what they have in view for distribution of time.

In a leisure-oriented society, one could spend:

40% of his days on a vacation

40% of his days on an avocation

20% on neither that is, just relaxing

A Canadian study, *Social Future Alberta 1970-2005*<sup>2</sup>, has made a more refined projection of work and vacation time by occupational category. Table 9.1 summarizes this information.

The significance of increasing "blocks" of free time takes on more meaning with the results of an American study of workers on a four-day work week. The study showed a 152% increase in the number of workers who travelled after a switch to the four-day work week.<sup>3</sup>

Figures 9.1 and 9.2 and Table 9.2 indicate the economic impact of leisure trends by showing projected increases in economic indicators of leisure activity. Figure 9.2 also shows the importance of tourism in the national balance of payments.

It is estimated that \$105 billion is spent on leisure objects and activities by Americans. This represents almost a doubling in just seven years. More than 50% of this amount is spent on travel, vacation land, and second homes. Tables 9.3, 9.4, and 9.5 summarize these statistics.

Travel in Canada by Canadians and non-Canadians accounts for

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2. H.J.Dyck, Social Future Alberta, 1970-2005.

3. Riva Poor, 4 Days, 40 Hours, Cambridge: Bursk and Poor Publishing, 1970), p. 116.

TABLE 9.1 AVERAGE TIME SPENT WORKING  
AND VACATIONING, BY OCCUPATIONAL CATEGORY, 1975-2005

<u>CATEGORIES</u>	<u>1975</u>	<u>1980</u>	<u>1990</u>	<u>2005</u>
Length of Work Day (in hours)				
Professional-Managerial	7.9	7.6	6.8	6.3
White Collar	6.9	6.9	5.6	5.0
Skilled Labour	7.0	5.7	5.4	5.0
Unskilled Labour	7.4	6.9	5.5	5.1
Length of Work Week (in hours)				
Professional-Managerial	40	38	33	31
White Collar	34	28	26	24
Skilled Labour	34	28	25	22
Unskilled Labour	37	34	27	24
Annual Vacation (in weeks)				
Professional-Managerial	4.3	5.1	6.2	7.7
White Collar	3.8	4.5	5.5	7.5
Skilled Labour	3.5	4.5	5.8	7.8
Unskilled Labour	3.0	3.7	4.9	5.8
Average Age of Entry into the Labour Force				
Professional-Managerial	26	27	28	28
White Collar	21	22	23	24
Skilled Labour	21	21	22	22
Unskilled Labour	18	18	19	24
Average Age of Retirement				
Professional-Managerial	63	60	57	53
White Collar	62	59	56	53
Skilled Labour	61	58	55	52
Unskilled Labour	62	59	57	55
Rate of Unemployment	9.2%	10.0%	18.4%	32.7%

Source: H.J. Dyck, Social Future Alberta, 1970-2005

MILLIONS OF CONSTANT \$ (1961)

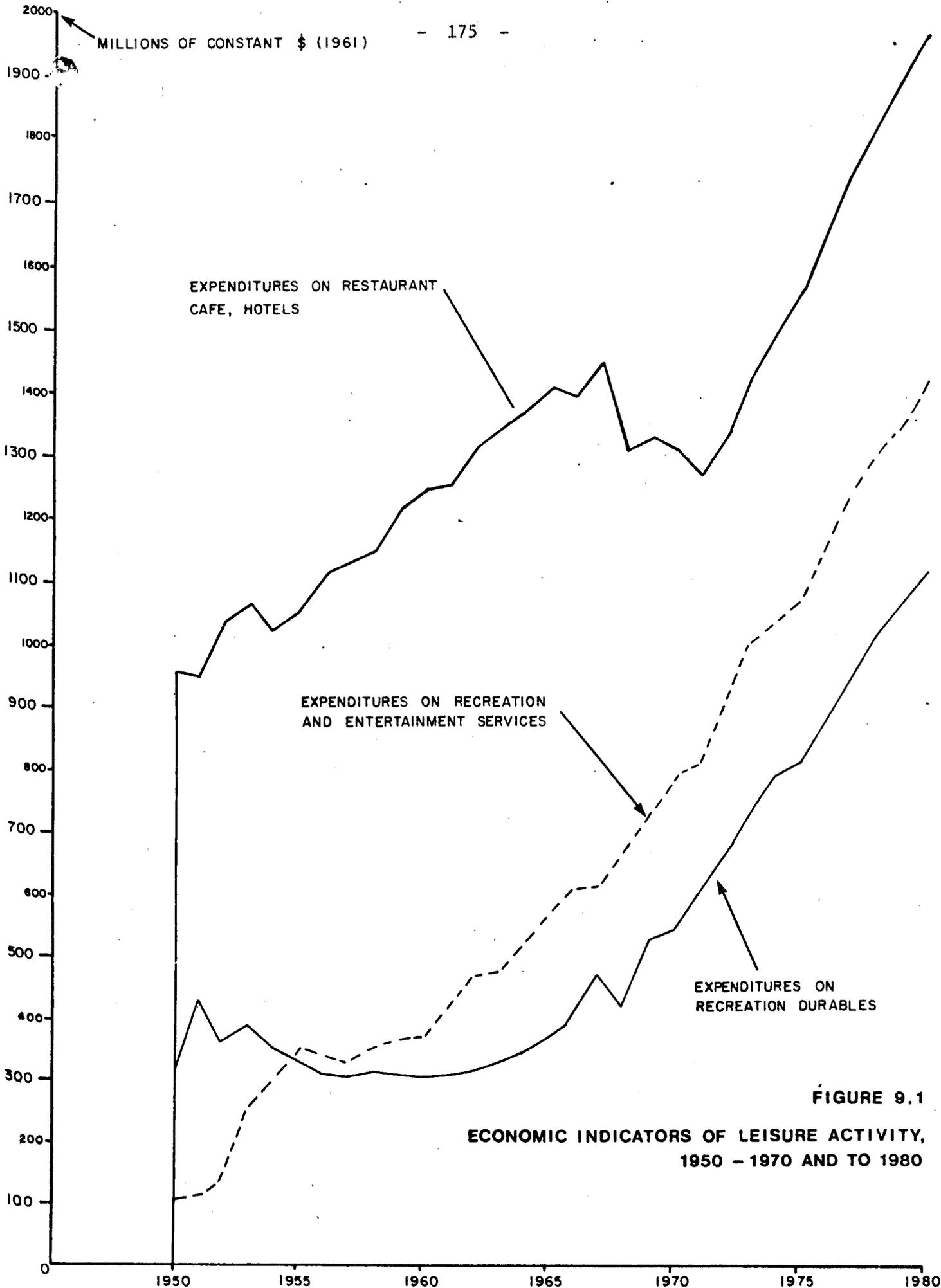


FIGURE 9.1

ECONOMIC INDICATORS OF LEISURE ACTIVITY,  
1950 - 1970 AND TO 1980

FIGURE 9.2

TRAVEL RECEIPTS AND PAYMENTS,  
1950 - 1970 AND PROJECTED TO 1980

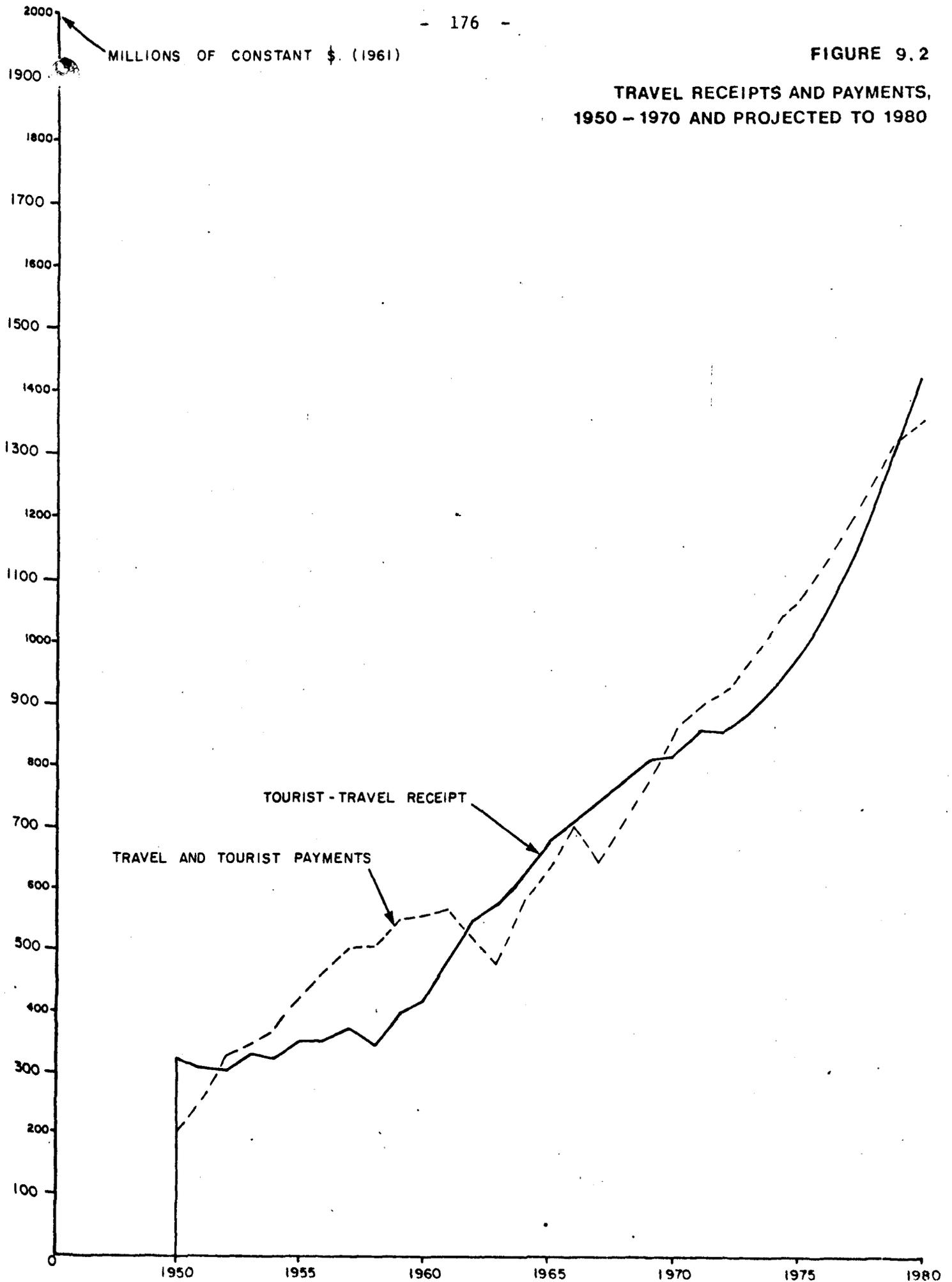


TABLE 9.2 PROJECTED INCREASES IN KEY ECONOMIC  
VARIABLES OF LEISURE ACTIVITIES, 1951 TO 1980  
(Millions of 1969 Dollars)

<u>Expenditure Group</u>	<u>1951</u>	<u>1980</u>	<u>% Inc.</u>
Restaurants, Cafes, and Hotels	\$1,037	\$1,972	90%
Recreation, Entertainment, and Services	344	1,139	231%
Recreation Durables	125	1,421	1,036%
Travel Receipts	311	1,419	358%
Travel Payments	261	1,354	419%

Source:

TABLE 9.3 SPENDING FOR LEISURE

	<u>1965</u>	<u>1967</u>	<u>1969</u>	<u>1972</u>
		(\$billion)		
Total	\$58.3	\$71	\$82.6	\$105

Source: U.S. News and World Report, April 1972.

TABLE 9.4 WHERE THE MONEY GOES

	<u>(billions of dollars)</u>	<u>%</u>
Recreation, sports equipment and activities	50	48
Vacations, recreation trips in U.S.	40	38
Travel Abroad	7.5	7
Vacation Land & Lots	5.5	5
Second Homes	<u>2</u>	<u>2</u>
<b>TOTAL</b>	<b>105.0</b>	<b>100</b>

Source: U.S. News & World Report, April 1972.

TABLE 9.5 EIGHT WAYS AMERICANS SPEND LEISURE MONEY

	<u>1967</u>	<u>1972 (est.)</u>
	<u>(billions of dollars)</u>	
Recreation - sports equipment (airplanes, athletic gear, bicycles, boats, campers, toys, etc.)	9.6	18.0
Radios, TV, records, instruments	8.5	10.2
Books, magazines, newspapers	5.9	9.0
Admissions to sports, movies, cultural events	3.6	4.7
Clubs and international organizations	1.0	1.3
Garden materials	1.1	1.6
Race track receipts	0.8	1.1
Other "personal consumption" activities	<u>2.5</u>	<u>4.1</u>
<b>TOTAL</b>	<b>33.0</b>	<b>50.0</b>

Source: U.S. News & World Report, April 1972.

approximately \$5 billion annually and is fast becoming Canada's leading industry. Ninety-eight percent of the travellers to Canada are American. The desire to travel by Americans is likely to continue at its current rate of increase. As parks and other tourist attractions approach their limits of capacity in the United States, proportionately more Americans are likely to come to Canada (in 1972, Canada was the world's leading travel destination). The Federal Office of Tourism has estimated that "if reasonable attention is given to planned plant development, receipts on the international travel account for 1980 could reach \$4 billion, a three-fold increase over 1971".<sup>4</sup>

The proportion of Canadian adults travelling away from home during their summer holidays reached 54% in 1970, surpassing the previous peak level of 50% in 1967 (the year of Expo in Montreal). Thus, for the first time, the majority of the adult population took a summer vacation trip.

There was not only an increase in the proportion of Canadians travelling on vacation in 1970; there was also an increase in the number of vacation trips taken. About 15% of all Canadian adults took two or more trips in 1970, a significant increase over 1966 (10%). Multiple vacation trips were most common among upper income groups, families with no children, city dwellers, and white collar workers. The number of people with these characteristics in Canada is steadily increasing.

Current disparities in leisure activities by residents of the Atlantic Provinces and residents of the rest of Canada are indicated in Table 9.6. With the exception of bowling, snowmobiling, hockey, hunting and fishing, leisure activities are pursued more frequently by residents of the rest of

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4. Office of Tourism Brief presented to a public hearing on the Planning Proposals for the Lake Louise Area of Banff National Park, March 9th and 10th, 1972.

Canada than by residents of the Atlantic Provinces. There are a number of variables which may be direct or indirect causes of this difference. These may include lower discretionary incomes, fewer facilities, less leadership, and other environmental, cultural, and social phenomena.

TABLE 9.6 ESTIMATED PARTICIPATION  
IN SPORTS ACTIVITY, ATLANTIC AND OTHER PROVINCES, 1972

<u>Sports Activity</u>	<u>Atlantic Provinces Average %</u>	<u>Other Provinces Average %</u>
Golf	4.6	8.1
Tennis	2.6	4.8
Bowling	18.6	11.1
Curling	3.35	7.9
Skating	17.9	18.9
Skiing	2.8	6.0
Snowmobiling	11.8	11.3
Swimming	26.1	26.8
Waterskiing	2.1	5.75
Jogging	4.95	7.3
Walking	33.7	41.5
Bicycling	7.8	12.8
Hunting and Fishing	23.3	20.6
Hockey	8.65	6.8
Other	7.8	26.15

Derived from 1972 Survey of Selected Leisure Time Activities, Statistics Canada, Education Division, Cat. No. 81-001, Volume 2, No. 1, January, 1973.

It is important to note that travel by residents of the Atlantic Provinces is likely to increase significantly in the 1970s, as regional economic development programs generate higher incomes and the threshold of discretionary income is reached by a greater number.

ECONOMIC SIGNIFICANCE OF TOURISM AND  
RECREATION IN THE ATLANTIC PROVINCES

Tourism in its broadest context includes business as well as vacation travel and also resident and non-resident vacationing within a

province. Table 9.7 shows that tourism cuts across provincial boundaries, and that in 1971 it brought in approximately \$315 million to the region.

Recreation expenditures in the Atlantic Provinces also are sizable. Residents' spending includes a variety of activities - for example, dining out, golf, hunting and fishing, movies, and hockey games. The size of the total recreation industry in the Atlantic Provinces in 1971 is estimated at \$244 million, as indicated in Table 9.8.

Tourism, an industry that only truly developed in the region in the 1960s, has become a major component in the economies of each of the Atlantic Provinces. This is evidenced by the receipts it brings in, the number of people it employs, and the amount of investment capital going into new construction and repair work on tourist facilities.

Table 9.9 compares the performance of tourism and recreation with that of selected industry sectors for the Atlantic region as a whole. These comparisons reveal that tourism and recreation are now the most important resource-based industries in the Atlantic Provinces in terms of both gross revenue and the number of employees. In addition, tourism dollar imports benefit all industry sectors, from the point of view of increased consumer demand for goods and services in the region and of expenditures to develop the tourist plant.

Although there are no recent studies that indicate the relative impact of tourism expenditures compared with those from other industries, an analysis that was done in 1960 by Kari Levitt examined the income-generating ability of hotels and restaurants in the Atlantic region. Hotels and restaurants were ranked fifth among thirty-three other industries on this factor.

TABLE 9.7 ESTIMATE OF TOTAL TOURIST EXPENDITURES, ATLANTIC PROVINCES, 1971

	<u>Tourist Expenditures</u> (\$ millions)		
	<u>Canadian Travellers*</u>	<u>Foreign Visitors**</u>	<u>Total</u>
Newfoundland	58.6	15.0***	73.6
Prince Edward Island	25.1	5.0	30.1
Nova Scotia	95.8	25.0	120.8
New Brunswick	<u>69.9</u>	<u>20.0</u>	<u>89.9</u>
<b>TOTAL</b>	<b>249.4</b>	<b>65.0</b>	<b>314.4</b>

Sources:

\* Highlights-Research Bulletin No. 1, Canadian Travel Survey, 1971. Includes resident and non-resident domestic travel in each province.

\*\* Leisure Consultants estimate based on U.S. summer visitor expenditures collected in Maritime Exit Survey and expanded to cover all foreign visitors and whole year.

\*\*\* Leisure Consultants estimate. Newfoundland did not participate in the Maritime Exit Survey.

TABLE 9.8 ESTIMATE OF TOTAL ANNUAL RECREATION EXPENDITURES, ATLANTIC PROVINCES, 1971

	<u>Recreation Expenditures</u> (\$ millions)
	Newfoundland
Prince Edward Island	16.0
Nova Scotia	117.9
New Brunswick	<u>88.9</u>
<b>TOTAL</b>	<b>243.7</b>

Sources: Statistics Canada, Cat. No. 62-535 "Family Expenditure in Canada - 1969". Atlantic Province families spent an average of \$188 on recreation during 1969.

"Survey of Markets 1971/72"-Financial Post-estimates of number of households by province in 1971. Total recreation expenditures were derived by multiplying the number of households in each province by \$188.

TABLE 9.9 ECONOMIC PERFORMANCE OF SELECTED INDUSTRIES,  
ATLANTIC PROVINCES, 1971

	<u>Gross Revenue</u> (\$ Millions)	<u>Employees</u> (Thousands)	
		<u>Total</u>	<u>% Full Time</u>
Retail Trade	2,526	86.5	*
Manufacturing	2,038	74.6	*
Construction	1,412	32.5	*
Tourism/Recreation	559	27.6	72%
Farming	154	17.0	*
Forestry	132	6.9	*
Fishing	122	20.8	29%

\* No statistics available.

Sources: Statistics Canada 96-723, 24-202, 24,205 and The Financial Post Survey of Markets 1971/2.

Analyses have since been carried out relating to tourist expenditures alone for three of the Atlantic Provinces (Prince Edward Island, Nova Scotia, and New Brunswick).<sup>5</sup> It is estimated that the equivalent of one full-time job (direct, indirect, or induced) at \$7,000 a year is created for every \$6,681 and that one direct job is created for every \$14,270 of tourist expenditures.<sup>6</sup>

These job-creation measures have been applied to estimates of year-round expenditures in each of the Atlantic Provinces (see Table 9.7). Each province's expenditures were divided by \$6,681 to estimate the number of full-time jobs which could be traced to the expenditure. The same figures

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5. These analyses are based on data compiled by the Maritime Exit Survey 1971, and by Statistics Canada.

6. Job equivalent measurement figures were taken from Nova Scotia's proposed program of Tourism and Recreation Development.

were also divided by \$14,270 to determine which of the total number were direct full-time jobs, that is, jobs created at final consumer demand point. Simple subtraction subsequently yielded the number of indirect or induced jobs which also can be attributed to annual tourist expenditure (see Table 9.10).

TABLE 9.10 EMPLOYMENT CREATED BY  
ANNUAL TOURIST EXPENDITURES, ATLANTIC PROVINCES, 1971

	<u>Annual Tourist Expenditure (\$ Millions)</u>	<u>Full-Time Jobs Created (Thousands)</u>		
		<u>Direct</u>	<u>Indirect/ Induced**</u>	<u>Total</u>
Newfoundland	73.6	5.2	5.8	11.0
Prince Edward Island	30.1	2.1	2.4	4.5
Nova Scotia	120.8	8.4	9.6	18.0
New Brunswick	<u>89.9</u>	<u>6.3</u>	<u>7.2</u>	<u>13.5</u>
<b>TOTAL</b>	314.4	22.0	25.0	47.0

\*\* Indirect and induced employment consists of jobs created by the impact of tourist purchases of finished goods and services at final production demand point.

Another indication of the economic importance of the tourism/recreation industry in the Atlantic Provinces is the amount of investment in plant. The tourist plant comprises both natural and man-made facilities. Included in the former category are areas such as parks and beaches, as well as more intangible assets such as rural habitation, seascape, forest growth, roadside scenery, waterfalls, mountains, and - probably most important of all from a future perspective - open space itself. Man-made facilities include the transportation services (such as airlines) used to reach the Atlantic Provinces. For our purposes, we are concerned only with on-site facilities. Of these, accommodation facilities account for the largest segment,

but also important are restaurants, tourist attractions, handicraft shops, outdoor recreation facilities, and supporting services such as car rental agencies, information bureaux, and sightseeing services.

Tables 9.11 to 9.14 indicate the relative impact of tourism and recreation on the economy of each of the Atlantic Provinces. In Tables 9.15 and 9.16, we provide an initial indication of the total current value of the tourist plant in each province, taking into account parks and accommodation facilities (both roofed and campground) as well as the value of the recreation plant. This latter includes sports, cultural, and social facilities; but since statistics are available only on the first mentioned (sports facilities), our estimates of value are restricted to these.

Table 9.17 summarizes data on the capacity of hotels from 1962 to 1968. The data are for each of the Atlantic Provinces as viewed within the context of the industry in Canada.

#### BARRIERS TO GROWTH

Present indicators of tourism growth in Canada and the United States point to the prospect of continued prosperity for the industry in the Atlantic Provinces. The supply of services, however, must be sufficient to meet the demand. There is no way of knowing, on the basis of available information, whether the current supply of tourist facilities and activities is even meeting present demand - that is, whether there is a significant amount of non-actualized demand owing to lack of facilities or activities.

What is known is that the usage rate of many types of tourist facilities is virtually 100 per cent during the months of July and August.

TABLE 9.11 COMPARATIVE IMPACT  
OF TOURISM AND RECREATION ON THE ECONOMY OF NEWFOUNDLAND, 1971

	<u>Gross Revenue</u> (\$ millions)	<u>Employees</u> (Thousands)
Farming	-	1.0
Fishing	37	9.1
Manufacturing	288	11.0
Construction	539	6.0
Retail Trade	528	19.0
Tourism	74	4.5
Recreation	21	1.2
Forestry	25	1.9

Sources: Financial Post Survey of Markets 1971/2.

Statistics Canada: 96-723, 24-202, 24-205.

TABLE 9.12 COMPARATIVE IMPACT  
OF TOURISM AND RECREATION ON THE ECONOMY OF PRINCE EDWARD ISLAND, 1971

	<u>Gross Revenue</u> (\$ millions)	<u>Employees</u> (Thousands)
Farming	39	4.5
Fishing	10	1.7
Manufacturing	66	2.6
Construction	57	1.5
Retail Trade	143	4.5
Tourism	30	1.7
Recreation	16	.4
Forestry	0	0.0

Sources: Financial Post Survey of Markets 1971/2.

Statistics Canada: 96-723, 24-202, 24-205.

TABLE 9.13 COMPARATIVE IMPACT  
OF TOURISM AND RECREATION ON THE ECONOMY OF NOVA SCOTIA, 1971

	<u>Construction Investment</u> (\$ millions)	<u>Gross Revenue</u> (\$ Millions)	<u>Employees</u> (Thousands)
Farming	2	63	6.0
Fishing	n.a.	59	7.4
Manufacturing	43	840	32.0
Construction	n.a.	466	15.0
Retail Trade	3	1,026	35.0
Tourism	9	121	8.8
Recreation		118	2.1
Forestry	n.a.	29	1.6

n.a. - not available

Sources: Financial Post Survey of Markets 1971/2.

Statistics Canada: 64-201, 96-723, 24-202, 24-205.

TABLE 9.14 COMPARATIVE IMPACT

OF TOURISM AND RECREATION ON THE ECONOMY OF NEW BRUNSWICK, 1971

	Construction		
	<u>Investment</u>	<u>Gross Revenue</u>	<u>Employees</u>
	(\$ millions)	(\$ millions)	(Thousands)
Farming	3	52	5.5
Fishing	n.a.	16	2.6
Manufacturing	24	844	29.0
Construction	n.a.	350	10.0
Retail Trade	6	829	28.0
Tourism		90	7.5
Recreation	8	89	1.4
Forestry	n.a.	78	3.4

n.a. - Not available

Sources: Financial Post Survey of Markets 1971/2.

Statistics Canada: 64-201, 96-723, 24-202, 24-205.

TABLE 9.15

ESTIMATE OF CURRENT VALUE OF TOURIST PLANT, ATLANTIC PROVINCES, 1972

(\$ millions)

	<u>Newfoundland</u>		<u>Prince Edward Island</u>		<u>Nova Scotia</u>		<u>New Brunswick</u>	
	<u>Number</u>	<u>Value</u>	<u>Number</u>	<u>Value</u>	<u>Number</u>	<u>Value</u>	<u>Number</u>	<u>Value</u>
Roofed Accommodation -Units at \$8,000 each	4,400	\$35.2	3,800	\$30.4	8,800	\$70.4	8,100	\$64.8
Campsites (gov't & commercial) -Units at \$200	1,295	.3	6,200	1.2	10,700	2.1	8,000	1.6
Parks (prov. and nat'l) Acres at \$200 each	582,400	116.5	7,040	1.4	343,680	68.7	161,920	32.4
TOTAL VALUE		\$152.0		\$33.0		\$141.2		\$98.8

Sources: Roofed Accommodation Units: The Canadian Tourism Facts Book, 1972. (Corrected where more reliable figures are known.)

Campsites: The Canadian Tourism Facts Book, 1972; Federal Parks Branch; and Provincial Tourist Department Publications.

Parks: 1972 Canada Year Book, 1972.

- \* Many facilities directly and indirectly serving the tourist industry are not included in the above analysis owing to the absence of statistics. Some obvious ones that are missing are restaurants, tourist attractions, beaches, ski developments, marinas, and tourist ground transportation services, not to mention the natural attractions - seascape, forests, rural habitation, waterfalls, and roadside scenery.

TABLE 9.16 CURRENT VALUE OF RECREATION PLANT, ATLANTIC PROVINCES, 1972

	<u>Newfoundland</u>		<u>Prince Edward Island</u>		<u>Nova Scotia</u>		<u>New Brunswick</u>	
	<u>Number</u>	<u>Value</u>	<u>Number</u>	<u>Value</u>	<u>Number</u>	<u>Value</u>	<u>Number</u>	<u>Value</u>
Recreation Centres (\$100 ea.)	9	\$ .9	8	\$ .8	37	\$3.7	70	\$7.0
Multi-Purpose Playing Fields (\$100 ea.)	40	4.0	17	1.7	110	11.0	84	8.4
Swimming Pools (\$100 ea.)	34	3.4	5	.5	48	4.8	42	4.2
Arenas (\$200 ea.)	15	3.0	15	3.0	40	8.0	44	8.8
Gymnasias (\$200 ea.)	21	4.2	38	7.6	234	46.8	185	37.0
Bowling Emporiums (\$25 ea.)	10	1.0	7	.7	40	4.0	54	5.4
Baseball (\$25 ea.)	19	.5	9	.2	116	2.9	142	3.6
Softball (\$25 ea.)	54	1.4	28	.7	165	4.1	160	4.0
Tennis (\$20 ea.)	20	.4	5	.1	64	1.3	55	1.1
Golf (\$20 ea.)	4	.8	5	1.0	36	7.2	29	5.8
Sports Fields (\$100 ea.)	42	4.2	24	2.4	94	9.4	58	5.8
Track & Field (\$50 ea.)	6	.3	7	.4	31	1.6	31	1.6
Playgrounds (\$25 ea.)	71	<u>1.8</u>	26	<u>.7</u>	226	<u>5.7</u>	211	<u>5.2</u>
TOTAL VALUE		\$25.9		\$19.8		\$110.5		\$97.9

Source: Recreation Canada's May 1972 Research Bulletin containing Preliminary Results of the Canadian Sports Facility Inventory. A report has just been completed on social and cultural facilities, but this will not be made available until it has been reviewed by the provinces.

TABLE 9.17

PRINCIPAL STATISTICS OF HOTELS, BY PROVINCE, 1962, 1965 AND 19681962

Number of Hotels	69	15	109	78	1,603	1,356	1,753	4,983	271	5.44
Number of Guest Rooms	1,333	477	3,341	2,876	43,170	44,978	56,292	152,467	8,027	5.26
Bed Capacity	2,230	1,004	5,986	5,014	80,287	88,790	105,995	289,306	14,234	4.92
Total receipts(\$'000)	5,525	707	7,297	4,466	146,630	181,431	241,635	587,691	17,995	3.06

1965

Number of Hotels	68	12	91	63	1,673	1,259	1,680	4,846	234	4.83
Number of Guest Rooms	1,427	415	3,325	2,609	45,800	44,738	56,645	154,959	7,776	5.02
Bed Capacity	2,050	750	4,866	3,742	63,190	67,544	78,734	220,876	11,408	5.16
Total receipts (\$'000)	6,823	790	9,817	6,294	187,083	229,714	299,492	740,013	23,724	3.21

1968

Number of Hotels	61	11	86	54	1,727	1,183	1,647	4,769	212	4.45
Number of Guest Rooms	1,781	394	3,383	2,329	47,984	45,853	56,400	158,124	7,887	4.99
Bed Capacity	2,829	714	5,320	3,332	66,422	65,959	74,212	218,788	12,195	5.57
Total Receipts(\$'000)	9,748	991	12,742	7,691	243,320	291,468	390,258	956,218	31,172	3.26
Total Employees	901	111	1,334	909	18,943	26,132	29,810	78,140	3,255	4.17

Source: Statistics Canada, 63-204; Canada Year Book.

Hotels are defined as establishments with six or more hotel-type rooms. Tourist camps, motels, cabins, and other types of accommodation are not included.

Thus, to handle expected increases, additions will have to be made to the tourist plant to meet the demand during the peak season. As Figure 9.3 shows, this will further aggravate the degree of under-utilization of those facilities during the other ten months of the year. The statistics relate to Nova Scotia and projections are made on the basis of growth in the number of party-nights registered from the middle of June to the middle of September in 1971 as compared with the same period in 1968. The projections for the shoulder periods (i.e. May 15 to June 12 and September 12 to October 31) assume the same rate of increase as per the peak season.

Although all types of tourist facilities are affected by this peaking phenomenon, the impact on the accommodation industry is the most significant. If tourists are unable to find accommodation in an area, there is no possibility of their staying to use other services and facilities. Thus, any deficiency in the supply of accommodation is the major obstacle to tourism growth in the Atlantic Provinces. (In Newfoundland, there is the additional problem of access; but since its solution depends mainly on actions taken outside provincial borders jurisdiction - such as the expansion of air services and reductions in air fares - consideration of it is beyond the scope of this study).

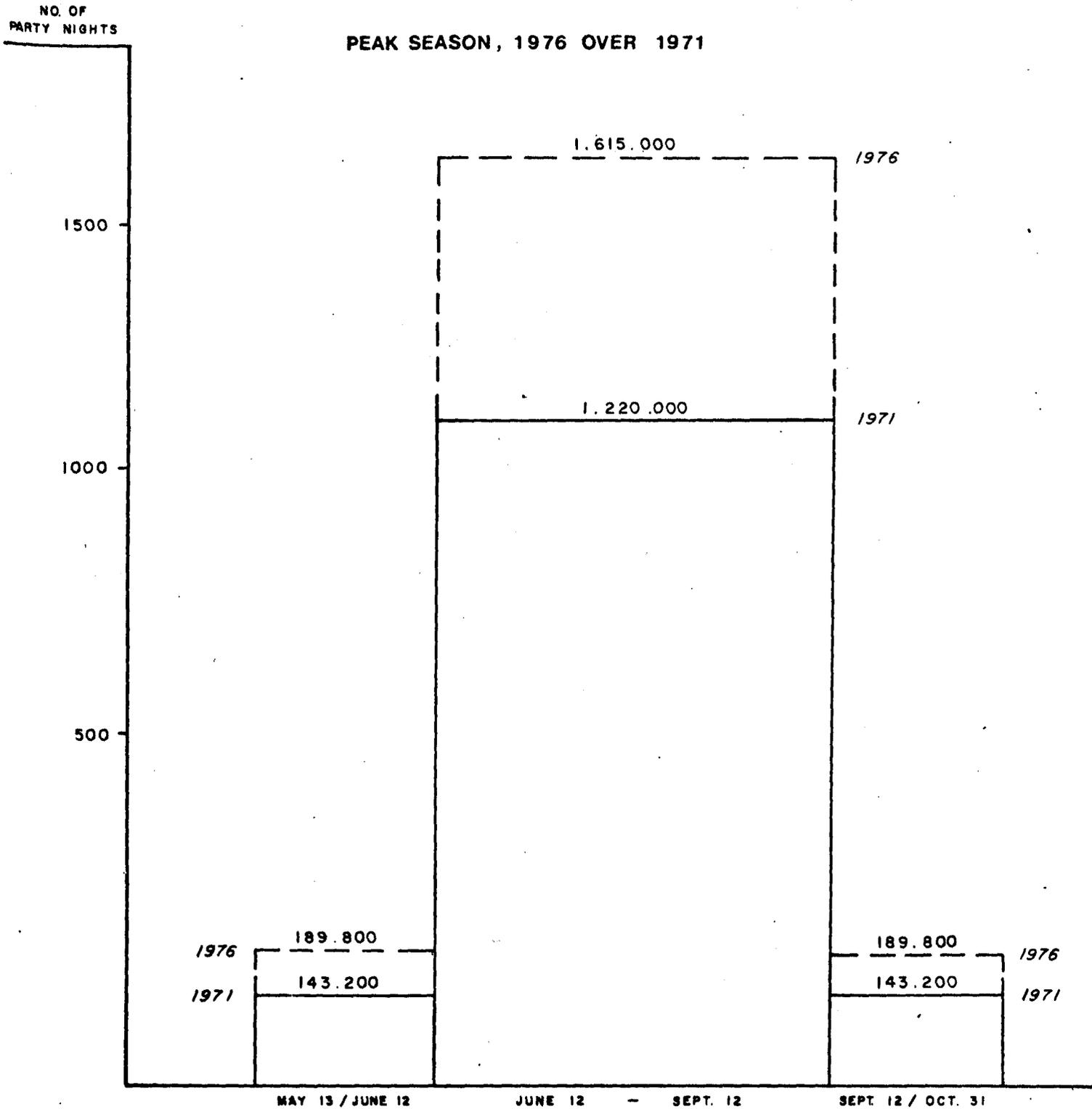
The major needs in the recreation plant are for sports, cultural, and social recreation facilities for the widely dispersed rural population and for more open spaces for the urban population. Unfortunately, filling these needs does not result in impressive economic gains to the region, as is the case with investment in the tourist plant. More and more, the provincial governments in the Atlantic region are developing approaches and

FIGURE 9.3

PROJECTED GROWTH IN  
NUMBER OF PARTY NIGHTS

NOVA SCOTIA

PEAK SEASON, 1976 OVER 1971



SOURCE: "Some aspects of the Tourist Industry in Nova Scotia", Graph 19, p. 66  
(the "Extended Season" figures have been split 50:50 for May 15 to  
June 12 and September 12 to October 31 respectively.)

taking steps to coordinate their planning efforts so that, for example, tourism investments will also fill some of the gaps in the recreation plant.

COST OF ALLEVIATING THE MAJOR  
BARRIER TO TOURISM GROWTH

Deficiencies in the supply of accommodation, in terms of the capacity to meet future demand at peak periods, exist in Prince Edward Island, Nova Scotia, and New Brunswick. The situation in Newfoundland is difficult to assess because of a lack of statistics.

At present, in the three Maritime Provinces, well-located and appropriate establishments operate at full capacity during the months of July and August. A lower occupancy rate is experienced in the months of June and September, and few establishments are open from October to May (except for those in urban centres catering to business travellers). Indications are that this seasonal pattern will persist.

Each year, new units of accommodation have to be added to keep pace with increases in peak season demand. By projecting demand, it is possible to estimate the number of units required in future peak periods. Such an analysis is carried out in Appendix 8.

The objective of this analysis is to arrive at a rough plan for bridging the major critical gap in the tourist plant - an inadequate supply of accommodations. Our calculation is based on the following assumptions and conditions:

1. It is assumed that each party occupies one unit of accommodation and that there is a one-to-one relationship between number of party-nights and accommodation usage;

2. Demand in terms of party-nights is projected for the peak season in 1976;
3. June 12 to September 12 is treated as the peak season, because our data sources do not provide a breakdown for the months of July and August alone;
4. The excess in the projected number of party-nights over the 1971 level is distributed over the 93-day period to determine the number of additional party-nights per night in the peak season of 1976;
5. It is assumed that these additional party-nights will have to be serviced through the development of new accommodation units, except in the case of those party-nights that are spent in private homes;
6. It is further assumed that the accommodation preferences of tourists' parties in 1976 will be the same as those expressed by tourist parties travelling through the Maritime Provinces in 1971.

The major limitation of the analysis is that it is restricted to growth in demand of out-of-province tourists, because that was the population surveyed in the Maritime Exit Survey. Thus, while the analysis covers the major segment of the market, it does not take into account the increase in demand of residents vacationing in their own province.

Also, the analysis does not cover the accommodation additions required to offset units lost through the closing of establishments. For example, 4,082 rooms were added in Nova Scotia in the ten years up to 1972 but 3,074 rooms were lost as establishments went out of business. This is not likely to be a serious factor over the years ahead.

When the Maritime Exit Survey results are projected five years to 1976, the results show that tourist parties will spend 1 million more nights in the three provinces in 1976 than they did in 1971. This averages out to 11,460 additional party-nights per night. Some of those nights will be spent in private homes; but if the tourists' accommodation reference remains the same as it was in 1971, 85% (9,741 party-nights) will be spent in commercial accommodation.

It is assumed that an equivalent amount of new units (9,741) will have to be provided between the period 1971 and 1976 to meet this demand. Allocating these units according to the accommodation preferences expressed in the Maritime Exit Survey, it is estimated that approximately 6,200 units of roofed accommodation and 3,600 campsites will have to be added to the 1971 accommodation supply level.

The cost of supplying these new accommodation units is estimated at \$50 million (see Appendix 8). This indicates the order of magnitude of the total investment that will be required over the years to satisfy tourist demand in 1976. It relates only to the 1 million additional nights of occupancy conservatively projected for summer out-of-province tourists to Prince Edward Island, Nova Scotia, and New Brunswick. Newfoundland is not included; nor is local resident vacation travel within each of the three provinces.

In addition to filling the accommodation gap, the capacity of other types of tourist facilities and services, such as restaurants, tourist attractions, beaches, and sightseeing services, will have to be expanded to cope with the growing demand during the peak summer season.

Tourist installations of major proportions are in a separate category from the facilities mentioned above. For example, the decision to restore Louisbourg to its original state resulted in an expenditure of \$20 million.

## ECONOMIC IMPACT OF REMOVING BARRIERS

As a conservative estimate, \$50 million over the period 1971 to 1976 removes the major gap in the tourist plant of the three Maritime Provinces. As the accommodation supply is improved, other barriers to growth will appear, and the cost of removing these over the next few years will have to be added to the \$50 million to determine the full investment required to satisfy peak demand in 1976.

If the required investments are made, the three provincial economies will benefit proportionately from the expenditures generated by the increase in peak season demand. For off-season travel, any future increases in demand can be easily handled by the present tourist plant, at least with respect to accommodations (see Figure 9.3). Thus, expenditures associated with these increases in off-season demand cannot rightly be attributed to investment in new facilities.

The following analysis attempts to gauge what the economic benefits will be in 1976 if adequate investments are made to develop the tourist plant to handle projected peak period demand. Again, the analysis is limited to the three Maritime Provinces and takes into account only the economic benefits derived from out-of-province tourism.

Table 9.18 sets out the total amount of expenditures and the total number of party-nights recorded for out-of-province tourists visiting each of the three provinces during the peak period in 1971. The average expenditure per party-night is calculated by dividing the former statistic by the latter. It is assumed that, at minimum, there will be the same level of expenditure per party-night in 1976 (in constant dollars) as there was in 1971.

TABLE 9.18 EXPENDITURE PER PARTY-NIGHT,  
MARITIME PROVINCES,  
JUNE 12 - SEPTEMBER 12, 1971

	<u>Expenditures</u> \$ thousands (1)	<u>No. of Party- nights</u> thousands (2)	<u>Avg. Expenditure</u> <u>per party-night</u> (1) + (2)
Prince Edward Island	12,000	540	\$22
Nova Scotia	56,000	1,220	46
New Brunswick	<u>44,000</u>	<u>1,500</u>	<u>29</u>
<b>TOTAL</b>	<b>112,000</b>	<b>3,260</b>	<b>\$34</b>

Sources: Prince Edward Island figures - "Tourism: A Product - An Environment".  
Nova Scotia figures - "Some Aspects of the Tourist Industry in N.S."  
New Brunswick figures - Summary Report on the New Brunswick results  
from the Maritime Exit Survey.

Applying these average expenditures per party-night to the 1 million additional party-nights expected in 1976 over the 1971 level, it is estimated that \$36 million will be generated by the additional demand. This amount, then, is created as the result of investment in new facilities.

TABLE 9.19 EXPENDITURE GENERATED BY ADDITIONAL  
PARTY-NIGHT DEMAND, MARITIME PROVINCES, 1976 OVER 1971

	<u>Additional Party-night Demand 1976 over 1971 (Thousands)</u> (1)	<u>Expenditure per Party-night</u> (2)	<u>Additional tourist expenditures by filling supply gaps (\$ Millions)</u> (1) x (2)
Prince Edward Island	170	\$22	\$ 3.7
Nova Scotia	395	46	18.1
New Brunswick	<u>489</u>	<u>29</u>	<u>14.2</u>
<b>TOTAL</b>	<b>1,054</b>		<b>\$36.0</b>

Source: Appendix 8.

These additional expenditures can, in turn, be translated into jobs by using the job-creation measures set out on page 266 . One full-time job,

it is estimated, is created for every \$6,681 and one direct full-time job for every \$14,270 of tourist expenditures. By dividing the amount of additional expenditure in each province by \$6,681, an estimate is derived of the total number of full-time jobs that will be created as a result of that additional expenditure. By dividing the same figure by \$14,270, the number of direct full-time jobs (that is, jobs at final tourist demand point) is estimated.

Using these job-creation measures, it is estimated that approximately 5,400 new full-time jobs will be created by 1976 as a result of filling the supply gaps.

TABLE 9.20 FULL-TIME JOBS RESULTING FROM EXPENDITURE  
GENERATED BY ADDITIONAL PARTY-NIGHT DEMAND,  
MARITIME PROVINCES, 1976 OVER 1971

	Additional Tourist Expenditures - 1976 over 1971 (\$ Millions)	Full Time Jobs that will be Created		
		Direct	Indirect/ Induced*	Total
Prince Edward Island	3.7	260	290	550
Nova Scotia	18.1	1,270	1,440	2,710
New Brunswick	<u>14.2</u>	<u>1,000</u>	<u>1,160</u>	<u>2,160</u>
TOTAL		2,530	2,890	5,420

\* Indirect and induced employment is that created by the impact of tourist purchases of finished goods and services at final production demand point.

In this and the preceding three sections, a beginning look has been taken at the total economic value of the tourist and recreation plants in the Atlantic Provinces and the amount of revenue generated by those plants. While the scope of this study did not permit a detailed investigation into the economic value of all the various components of the tourist and recreation

plants (see Table 9.17), it can be tentatively estimated that the gross economic value is in excess of \$1 billion when both natural and man-made facilities are considered.

Generally, investment in tourism is a greater stimulus to economic growth in a region than investment in recreation. But the benefits of recreation development should not be undervalued. By providing a better social and physical environment, opportunities for attracting new industries and new skills to the region and for reversing the outflow of local residents are enhanced.

We have estimated that, through the gross investment of somewhere between \$75 and \$100 million, increases of about 20% would result in both revenues and employment. Whether or not the tourism and recreation industries are earmarked for development and the nature of such development, are dependent on a number of considerations outside the scope of this study. The economic costs versus the economic contributions in these industries must be compared with similar analyses in other service industries, as well as with the projected impact of potential investment in other industry sectors.

It must be emphasized that the analysis has been strictly economic and that social, physical, and environmental considerations must be given equal weight in future decisions. The following section looks at some of the specific factors requiring examination in the decision-making process.

## CONCLUSION

Much of the planning for tourism in the Atlantic Provinces is based on the dramatic successes of the 1960s. Tourism reached full industry status during that decade and has become a major component in the economies of the Atlantic Provinces. In 1971, the Atlantic region realized a \$13 million net

flow from Canadian travel. For some, tourism has indeed been perceived as an economic and social panacea.

Although tourism is a highly labour-intensive industry, the problem of seasonality persists and threatens to remain the industry's most intractable problem in the Atlantic Provinces. The pyramiding of tourist demand during July and August has resulted in a tourist plant which is inadequate in this peak seven-week period, is under-utilized in the six to eight-week shoulder periods of May-June and September-October, and is non-utilized for the remaining seven months of the year. (This statement does not apply to facilities in urban areas which have a year-round business.)

Under-utilization affects profitability, which in turn makes this industry relatively less attractive to potential investors and creditors. It also causes seasonal variations in employment which, while advantageous to students, tends to downgrade the overall calibre of the tourism labour force.

It is difficult to project the growth of tourism for the Atlantic Provinces in the next ten years. A scenario can easily be developed indicating continued rapid growth resulting from the factors described on pages 172 to 180. An equally forceful argument can be developed, however, to the effect that the growth of tourism will level off within the next ten years. Approximately 85% of tourists travelling to the Atlantic Provinces arrive by car. The world-wide energy crisis (particularly affecting the United States) is resulting in higher gas prices and, in some locales, gas rationing. Emphasis on clean air and emission controls on exhaust systems are resulting in lower mileage per gallon. Therefore, family travel for long distances by automobile may be affected.

Further, the U.S. balance of payments problem is worsening. The

idea of curtailing international travel, while not successful, was initiated during the Johnson Administration. As the balance of payments problem approaches crisis proportions, such restrictions are not an impossible prospect.

Even in the absence of a curtailment of travel as a result of these factors, decisions regarding the development of tourism must consider that there are maximum levels of physical, environmental, and social carrying capacities. Although we do not know what these are, they nonetheless exist. Also, either before or after these capacities are reached, "negative feedback loops" will begin developing: people will be unable to find accommodation; they will experience crowded conditions; the things that tourists come to see will be despoiled as a result of more tourists coming to see them; the residents' attitude of friendliness towards visitors will be replaced by the opinion that they are a nuisance.

The extent to which these negative considerations evolve - and when they will evolve - depends, of course, on a number of factors and on the ability of the Atlantic Provinces to plan for the future growth of tourism.

There are essentially two approaches to planning, and the Atlantic Provinces probably require a combination of both. Forward planning is based on what is, and future planning is based on what we want to be.

The key insight into the travel industry is the realization that the supply components are highly interdependent and that as demand increases, the industry must grow in a balanced manner. This balance does not currently exist. Therefore, a maximum cost/benefit contribution can be made over the short term (a five-year period) by a rationalization of the current tourist plant system - that is, key supply gaps can be identified specifically in terms of time, place, and type or function, and the necessary steps can be taken to remove them.

This is an example of a forward planning approach. It is necessary, in time, to begin moving in the direction of future planning. For example, the development of tourism could be designed and shaped in a manner consonant with broad human development goals, community development goals, and environmental goals and long-term open space requirements, as well as with the economic goals of the Atlantic region.

The necessity of making the transition from forward planning to future planning is highlighted by the projected peaking phenomenon analysed in the preceding discussion. Planning is required which is essentially lateral and futuristic in order to integrate the development of tourism with recreation, education, and other social development and service sectors of the Atlantic Provinces. In this context, one of the key gaps that exists is a conceptual gap.

Moving towards such goals would enhance and preserve the desired lifestyles of residents and also would make the area more attractive for the location of industry. Increasingly, major companies such as IBM are searching for "clean" recreation-oriented habitats in which to locate, because these areas attract a higher-quality staff, contribute to higher morale, and reduce employee turnover.

In the long term, the future planning function has the potential to make a greater contribution than the continued injection of capital by governments in an industry which essentially is not self-sustaining. In such future planning, the following considerations are germane:

1. The tourism and recreation industries currently have a major impact on the economies of the Atlantic Provinces. They contribute more revenue than the other three resource industries combined. Also, they employ more persons full time than do

farming, fishing, or forestry. Since the tourism and recreation industries have the potential to make a significantly greater impact, the Department of Regional Economic Expansion should consider support to this industry in the Atlantic Provinces.

2. Planning for tourism and recreation must take on broader dimensions than merely economic considerations. They must be planned for the long term and within a framework of broad human development, social development, and environmental protection goals, as well as economic goals.
3. The major problem yet to be resolved in tourism development is the problem of seasonality. The limited utilization of physical and human resources results in an unattractive return on investment, as well as an undesirable skill profile in the work force. The present planning process is likely to accentuate this problem even further. Its resolution is not seen within rationalization alone, but through the adoption of a broader integrated planning approach.
4. The immediate barrier to the further economic development of tourism in Prince Edward Island, Nova Scotia, and New Brunswick is the insufficient supply of appropriate accommodation to serve peak period demand. The estimated magnitude of this barrier over the time period 1971 (the latest statistics available) to 1976 is approximately 6,200 units of roofed accommodation and 3,600 campsites for a total cost in excess of \$50 million. A second major barrier to growth in Newfoundland is access.

5. While current views of the continuing growth of tourism are optimistic, some effort must be made at this time to begin to understand the ultimate growth potential of tourism in terms of social, environmental, and physical carrying capacities. As these limits are approached, the growth of tourism will begin to level. Current developments in the United States may cause the levelling off to happen sooner. Some present indicators on the horizon are higher gas prices and the balance of payments problem.

CHAPTER 10 - GOVERNMENT SERVICES

In the twentieth century, Canadians have witnessed the steady growth of the public sector as the country has shifted more and more to the collective consumption of goods and services. At present, governments collect and distribute well over one-third of the country's total income. It is likely that the government sector will continue to increase in size, and it is of major importance in any discussion of services in the Canadian economy.

Since the Second World War, the provincial and municipal governments have been carrying the major burden of these increases, and their proportion of total government spending in Canada has been constantly rising (from approximately 13% in 1945 to approximately 40% in 1950 and 50% in 1965). This trend is largely due to the fact that in peacetime the attention of Canadians has turned towards areas of provincial jurisdiction, such as health, welfare, and education. Federal responsibilities such as national defence, external affairs, and trade and commerce are considerably less important now in relative terms, and it is the provincial governments that primarily are having to cope with increased demands on their financial resources. Barring any constitutional change, the trend towards decentralization in the provision of governmental services is expected to continue, with the provincial governments assuming ever-greater responsibilities.

At the same time, it should be noted that employment and expenditures on general public administration have increased very little relative to total civilian employment over the last two decades.

Tables 10.1 to 10.4 statistically summarize the growth in employment at the municipal, provincial, and federal government levels. It appears that more than 25% of the labour force of each of the Atlantic Provinces is employed by the federal, provincial, or municipal government. Over the period 1967-1972, employment increased by about 10% in Newfoundland, 20% in Prince Edward Island, 30% in Nova Scotia, and 50% in New Brunswick. Most of this growth has occurred at the provincial level. As federal-provincial relations feature decentralization by federal departments and fiscal transfer payments, this trend can be expected to continue. The main point is that the level of services offered by various levels of government are rapidly expanding and providing numerous job opportunities - so much so, that government is by far the largest single employer in the Atlantic region.

#### EMPLOYMENT BY GOVERNMENTS

Looking at the performance of the government sector in the Atlantic Provinces over recent years, one can see that for the most part the pattern of government employment and expenditure mirrors that of the rest of Canada, with some regional differences. In general, government assumes a larger role in the economy of the Atlantic region than it does in the richer provinces. In the Atlantic Provinces, as in the rest of Canada, the number of employees in public administration and defence (civilian employees) has declined slightly as a proportion of the total civilian labour force over the past ten years. In 1970, however, this group represented 9.3% of the Atlantic Province labour force as compared with the national figure of 6.8%. This is most probably due to the fact

TABLE 10.1 FEDERAL GOVERNMENT EMPLOYMENT,  
AVERAGE NUMBER OF EMPLOYEES, ATLANTIC PROVINCES, 1967-1972

	<u>NEWFOUNDLAND</u>	<u>P.E.I.</u>	<u>NOVA SCOTIA</u>	<u>NEW BRUNSWICK</u>
1967	11,139	2,274	19,839	15,315
1968	10,545	2,302	23,079	14,532
1969	10,034	2,141	24,589	14,687
1970	9,638	2,246	24,209	14,834
1971	9,994	2,200	24,415	15,143
1972	9,812	2,267	24,978	15,388

Source: Statistics Canada: 72-004 (quarterly).

TABLE 10.2 PROVINCIAL GOVERNMENT EMPLOYMENT,  
AVERAGE NUMBER OF EMPLOYEES, ATLANTIC PROVINCES, 1967-1972

	<u>NEWFOUNDLAND</u>	<u>P.E.I.</u>	<u>NOVA SCOTIA</u>	<u>NEW BRUNSWICK</u>
1967	11,329	2,430	14,842	12,657
1968	12,637	2,699	19,541	12,694
1969	12,389	2,697	22,546	12,958
1970	12,714	3,052	21,770	13,596
1971	13,844	3,210	22,064	22,429
1972	14,840	3,575	22,201	27,310

Source: Statistics Canada: 72-007 (quarterly).

TABLE 10.3 MUNICIPAL GOVERNMENT EMPLOYMENT,  
AVERAGE NUMBER OF EMPLOYEES, ATLANTIC PROVINCES, 1967-1972

	<u>NEWFOUNDLAND</u>	<u>P.E.I.</u>	<u>NOVA SCOTIA</u>	<u>NEW BRUNSWICK</u>
1967	1,706	309	3,874	2,354
1968	1,802	283	4,042	2,824
1969	1,585	253	4,494	2,985
1970	1,715	278	4,506	2,880
1971	1,903	286	4,398	3,256
1972	2,227	299	4,355	3,202

Sources: Statistics Canada: 72-505 and 72-009 (quarterly).

TABLE 10.4 TOTAL NUMBER OF FEDERAL,  
PROVINCIAL AND MUNICIPAL GOVERNMENT EMPLOYEES, ATLANTIC PROVINCES, 1967-1972

	<u>NEWFOUNDLAND</u>	<u>P.E.I.</u>	<u>NOVA SCOTIA</u>	<u>NEW BRUNSWICK</u>
1967	24,174	5,013	38,555	30,376
1968	24,984	5,284	46,662	30,050
1969	24,008	5,091	51,629	30,630
1970	24,067	5,576	50,485	31,310
1971	25,741	5,696	50,877	40,819
1972	26,879	6,141	51,534	45,900
TOTAL NO. OF EMPLOYEES(1970)	102,000	22,600	202,200	159,700
GOVERNMENT AS A % of 1970 TOTAL	26.4%	27.2%	25.5%	28.7%

that governments have stepped into the vacuum created by deficiencies in the private sector and have had to take the initiative in creating jobs in the region.

As in the rest of Canada, the provincial governments in the Atlantic region have supplanted the Federal Government as the largest government employer in the area, and the number of provincial employees has risen substantially since 1967 (see Table 10.2). This is particularly true for the province of New Brunswick, which in 1971 assumed administrative control and responsibility for all local school boards. There is great pressure for increases in both the quality and quantity of services provided by governments in the Atlantic region in order to bring it closer to the national average in terms of available services. Municipal governments in the area are hard-pressed in terms of both financial capabilities and managerial expertise, and here the provincial governments are filling the void. In addition to health and education, the parts of the service sector that are demanding expansion are social assistance, environmental control, urban development, and recreation and culture.

Federal Government employment scarcely increased at all in the Atlantic Provinces over the last six years (see Table 10.1). The formation of the Cape Breton Development Corporation in 1967 distorts the picture for Nova Scotia. The addition of this agency contributes several thousand federal employees; but apart from this, there has been little growth in Federal Government employment in Nova Scotia.

#### Employment by the Department of National Defence

The decline of the Canadian defence establishment has played an important part in slowing the growth of the federal presence in the Atlantic

region. Table 10.5 presents the employment picture and the impact of the Department of National Defence in 1973. DND accounts for about 1% of Newfoundland's labour force, 6% of Prince Edward Island's, 9½% of Nova Scotia's, and 4% of New Brunswick's.

A considerable proportion of the country's armed forces have traditionally been located in the Atlantic Provinces and therefore the national cutbacks affected the region disproportionately. In 1961, defence represented 7.3% of the total regional labour force, as compared with 2.7% of the national labour force. The number of military in the Atlantic Provinces has dropped from 28,803 in 1961 to 19,395 at present, and the number of full-time civilian employees has fallen concurrently from 12,361 to 7,476. These cutbacks have not stabilized, and no further decreases are probable. Thus, although it has declined, there is still a sizable military force in the Atlantic Provinces, and it is an important component of the region's economy.

The economic impact of a defence installation in any given area goes far beyond the mere employment of personnel. The service industries in particular are stimulated, because the military and their dependents create a population base for which a range of services is required. Of some significance is the fact that the incomes of military personnel are, for the most part, higher than those of the other inhabitants of the region. The Department of National Defence also directly encourages service industries in its demands for construction, supplies, repairs and maintenance, and similar services. In the Atlantic Provinces, the defence industry is not scattered throughout the region, but rather is heavily concentrated in certain communities (such as Halifax-Dartmouth, N.S.; Fredericton-Oromocto,

**TABLE 10.5 DEPARTMENT OF NATIONAL DEFENCE,  
MILITARY AND CIVILIAN EMPLOYEES, ATLANTIC PROVINCES, AS AT MARCH 31, 1973**

	<u>NEWFOUNDLAND</u>	<u>P.E.I.</u>	<u>NOVA SCOTIA</u>	<u>NEW BRUNSWICK</u>	<u>ATLANTIC PROV.</u>
Armed Forces	804	1,047	12,810	4,734	19,395
Civilians - Permanent	191	243	5,539	1,503	7,476
- Casual	<u>70</u>	<u>34</u>	<u>1,207</u>	<u>193</u>	<u>1,324</u>
Civilians Total	261	277	6,746	1,696	8,800
Total Defence Employment	1,065	1,324	19,376	6,430	28,195

ARMED FORCES POPULATION, MARCH 31, 1973

	<u>NEWFOUNDLAND</u>	<u>P.E.I.</u>	<u>NOVA SCOTIA</u>	<u>NEW BRUNSWICK</u>	<u>ATLANTIC PROV.</u>
Armed Forces	804	1,047	12,810	4,734	19,395
Military Dependents	<u>1,688</u>	<u>2,198</u>	<u>26,902</u>	<u>9,943</u>	<u>40,731</u>
Armed Forces Population	2,492	3,245	39,712	14,677	60,126

Source: Department of National Defence.

N.B.; Summerside, P.E.I. It is therefore of critical importance to the economic well-being of these communities.

#### IMPACT OF GOVERNMENT EXPENDITURES

Turning to government expenditures in the Atlantic region, it can be observed that the provincial budgets have increased dramatically over the last six years (see tables 10.6 and 10.7). In Nova Scotia, actual government expenditures were multiplied over five times during the 1960s. For the year ended March 1972, education expenses alone exceeded the entire provincial budget for the year ended March 1962. The expenditures of other Canadian provinces, however, have increased even more rapidly, and the cost of services provided per capita by provincial and municipal governments in the Atlantic region is still significantly lower than elsewhere. In 1967-1968, the per capita cost of services in Newfoundland was \$635; in Prince Edward Island, it was \$611; in Nova Scotia, it was \$590; and in New Brunswick, it was \$549. These figures compare with the national average of \$706.

With reference to the components of provincial expenditures, it is found that the disparities are greater in some categories than in others. In both per capita terms and as a percentage of their budgets, the Atlantic Provinces spend considerably less on the protection of persons and property than does the rest of Canada. The same is true for the major sectors of health care and education (see Chapter 11). Transportation and communications, however, have always demanded a larger share of the budget in the Atlantic region than in the rest of Canada. Although this portion has dwindled substantially over the last decade, it is still 12.6% as compared with the national average of 9.9%.

TABLE 10.6 - PERCENTAGE CHANGE,  
COMPONENTS OF EXPENDITURE, ATLANTIC PROVINCES AND CANADA, 1967-1973

	Nfld.	P.E.I.	N.S.	N.B.	Atlantic Provinces	Canada
General government	52.2	240.9	188.9	149.5	129.9	134.3
Protection of persons and property	101.8	162.5	152.6	147.7	134.3	134.7
Transportation and communications	77.0	-11.7	13.0	30.8	32.0	42.0
Health	152.1	167.9	152.8	157.1	154.6	185.0
Social welfare	105.0	10.0	134.1	262.2	134.5	148.4
Education	110.6	261.2	164.0	326.0	185.6	145.9
Natural resources and primary industries	- 8.0	160.0	132.7	121.9	60.7	73.5
Debt charges (exclusive of debt retirement)	306.5	125.6	250.0	144.6	226.1	264.9
Unconditional transfers	20.0	20.0	771.4	52.7	102.8	92.8
All other expenditures	55.4	630.8	170.8	492.7	135.0	132.1
Total expenditures	101.7	122.8	132.4	159.4	128.7	136.6

Source: 68-207 Provincial government finance - revenue and expenditure 1968.  
(annual)

68-205 Provincial government finance - revenue and expenditure  
(annual) (estimates) 1972.

Looking at the growth rates of the different components of expenditures since 1967, one can see that there are some wide variations among the four provinces, reflecting different provincial priorities and levels of development (see Table 10.7). Nevertheless, taking the Atlantic region as a whole, it appears that the trends are much the same as for the rest of Canada. Everywhere the largest increases in government spending are in education, health, and social welfare. At the opposite end of the scale, one sees that in all Canadian provinces provincial government expenditures on transportation and communications have grown the least, with expenditures on natural resources and primary industries a close second.

An examination of local government statistics reveals that the local governments of the Atlantic Provinces spend less per capita for virtually every function than do municipalities in the other Canadian provinces (see Table 10.8). In some categories, there are really dramatic differences. In 1969, for public works, municipal expenditures per capita in Newfoundland, Prince Edward Island, Nova Scotia, and New Brunswick were \$10, \$11, \$14, and \$19 respectively, while those in the other provinces ranged between \$32 and \$60. In certain cases, there are also considerable variations among the four Atlantic Provinces themselves. For example, for sanitation and waterworks, in 1969 the local governments of Newfoundland and Prince Edward Island spent \$8 and \$9 per capita respectively on this item, as compared with \$21 for Nova Scotia and \$18 for New Brunswick.

TABLE 10.7 - COMPONENTS OF GROSS GENERAL EXPENDITURE AS A PERCENTAGE OF TOTAL

GENERAL EXPENDITURE, ATLANTIC PROVINCES AND CANADA, 1973 ESTIMATES (FISCAL YEAR ENDED MARCH 31/73)

	Nfld.	P.E.I.	N.S.	N.B.	Atlantic Provinces	Canada
General government	3.1	6.8	3.4	4.7	3.9	3.7
Protection of persons and property	2.1	1.9	2.3	1.9	2.1	3.5
Transportation and communications	13.2	10.3	11.9	13.2	12.6	9.9
Health	21.6	20.5	26.2	21.8	23.1	28.2
Social welfare	10.3	8.0	7.1	9.1	8.7	9.6
Education	26.0	28.0	26.0	30.8	27.6	28.2
Natural resources and primary industries	4.2	7.1	4.1	4.1	4.3	3.9
Debt charges (exclusive of debt retirement)	10.2	8.0	13.2	6.7	10.0	6.6
Unconditional transfers	0.7	0.5	2.0	3.5	2.0	2.3
All other expenditures	8.6	8.7	3.9	4.3	5.7	4.1

Source: 68-205 Provincial government finance - revenue and expenditure  
(estimates) 1972

TABLE 10.8 LOCAL GOVERNMENT EXPENDITURES - 1969

	General Govern- ment	Protec- tion	Public Works	Sanitation and Waterworks	Health	Social Welfare	Recreation and community Education	Debt charges	Other	TOTAL	
Newfoundland.....\$'000	3,475	1,424	5,199	4,191	6	4	1,026	009	2,955	1,457	20,637
Population 507,000, per capita in.....\$	7	3	10	8	-	-	2	2	6	3	41
Prince Edward Island.....\$'000	344	787	1,191	980	1	42	149	14,373	1,325	705	19,897
Population 110,000, per capita in.....\$	3	7	11	9	-	-	1	131	12	6	180
Nova Scotia.....\$'000	8,298	13,027	10,402	15,827	12,061	11,717	4,098	99,808	10,616	9,062	194,916
Population 760,000, per capita in.....\$	11	17	14	21	16	15	5	131	14	12	256
New Brunswick <sup>1</sup> .....\$'000	3,148	9,404	11,132	11,132	46	29	4,107	64	3,923	1,837	45,561
Population 624,000, per capita in.....\$	5	15	19	18	-	-	7	-	6	3	73
Quebec <sup>1</sup> .....\$'000	108,357	144,294	191,579	144,231	8,986	6,117	56,283	1,001,909	198,819	50,477	1,911,052
Population 5,927,000, per capita in.....\$	18	24	32	24	2	1	9	169	34	9	322
Ontario.....\$'000	104,979	216,140	403,146	196,747	65,610	114,889	113,147	1,569,558	163,588	127,199	3,075,003
Population 7,306,000, per capita in.....\$	14	30	55	27	9	16	15	215	22	17	420
Manitoba.....\$'000	27,520	20,069	35,135	20,176	5,038	5,108	11,469	164,265	17,187	10,751	316,718
Population 971,000, per capita in.....\$	28	21	36	21	5	5	12	169	18	11	326
Saskatchewan.....\$'000	11,633	16,578	45,318	18,224	13,973	2,412	9,991	158,329	16,296	8,768	301,522
Population 960,000, per capita in.....\$	12	17	47	19	15	3	10	165	17	9	314
Alberta.....\$'000	19,112	44,553	92,095	50,274	30,277	7,574	28,960	315,184	38,644	11,894	638,567
Population 1,526,000, per capita in.....\$	13	29	60	33	20	5	19	206	25	8	418
British Columbia.....\$'000	26,917	58,034	71,512	62,527	7,448	58,033	33,111	359,269	39,220	23,493	739,564
Population 2,007,000, per capita in.....\$	13	29	36	31	4	29	16	179	20	11	368
Yukon Territory.....\$'000	191	238	382	305	16	-	68	-	34	46	1,280
Population 15,000, per capita in.....\$	13	16	25	20	1	-	5	-	2	3	85
Northwest Territories.....\$'000	355	128	575	548	23	-	503	916	80	35	3,163
Population 31,000, per capita in.....\$	11	4	19	18	-	-	16	30	3	1	102

Source: 68-204 Local government finance - revenue and expenditure (annual) assets and liabilities, actual 1969.

CONCLUSION

The level of services offered to Canadians has substantially increased over the past decade. Involved in the increased provision of services has been a trend to federal-provincial cooperation. The provinces have expanded their budgets and their employment base very rapidly. Currently, the federal, provincial, and municipal governments provide employment to more than one-quarter of the provincial labour force. In spite of this high level, the Atlantic Provinces and municipalities substantially lag behind their counterparts in other parts of Canada. This lag is rooted in the limited revenue base of provinces and municipalities in the region. As a result, the level of services offered to individuals, business, and communities in the Atlantic region lags behind that in other parts of Canada.

*In attempting to reduce regional disparities, government services should receive closer attention and be directly incorporated into developmental efforts. In this way, employment opportunities may be expanded and linkage effects may be experienced by many service industries (such as education and tourism and recreation), as well as primary and secondary industries.*

Our attention will now be directed to education as an example of a major government service which can be upgraded in the Atlantic region.

## CHAPTER 11 - EDUCATION

As has been indicated in the previous chapter, expenditures by government constitute about 40% of Canada's Gross National Product. Education (excluding transfer payments) is the largest item of expenditure, accounting for about one-fifth of all government expenditures. Because the bulk of such expenditures is undertaken at the provincial and municipal levels, the ability of these governments to raise and gain access to funds is very important in determining the level of educational services provided to residents of the region.

This chapter focuses on two aspects related to educational services:

1. The role and status of education in the Atlantic region
2. The relationship of education to economic growth and the problems of regional economic disparities

The discussion will provide a context within which recommendations may be considered for helping to improve the existing situation.

### THE ROLE AND STATUS OF EDUCATION

#### Growth in Education

During the past decade, education has expanded more than any other part of the economy and, together with health care, has contributed most to the spectacular increase in the importance of government services. Today, by almost any measure, education is Canada's biggest industry: for example, about one-third of our population was involved in it during the 1960s. School and university enrolment increased by 50% and staff by 70%. Education's

share of the Gross National Product rose from 4.3% in 1960 to approximately 8% in 1972.

In the Atlantic Provinces, a similar rate of growth was experienced, but the average educational level for the region remains lower than that for the nation as a whole. Although increases in enrolment and staff are levelling off, it is expected that in the Atlantic region education will continue to grow rapidly in some areas, in an effort to catch up to the other provinces. In its projections to 1980, the Economic Council of Canada sees a significant reduction in provincial differences in elementary and secondary school attendance rates, with close to 100% of all young Canadians finishing high school. It is somewhat more difficult to make accurate forecasts concerning post-secondary education, for a variety of reasons.

Enrolment in the elementary and secondary schools in the Atlantic Provinces was at 587,025 in 1970/71, showing an increase of 14% over the previous ten years. This increase was partly due to the increase in the school-aged population of the region, but it also reflects the growing retention of students in secondary schools. In 1970/71, grade eleven classes retained 67% of the original grade seven enrolment, as compared with 55% five years earlier. One finds more older students in the high schools. Since 1961/62, the number of students 19 years and over has increased by 131%.

From 1961/62 to 1970/71, the number of teachers increased by 38%, from 19,141 to 26,398. When this figure is related to the 14% increase in enrolment, a significant decline in the student/teacher ratio is revealed (from 27:1 to 22:1).

Private schools have not participated in this growth, and the past decade has been a difficult one for them. Between 1961/62 and 1971/72, the

number of private schools in the Atlantic Provinces dropped from 45 to 20, and enrolment fell from 10,253 to 2,549.

#### Differences in Education in Atlantic Canada

There are individual variations among the provinces in some areas of elementary and secondary education, and these are worth noting. To begin with, there is no kindergarten offered in the public schools in New Brunswick or Prince Edward Island, and only a very few children are sent to private kindergarten. In Nova Scotia, however, public kindergarten is compulsory for 5-year olds, and this province has the highest enrolment ratio in Canada. In Newfoundland also, kindergarten is publicly supported, although it is not compulsory; about 85% of all 5-year-olds attend. This represents considerable recent expansion. In 1951/52, kindergarten enrolment in Newfoundland was nil.

Another wide variation occurs in the qualifications of the teaching staff in the four provinces. In Nova Scotia, teachers are generally better qualified than those in the other provinces, particularly than those in Newfoundland and Prince Edward Island, and this is reflected in the different salary structures. In New Brunswick, Prince Edward Island, and Newfoundland, salaries are comparable; but in Nova Scotia, teachers receive much higher pay. Starting salaries exceed those of the other provinces by almost \$1,000, and this gap widens with years of experience.

Throughout Canada, the lower birth rates of the 1960s are having and will continue to have a marked effect on the educational establishment in the 1970s and 1980s. It is safe to say that the expansionary period in elementary and secondary education is over. Already the lower birth rate has led to drops in elementary school enrolment, and this decline will continue

at least through the next several years. By the late 1970s, this smaller group will have moved into the secondary schools, and there also a declining number of students will be in evidence. It follows that fewer teachers will be needed and that the construction of new and expanded educational facilities will slow down.

These trends also apply to the Atlantic Provinces, but a number of considerations indicate that the decline in overall elementary and secondary enrolment might not be as pronounced as in the rest of Canada. The absence of public kindergarten in New Brunswick and Prince Edward Island suggests a potential area for development. Everywhere there is an increasing emphasis on early education for children; and in parts of Canada, 4-year-olds and even some 3-year-olds are appearing in the schools. It is therefore reasonable to assume that over the next decade there will be considerable development of public kindergarten in the provinces that lag behind.

At the secondary level, the decline in enrolment resulting from the decline in the school-aged population might be offset somewhat by a further increase in retention rates. If the Economic Council of Canada forecasts prove correct and graduation from high school becomes as universal as finishing elementary school is now, then many more young people will be staying in the high schools of the Atlantic region. In Canada as a whole, there were large provincial variations in enrolment ratios at the beginning of the 1950s. By 1967/68, however, these differences had been reduced, and now most provinces have enrolment ratios between 90% and 100%. Only the Atlantic Provinces still lag far behind, with less than 80% of the young people between the ages of 14 and 17 in high school. This represents another area for probable expansion.

In the Atlantic Provinces, as in the rest of Canada, it was in the area of post-secondary education that the most rapid growth occurred in recent

years. In 1970/71, there were 44,712 full-time and part-time students enrolled in the universities of the Atlantic region. This provided employment for 2,592 full-time university teachers. Factors contributing to this expansion were the growth in the number of university students from outside the region and the increase of young people of college age within the area. Also of major importance was the rising rate of retention in the high schools and subsequently in the universities. Total full-time university enrolment as a proportion of the 18-24-year age group rose from less than 4.0% in 1952/53 to 12.5% in 1970/71.

It was fully expected that this upward trend would continue, at least until the young people of the postwar baby boom were out of the college age bracket. But in 1970/71, the first signs of a slowdown in the rate of increase appeared in the Western Provinces. In 1971/72, Ontario and the Atlantic Provinces followed suit, and it now appears that the rate of growth of higher education will be considerably more modest than had previously been anticipated. Young people are discovering that university degrees are no longer as marketable as they once were, and for some it is difficult to meet expenses as they continue their education. Many students are disenchanted with their university courses and prefer to gain experience in the "outside world". In general, young people do not seem to attach the same importance to a university degree they did during the 1960s.

#### OUTLOOK FOR THE FUTURE

The slowdown in growth of university enrolment is a recent phenomenon and has taken most educational planners completely by surprise. Tentative suggestions are that low growth rates in university enrolment will continue for the next few years at least. In absolute numbers, there probably will

be small increases each year, but the annual 15% increases of the 1960s appear to have ended. Growth in enrolment is possible, however, in technical colleges and school systems. This situation could change in a positive manner if the rate of growth of the economy of Atlantic Canada were to increase substantially. The pattern is circular: to a great extent, growth in the economy is influenced by the level of education provided; and this level of education is, in part, determined by the nature of economic activity.

Our attention will now focus on the interrelationships between economic disparities and education.

## EDUCATION AND REGIONAL ECONOMIC DISPARITIES

### Education and Economic Disparities

It is a widely held view that education, and hence educational upgrading, is a most important factor in economic growth. The lower levels of educational attainment in the Atlantic Provinces have often been cited as a cause of the lagging economy of the region. In April 1972, only 28.9% of people aged 14 and over had completed a high school education. This compared with 34.8% in Ontario, 35.3% in Quebec, 36.1% in the Prairie Provinces, and 44.3% in British Columbia. In Newfoundland, 43.5% had less than a grade 8 education.

The predominantly rural character of the Atlantic population vis-à-vis that of the rest of Canada is perhaps a prime contributor to this lower level of educational attainment. It appears that rural people throughout Canada tend to be not as well educated as their urban counterparts and that the urban/rural distribution of the population has a

considerable impact on the overall level of educational attainment in any given region. It is interesting to note that in 1961 the rural population of the Atlantic Provinces was less well educated than the rural population of Canada as a whole; but, the Atlantic urban population was better educated than the urban population of the nation.

In a recent study,<sup>1</sup> Statistics Canada has pointed out that lack of education is a major factor in unemployment. In the Atlantic region, 72% of the employed labour force had some high school training, whereas only 52.1% of the unemployed did. For persons with less than a grade 8 education, the unemployment rate was 17.3%; for those with some high school, it was 9.4%; and for those with a post-secondary education, it was 5.5%. It also appears that the duration of unemployment is greater for those with less education. There is a strong correlation, too, between educational attainment and the income of an individual, and this is a factor in the relatively smaller personal incomes of the Atlantic Provinces, as compared with the rest of Canada.

It may be concluded that an increase in the educational effort in the Atlantic region would lead to a reduction of regional economic disparities by

1. Upgrading educational attainments of individuals, thereby increasing an individual's suitability and motivation for work, hence reducing the rate of unemployment
2. Increasing an individual's adaptability and readiness to accept alternative employment, hence reducing the duration of unemployment

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1. See Statistics Canada: 71-512 (occasional), 81-220 and 81-547.

3. Increasing an individual's productivity, and hence his ability to command a higher salary.

Although these conclusions are generally true, the situation is complicated somewhat by the patterns of out-migration from the region. If there is no market for his talents at home, the educated person will probably seek employment elsewhere. About one-fourth of the persons who have attended high school in the Atlantic Provinces now live elsewhere. The same pattern is found at the university level. In neither case does in-migration to the region offset these losses. The result is a net out-flow of educated persons and a form of subsidization to the rest of Canada by the Atlantic region's education system. In the light of regional economic disparities, this is far from equitable.

#### Financing Education

Another constraint is the limited capacity of the provinces in the Atlantic region to finance increasingly highly specialized education. The age distribution of the Atlantic population is significantly different from that of the rest of Canada. There are, proportionately, far more people under the age of 15 and over the age of 65 than there are in the nation as a whole. This larger "dependent group" must rely on a smaller labour force to support it. The cost of education has climbed everywhere in recent years; but given their limited tax base, it is far more difficult for the Atlantic Provinces to maintain an adequate flow of resources to the education sector in order to assure a steadily improving output in the face of these rising costs.

In general, in comparison with the rest of Canada, the Atlantic region spends a similar proportion of its governmental revenue on education. But, because its financial resources are smaller than those of more prosperous parts of the country, educational expenditure per capita and per student is considerably lower.

The 1968/69 school year is the latest for which financial data on education are available (see Table 11.1). During this year, \$478.7 million were spent on all levels of education in the Atlantic Provinces.

TABLE 11.1 COSTS OF EDUCATION, ATLANTIC REGION, 1968/69

	<u>\$ MILLIONS</u>	<u>% OF TOTAL</u>
Elementary and secondary	272.8	57
Post-secondary, non-university	14.3	3
Vocational education	63.8	13
Universities and colleges	<u>127.8</u>	<u>27</u>
TOTAL	478.7	100

Approximately 70,000 jobs were created by these expenditures - a direct substantiation of claims regarding the size of the industry as a direct income and employment generator.

Education is constitutionally the responsibility of the provinces in Canada. Accordingly, it is not surprising that the provincial governments carry the greatest share of these expenditures, contributing \$302.8 million or 63.3% of the total figure.

Local governments also are involved in education. To get a clear picture of the financial burden that it exerts on the inhabitants of a region, municipal expenditures should be taken together with provincial expenditures.

From Table 11.2, it appears that there are great discrepancies between the four provinces in the Atlantic region in the emphasis that they place on education. But it also can be seen that, taken together, the Atlantic Provinces apply a higher percentage of their budgets to education than do some of the other Canadian provinces, in fact, they compare quite well with the national average in this respect.

It is in terms of educational expenditure per capita and per student that the Atlantic Provinces lag significantly behind the rest of Canada. For example, for the two years 1966 and 1967, the average educational expenditure per capita in the Atlantic Provinces was \$116, as compared with \$198 for Ontario and \$170 for Canada as a whole. Thus, the expenditure per capita, like income per capita, is about 70% of the national average.

Wide variations exist also in expenditures per student in the different branches of education. In the elementary and secondary schools, expenditure per student out of local government taxation and provincial government net revenue in 1966/67 was \$314 in the Atlantic Provinces, \$541 in Ontario, and \$478 in the nation as a whole. For vocational education, the figures are \$392 (Atlantic Provinces), \$571 (Ontario), and \$717 (Canada). In higher education, the gap is widest: \$578 per student in the Atlantic Provinces, a high of \$3,049 in Ontario, and \$1,972 for the Canadian average. Thus, one finds that educational expenditures reflect the tax base available to provincial municipal governments in the Atlantic region. The allocation of funds tends to be concentrated at lower levels, and the availability of highly qualified people is lower as a result of educational expenditure patterns and net immigration.

In order to bring the regional figures up to the national level

TABLE 11.2 ESTIMATED MUNICIPAL AND PROVINCIAL EXPENDITURES ON EDUCATION, BY PROVINCE, 1969

<u>PROVINCE</u>	<u>NET GENERAL REVENUE AND LOCAL TAXATION</u>	<u>EXPENDITURE ON EDUCATION</u>	<u>PER CENT APPLIED TO EDUCATION</u>
	(Thousands of Dollars)		
NEWFOUNDLAND	237,354	84,340	35.5
PRINCE EDWARD ISLAND	49,424	19,205	38.9
NOVA SCOTIA	376,013	154,320	41.0
NEW BRUNSWICK	<u>305,957</u>	<u>128,610</u>	<u>42.0</u>
ATLANTIC PROVINCES	<u>968,748</u>	<u>386,475</u>	<u>39.9</u>
QUEBEC	3,842,319	1,449,180	37.7
ONTARIO	4,952,193	2,181,431	44.0
MANITOBA	548,218	178,120	32.5
SASKATCHEWAN	546,154	209,902	39.1
ALBERTA	973,119	463,100	47.6
BRITISH COLUMBIA	<u>1,252,425</u>	<u>406,240</u>	<u>40.4</u>
ALL PROVINCES	<u>13,083,176</u>	<u>5,274,448</u>	<u>41.0</u>

in these categories, well over 50% of the region's current financial resources would have to be spent on education. There are sectors other than education, however, that are also in desperate need of more funds, and it is difficult to choose among them in allocating priorities.

In the face of this rather gloomy financial picture, it is important that the provinces receive the greatest benefit for each dollar spent on education. Efforts have recently been directed towards improvement in the efficiency of the sector, through consolidation and rationalization of existing programs. Before 1969, for example, Newfoundland had 300 "denominational" school boards, but now the province is organized into 35 school districts. New Brunswick in particular has undertaken a drastic overhaul of its educational system: in 1967, the province assumed complete responsibility for all public schools and reduced the number of boards from 400 to 33; above these school boards, seven administrative regions were created and this further simplified control. Prince Edward Island has recently experienced a similar reorganization, with the number of school districts dropping from over 400 to 5.

At the post-secondary level also, there appears to be a growing consciousness of the need for rationalization of educational programs and a desire to prevent costly duplication of effort in the four provinces.

#### CONCLUSION

It is clear from the preceding discussion that education can provide a broad base for reducing educational disparities. In spite of recent attempts to improve the efficiency of the educational system in the Atlantic Provinces, the following facts remain:

1. Resources available for education in the Atlantic region are

limited by the relatively low pace of economic activity and the relatively small tax base of each province.

2. Allocation of educational resources tends to reduce the supply of highly trained individuals, thereby reinforcing existing economic disparities.
3. Out-migration from the region continues as a result of insufficient new economic opportunities in both the service sector and the manufacturing and primary industries.

As mentioned earlier, the educational system, in spite of its shortcomings and financial woes, actually subsidizes the provision of trained people in other parts of Canada. In order to address this situation, it is recommended that

*Direct subsidization of educational facilities should be considered for the Atlantic Provinces. The subsidies should be directed to the technical and testing levels and aimed at meeting needs evolving in all sectors of the economy of the region.*

The direct impact of such a program could be the creation of an additional 10,000 jobs in education-related activities. These new opportunities could emerge in such areas as forestry technology and economics, secretarial and stenographic training, oceanographic and ecology studies, social work, education, and public administration. A specific blueprint for stimulating growth in education should be drawn up, keeping in mind many of the recommendations and discussions provided in the foregoing chapters. It is also imperative to relate such a blueprint to the present role and status of education in each of the Atlantic Provinces.

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APPENDIX 1 - TERMS OF REFERENCE

The service sector of the economy of the Atlantic Provinces is the largest in terms of its contribution to employment and to the Gross Provincial Product. It is also a rapidly growing sector. At present, however, there is no clear understanding of the dynamics of growth characteristic of industries comprising the service sector. In considering remedies to problems of regional economic disparity, it is essential to identify growth or stagnation in the service industries, and the impact of these industries on the primary and secondary sectors.

It has been suggested that a study be undertaken of a wide range of service industries in the Atlantic region. Specifically, the study should be related to service industries oriented towards

1. Individual consumers
2. Manufacturing and primary based enterprises
3. Other service industries

Such industries can be considered within the following categories:

1. Business services
2. Transportation
3. Distribution of goods (wholesale and retail)
4. Financial services, insurance, and real estate
5. Residential and commercial construction
6. Tourism and recreation
7. Government services
8. Education

DESCRIPTION OF THE PROJECT

In undertaking a project of this nature, the approach should be based on the anchor principle; that is, local market deficiencies or importation of services should be identified, particularly in those instances where demand appears to be buoyant. Opportunities to develop industries to serve the needs of the domestic market are thus necessary considerations. Export potential should be thought of in terms of adding to the potential for growth.

The project should deal with specific industries and opportunities. Recommendations and suggestions should be highlighted for specific industries in the Atlantic Provinces and estimates made of the potential range of benefits which could be derived.

In the pursuit of the study, we propose that there be three distinct phases:

Phase 1: To identify service industries with a potential for either development or import substitution and to provide estimates for the development of export markets

Phase 2: To select the more promising industries delineated in Phase 1 for intensive examination, in which their structures, modus operandi, institutional characteristics, and linkages will be explored

Phase 3: To develop a program indicating the nature of possible interventions to stimulate service industries offering the greatest scope for generating economic activity in Atlantic region

This project will focus on Phase 1.

APPENDIX 2 - THE SERVICE SECTOR AND EMPLOYMENT

As has been indicated in chapters 1 and 2, the service sector is expected to contribute increasingly to the economic growth of Canada. Tables A2.1 and A2.2 present some statistics indicating the anticipated growth of employment opportunities in this sector.

TABLE A2.1 SERVICES (Real Domestic Product), CANADA,

1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	2,938
1949	3,063
1950	3,165
1951	3,310
1952	3,465
1953	3,595
1954	3,663
1955	3,755
1954	3,982
1956	4,107
1957	4,262
1958	4,494
1959	4,673
1960	4,832
1961	5,093
1962	5,359
1963	5,750
1964	6,224
1965	6,785
1966	7,268
1967	7,645
1968	8,053
1969	8,531
1970	8,880
1971	9,565
1972	10,304
1973	10,927
1974	11,462
1975	12,133
1976	12,910
1977	13,640
1978	14,300
1979	14,987
1980	

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A2.2 EMPLOYMENT IN SERVICES, CANADA,  
1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>THOUSANDS</u>
1948	587
1949	608
1950	646
1951	651
1952	706
1953	730
1954	769
1955	801
1956	847
1957	910
1958	956
1959	1,015
1960	1,107
1961	1,178
1962	1,244
1963	1,306
1964	1,386
1965	1,490
1966	1,622
1967	1,732
1968	1,829
1969	1,902
1970	2,017
1971	2,091
1972	2,220
1973	2,371
1974	2,520
1975	2,647
1976	2,791
1977	2,964
1978	3,139
1979	3,305
1980	3,473

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

APPENDIX 3 - THE ATLANTIC CONTEXT

The discussion in Chapter 3 has been based on information from three major sources: first, from a survey and screening of statistical information; second, from interviews with individuals in industrial parks and service and manufacturing enterprises; and third, to questionnaires sent to both manufacturing and service enterprises in the Atlantic Provinces.

None of the Atlantic Provinces has any information which relates specifically to business services. Much of what is available is incomplete, too general, or out of date. This state of affairs is well known to all four provincial governments; and in each case, data gathering is currently underway to correct the situation. Because of this lack of provincial data, the statistics used in this study are gleaned mainly from Federal Government sources. This means that there were few instances where information was available in the required format, namely, broken down by province and by type of service.

The interviews were conducted with individuals who had been screened and selected on the basis of the following characteristics:

1. He had firsthand knowledge of the manufacturing sector in the Atlantic Provinces; or
2. He had firsthand knowledge of the service sector in the Atlantic Provinces; or
3. He was involved in a phase of the decision-making process of economic development in
  - (a) any one of the Atlantic Provinces
  - (b) any one of the larger urban centres; or

4. He was involved in the development of industrial parks.

The interviews were aimed at verifying some of the opinions evident in replies to the questionnaire, as well as at identifying the nature of existing problems and opportunities specific to the Atlantic Provinces.

Information was gathered from both the manufacturing sector and the service sector by way of two separate questionnaires. Questionnaires were sent to all manufacturing concerns established in the industrial parks of the Atlantic Provinces, as well as to a random sample of other manufacturers located outside industrial parks. The questionnaire designed for service industries was sent to a random sample of companies selected from the eight industrial categories. Attempts were made to achieve a representative response equivalent to each province's relative economic output.

The questionnaires were designed to provide two different viewpoints:

1. The manufacturer's viewpoint of his relationship with business services
2. The service sector's views of its own problems.

Each questionnaire contained two separate elements: questions of fact and questions of opinion. Questions of fact were aimed at assembling market information, ownership and output structure, input structures, employment, and age of the enterprise. Opinion questions referred to demand and supply expectations, as well as to the identification of existing problems and opportunities in the service sector.

Questionnaires were sent to 125 manufacturing firms, most of which were in industrial parks, and to 135 firms in the service category. The responses received and characteristics of respondents were as follows:

1. Manufacturing Sector

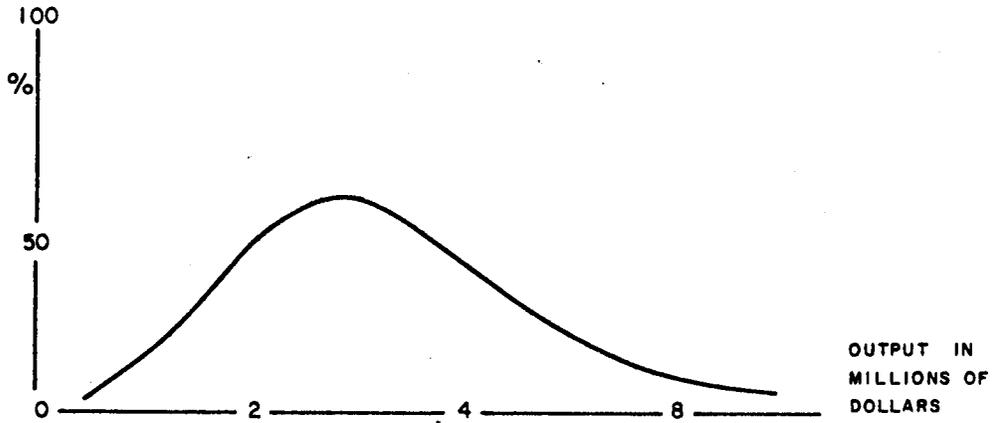
Of the 125 primary and secondary manufacturing firms that received the questionnaire, 25 replied, for a 20% response. Among the respondents, 77% were Canadian-owned and 23% foreign-owned firms. About 48% of the firms had their head offices in the Atlantic Provinces, while 20% were subsidiaries of firms whose head office was located outside the Atlantic region. The remaining 32% of responding firms were branch plants. Participating firms were evenly distributed among the primary and secondary sectors. In terms of size of output, the volume of respondents varied from \$200,000 per annum to \$15 million, with the concentration being in the \$2-6 million range. Employment in these firms varied from a low of 5 to a high of 250, with the majority being concentrated between 30-60 employees. (See Figure A3.1).

2. Service Sector

Of the 135 firms in the service sector that received the questionnaire, 28 replied, for a response total of 21%. All the respondents were owned by interests from the Atlantic Provinces, with the exception of one firm, which was 99% owned by Canadian interests and 1% owned by foreign (U.K.) interests.

FIGURE A3.1

MANUFACTURING INDUSTRIES - RESPONDENT CHARACTERISTICS



DISTRIBUTION BY EMPLOYMENT

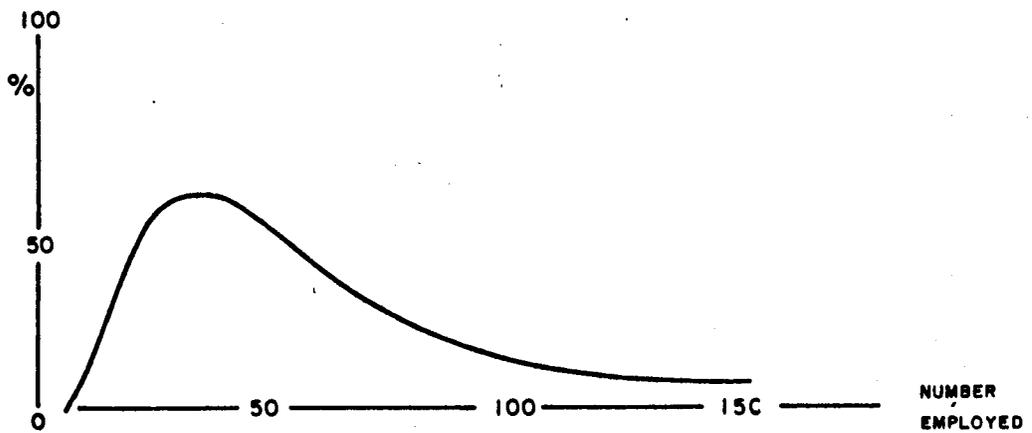
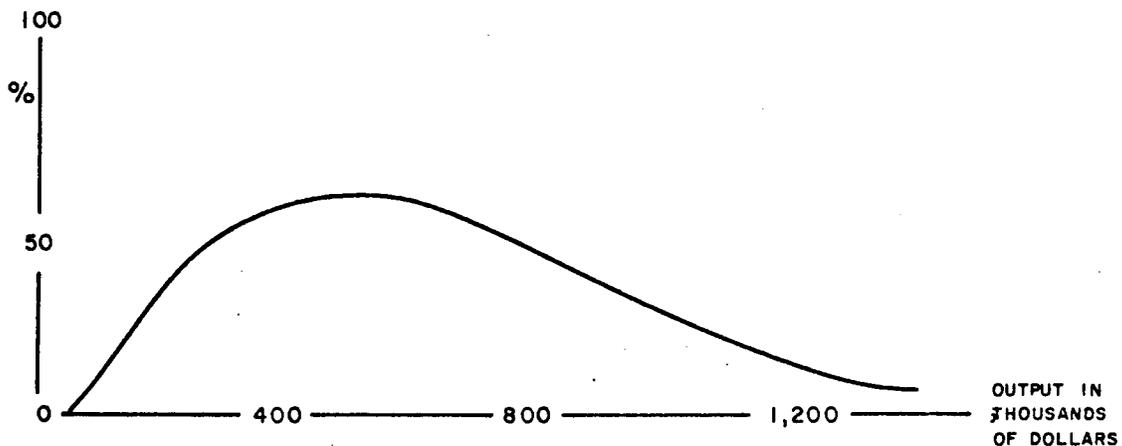
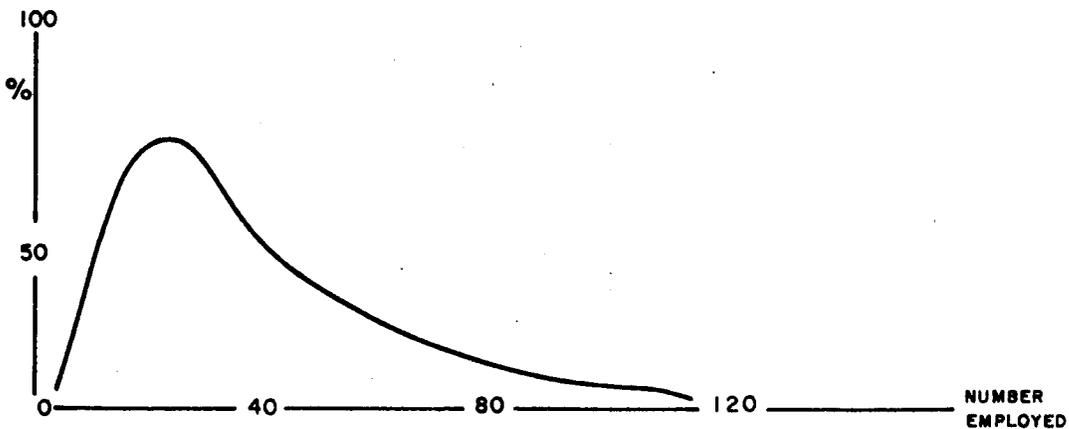


FIGURE A3.2

SERVICE INDUSTRIES - RESPONDENT CHARACTERISTICS



DISTRIBUTION BY EMPLOYMENT



About 96% of the firms did all their business in the Atlantic Provinces: 60% of the same firms did more than 70% of their business with industry and only 15% did less than 50% of their business with industry. The employment of respondent firms varied from a high of 450 to a low of 2, the majority being grouped at the 20-40 level. In terms of output, only four firms had sales of more than \$1 million with the majority being concentrated at the \$100,000 to \$500,000 level (see Figure A3.2). The majority of responding service firms can be considered well established in their business: 72% had been in business for eight years or more, and only 12% had been in business for less than five years.

APPENDIX 4 - COMMERCIAL SERVICES

The business services, transportation, distribution, and financial services and insurance comprise the commercial service segment of the service sector. In chapters 4-7, we have examined each industry individually and have described some of the existing interrelationships within and outside the sector. Projections of growth of commercial services are contained in Tables A4.1 and A4.2.

TABLE A4.1 COMMERCIAL SERVICES (Real Domestic Product),  
1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	1,510
1949	1,564
1950	1,630
1951	1,697
1952	1,795
1953	1,876
1954	1,874
1955	1,945
1956	2,097
1957	2,139
1958	2,205
1959	2,323
1960	2,394
1961	2,456
1962	2,544
1963	2,674
1964	2,836
1965	3,055
1966	3,283
1967	3,477
1968	3,583
1969	3,785
1970	3,888
1971	4,149
1972	4,495
1973	4,828
1974	5,058
1975	5,309
1976	5,643
1977	5,971
1978	6,251
1979	6,509
1980	6,798

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A4.2 VALUE ADDED IN COMMERCIAL SERVICES,

CANADA, 1950-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1950	1,650
1951	1,687
1952	1,845
1953	1,927
1954	1,911
1955	1,990
1956	2,124
1957	2,177
1958	2,228
1959	2,313
1960	2,386
1961	2,456
1962	2,546
1963	2,652
1964	2,792
1965	2,909
1966	3,015
1967	3,139
1968	3,095
1969	3,206
1970	3,298
1971	3,430
1972	3,676
1973	3,911
1974	4,043
1975	3,197
1976	4,434
1977	4,665
1978	4,849
1979	5,011
1980	5,204

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

APPENDIX 5 - NON-COMMERCIAL SERVICES

In addition to commercial services, there are numerous non-commercial services. The magnitude and growth of such services are summarized in Tables A5.1 and A5.2.

TABLE A5.1 (Real Domestic Product), CANADA  
1948-1970 AND PROJECTED SERVICES - NON-COMMERCIAL TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	1,427
1949	1,499
1950	1,534
1951	1,613
1952	1,669
1953	1,719
1954	1,789
1955	1,809
1956	1,884
1957	1,968
1958	2,056
1959	2,170
1960	2,278
1961	2,376
1962	2,549
1963	2,684
1964	2,914
1965	3,169
1966	3,501
1967	3,790
1968	4,061
1969	4,281
1970	4,554
1971	4,730
1972	5,070
1973	5,476
1974	5,869
1975	6,153
1976	6,490
1977	6,939
1978	7,388
1979	7,790
1980	8,189

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A5.2 VALUE ADDED IN NON-COMMERCIAL SERVICES,  
CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	1,235
1949	1,315
1950	1,354
1951	1,454
1952	1,550
1953	1,640
1954	1,707
1955	1,790
1956	1,821
1957	1,913
1958	2,040
1959	2,174
1960	2,285
1961	2,377
1962	2,523
1963	2,655
1964	2,828
1965	2,975
1966	3,176
1967	3,423
1968	3,657
1969	3,802
1970	4,020
1971	4,143
1972	4,401
1973	4,709
1974	4,993
1975	5,178
1976	5,414
1977	5,746
1978	6,068
1979	6,341
1980	6,612

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

APPENDIX 6 - CONSUMER SERVICES

The commercial and non-commercial services are relatively small as compared with consumer services (Tables A6.1 and A6.2). Expenditures on personal care services (Table A6.3), perhaps the most visible element of consumer services, in reality comprise a small portion of the industry.

TABLE A6.1 CONSUMER SERVICES,  
CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	5,015
1949	5,399
1950	5,626
1951	5,925
1952	6,436
1953	6,808
1954	7,091
1955	7,479
1956	7,885
1957	8,286
1958	8,694
1959	9,213
1960	9,640
1961	10,035
1962	10,230
1963	10,800
1964	11,504
1965	12,061
1966	12,694
1967	13,182
1968	13,890
1969	14,674
1970	15,301
1971	16,288
1972	17,560
1973	18,741
1974	19,601
1975	20,438
1976	21,634
1977	22,922
1978	24,060
1979	25,066
1980	26,173

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A6.2 EXPENDITURES ON CONSUMER SERVICES,  
CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF DOLLARS</u> <u>IN CURRENT YEAR VALUES</u>
1948	3,073
1949	3,480
1950	3,842
1951	4,359
1952	4,989
1953	5,469
1954	5,914
1955	6,412
1956	6,977
1957	7,590
1958	8,233
1959	8,908
1960	9,486
1961	10,035
1962	10,464
1963	11,251
1964	12,266
1965	13,276
1966	14,502
1967	15,780
1968	17,412
1969	19,063
1970	21,216
1971	23,408
1972	25,779
1973	28,336
1974	30,775
1975	33,181
1976	36,134
1977	39,431
1978	42,752
1979	45,980
1980	49,421

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A6.3 EXPENDITURES ON PERSONAL CARE SERVICES,  
CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	140
1949	159
1950	162
1951	163
1952	181
1953	197
1954	212
1955	229
1956	242
1957	254
1958	265
1959	274
1960	283
1961	294
1962	298
1963	303
1964	311
1965	318
1966	327
1967	338
1968	325
1969	330
1970	335
1971	359
1972	393
1973	426
1974	454
1975	480
1976	515
1977	555
1978	592
1979	627
1980	664

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

APPENDIX 7 - DISTRIBUTION OF GOODS

Chapter 6 has presented a detailed view of distribution channels, activity, and employment for the Atlantic region. The tables included in this appendix provide some of the parameters existing for Canada at large. The development of the distribution industry is influenced by the level of consumer expenditures (Table A7.1) of which food is a large part (Table A7.2). The economic significance of distribution (trade) is summarized in Table A7.3 and the value-added component in Table A7.4. The value of output for wholesale and retail industries is indicated in Table A7.5 and employment in Table A7.6.

TABLE A7.1 TOTAL CONSUMER EXPENDITURE,  
CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	13,438
1949	14,083
1950	15,038
1951	15,224
1952	16,514
1953	17,538
1954	18,296
1955	19,757
1956	21,172
1957	22,044
1958	22,846
1959	24,000
1960	24,866
1961	25,816
1962	27,028
1963	28,393
1964	30,283
1965	32,077
1966	33,785
1967	35,407
1968	37,008
1969	39,218
1970	40,407
1971	43,329
1972	46,929
1973	49,849
1974	51,575
1975	53,531
1976	56,848
1977	60,253
1978	62,989
1979	65,318
1980	68,117

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A7.2 EXPENDITURES FOOD AT RETAIL PRICES,  
CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	2,915
1949	2,917
1950	3,131
1951	3,150
1952	3,281
1953	3,450
1954	3,592
1955	3,739
1956	3,984
1957	4,151
1958	4,217
1959	4,419
1960	4,603
1961	4,638
1962	4,772
1963	4,855
1964	5,052
1965	5,205
1966	5,263
1967	5,538
1968	5,707
1969	5,815
1970	5,022
1971	6,292
1972	6,527
1973	6,760
1974	6,924
1975	7,098
1976	7,359
1977	7,629
1978	7,854
1979	8,049
1980	8,276

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A7.3 TRADE (Real Domestic Product),  
CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	2,558
1949	2,667
1950	2,857
1951	2,889
1952	3,084
1953	3,293
1954	3,329
1955	3,710
1956	4,046
1957	4,046
1958	4,141
1959	4,418
1960	4,427
1961	4,536
1962	4,813
1963	5,044
1964	5,420
1965	5,869
1966	6,241
1967	6,564
1968	6,831
1969	7,071
1970	7,051
1971	7,684
1972	8,261
1973	8,832
1974	9,061
1975	9,362
1976	9,990
1977	10,576
1978	10,970
1979	11,279
1980	11,698

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A7.4 VALUE ADDED IN TRADE,  
CANADA, 1950-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1950	2,957
1951	2,971
1952	3,220
1953	3,431
1954	3,369
1955	3,704
1956	4,060
1957	4,118
1958	4,158
1959	4,356
1960	4,446
1961	4,536
1962	4,814
1963	5,046
1964	5,436
1965	5,850
1966	6,173
1967	6,375
1968	6,633
1969	6,953
1970	6,936
1971	7,504
1972	8,153
1973	8,714
1974	8,883
1975	9,140
1976	9,764
1977	10,361
1978	10,751
1979	11,039
1980	11,435

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A7.5 INDUSTRY OUTPUT TRADE,  
CANADA, 1950-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1950	4,496
1951	4,517
1952	4,896
1953	5,217
1954	5,123
1955	5,632
1956	6,173
1957	6,261
1958	6,321
1959	6,623
1960	6,760
1961	6,896
1962	7,320
1963	7,672
1964	8,265
1965	8,895
1966	9,395
1967	9,692
1968	10,084
1969	10,607
1970	10,648
1971	11,409
1972	12,395
1973	13,248
1974	13,504
1975	13,895
1976	14,844
1977	15,752
1978	16,346
1979	16,783
1980	17,385

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A7.6 EMPLOYMENT IN TRADE,  
CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>THOUSANDS</u>
1948	695
1949	693
1950	690
1951	760
1952	824
1953	856
1954	865
1955	882
1956	921
1957	942
1958	954
1959	986
1960	1,018
1961	1,026
1962	1,049
1963	1,062
1964	1,105
1965	1,145
1966	1,180
1967	1,225
1968	1,260
1969	1,284
1970	1,288
1971	1,337
1972	1,373
1973	1,420
1974	1,451
1975	1,475
1976	1,514
1977	1,559
1978	1,596
1979	1,623
1980	1,647

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

APPENDIX 8 - TOURISM

Prince Edward Island  
Nova Scotia and New Brunswick

This appendix contains a step-by-step analysis of some of the results contained in the 1971 Maritime Exit Survey in order to obtain an estimate of new units of accommodation required to meet peak season demand in 1976. Trend data are obtained by comparison with results of a similar survey carried out for Nova Scotia in 1968.

The analysis relates to only three of the Atlantic Provinces (Prince Edward Island, Nova Scotia, and New Brunswick) and to only the future demand of out-of-province tourists (that is, it excludes resident vacationers). These limitations are imposed by the survey coverage.

The following table contains estimates of 1976 demand in terms of party-nights by assuming that the average growth in number of party-nights between 1971 and 1976 will be the same as that experienced in Nova Scotia between 1968 and 1971 (18.2% for the three-year period).

ADDITIONAL PARTY-NIGHT DEMAND DURING PEAK  
SEASON, MARITIME PROVINCES, 1976 OVER 1971

	Number of Party-Nights (Thousands)		Additional Party-Night Demand <hr/> 1976 over 1971
	Actual	Projection	
	June 12-Sept 12 1971	June 12-Sept. 12 1976	
Prince Edward Island	540	710	170
Nova Scotia	1,220	1,615	395
New Brunswick	<u>1,500*</u>	<u>1,989</u>	<u>489</u>
TOTAL	3,260	4,314	1,054

\* Peak Season figure estimated (on the basis of Nova Scotia statistics) by taking 77% of total season party-nights.

Sources: Prince Edward Island figures - Computer Printout of 1971 Maritime Exit Survey results for P.E.I.

Nova Scotia figures - "Some Aspects of the Tourist Industry in Nova Scotia".

New Brunswick Figures - Summary Report on the New Brunswick results from Maritime Exit Survey.

It is estimated that tourist parties will spend 1 million more nights in the Atlantic Provinces in 1976 than they did in 1971. Though it is to be expected that the bulk of this additional demand will come in July and August, it is felt it would over complicate this analysis to attempt to proportion the demand on any other basis than that of an equal per night distribution. Thus, additional demands in 1976 over 1971 are calculated in the following table to be 11,460 party-nights per night.

ADDITIONAL PARTY-NIGHT DEMAND PER MONTH  
DURING PEAK SEASON, MARITIME PROVINCE  
1976 OVER 1971

	Additional Party-Night Demand, 1976 over 1971 (1)	Per Night During Peak Season in 1976 (1) 93 days
Atlantic Provinces (excl. Newfoundland)	1,054,000	11,460

Not all of this demand will impact on commercial accommodation - some parties will, in the future as in the past, spend their visit with friends or relatives or in owned or borrowed cottages. To estimate the proportion that will use roofed and campground accommodation, the following table sets out statistics on the accommodation preferences of the 1971 tourist parties and allocates the 11,460 additional party nights projected for each night accordingly. In this way, estimates are derived on the number of new units that will have to be added to the tourist plant as it existed in 1971 to meet peak period demand in 1976.

ALLOCATION OF ADDITIONAL PARTY-NIGHT DEMAND  
PER NIGHT BY ACCOMMODATION PREFERENCE, MARITIME PROVINCES,  
1976 over 1971

	Accommodation Preference of Tourist Parties 1971*		Additional Party- Night Demand per Night 1976 over 1971	Allocation of Additional Party- Night Demand per Night, 1976 over 1971
Roofed Accommodation	54%	x	11,460	6,188
Campgrounds	31%	x	11,460	3,553
Non-Commercial Accommodation	15%	x	11,460	<u>1,719</u>
<b>TOTAL</b>				<b>11,460</b>

\*Source: Graph 22 - "Some Aspects of the Tourist Industry in Nova Scotia".

An assumption underlying this analysis is that, except for party-nights projected for non-commercial accommodation, the additional party-night demand per night in 1976 over 1971 would have to be met by the supply of new accommodation units. Thus, by 1976, approximately 6,200 units of roofed accommodation and 3,600 units of campground accommodation will have to be added to the tourist plant as it existed in 1971 to meet 1976 demand.

In the following table, the analysis moves on to estimate that it will cost \$50 million over the period 1971 to 1976 to meet the cost of providing the new units of accommodation required for peak demand in the latter year.

COST OF MEETING DEMAND FOR NEW ACCOMMODATION,  
MARITIME PROVINCES, 1971 - 1976

	<u>New Units Required in 1976</u>	<u>Conservative Est. of cost per unit</u>	<u>Total Cost over 5-year Period (\$ Millions)</u>
Roofed Accommodation	6,186	\$8,000	\$49.5
Campground	3,553	200	<u>.7</u>
TOTAL COST			\$50.2

APPENDIX 9 - GOVERNMENT ACTIVITIES AND EXPENDITURES

As is indicated in Chapter 10, the role of the government and the provision of government services have grown to assume massive proportions. Table A9.1 gives the magnitude of government current expenditures, and Table A9.2 gives the proportion attributable to public administration. Tables A9.3-A9.8 summarize the trend in the growth of demand originating from the federal, provincial, and municipal governments (excluding hospital and educational expenses). The wages (excluding inflationary effects) of provincial and municipal governments are provided in Tables A9.7 and A9.8, and projected growth in the number of federal government employees in A9.9. Another major component of federal government activities focuses on the value of transfer payments, which are expected to grow very rapidly during the 1970's (Table A9.10).

TABLE A 9.1 GOVERNMENT CURRENT EXPENDITURES,  
CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	2,730
1949	3,025
1950	3,245
1951	4,135
1952	5,028
1953	5,198
1954	5,028
1955	5,145
1956	5,272
1957	5,201
1958	5,380
1959	5,348
1960	5,475
1961	6,350
1962	6,600
1963	6,737
1964	7,010
1965	7,181
1966	7,952
1967	8,271
1968	8,563
1969	8,838
1970	9,683
1971	10,256
1972	10,697
1973	11,192
1974	11,739
1975	12,236
1976	12,780
1977	13,382
1978	13,969
1979	14,521
1980	15,072

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A 92 PUBLIC ADMINISTRATION (Real Domestic Product),  
CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	1,269
1949	1,400
1950	1,466
1951	1,636
1952	1,873
1953	1,982
1954	2,081
1955	2,149
1956	2,184
1957	2,250
1958	2,354
1959	2,407
1960	2,445
1961	2,528
1962	2,607
1963	2,629
1964	2,688
1965	2,738
1966	2,837
1967	2,989
1968	3,072
1969	3,095
1970	3,163
1971	3,247
1972	3,315
1973	3,401
1974	3,515
1975	3,587
1976	3,665
1977	3,770
1978	3,876
1979	3,966
1980	4,052

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDID), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A9.3 FINAL DEMAND, FEDERAL CURRENT EXPENDITURES,  
(OTHER THAN HOSPITAL, DEPT., AND EDUCATION),

CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	744
1949	700
1950	743
1951	724
1952	752
1953	786
1954	779
1955	774
1956	862
1957	850
1958	965
1959	900
1960	905
1961	969
1962	979
1963	965
1964	1,062
1965	1,096
1966	1,299
1967	1,385
1968	1,474
1969	1,681
1970	1,698
1971	1,768
1972	1,861
1973	1,837
1974	2,039
1975	2,178
1976	2,326
1977	2,452
1978	2,564
1979	2,690
1980	2,822

Source: Canadian Disaggregated Interdepartmental Econometric Model  
(CANDIDE), September Solution (Ottawa: Economic Council  
of Canada, 1972)

TABLE A9.4 FINAL DEMAND, PROVINCIAL CURRENT EXPENDITURES,  
(OTHER THAN HOSPITAL AND EDUCATION),  
CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	433
1949	482
1950	480
1951	496
1952	519
1953	515
1954	555
1955	599
1956	650
1957	665
1958	724
1959	770
1960	823
1961	921
1962	967
1963	1,056
1964	1,098
1965	1,154
1966	1,312
1967	1,345
1968	1,389
1969	1,412
1970	1,472
1971	1,529
1972	1,595
1973	1,678
1974	1,766
1975	1,838
1976	1,915
1977	2,008
1978	2,106
1979	2,198
1980	2,286

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A 9.5 FINAL DEMAND, MUNICIPAL CURRENT EXPENDITURES,  
 (OTHER THAN HOSPITAL AND EDUCATION),  
 CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	339
1949	367
1950	371
1951	388
1952	403
1953	413
1954	437
1955	466
1956	496
1957	517
1958	563
1959	599
1960	633
1961	705
1962	744
1963	800
1964	839
1965	879
1966	974
1967	1,023
1968	1,078
1969	1,100
1970	1,149
1971	1,194
1972	1,246
1973	1,313
1974	1,382
1975	1,437
1976	1,496
1977	1,571
1978	1,648
1979	1,719
1980	1,789

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A 9.6 FEDERAL GOVERNMENT EXPENSES  
ON GOODS AND SERVICES, CANADA,  
1960-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF</u> <u>CONSTANT DOLLARS (1961)</u>
1960	127
1961	157
1962	148
1963	156
1964	200
1965	206
1966	219
1967	360
1968	423
1969	537
1970	557
1971	623
1972	678
1973	709
1974	763
1975	859
1976	960
1977	1,034
1978	1,096
1979	1,175
1980	1,262

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A 9.7 PROVINCIAL AND LOCAL  
GOVERNMENT WAGES AND SALARIES,  
CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	1,005
1949	1,051
1950	1,076
1951	1,131
1952	1,157
1953	1,232
1954	1,269
1955	1,332
1956	1,374
1957	1,460
1958	1,600
1959	1,701
1960	1,762
1961	1,898
1962	2,015
1963	2,116
1964	2,237
1965	2,312
1966	2,485
1967	2,699
1968	2,930
1969	2,971
1970	3,091
1971	3,184
1972	3,300
1973	3,455
1974	3,636
1975	3,731
1976	3,844
1977	4,019
1978	4,190
1979	4,329
1980	4,454

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A 9.8 JUNIOR GOVERNMENT EXPENDITURES  
ON GOODS AND SERVICES,  
CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	421
1949	514
1950	488
1951	482
1952	520
1953	457
1954	528
1955	593
1956	684
1957	662
1958	719
1959	762
1960	847
1961	969
1962	995
1963	1,143
1964	1,154
1965	1,226
1966	1,509
1967	1,438
1968	1,389
1969	1,412
1970	1,948
1971	2,303
1972	2,420
1973	2,505
1974	2,566
1975	2,669
1976	2,792
1977	2,888
1978	2,978
1979	3,080
1980	3,192

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A9.9 EMPLOYMENT IN PUBLIC ADMINISTRATION,  
CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>THOUSANDS</u>
1948	243
1949	231
1950	258
1951	262
1952	247
1953	249
1954	258
1955	262
1956	276
1957	278
1958	293
1959	325
1960	345
1961	356
1962	361
1963	371
1964	377
1965	402
1966	419
1967	444
1968	458
1969	463
1970	491
1971	511
1972	522
1973	535
1974	551
1975	564
1976	578
1977	594
1978	609
1979	621
1980	635

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

TABLE A9.10 TRANSFER PAYMENTS FROM FEDERAL  
TO PROVINCIAL AND LOCAL GOVERNMENTS,  
CANADA, 1948-1970 AND PROJECTED TO 1980

<u>YEAR</u>	<u>MILLIONS OF CONSTANT DOLLARS (1961)</u>
1948	857
1949	942
1950	1,023
1951	1,024
1952	1,343
1953	1,449
1954	1,626
1955	1,719
1956	1,746
1957	2,052
1958	2,605
1959	2,721
1960	3,090
1961	2,709
1962	2,912
1963	2,979
1964	3,175
1965	3,402
1966	3,722
1967	4,640
1968	5,346
1969	6,060
1970	6,804
1971	7,821
1972	8,584
1973	9,464
1974	10,475
1975	11,492
1976	12,650
1977	13,936
1978	15,358
1979	16,922
1980	18,641

Source: Canadian Disaggregated Interdepartmental Econometric Model (CANDIDE), September Solution (Ottawa: Economic Council of Canada, 1972)

